

# ALL HANDS

- **What You Can Do to Save the Environment**

- **Back to Nature at Jacksonville**

- ***All Hands* Environmental Pullout Poster**

**APRIL 1993**

I dreamed our planet  
got well again because  
everyone who lived here  
started doing things  
to help it.



PHOTOS: R. LEVY, FRG © 1992 EARTH DAY USA

Everyone started recycling,  
not throwing so much away,  
saving water, planting trees,  
driving less and walking more  
because everyone understood  
we all live in the same place.

APRIL 22  EARTH DAY

# Inside



## ALL HANDS

APRIL 1993 • NUMBER 913



See Page 10

- 6** **Saving the environment**  
*Ways you can become Earth-friendly*
- 10** **Treasure the Chesapeake**  
*Volunteers help clean the bay*
- 14** **Life inside a garbage bag**  
*Recycling from a different perspective*
- 18** **BEAKS**  
*Wildlife and Jax: a healthy co-existence*
- 22** **Gentle Giants**  
*Navy protects Florida manatees*
- 24** **Wetland sunset**  
*Pullout poster from All Hands*

- 30** **Antarctica**  
*The last great frontier*
- 32** **Cashing in on trash**  
*Recyclables net big bucks for MWR*
- 34** **The power down below**  
*China Lake leads in geothermal energy*
- 36** **Fueling the Navy's future**  
*Navy turns to alternative fuels*
- 40** **Environmentally sound**  
*Opportunity knocks at Subase Bangor*
- 44** **Searching for roots**  
*Sailor reunites with mother after 38 years*

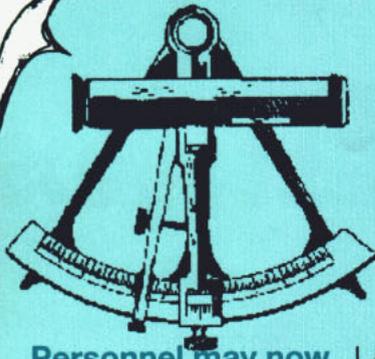


See Page 34

### On the Covers

**Front:** Photo by PH1(AW) Joseph Dorey, digitally enhanced/solarized using Adobe Photo Shop with a MacIntosh computer.

**Back:** Environmental fold-in poster depicts what we can do to support the Navy's environmental efforts. Art by LCDR Rob Raine.



# From the charthouse

## Personnel may now fly free on Space-A

In the midst of budget cuts and personnel reductions throughout the military, service members' benefits took a different twist — space-available flights on military aircraft and charters are now free.

"The old [\$10] fee helped offset the cost of processing," Air Force Lt. Col. Randy Morger, public affairs officer for Air Mobility Command, explained. "We decided the military should bear the cost instead of the members."

## CHAMPUS daily rate increases

The Civilian Health and Medical Program for the Uniformed Services (CHAMPUS) daily rate for family members of active-duty personnel who receive civilian hospital inpatient care recently increased to \$9.30.

When active-duty family members are admitted to civilian hospitals for care under CHAMPUS, they will either pay the

\$9.30 per day or a flat fee of \$25 for the total hospitalization, whichever is greater. This rate doesn't apply to any other category of CHAMPUS-eligible patients. Non-active-duty CHAMPUS beneficiaries are also feeling the pinch — their rates have gone up as well. The cost of hospitalization in a civilian hospital for non-active-duty family members is \$265 or 25 percent of the civilian hospital's billed charges, whichever is less.

For more information on payments and daily rates, contact your health benefits advisor or CHAMPUS representative at the nearest military medical treatment facility.

## It's never too late to kick butts

Many people never give up smoking because they feel that, for them, the damage is done and it's

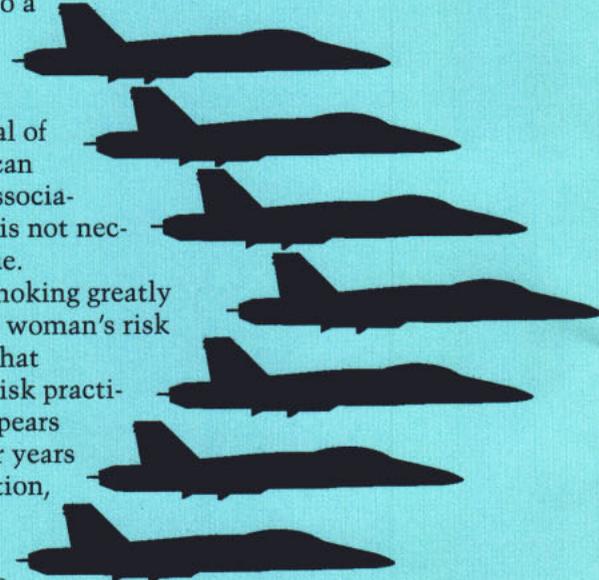


too late. However, according to a study published recently in the "Journal of the American Medical Association," this is not necessarily true.

While smoking greatly increases a woman's risk of stroke, that increased risk practically disappears two to four years after cessation, the study said.

Cigarette smoking is a major contributor to the risk of stroke among women, and quitting reduces the risk, according to Dr. Ichiro Kawachi, from the Department of Medicine, Brigham and Women's Hospital, Boston.

The study began in 1976 with 117,006 women aged 30 to 55 and free of coronary heart disease, stroke and cancer. The study found that "overall, the data indicate that benefits of smoking cessation in terms of stroke reduction are available to all smokers regardless of age at starting and number of cigarettes smoked. The findings warrant vigorous efforts to encourage smokers to stop at any age."



## DoD releases Blue Angel '93 tour schedule

The Department of Defense recently announced the 1993 touring schedule of the Navy's flight demonstration team, the Blue Angels. The schedule follows:

<b>April</b>	
3-4	Sanford, Fla.
17-18	MCAS Cherry Point, N.C.
24-25	MCAS Yuma, Ariz.
<b>May</b>	
1-2	Yakima, Wash.
8-9	Latrobe, Pa.
15-16	Lexington, Ky.
22	NAS Patuxent River, Md.
24	USNA Annapolis, Md.

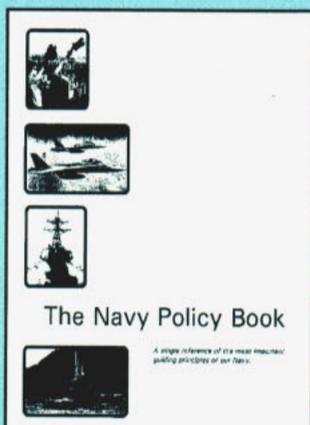


- 29-30 Columbia, Mo.  
**June**  
 5-6 Kalamazoo, Mich.  
 12-13 NAS South Weymouth, Mass.  
 19-20 Oklahoma City, Okla.  
 26-27 Kankakee, Ill.  
**July**  
 3-4 Elmira, N.Y.  
 10-11 NAS Whiting, Fla.  
 17-18 Hibbing, Minn.  
 24-25 Offutt AFB, Neb.  
 31 Seattle  
**August**  
 1 Seattle  
 7-8 Eugene, Ore.  
 14-15 NAS Miramar, Calif.  
 21-22 Avoca, Pa.  
 28-29 Malmstrom AFB, Mont.  
**September**  
 4-6 Cleveland  
 11-12 NAS Oceana, Va.  
 18-19 Reese AFB, Texas  
 25-26 Lafayette, La.  
**October**  
 2-3 NAS Cecil Field, Fla.  
 9 San Francisco  
 10 NWC China Lake, Calif.  
 16-17 Hawaii  
 24 NAS Point Mugu, Calif.  
 30-31 El Paso, Texas  
**November**  
 6-7 NAS Dallas, Texas  
 12-13 NAS Pensacola, Fla.

### Navy Policy Book hits the street

The Navy Policy Book, a single-source reference of the Navy's ideals, guiding principles, missions and policies, is now available from the Navy Aviation Supply Center.

The maximum number of copies that can be ordered is 1,000. Place your order to: Navy Aviation Supply Office, 5810 Tabor Ave., Philadelphia, Pa. 19120-5099 (formerly Navy Publications and forms center), NSN 0584-LP-541-4800.



### NCOA offers job listing service

The Non Commissioned Officers Association (NCOA), a veterans' service organization that represents the total force, is offering a free listing service to all veterans who are seeking employment.

The service is called the

"People Bank/Resume Registry," and it uses NCOA's unique "Mini Resume" to enter a job seeker's qualifications into a computer data base that is accessed by hundreds of companies across the nation.

Membership in the organization is not required and there are no rank or grade restrictions. All veterans, family members and DoD civilians are eligible to use this free service.

To obtain a "Mini Resume," contact any local NCOA Service Center or write to: NCOA, Veterans Employment Assistance Program, P.O. Box 33610, San Antonio, Texas, 78265.

