



September 2010

Report to **STAKEHOLDERS**

Volume 15 No. 9

Watch out for desert tortoises

page 3

Timing is everything

page 4

RAB Member Profile:

Richard Salazar

page 6



Report to Stakeholders is a publication of Edwards Air Force Base, 95th Air Base Wing, Civil Engineer Division, Environmental Management. Its purpose is to inform and educate the public, base workers and residents about continuing environmental and safety efforts on base. It currently has a circulation of 6,000, including about 2,000 subscribers.

Contents of the *Report to Stakeholders* are not necessarily the official view of, or endorsed by, the U.S. government, the Department of Defense or the Department of the Air Force.

All photos are property of the Air Force, unless otherwise identified.

Any comments or questions about the contents of the *Report to Stakeholders* may be directed to: Gary Hatch, 95 ABW/PAE, 305 E. Popson Ave., Edwards AFB, CA 93524-8060, (661) 277-4127.

E-mail: 95abw.pae@edwards.af.mil



Commander of the 95th Air Base Wing
Gregory E. Schwab

Base Civil Engineer
James E. Judkins

Chief of Environmental Management
Robert Wood

Section Chief of Environmental Restoration
Ai Duong

Section Chief of Environmental Conservation
Thomas Rademacher

Section Chief of Environmental Quality
Herb Roraback

STAKEHOLDERS STAFF

EDITOR

Vanessa Green

CONTRIBUTORS

Heidi Gesirtech
Patti Kumazawa
Leilani Richardson
Paul Rogers

WHAT'S ON THE COVER?

MOVING ROCKS? —
Desert tortoises are slow movers, and couple that with their tendency to cross roads and you have a recipe for road kill. But it doesn't have to be that way. See the article on page 3.



Timing is everything	4
New hazardous substances concept could save money...	5
RAB Member Profile: Richard Salazar	6
Information	8

Round 'em up, buckaroos!

While finishing up routine water sampling at Piute Ponds, base biologists Chris Herbst and Edward Morgan were surprised to find themselves in the midst of a herd of cattle.

“We were pulling up to the last sampling area and as we were parking, all of a sudden, boom — cows!” Herbst said. “They were literally jumping out of the tamarisk. I slammed on the brakes and we were both kind of speechless. We were not expecting to see that.”

Cattle are not a regular sight within the acres of desert habitat that make up Edwards Air Force Base. The two exceptions to this desert landscape are the aquatic habitat areas: Piute Ponds and Branch Memorial Park and Pond. These aquatic habitats attract several species of water-loving birds and animals, but previous to this summer day, cattle were not on that list.

After the surprise wore off, Herbst and Morgan phoned Wildlife Security Forces to notify them of the cattle and followed the herd in an attempt to get a glimpse of any brands on the animals. “Cattle are very easy to track,” Morgan said, “but these were free-range cattle, so they were running.”

“We didn’t have any sort of cattle wrangling supplies, so we obviously couldn’t do anything to control the animals,” Herbst said. “We were just trying to get a visual on their brands but couldn’t get close enough. Eventually, Wildlife Security Forces were able to.”

Wildlife Security Forces worked with Los Angeles County officials to find the owner of the animals. He had filed a report with the Los Angeles County Sheriff’s Department stating that his herd had been stolen. The owner coordinated with Wildlife Security Forces to set up a corral at Piute Ponds and remove the cattle.

Prompt removal of the cattle was important for a couple of reasons, according to biologists. The 10-plus cattle, while small in number, caused a bit of damage to the habitat at Piute Ponds and if they had not been rounded up, could have caused more significant damage.

“We just followed their tracks out and you could see just a huge line,” Morgan said. “They just tore it up as they ran through.”

“Cattle can be damaging to the habitat and environment over there,” Herbst said. “There is also a FOD [Foreign Object Damage] risk, because they can wander onto the lakebeds and flightline.”

In animal control situations, Wildlife Security Forces and base biologists often work together to control the animal causing damage, or threatening human life or the environment.

Biologists suggest that if workers or residents notice a suspicious animal on base, they should call Wildlife Security Forces at (661) 277-3340. If the situation involves an animal of environmental concern, base biologists will be notified.