### Gulf vet blood donation ban lifted

Effective Jan. 1, DoD has lifted the ban on blood donations from military personnel who served in the Persian Gulf area.

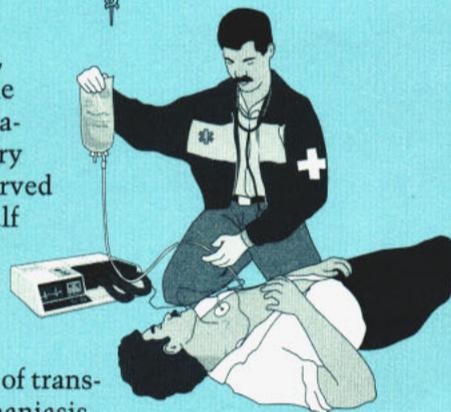
The ban was ordered in November 1991 to reduce the risk of transmission of leishmaniasis, a parasitic infection caused by the bite of a sandfly.

During the 14-month deferral period, no scientific evidence was found

to conclude that the infection posed a threat to the blood supply.

Twenty-eight cases of the infection were confirmed in U.S. personnel who served in Operations *Desert Shield and Storm*. Eleven of the personnel had the internal form of the infection and the other 17 had the skin disorder variety. There have been no cases where the infection has been transmitted through the blood supply.

DoD will continue to screen personnel interested in donating blood and blood already donated by military personnel for the infection. □





# Co

**T**he world is at a crossroads and **you** alone hold its fate. What will you do? Will you continue to treat the earth and its resources as if they are disposable? Or will you get with the program and ask “What can I do to help?”

According to sea service tradition, when someone is called “green,” it means a sailor who is inexperienced or seasick, but there is another meaning — a commitment to the environment. In this edition of *All Hands*, you will see what we are doing to be good stewards of the environment and how we must develop new ways to be “earth friendly.”

If you look beyond the headlines, you will find innovative programs didn’t begin at the top — they began with people like **you**. You don’t have to be a chief petty officer or an officer to bring about change, but you do have to act. You just need to act! Convert your thoughts and ideas into collective action for the better.

# Condition green

## A call to action

The next time you hear or read about the growing hole in the ozone layer or the rampant destruction of the world's rain forests, don't ask how this can be happening. Instead, ask what you can do to reverse their course — drive less or conserve paper. Your idea can turn into a policy change Navywide with every sailor and Marine, spouse and child pulling together to save and protect our environment.

The fate of our world is in your hands — what are **you** going to do?

# Simple things you can do to help save the **Enviro**

## Pre-cycle

**Think ahead! Figure out how you're going to dispose of a product and its packaging before buying.**

## Recycle Glass

**Glass never breaks down — it can be recycled forever! Glass is such a popular recyclable that most bottles and jars contain at least 25 percent recycled glass. Glass can be recycled the same way as aluminum.**

## Recycle Aluminum

**Recycling aluminum is much more efficient than producing it from raw materials. Twenty aluminum cans can be recycled into new containers with the same amount of energy it takes to make one from scratch. Some base housing areas have set up curbside recycling systems. The same is true of many civilian communities. If curbside recycling is not available, you can take your recyclables to the nearest recycling center.**

**A**lmost any day of the week you can turn on your radio or television and hear about some environmental disaster or another — oil tankers running aground and spilling millions of barrels of oil into the ocean; holes in the earth's protective ozone layer; or the Brazilian rain forest disappearing before our very eyes.

There is probably little you can do to keep tankers on course, to patch up the ozone or to keep loggers from destroying woodlands. But you *can* take steps every day to see to it that fewer tankers are needed, that fewer ozone depleting chlorofluorocarbons (CFCs) are poured into the atmosphere and that there is a smaller call for the products that result from the destruction of rain forests. Here are a few simple things you can do to help the environment.

## Ecology Quiz

1. How many pounds of paper does the average office worker produce a day?

2. For every ton of paper we recycle, we save how many trees, how many barrels of oil, how many gallons of water and how many cubic yards of landfill space?

3. How many pounds of household hazardous waste does an average household generate per year?

4. What percentage of waste

placed in security holders is inappropriate material and should be placed in the ordinary waste basket, or better yet, in the recycled white paper bin?

5. How much packaging is used to wrap and decorate consumer products?

6. What products make up the largest proportion of our waste by weight?

7. If you substitute public trans-

# ment

## Recycle Paper

Every year Americans throw away 4 million pounds of office paper. That's enough to build a 12-foot-high wall of paper from California to New York. Check the yellow pages for a paper recycler. Some will even come to your office to pick it up.

## Use Cloth Grocery Bags

They're sturdy and reusable. If every household in America did, we could save as many as 60,000 trees for every trip to the grocery store.

## Stop Receiving Junk Mail

Send your name and complete address to Direct Marketing Association, Attn: Mail Preference Service, P.O. Box 9008, Farmingdale, N.Y. 11735 and they will take you off national mailing lists used by most mail order companies.

portation or double-up in a car or van pool for just five miles of daily commuting, how many miles or gallons of gas will you save during a six month period of time?

8. How many trees could we save every week if we recycled newspapers?

9. Why is a tin can called such when it is really mostly steel? Are they recyclable?

10. Which country has the highest

aluminum recycling rate?

11. Which country recycles more than half its household and commercial waste?

12. How much glass could the average American save per month to be recycled?

13. What percent of trash does glass thrown out in U.S. households make up?

14. What percent of trash is recycled?

15. How much crude oil does it take to produce just one rubber truck tire?

16. How many pounds of aluminum cans can one paper grocery bag hold?

17. How much energy can you save by recycling one aluminum can?

18. How much of America's oil is imported?

*Turn to Page 8 for answers.*

### **Recycle Phone Books**

Some recycling centers take phone books, and many phone companies are beginning to set up their own recycling programs. Each year, 650,000 tons of paper are used in phone books. Before recycling your yellow pages, use them to find a recycler that will take them.

### **Recycle Plastic**

The EPA has a list of chemicals that generate the most hazardous waste during production. The plastics industry uses five of the top six. Plastic can be recycled the same way as aluminum.

### **Snip 6-Pack Rings**

Those plastic 6-pack rings used for beer, soda and oil, etc., are lightweight. This makes them easy to lose at the beach and allows them to blow around in landfills. If they end up in the water they are deadly to fish, birds and sea mammals. If you snip or simply tear the rings, they won't strangle or be ingested by innocent marine life.

### **Re-use Your Christmas Tree**

Next Christmas, use a living Christmas tree — you can transplant it after the holiday. Check with your local nursery to find out how.

## **Answers to the Ecology Quiz**

1. A rule of thumb is that every employee produces one-half pound of paper per day. The most valuable is white, high-grade office paper and it is the easiest to recycle.

2. For every ton of paper we recycle, we save 17 trees, 25 barrels of oil, 7 million gallons of water and three cubic yards of landfill space.

3. The average household generates more than 20 pounds of household hazardous waste per year.

4. A mini-study reveals that as much as two-thirds of the material placed in security holders does not have to be shredded/pulverized for security requirements because of category. Such items found at the shredding facility include: magazines, newspapers, cans, yesterday's lunch, etc.

5. One half the nation's paper and one third of our plastic goes into packaging.

### **Carpool to Work**

Each year traffic congestion on U.S. streets wastes 3 billion gallons of gasoline — about 5 percent of our total gasoline consumption. By carpooling you'll be saving gas, plus most bases have special parking privileges for those who do. Carpooling just eight miles saves about 4,000 auto miles per person, per year.

### **Don't Buy Juice Boxes**

Juice boxes are made from aluminum foil, paper and plastic — they can't be recycled. Besides, it's cheaper to buy juice in large quantities and keep it in a reusable container.

### **Take Care of Car Tires**

Tires have a bigger impact on the environment than you may think: It takes half a barrel of oil to produce the rubber needed for one truck tire. Also they cause problems in landfills — they're bulky, don't decompose and provide breeding grounds for mosquitoes. By buying longer-lasting, more fuel-efficient tires and ensuring they are properly inflated, balanced and rotated on a regular basis, your tires will last much longer.

### **Recycle Car Batteries**

Your car battery contains 18 pounds of toxic lead and a gallon of sulfuric acid — not exactly the kind of stuff you want floating around in your drinking water. Most retailers who sell batteries gather old ones and recycle in bulk.

6. Paper and paperboard take the lead; yard waste comes in second.

7. You'll avoid almost 600 miles of driving that can translate into 30 gallons of gasoline you would normally have to buy and burn.

8. About 62 million newspapers are bought by Americans every day; 44 million of these are thrown away. This means the equivalent of 500,000 trees are dumped into landfills every week.

9. "Tin" cans, as we know them in our homes, are actually steel with a tin coating. Food was first canned in the early 1800s, and today's technology has allowed the tin coating to become progressively thinner. Tin is now less than 0.333 percent the weight of the can. Yes, tin cans are 100 percent recyclable. The tin and steel are recovered separately and today's cans are already 25 percent recycled steel.

10. The Netherlands.

11. Japan.

12. Six pounds.

13. 8 percent.

14. Only 10 percent.

15. One half a barrel.

16. About 1.5 pounds.

17. Enough to run a TV set for three hours.

18. About 50 percent. Saving energy by recycling means less dependency on foreign supplies.



# Treasure

Story and photos by JO1 Celeste Barrett Rubanick

**T**he slogan on Maryland license plates reads "Treasure the Chesapeake." Military and civilian personnel at the Naval Explosive Ordnance Disposal Technology Center (NavEODTechCen), Indian Head, Md., do just that when volunteers annually clean the beach along the Potomac River. The center recently held its fourth annual beach clean-up.

"It's interesting to compare each year's haul," said retired Master Chief Engineman Jack Myers. "In 1992, we picked up 5,859 pounds of trash along 1.8 miles of beach."

While some volunteers combed the beach and knee-deep water, others climbed into three rubber boats and

**"All of us — fish, critters and humans — use these waters and need them to be clean."**



**Above:** Volunteer Richard Strelin carries a 55-gallon drum to the trash pile to be weighed and inventoried. **Right:** BMC Kevin Osborne and Jason Shafer unload trash from one of the rubber boats.



**“If people would just think before throwing things into the water. . . .”**



# the Chesapeake

one johnboat to collect trash in deeper water. Each object was categorized — glass, plastic, rubber or metal — and placed into bags with similar objects for recycling later. Tires were a common item, along with quart-size oil containers, anti-freeze bottles and various metals. A styrofoam-filled fuel tank, water heater, propane tank and acetylene cylinder were some of the uncommon items encountered by the group.

Hull Maintenance Technician 1st Class (SW/DV) Glen Rubin was participating in his first beach clean-up. “This will make the Potomac, and ultimately the Chesapeake, a prettier and cleaner place for everyone,” Rubin said. “All of us — fish, critters and humans — use these waters and need them to be clean.”

EOD personnel, who frequently dive in the Potomac, are the first to see the water change for the better. “It has gotten cleaner and clearer in the past several years,” said Senior Chief Engineman (SW/DV) Craig Settler. “If people would just think before throwing things into the water, we wouldn’t be here and my job would be easier.” □

*Rubanick is a Naval Reserve journalist assigned to Public Affairs Center, Norfolk.*

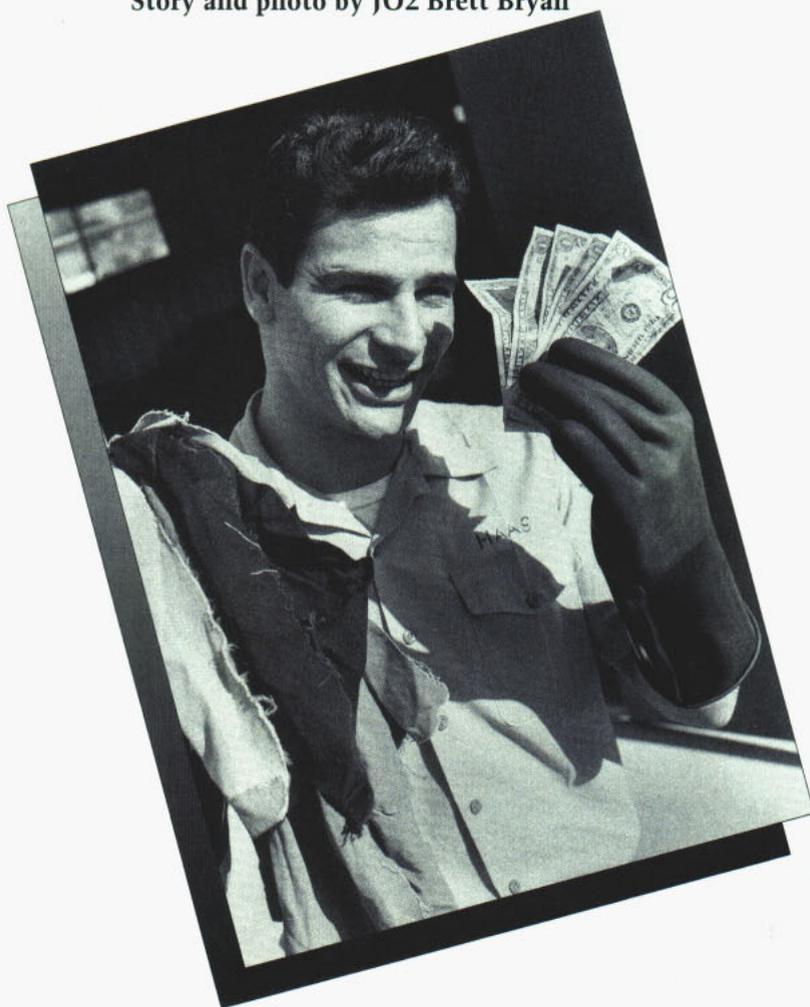


**Top:** During the beach clean-up almost 3 tons of trash was collected. **Above:** BM2(SW) Terry Burlingame volunteered to collect bags of debris to be weighed. **Left:** Jason Shafer surveys a trash-filled boat ready to be unloaded.



# From rags to Riches

Story and photo by JO2 Brett Bryan



**M**achinist's Mate 2nd Class James Haas' effort to protect the environment is a real rags to riches story.

Haas runs the rag recycling facility at Naval Air Station (NAS) Miramar, Calif. He takes rags contaminated with paints, oils and lubricants from aircraft maintenance facilities at Miramar and washes them. It doesn't sound like much, but this year he saved the base about \$300,000 in hazardous waste disposal costs.

"One drum of rags costs about \$445 to dispose of — to recycle it costs about \$45," said Haas. "Instead of sending 10 drums of contaminated rags to the landfill, we can send one drum of liquid waste [left over from the washing] to be incinerated," Haas said.

Haas's thrift is only matched by his enthusiasm. At first, he said he wasn't too thrilled to be the "rag man," but once he saw the benefit to the environment, he was onboard whole-heartedly. "Every drum recycled is one drum that isn't going to go to a landfill. The bottom line is we're running out of places to put them. If we [the Navy] don't take aggressive steps now toward hazardous waste reduction, we're going to run out of places to put things," he said.

Haas said he's learned even if he isn't a manager, he can influence the chain of com-

**"If we [the Navy] don't take aggressive steps now toward hazardous waste reduction, we're going to run out of places to put things."**

mand by his example. "I can show decision-makers that a successful recycling program can be maintained, and I can show the savings.

"My goal is to get this program implemented Navywide — on the largest shore facilities and the largest ships," Haas said. □

*Bryan is a staff writer for All Hands.*

# Forester sees natural treasure in Cecil's timberlands

Story and photo by Loren A. Barnes

**W**hen our founding fathers came to this place in the 1500s and named it 'La Florida' [the flowers], they must have seen something different than what we see today," said Hank Cochran, Navy forester at Naval Air Station Cecil Field, Fla.

Through the Navy's careful management of natural resources, Cochran hopes Cecil Fielders will one day be able to experience subtropical Florida as it was when those early explorers found it.

Cochran, a native Floridian, brought years of forest management experience and enthusiasm to Cecil Field when he assumed his duties last year, and has already implemented several plans to improve and protect the base's 16,000 acres of timberland.

"We need to do a lot of timber stand improvements, thinning out the diseased or malformed trees and allowing more vigorous trees to grow," he said. In some areas, Cochran has marked every sixth row of pine trees to be harvested and sold for pulp, lumber or poles, depending on their maturity. Seedlings will be planted to provide tomorrow's forests.

Cochran pointed out that fires caused by lightning were once a natural part of the regenerative cycle in Florida before man started con-



trolling blazes.

"Certain wildlife requires fire for survival," he explained. "Four to five years without fire in a quail habitat and quail will disappear. Some plants, such as orchids, depend on fire for seed germination. These plants need burns to survive. A lot of our native plants on endangered lists are out there — we just have to get some kind of fire disturbance or other management activity to expose them."

Cochran has scheduled more than 1,000 acres for controlled burning during the year.

Fish and game management is another priority for the forestry program. There is already a variety of wildlife on base, including turkey,

**Navy forester Hank Cochran marks trees for thinning at NAS Cecil Field, Fla.**

deer, alligators, egrets and gopher turtles. Cochran stresses that game management is a matter of balance. "What's good for the turkeys may not be good for the mockingbirds," he said.