Watch out for desert tortoises crossing the road

We've all heard the story of the tortoise and the hare — through a slow and steady pace, the tortoise crosses the finish line first after the overly confident hare takes a nap during the race. That fable can be indicative of real life in many ways, particularly, with the slow-moving pace of a tortoise.

While desert tortoises usually reach their destinations, their path may lead them across roads on and surrounding Edwards, creating a dangerous situation for the sure-footed reptiles. This was the case in June when an adult female tortoise was run over and killed by a vehicle on Mercury Boulevard.

"The incident occurred when someone who was driving along Mercury spotted a tortoise in the road and pulled off to the side," said Cher Keaton, project manager for the Edwards Desert Tortoise Head Start Program. "When a second car came along, the driver of the first car began waving her arms from the side of the road in an attempt to alert the second driver. Unfortunately, the second driver was distracted by the person waving and didn't see the tortoise before hitting it."

In response to this situation, the U.S. Fish and Wildlife Service (USFWS) has requested that Edwards biologists make a change to the mandatory desert tortoise-awareness training.

"We are now adding a strong message to take immediate action. If it is safe to do so, move the tortoise off of the road," Keaton said. "Until now, the training has left it up to the individual to decide whether or not to move a tortoise based on how busy the road was."

Keaton and other biologists stress safety for the driver must come first. But they, along with USFWS representatives, want drivers to be proactive and pick up and move the tortoise if they can.

Proper procedures for moving a tortoise are to pick it up gently using both hands, placing a hand on each side of the tortoise. Raise it carefully, keeping it level and low to the ground. Always move it in the same direction it was headed and move it approximately 100 feet from the road. Place it in a shady area if possible.

"They're very stubborn creatures; they're going where they want to go," Keaton said. "If you

move a tortoise away from the direction it was headed, it will turn around and head right back to the road."

Try to avoid frightening the tortoise. When scared, tortoises sometimes empty their bladders as a defense mechanism. This is serious because it can result in the eventual death of the tortoise if it is unable to replenish the water quickly enough. Replenishing that water is difficult to do during most of the year in the desert. However, biologists insist that a tortoise losing its water is much better than it being crushed by a car.

Anyone observing or assisting a desert tortoise is requested to call biologists at Environmental Management to report the location and details of the situation. This information is crucial because if there is a continuing problem, the tortoise may need to be safely relocated to an area farther away from the road.

The desert tortoise has been federally listed as a threatened species since April 1990 due to a sharp decline in population. This listing under the *Endangered Species Act* prohibits anyone from harming, capturing or killing a tortoise, and the penalties can involve steep fines and even jail time.

Tortoises are most active from March through October, spending the majority of their time during the alternate months hibernating in underground burrows. The life span of a desert tortoise is very similar to that of a human — a fully grown adult ranges in age from 25 to 100 years old. Reaching adulthood for a desert tortoise is a significant accomplishment considering the predation and loss of habitat that these creatures face on a daily basis, biologists say.

Moving a tortoise out of harm's way on roads is not a permit or exemption from the prohibitions of Section 9 of the *Endangered Species Act*, according to Ray Bransfield, senior biologist with the USFWS.

"However, having people stand by while an individual of a federally listed species is about to be killed is not productive,"

Bransfield said. "I think having anyone on base be able to move desert tortoises,



LOOK OUT — Desert tortoises often wander onto roads, paved or unpaved, and can get into harm's way. Biologists urge Edwards residents and workers to be on the look out for these reptiles.

when they are in trouble, is truly the best course of action. It is simply the right thing to do."

The Air Force and USFWS will continue to follow the standard practices of the *Endangered Species Act* to review base programs and activities, but this change in policy will allow residents and workers at Edwards to take an active role in protecting desert tortoises as they travel on base.

According to Keaton, this change in policy is effective immediately. Any questions can be directed to Environmental Management customer service desk at (661) 277-1401. Biologists suggest that base workers and residents program the Environmental Management main number into their cell phones so it's handy in the event of spotting a desert tortoise on the road.