Cochran also hopes to continue beautification of the base through "urban forestry" — planned landscaping that not only adds beauty but helps nature while reducing the energy and maintenance costs of buildings. □

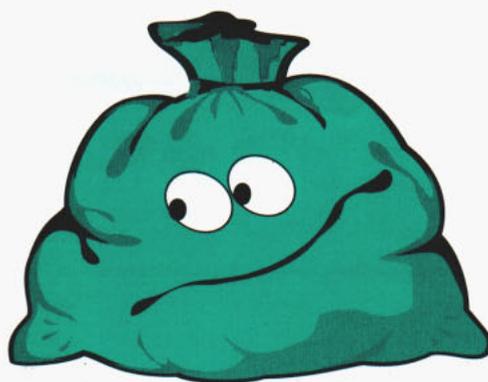
*Barnes is assigned to NAS Cecil Field, Fla.*

Life inside a

# garbage



# bag



Story by JO2 Brett Bryan

**D**eep in Middle America, in the recesses of a medium-sized kitchen garbage bag, four used receptacles pondered their fate.

"Decomposition!" said a gruff old milk carton. "Gradual deterioration until there is nothing left. Dust to dust I say."

"That may be fine for you and the can," said an empty plastic bottle, "but I'm a space-age polymer — I won't degrade for thousands of years."

"I thought you were bio-degradable," said an empty can.

"No, I'm supposed to be photo-degradable. Which means I'll only degrade if I'm left in sunlight, and there's little chance of that in a landfill," the plastic bottle said. "Decomposition may be a factor for you and the can, it's just not relevant for me and picklehead here."

"Doesn't glass decompose?" the pickle bottle asked meekly.

"Not really," replied the plastic bottle. "Eventually you may break up into smaller pieces until you wind up like the sand you came from."

"But I never was sand. I was a bottle before. Can't I be a bottle again?" the bottle asked.

"I was a bottle before, and I'll be a bottle again," the carton mimicked. "A bunch of new-age nonsense. All this reincarnation stuff is bunk."

"Recycling."

"What?" the carton asked angrily.

"It's recycling, not reincarnation, and it happens all the time," the plastic bottle said. "Used containers can

be recycled and used again."

"Nonsense. I was never recycled. I came from a tree in the great Northwest," the carton said forcefully.

"There's no law that says this is it," the plastic bottle retorted. "We don't have to end up in some landfill. We can be recycled and used again."

"I was recycled before. Look!" the bottle said and lifted a little so the rest of the group could see her underside. On the bottom of the bottle it said: *Made from 100 percent recycled glass.* "See, I told you," she said.

The can perked up. "Could I end up a bottle?" he asked.

"No you wouldn't end up a bottle. But you could end up as part of a jet airplane. When you are recycled, your basic make-up probably won't change much, but your form may. You might not be a can anymore."

"It doesn't matter anyway," the carton said. "We're all here in the bottom of a garbage bag. We'll never end up anywhere but in a landfill. Face facts, it's over."

"Oh man! I was really looking forward to being a jet airplane," the can said disappointedly.

"I'm afraid carton may be right. Once in this garbage sack, there

isn't much chance of being recycled. It would be nice if people would separate their garbage and put it into individual recycling bins," the plastic bottle added. "But it looks like this is our fate."

The four items let out a collective sigh and a gloom set in over life in the bag. □

Bryan is a photojournalist for All Hands.

## Decomposition times for ordinary household items

	PAPER 2-4 weeks
	COTTON RAG 1-5 months
	ROPE 3-14 months
	BIO-DEGRADABLE PLASTIC BAG 2-3 months
	BAMBOO POLE 1-3 years
	WOODEN STAKE PAINTED STAKE 1-4 years 13 years
	TIN CAN 100 years
	ALUMINUM CAN 200-500 years
	PLASTIC 6-PACK RINGS 450 years
	GLASS BOTTLE 1 million years

# Making a difference



Story and photo by JO2 Brett Bryan

**O**ne sailor's efforts have not only helped save the environment but have made him \$700 richer.

Aviation Structural Mechanic (Hydraulic) 2nd Class Isidro Raymundo, of Fighter Attack Squadron (VF) 24, was preparing drained hydraulic fluid cans for disposal when an idea came to him.

"Instead of disposing of the used cans, why don't we recycle them?"

**"Instead of disposing of the used cans, why don't we recycle them?"**

he asked himself. "The only reason these cans are classified as hazardous is because of the small amount of fluid left after use," Raymundo said.

"By opening both sides of the can and cleaning it out with a rag, the hazardous liquid left is acceptable for recycling. Base recycling is then able to sell the cans."

According to Raymundo, more than 300 barrels a year at a disposal cost of \$400 each don't go to the landfill — saving more than \$100,000. Raymundo's idea not only benefited the Navy and the environment, it helped him earn a beneficial suggestion check of \$700. □

*Bryan is photojournalist for All Hands*

ALL HANDS

# Paint Paint Paint

## Passing on the savings

Story by JO1 Steve Orr

If it moves, salute it. If it doesn't, paint it. Now another line can be added to this old adage. "After you paint it, recycle your paint."

It used to be difficult to dispose of hazardous materials, like paint. Now Naval Air Station Norfolk's supply department has made it easy to do. Larry Odietus, an equipment manager in the department, organized a paint recycling center at a warehouse on the air station.

"A gallon of paint can cost less than a dollar," Odietus said. "It can cost up to \$16 to safely dispose of that same gallon of paint."

"At the recycling center I have all kinds

of paints, adhesives, cleaning solvents, lube oil and hydraulic fluid. When a command has too much of any of these materials, they can turn it in to me. I'll take anything that we can save money on and that the average person can handle safely. I'll turn around and reissue it to another com-

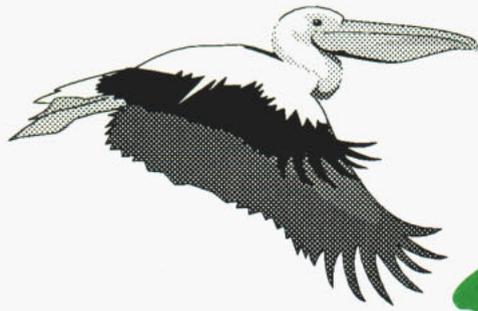
mand at no cost. Disposal costs are saved, and it saves money for the command receiving the item."

The material is issued for official use only, Odietus stated.

The recycling center has enthusiastic supporters among its users. "It's a good deal for the command and for everyone in general," said Aviation Boatswain's Mate (Handler) 2nd Class Michael White, a recycling center customer. "You don't have to store any unwanted hazardous material and it also helps out anyone who needs the stuff you don't use." □



*Orr is assigned to NIRA  
Det. 4, Norfolk.*



# BEAKS



Photo by Lynne M. Campbell



Photo by LCDR David G. Campbell

**Top:** LCDR Campbell holds a red-tailed hawk he rescued for BEAKS. **Above:** A red-tailed hawk is ready to be released near Jacksonville. **Right:** A great egret is another species helped by BEAKS.

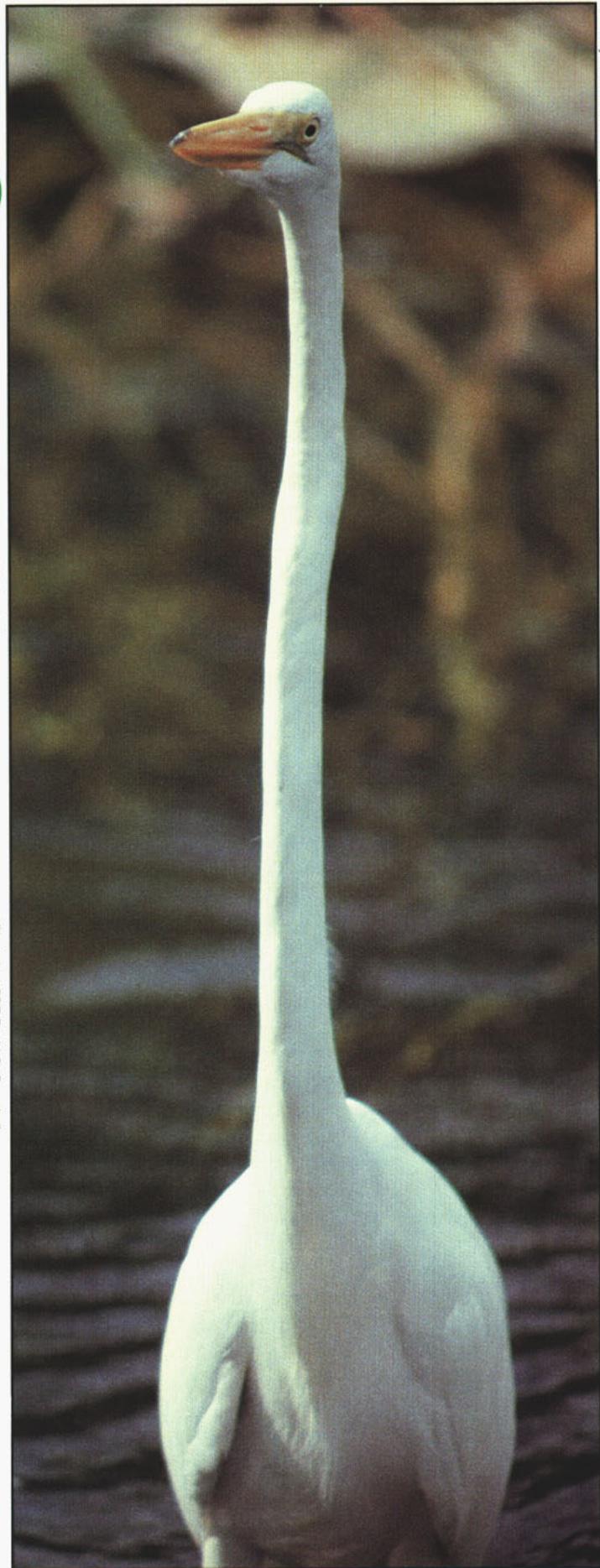


Photo by LCDR David G. Campbell



Photo by LCDR David G. Campbell

Barred owls (left) and bald eagles (below) have also been rescued by BEAKS during the past 10 years.

### Story by JO3 Sherry Coles

**T**hanks to the vigilant eyes of LCDR David G. Campbell and his friends, the wildlife at Naval Air Station (NAS) Jacksonville, Fla., enjoy a healthier coexistence with the Navy.

Campbell, a readiness officer for Commander Helicopter Wings Atlantic, is one of many volunteers who rescues injured birds for the Bird Emergency Aid & Kare Sanctuary (BEAKS). Recently, he set free a healthy chipping sparrow that he found injured in his backyard.

"The sparrow had a broken wing," Campbell said. "I immobilized it and took the bird to a local veterinarian. After about two weeks the bird's wing had healed enough to be set free."

Others at NAS Jacksonville are just as concerned for wildlife. When alerted by the naval community, BEAKS volunteers retrieve birds injured by aircraft or fishing line.

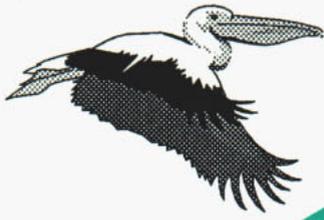
"I retrieved a red tail hawk and an osprey off of the runway," said Cindy Mosling, the president of BEAKS. "I'm happy we have a good working relationship with the folks at NAS Jax. We want to save these birds and are more than willing to come to their aid. It's wonderful that people at NAS Jax pay attention to the wildlife on base."

The BEAKS program is run by Mosling and her husband Andrew Liliskis. The program started more than 10 years ago when Mosling and Liliskis lived next door to a veterinarian.

"One day the vet had to go out of town and asked me to care for an injured sea gull," Mosling said. "That was how BEAKS began. I enjoy taking care of animals, though seeing them hurt is emotionally



Photo by LCDR David G. Campbell



# BEAKS

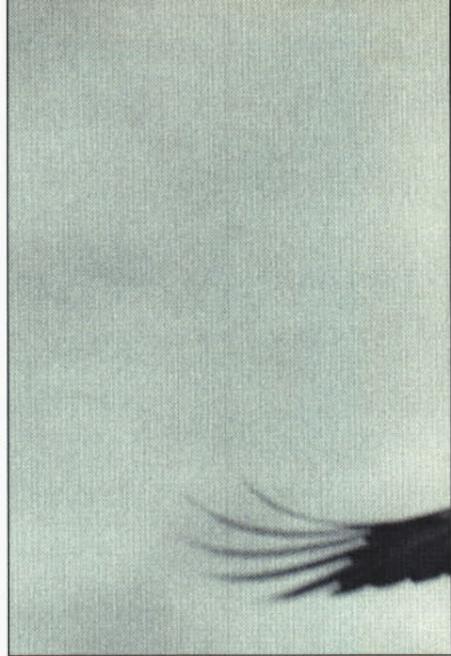
draining."

Since the program's conception, 24,000 birds have been cared for, and 165 volunteers have been trained and certified to transport wildlife. Mosling also goes to area schools to teach safe hunting procedures.

"About 99 percent of the wounds are caused by cars, guns and fishing line," Mosling said. "We spend a considerable amount of time educating students on safety procedures. This should lessen the amount of injury to wildlife by man." □

*Coles is a staff writer for Jax Air News, Jacksonville, Fla.*

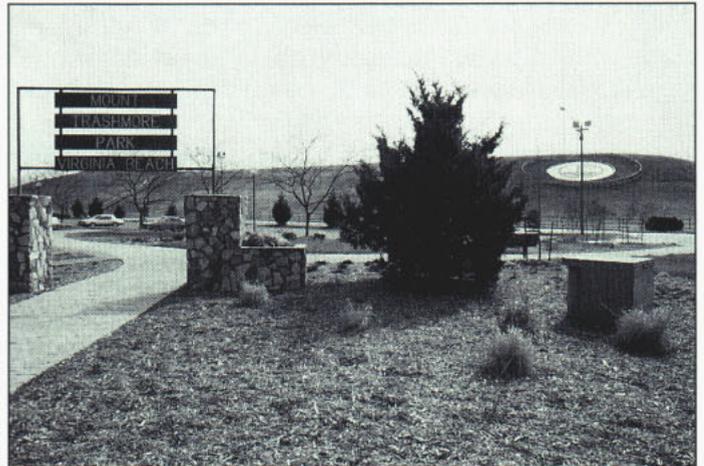
Photo by LCDR David G. Campbell



# MAKING A MOUNTAIN OUT OF A TRASH-HEAP

Story by JO2 Paul Taylor

Photo by JO1 Steve Orr



**I**n 1966 the city of Virginia Beach, Va., came up with an innovative solution to the problem of what to do with the city dump — convert it into a park.

The idea was simply to build a mountain out of trash. Then, when the landfill reached capacity, cover it with soil and grass, install picnic shelters, playgrounds, rest rooms and more. The four-and-one-half year project resulted in a 68-foot high, 800-foot long mountain.

Today, Mount Trashmore, as the park is called, draws people by the thousands. It's hard to believe it's the home of 640,000 tons of solid waste.

Perhaps the best thing about this landfill is that it will continue to provide the people of Virginia Beach with a wide assortment of recreational opportunities — a much better fate than that of most landfills that are left like open sores on the land. □

*Taylor is a staff writer for All Hands.*



# The forest primeval

*Volunteers restore wildlife preserve*

Story and photo by Loren Barnes

**Y**ou're standing in the middle of a seemingly untamed forest, but believe it or not you're actually aboard a very busy naval air station.

The result of months of planning and hard work under the Florida sun, Naval Air Station Cecil Field's Nature Trail and Wildlife Habitat is aimed at preserving a piece of the environment, not only for the sake of conservation, but also for the enjoyment of visitors.

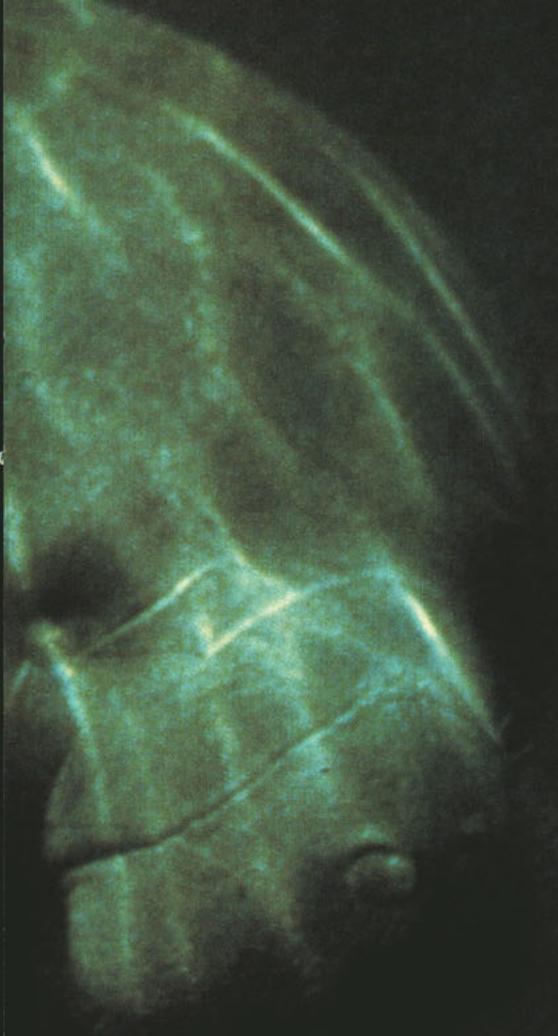
The all-volunteer effort took 13 months to complete. The first task was to clear the area of the litter that had built up over the years. During one clean-up day alone, volunteers recovered 458 pounds of plastic, glass, rubber, metal and wood — all of which were taken to the base recycling center for disposal. □



The nature trail offers kids from Jacksonville the opportunity to interact with nature.