RTS

Timing is everything

Air Force cleanup officials coordinated with the Army to clean up contamination at Site 231 near an area used by the Army to test and train its unmanned aerial vehicle, Sky Warrior.

Geographically, Edwards Air Force Base is like an island. The base is remote and the ideal paradise for flight test. But when it comes to program development, base workers believe no man is an island unto himself. That's why Air Force officials harmonized their cleanup project with the Army's schedule for its extended-range/multi-purpose "Sky Warrior" unmanned aircraft project.

Sharing common air

Similar to the RQ-1 Predator — an unmanned aerial vehicle used by the Air Force — the Sky Warrior carries multiple on-board weapons and can fly over enemy territory for many hours at altitudes up to 25,000 feet. Army officials chose Edwards as a base camp to train soldiers on the operation of the Sky Warrior aircraft.

"A big reason we chose Edwards was the airspace," said Mary Deatherage, a senior test engineer contracted by the Army. "The airspace is restricted, which allowed us to conduct operations at night. Edwards also shares airspace with Fort Irwin, so we could fly directly to the National Training Center to test the system's capabilities."

The Fort Irwin National Training Center is the Army's premiere training post that prepares soldiers for combat in the global war on terrorism in Iraq and Afghanistan. The training camp simulates Iraqi-like villages, enemy insurgents, explosions and even injuries.

"We were able to test the system in simulated war conditions while soldiers were on the ground," Deatherage said. "This way, any issues could be ironed out before we deploy into the field."

The area in the northern section of Edwards, designated for the Sky Warrior project is also home to Edwards' Environmental Restoration Program Site 231. Bruce Oshita, Environmental Management restoration program manager, originally planned to perform a non-time-critical removal action for soil excavation to remove lead-contaminated soils. That plan changed after Oshita learned about the Sky Warrior project area.

"We had to accelerate our cleanup schedule," Oshita said. "There's a window of opportunity between project phases in which the Army will vacate the area from August to December.

It's the perfect time for us to get in there and do the soil excavation."

According to Roger Otis, deputy director of projects at the 452nd Flight Test Squadron, coordinating the two efforts resulted in a "win-win" situation for everyone. It was important for us not to disrupt the Army's schedule because they were working toward an operational deployment date. We found a way to get both missions accomplished without much disruption. That's what makes this a success story," he said.

Getting the lead out

Site 231 is located 300 feet northwest of Rogers Dry Lake at



SKY WARRIOR — The Army tests their unmanned aerial vehicle, called Sky Warrior, in the airspace over Edwards.

Edwards. Base cleanup experts determined that the lead contamination is the result of battery waste stored at the site from the late 1940s to 1970s. The Air Force will be excavating and disposing of an estimated 800 cubic yards of lead-contaminated soil.

"The Air Force is taking a proactive approach with a straight-forward remedy," Oshita said. "This will be a simple dig-and-haul that will remove soil contamination from the site completely. It just makes sense to do it now rather than wait any longer. The second phase of Sky Warrior will extend well into 2011. We can remove the contaminated soil and help cut any long-term monitoring costs as well."

With the need to remove contaminated soil from Site 231 within a short time frame, the cleanup action changed from non-time-critical to time-critical. Local newspaper advertisements announced a 30-day public comment period for the Site 231 removal action in late May. The public comment period ended on June 28. In conjunction with the comment period, an Engineering Evaluation/Cost Analysis was released to the public with details of the site's history and why the Air Force recommended the proposed remedy.

Warriors supporting warriors

While cleaning up the environment is an important duty, Air Force and Army officials were focused on a more immediate threat. "Sky Warrior is a product that is going to help our soldiers abroad," said Susan Haseltine, who works in the base's plans and programs office. "It is going to save lives."

Deatherage agreed, saying that "the Sky Warrior aircraft is expected to help American soldiers with the global war on



SITE 231 — The Army's extended-range/multi-purpose Sky Warrior project is being tested at Edwards near Environmental Restoration Program Site 231. Base restoration officials are working around the Army's schedule to remove previously contaminated soil at the site.

terrorism. This project is very important to us. There was a sense of urgency because we had a requirement to get our soldiers deployed by July.”

Supporting the Sky Warrior project was a huge effort and required many different base organizations to work together.