*Barnes is a staff writer for Cecil Field's base newspaper, The Airwinger.*





Story by JO2 Gregory W. Belmore

**T**hey look like a cross between a walrus and a dolphin. Their large, lumbering bodies, natural curiosity and gentleness have prompted the nickname, "sea cow." But the manatee, for all its gentleness, is in danger of extinction.

Once hunted for its flesh, hide and oil, only about 1,450 West Indian manatees remain in Florida waters, including those off Naval Air Station, Jacksonville. Since federal and state laws were enacted to protect the mammal, motorboats are the animal's biggest predator today. To protect them from boat-related injuries or death, the air station designated a manatee refuge/motorcraft exclusion area, where the only boat power allowed comes in the shape of a paddle.

"We own 5.5 miles of coastline," said CAPT Charles Cramer, the air station's commanding officer. "The manatees frequent this coastline so it's only logical that we play a key part in the program."

Manatees are part of DoD's Legacy Resource Management Program. Other naval installations in the southeast, such as Naval Submarine Base Kings Bay, Ga., are also actively protecting these gentle giants by installing propeller guards on tugs and small boats.

"Because they are an endangered species, it's important to protect them," said Sandy Maynard, NAS Jacksonville's natural resources manager. "They are curious, gentle animals that won't bite. You can't help but love them."

*Belmore is assigned to NAS Jacksonville, Fla.*

# Gentle Giants

U.S. Fish and Wildlife Service photo by James Powell



**ALL HANDS**

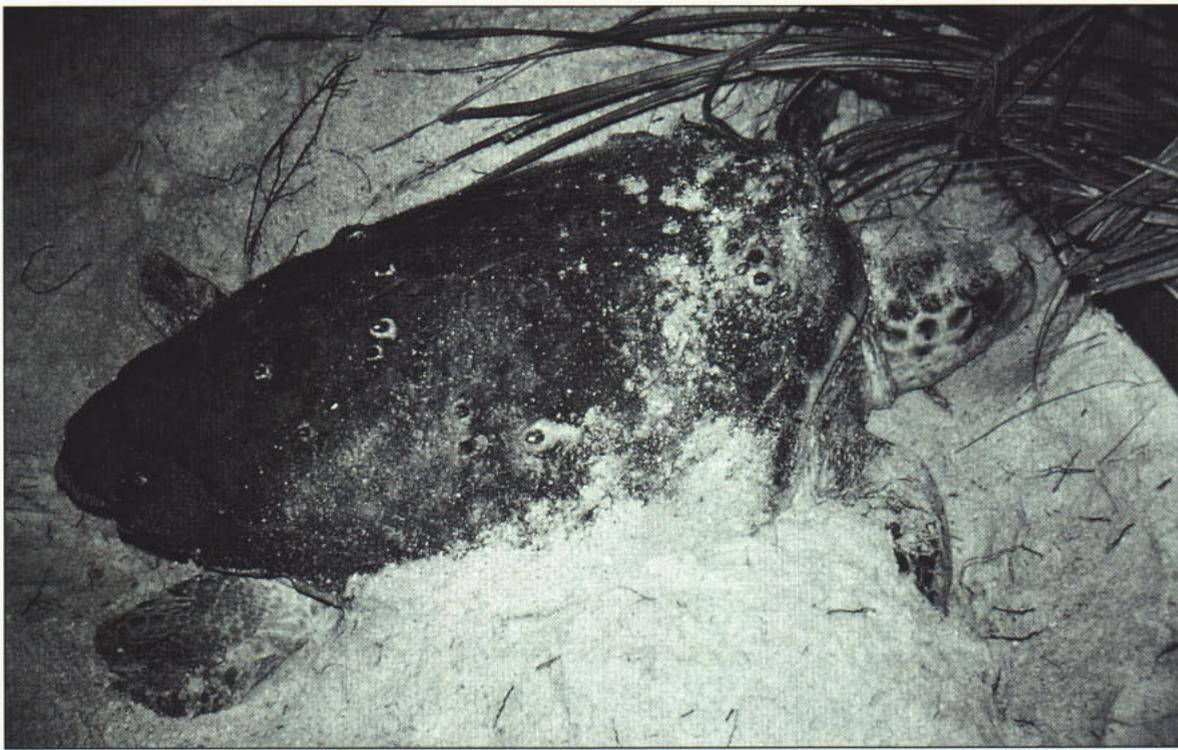
***Where once we hunted, now we  
protect. Where once we dumped,  
now we clean and promote life.  
We've grown kinder and gentler and  
in the process, perhaps a little wiser.***



# Closer to NATURE

*Conservation efforts at Dam Neck focus on  
wetlands, beach preservation*





Story by JO1 Steve Orr

**E**ven in a Navy that's downsizing, Fleet Combat Training Center Atlantic Dam Neck, Va., has one segment of its population growing at an incredible rate. Because of efforts to preserve Dam Neck's wetlands, the animal population is rapidly increasing, according to Jimmi Bonavita, Dam Neck's natural resource specialist. "We have everything," Bonavita said, listing among the base's wildlife, the grey fox, muskrat, raccoon and bobcat.

The base has 450 acres of wetlands — 26 of them man-made — according to Andy Porter, Dam Neck's engineering director. "No one is allowed free access to the natural wetlands," Porter said.

While the wetlands are allowed to maintain themselves naturally, Dam Neck's beaches need human intervention to repair erosion damage caused by storms.

To preserve the dunes, sailors erect, maintain and replace nearly six miles of dune fencing every year. "Dune fencing replacement is a self-help project using volunteers," said LT Les Steele, deputy base civil engineer.

When a fence is in place, windblown sand collects on it and builds up the dunes. No one is allowed to walk or drive across the dunes. Instead, six crossovers (wooden bridges) allow beachgoers to cross to the beach.

"Environmental protection is something we must take responsibility for," said Mess Management Specialist 1st Class Nancy Vaughn, a dune fencing volunteer. "It's important to protect Dam Neck's dunes and wildlife." □



**Opposite page:** Careful care of Dam Neck's wetlands have brought a variety of wildlife, including these loggerhead snow geese, back to base property. **Top:** Rare loggerhead turtles have chosen beaches at Dam Neck to lay eggs. **Above:** Individual efforts, like these volunteers replacing dune fences at Dam Neck, are the key to saving our environment.

*Orr is assigned to NIRA Det. 4, Norfolk.*

Savi



# ng the Shrike

Story by JO2 Brett Bryan,  
photos by Ron Garrison

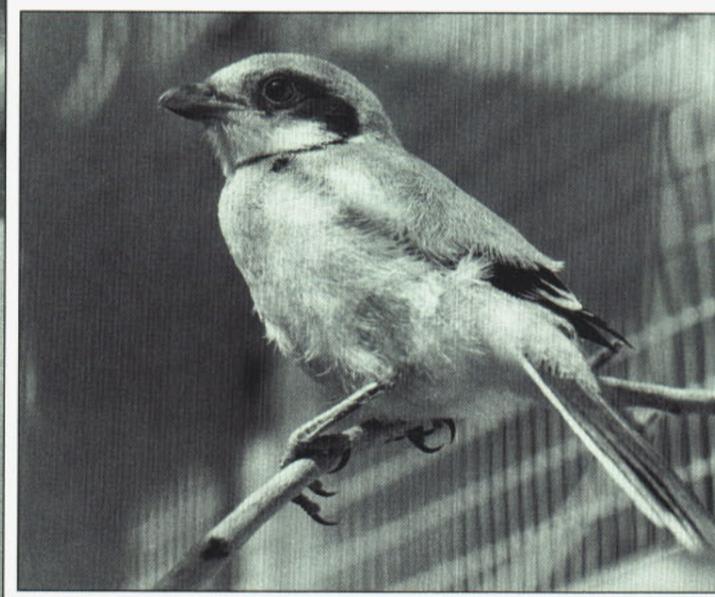
**T**he case of the San Clemente Island loggerhead shrike is a conservation success story for the Navy.

"By 1989, there were only 13 shrikes left on the island, making it one of the most critically endangered birds in the world," said Jan Larson, natural resources manager at Naval Air Station North Island, Calif. The decline resulted from goats eating the island's plants which protected nested shrikes.

The Navy, which maintains the island, began a campaign to save the loggerhead shrike from extinction. Working with the San Diego Zoo, the Navy started a captive breeding program to restore the small birds to a self-sustaining population. "More than a dozen eggs were gathered from different shrike nests on the island and taken to the San Diego Zoo to be hatched," Larson said.

The next step was a captive breeding/rearing facility on San Clemente. Fourteen birds were hatched in the program's first two years. Last year, nine shrikes were released into the wild.