“But an effort like this is all in a day’s work for Team Edwards,” Haseltine said. “We adapt, overcome and test. This is the primary reason Edwards exists, to ensure quality products are ready to aid American soldiers. That’s what it’s all about.”

RTS

New hazardous substances concept could save money for Edwards Air Force Base

Somewhere at Edwards today, a hazardous material turned into hazardous waste. The item probably doesn’t look any different because it still has the same hazardous properties it had when the can, bottle or barrel first came onto the base. However, because the item has been used or has expired, the time has come for it to be recycled or disposed of. Currently, that means Edwards must handle the material differently.

“Everything that is hazardous waste has been a hazardous substance and a hazardous material through its entire life,” said Kathryn Curtis, Environmental Management’s program manager for both hazardous materials and waste.

That simple concept is guiding a new effort, led by Environmental Management, to reduce some of the costs and hassles of managing both hazardous material and waste separately.

Right now, although they overlap in many ways, hazardous material and waste are managed under two separate programs. The hazardous materials program covers substances from the time they come onto the base until they are used or expire. The hazardous waste program then picks up the product and either finds a way to reuse it or sends the product off base to a recycler or disposal site.

These programs have different Air Force instructions;

however, both programs require user training, written management plans and item-specific safety requirements for users (spelled out in the manufacturer’s Material Safety Data Sheets). Curtis and her staff are looking for ways to combine the two programs into one cradle-to-grave solution for hazardous substances.

“The two programs can’t be separated,” said Cat McDonald, a hazardous waste specialist. “We can’t have one without the other. It just makes sense to combine them.”

The Environmental Management team sees several benefits to consolidating the programs. “It should decrease labor and management costs associated with training, because those already overlap,” McDonald said.

“Overall management costs should be reduced,” Curtis said. “Managing one program will be less costly than managing two.”

Finally, combining the two programs should make for more standardized tracking procedures in both the current system and a Department of Defense-wide system under development called the Enterprise Environmental, Safety and Occupational Health Management Information System. When completed, the Web-based automated information system will collect environ-

See Hazardous, page 7



ENGINEERING AND THE ENVIRONMENT

Restoration Advisory Board (RAB) member Richard “Rick” Salazar stands in front of an F-35 Lightning II. He is the acting deputy director for Lockheed Martin Aeronautics, managing the flight testing of the F-35. As a RAB member, he will represent the 412th Test Wing and serve as a conduit of information between his community and Air Force cleanup officials.

Photo by Paul Weatherman, Lockheed Martin Aeronautics

Test Wing Representative Rick Salazar: Engineering a healthy environment

Leaving the Navy’s high seas for the aerospace industry seemed like a natural transition for Richard “Rick” Salazar. As the newest member of the Edwards Air Force Base Restoration Advisory Board (RAB), representing the 412th Test Wing employee community, Salazar is pursuing two of his passions; engineering and the environment.

Blending two lifelong interests

Before arriving at Edwards in 1997 to work on the F-22 Raptor program, Salazar had never worked at an Air Force base. Instead, he had spent more than 20 years working at Navy bases. His military career began at the U.S. Naval Academy in Annapolis, Md., where he earned a bachelor’s degree in engineering and then became a radar intercept officer for two Navy aircraft fighters — the F-4 Phantom II and the F-14 Tomcat.

While Salazar comes by his engineering skills naturally — his father and grandfather were both civil engineers — he attributes his love of the environment to growing up in New England, and camping and hiking extensively in the Appalachian Mountains. Fostering this love of the environment led him toward a master’s

degree in environmental management. Becoming a licensed environmental engineer seemed to be the perfect marriage of Salazar’s two pursuits.

“I am very interested in the environment,” Salazar said. “I especially enjoy the technical aspects of environmental engineering.”

For Salazar, the variety within environmental engineering is a welcomed challenge.

“Environmental engineering covers so many areas,” he said. “You have to know about water, air, soil, and health and safety.”

Getting the professional license “took a lot of work on my part,” he said. “I had an engineering background but not in environmental engineering, so I studied for the license on my own, without any formal classes.”