"We hope to remove the shrike from the endangered species list," Larson said. "Our [short term] goal is 50 breeding pairs. We hope that will sustain the population. The shrike recovery program is typical of the Navy's commitment to the environment." □

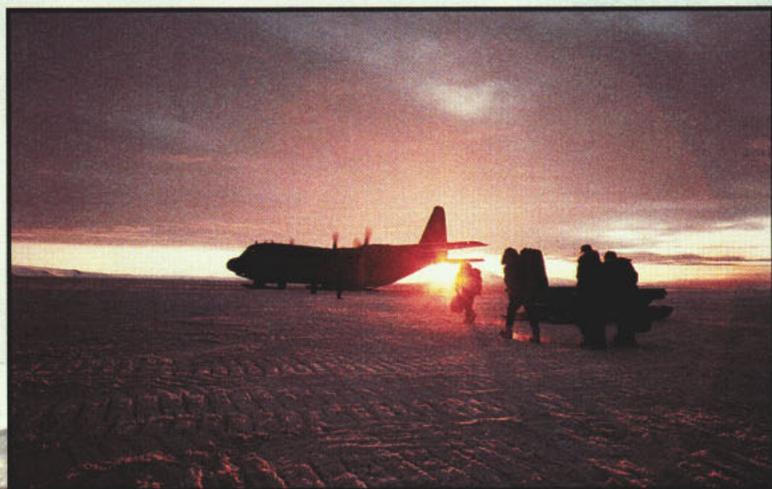


*Bryan is a photojournalist for All Hands. Garrison is with the Zoological Society of San Diego.*

# ANTAR



# CTICA



Story by JO2 Paul Taylor

**A**ntarctica — the last great frontier. Scientists there are studying this continent and conducting crucial research regarding the Earth's ozone layer.

"Without U.S. Naval Support Force Antarctica's (NSFA) crucial support to our program it would have taken much longer to discover the ozone hole," said Guy Guthridge, manager of the National Science Foundation's Polar Informa-

tion Program.

This research wouldn't be possible without the Navy's support of the U.S. Antarctic Program since 1956. NSFA and Antarctic Development Squadron 6 (VXE 6) plan and carry out the complex logistic programs needed to support research efforts in this unforgiving land. Environmental research is one of the program's major efforts.

Antarctica is ideal for this research. Since 1986, researchers have observed the changes in the

ozone layer above the Antarctic. Researchers agree that chloroflourocarbons contribute to the breakdown of stratospheric ozone creating the ozone hole over the region.

"At this point," said Guthridge, "we believe that something may still be done to protect the ozone from further deterioration. Without the Navy, we may not have discovered the hole until it was too late." □

*Taylor is a staff writer for All Hands.*

# Cashing in on trash

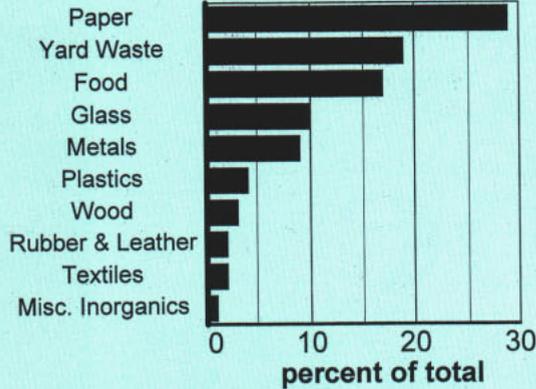
Story and photos by JO1 Steve Orr and JO2 Brett Bryan



A sailor at San Diego separates steel from aluminum at the recycling yard.



**Estimated composition of U.S. residential and commercial solid waste (excluding recycled material)**



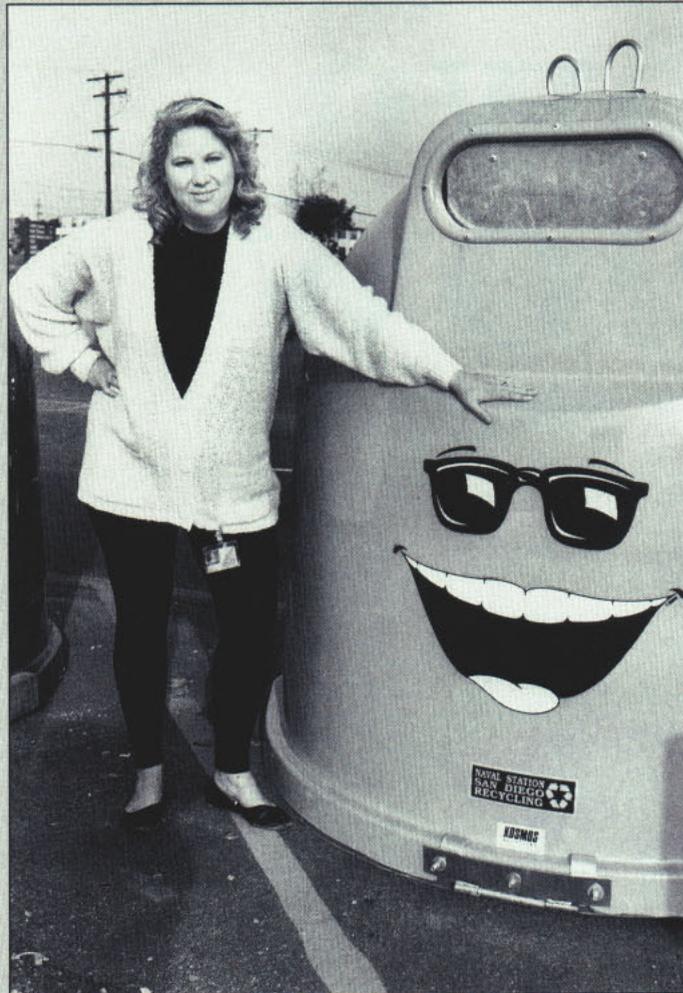
**A**t Naval Station San Diego, if you label an empty can as “trash” the “Recycling Queen” will quickly correct you.

“It’s not trash. It’s recyclable material,” said Theresa L. Morley, recycling program manager at Naval Station San Diego. The base is dotted with more than 140 “igloos” (large colored storage bins), recycling barrels and even personal desktop recycling bins.

More than 15 tons of paper, glass, plastic, steel, aluminum and wood are collected daily and brought to Naval Station San Diego Miniature Materials Recovery Facility (Mini-Murf). Once there, the materials are sorted, baled and sold. Currently the Mini-Murf is making a profit of almost \$6,000 a week, which is given to Morale, Welfare and Recreation. “Our goal is to make \$2 million a year,” Morley said. “We want to recycle up to 90 percent of what we used to throw away.”

The story is similar at Naval Base Norfolk, where the four on-base processing centers are busy with recyclables from the base’s 300 tenant commands and ships.

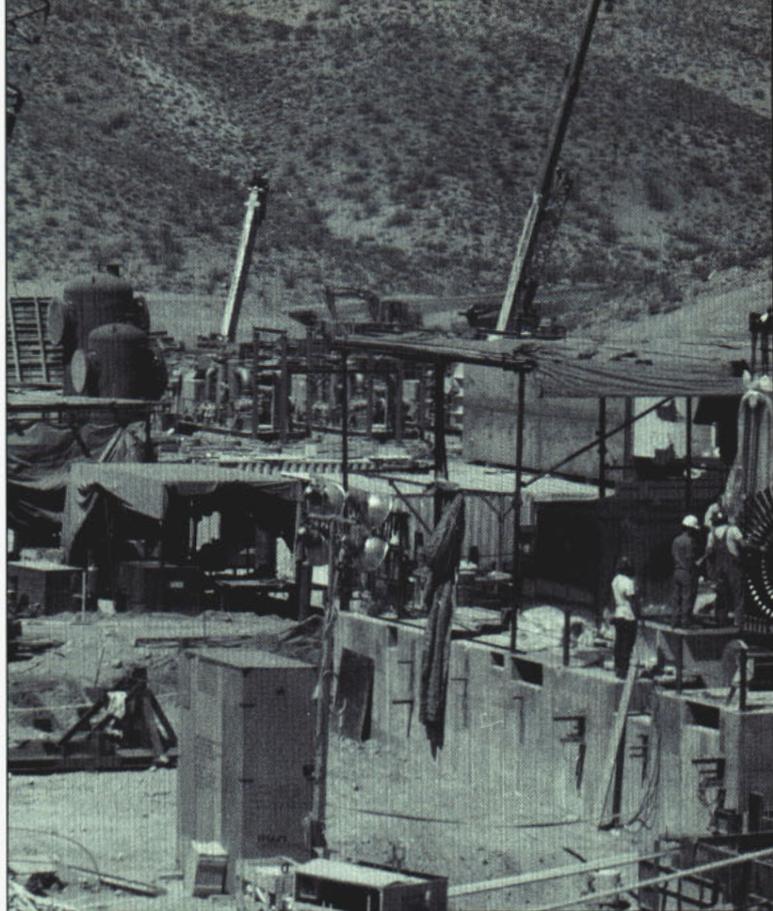
“Right now we process about 100 tons of aluminum a year,” said J.J. Hoyt, manager of Naval Base Norfolk’s resource recovery and recycling program. “In our metal yard, we are handling 50,000 to 75,000 pounds of scrap metal a day. We also process oily waste drums and aerosol cans, saving taxpayers \$300,000 a year in hazardous waste disposal.” □



**Top:** James Meyer, Naval Base Norfolk employee, stacks aluminum bricks that have gone through the densifier. **Above:** Theresa L. Morley, Naval Station San Diego’s “Recycling Queen,” is a driving force behind the base’s successful recycling program.