Although he’s currently working as a flight test engineer, Salazar doesn’t regret the effort it took to obtain his license. The knowledge he gained has helped him be a more informed RAB representative.

Volunteering for a better environment

Joining the Edwards RAB is something Salazar wanted to do for a long time after first becoming a RAB member at Point Mugu, Calif.

“I had been a RAB member at Point Mugu for about a year and a half,” Salazar said. “I liked doing the work and helping out.”

The purpose of the RAB is to encourage two-way communica-

tion between the public and those responsible for environmental cleanup at Edwards. People from the base and surrounding communities apply to represent their community on the board, which meets quarterly to discuss the progress of the base cleanup program.

Although his previous attempts to join the RAB were unsuccessful, Salazar didn't hesitate to act when he saw a vacancy for the Test Wing representative.

"I'm interested in the RAB because I work here and I know a little more than the average person about the [cleanup] procedures," Salazar said. "I know how hard this stuff is, how expensive it is. People need to know that environmental cleanup takes a long time; in some ways, it's an art form."

Salazar knows firsthand the difficulties of remediation. Before coming to Edwards, Salazar was responsible for remediating gas stations near the Naval Air Weapons Station in Point Mugu.

His remediation experience gives Salazar confidence in the Edwards program.

"The people that work in the environmental field, especially

out here, are very knowledgeable," he said. "They're doing the best job they can within the fund profiles they have. Edwards is a lot better off than some other locations that don't have a fully staffed environmental office. We're lucky to have this kind of resource."

Part of the Test Wing Community

For now, the RAB remains Salazar's only outlet for environmental interests. He currently works as the acting deputy to the Lockheed Martin test director at Edwards on the F-35 Lightning II program. Also known as the Joint Strike Fighter, the F-35 will be flight-tested at Edwards during the next four years. A combined team of military, government and contractor personnel will collect data and write analysis reports determining if the aircraft meets Air Force requirements.

While his day job keeps him busy, Salazar's door remains open to Test Wing employees who have concerns about environmental cleanup at Edwards. He can be reached by phone at (661) 275-3275 or e-mail richard.j.salazar@lmco.com.

RTS

A little more about Salazar

- His brother is Alberto Salazar, an American marathon runner and world record holder of the 1980s, who was on the 1984 U.S. Olympic Marathon Team.
- Salazar worked for NIKE, Inc. for two and a half years, developing technical running apparel bearing his brother's name.
- Salazar's grandfather owned a construction company in Cuba that retained Fidel Castro as its lawyer.
- Salazar emigrated with his family from Cuba at the age of 6. In the first grade, Salazar did not know a word of English. By the second grade, he had won his school's spelling bee.
- Salazar spent eight years as a radar intercept officer in the Navy's most prestigious fighter squadron — Strike Fighter Squadron 31 (VFA-31), known as the Tomcatters.
- Salazar's wife is originally from Oregon and shares his love of the environment.
- Salazar earned a Professional Engineer (PE) license, which requires several steps including; passing an engineer-in-training examination, working under other PEs for a few years and getting letters of recommendation from them and passing the PE license examination in your field of interest.

HAZARDOUS

From page 5

mental, safety and occupational health data for hazardous substances.

Despite the logic of combining the two programs, there are some obstacles. Base command and Air Force Materiel Command need to see the benefit. In-depth analysis and a briefing of the proposal to leadership will help. Another obstacle is funding. At this time, the

programs are funded separately. A resolution will be required to get the funds moving. A consolidated training program will need to be developed, as well. One fact that could simplify the training process is that a lot of the program-specific training is done locally — Environmental Management team members conduct the training.

Another obstacle is already being tackled: consolidating the two programs. The Hazardous Waste Management Plan rewrite and the Installation Hazardous

Material Management Program instruction update have been completed.

Environmental Management team members are currently transitioning the local instruction into a plan. Completion is estimated for early 2011, after which, the separate plans can be incorporated into a single management plan for hazardous substances.

RTS

Where to find more INFORMATION

Published data and documents relating to Environmental Management are available for public review in information repositories at three locations. The current information repositories are located in the cities of Lancaster and Rosamond, as well as Edwards Air Force Base. They are updated when new documents are released.

For questions about information in the repositories, you may contact Gary Hatch, Environmental Public Affairs at (661) 277-4127 or by e-mail at 95abw.pae@edwards.af.mil. Here is a list of our current information repositories:

Edwards Air Force Base Library

5 W. Yeager Blvd.
Edwards AFB, Calif.
(661) 275-2665
Hours of operation: Mon-Thu 9:30 a.m. – 7 p.m.
Fri 9:30 a.m. – 6 p.m.
Sat-Sun 10:30 a.m. – 6 p.m.

Kern County Public Library

Wanda Kirk Branch
3611 Rosamond Blvd.
Rosamond, Calif.
(661) 256-3236
Hours of operation: Wed 11 a.m. – 7 p.m.
Fri-Sat 9 a.m. – 5 p.m.

Los Angeles County Public Library

601 W. Lancaster Blvd.
Lancaster, Calif.
(661) 948-5029
Hours of operation: Mon-Wed 10 a.m. – 8 p.m.
Thu-Fri 10 a.m. – 5 p.m.
Sat 11 a.m. – 5 p.m.

For general information about Edwards or other documents of public interest, you may visit the following link:
www.edwards.af.mil/library/environment.

Restoration Advisory Board (RAB) Information

The RAB is made up of appointed representatives from communities in 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 among base restoration officials, regulators and the community representatives regarding the cleanup of contamination from past military activities.

The board meets quarterly, rotating meeting locations in 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, Environmental Public Affairs, at (661) 277-4127.

NEXT QUARTERLY MEETING

Date: Nov. 18, 2010

Time: 5:30 p.m.

Location: North Edwards, Calif.

Venue to be determined

RAB Members

OFF-BASE COMMUNITIES

Boron

Julie English (760) 762-6208 Home
brontesisters2003@yahoo.com

California City

Bob Smith (760) 373-4317 Home
bsmith@ccis.com

Lancaster

Peter Zorba (661) 945-6896 Work
pzorba@cityoflancasterca.org
ALTERNATE: Vacant

Mojave

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

North Edwards

Vacant

Rosamond

David Newman (661) 722-6433 Work
newmanispwest@yahoo.com
ALTERNATE: Leslie Uhazy (661) 256-8209 Home
luhazy@avc.edu (661) 722-6417 Work

ON-BASE COMMUNITIES

Housing

Vacant

Main Base Air Base Wing

Vacant

Main Base Test Wing

Richard Salazar (661) 275-3275 Work
richard.j.salazar@lmco.com

NASA Dryden

Vacant

North Base

Vacant

South Base

Brenda Weems-Hunter (661) 275-0456 Work
brenda.weems-hunter.ctr@us.af.mil

AF Research Laboratory and Propulsion

Directorate

Milton McKay (661) 275-5191 Work
milton.mckay@us.af.mil

Remedial Project Managers

California Department of Toxic Substances

Control

Kevin Depies (916) 255-6547 Work
KDepies@dtsc.ca.gov

Edwards AFB

Ai Duong (661) 277-1474 Work
ai.duong@edwards.af.mil

Lahontan Regional Water Quality Control

Board

Tim Post (760) 241-4942 Work
tpost@waterboards.ca.gov

Lahontan Regional Water Quality Control

Board (continued)

John Steude (530) 542-5571 Work
jsteude@waterboards.ca.gov

U.S. Environmental Protection Agency

James Ricks (415) 972-3023 Work
ricks.james@epa.gov

Joseph Healy (415) 972-3269 Work
healy.joseph@epa.gov

Report to STAKEHOLDERS SUBSCRIPTIONS

- New subscription
- Change of address
- Cancel subscription

Name _____

Organization _____

Address _____

City _____

State _____ Zip _____

Mail to:
95 ABW/PAE
RTS Subscription
305 E. Popson Ave.
Edwards AFB, Calif., 93524-8060



95 ABW/CEV
5 E. Popson Ave., Bldg. 2650A
Edwards AFB, CA 93524-8060
Official Business

Presorted
First Class
U.S. Postage
PAID
Permit No. 294
Tucker, GA

ADDRESS SERVICE REQUESTED