*Orr is assigned to NIRA Det. 4, Norfolk. Bryan is a photojournalist for All Hands.*

# We got the power down below



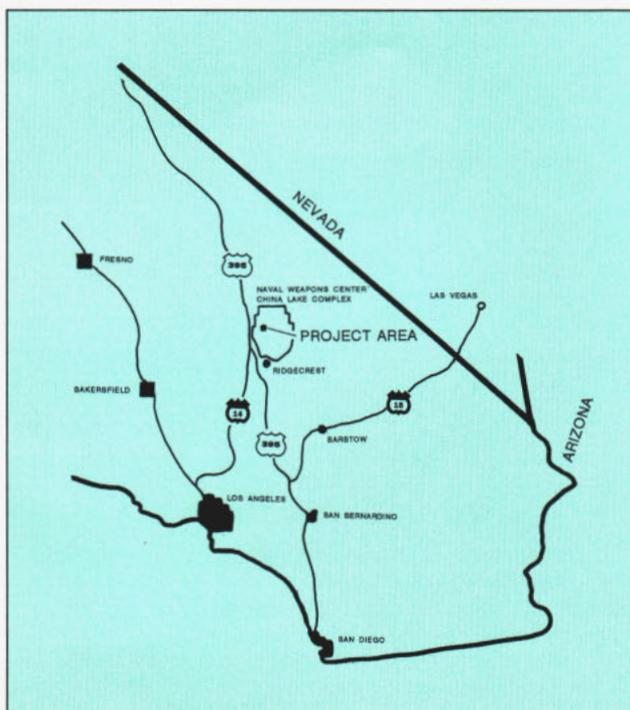
Story by JO2 Brett Bryan

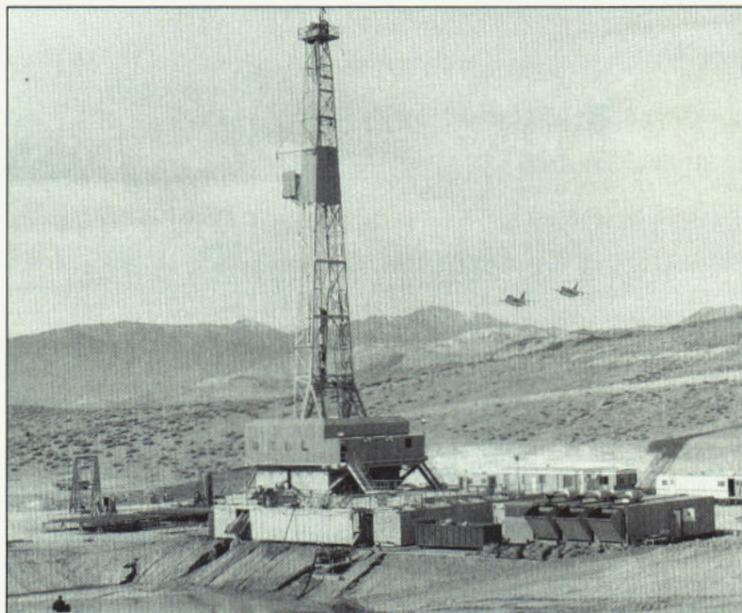
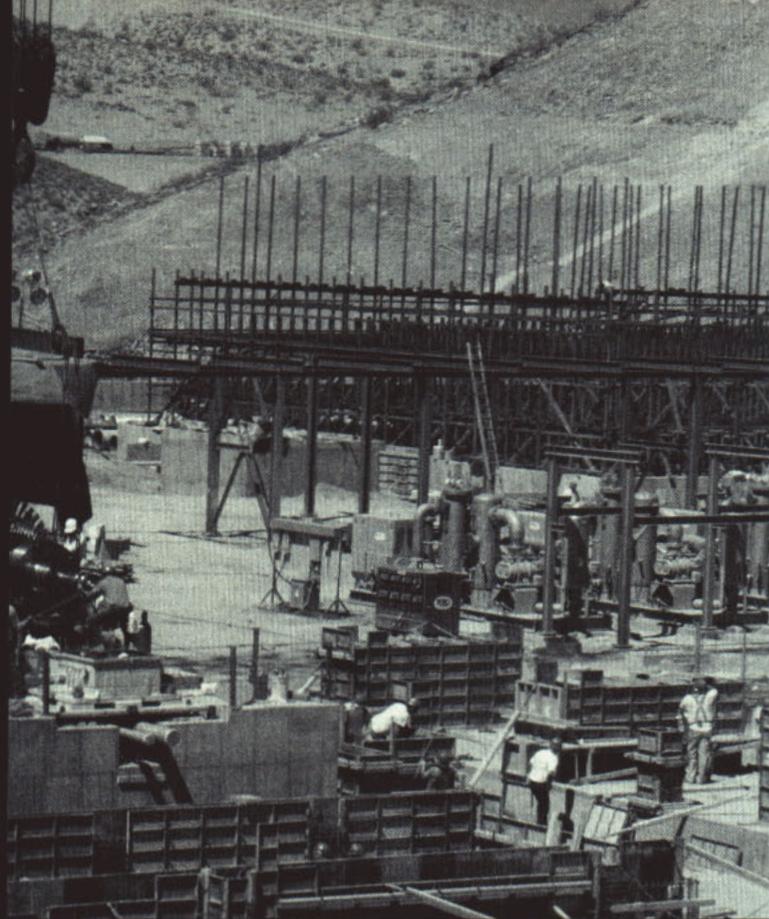
**I**f you've ever had to pinch pennies to pay the power company, you know the truth — electricity can be expensive. That's because the fossil fuels used to generate power, like coal and natural gas, aren't cheap.

Continuing to use fossil fuels isn't only expensive, but can be harmful to the environment. One solution to the fossil fuel problem is to use renewable energy sources, such as geothermal energy. Geothermal energy is heat energy which comes from beneath the Earth's crust. The most visible forms of geothermal energy include geysers and volcanoes. Naval Air Weapons Station (NAWS) China Lake, Calif., is leading the way for DoD by using renewable energy sources.

Not only are they producing cleaner, quieter, safer and cheaper energy, but they are also getting a substantial break on their electric bill. China Lake is one of the most aggressive users of renewable energy in the Armed Forces, according to Francis G. Monastero, China Lake's geothermal programs manager. It is also the center for energy research and development for DoD. Of the alternative energy sources, geothermal is the most widely used at China Lake.

Part of NAWS China Lake is centered above one of these geothermal areas, and scientists decided it was a good idea to tap into this energy and use it as a power source for the base. In March 1986, construction began on Navy Geothermal Plant 1 (Navy 1), Unit 1, in the Coso geothermal area. A 28-mile long power transmis-





sion line was constructed from the Coso area to a public utility power grid.

A little more than a year later, power from Navy 1 was transmitted to the public grid. The plant generated 25 megawatts (25 million watts) — at that time, NAWS peak power demand was only 20 megawatts, so they powered the base and had a 5 million watt surplus.

By 1990, a second geothermal plant (Navy 2) was on line generating another 80 million watts. During 1991 NAWS China Lake reduced their electric bill by 33 percent with a savings of \$3.4 million. Today the total electricity production from the Coso geothermal fields amounts to more than 240 megawatts. One megawatt of electricity will meet the needs of approximately 1,000 people, so Coso's output can provide enough power to serve 1 million people.

Geothermal production of electricity dramatically reduces fossil fuel consumption. Generating one megawatt of electricity geothermally for one year saves 2.4 million barrels of oil or 8 million pounds of coal — a significant benefit to air quality.

"Our mission is to have three more geothermal sites on line somewhere in DoD by the year 2000," said Monastero. "Our job is to investigate as many geothermal energy sources as we can find." □

*Bryan is a photojournalist for All Hands. Portions of this story were obtained from DoD publications and "About Geothermal Energy" a Scriptographic Booklet by Channing L. Bete Co., Inc.*

**Top left:** Workers lower China Lake's second geothermally-powered turbine generator into place. **Top:** The tremendous forces under the Earth's crust can be harnessed, reducing man's dependency on fossil fuel. **Above:** China Lake's Navy 1 geothermal plant has been in operation since 1986, and has saved the Navy millions of dollars.

# Fueling the Navy's future

Story by AKCS Ressa M. Aud,  
Photos by David Lambert

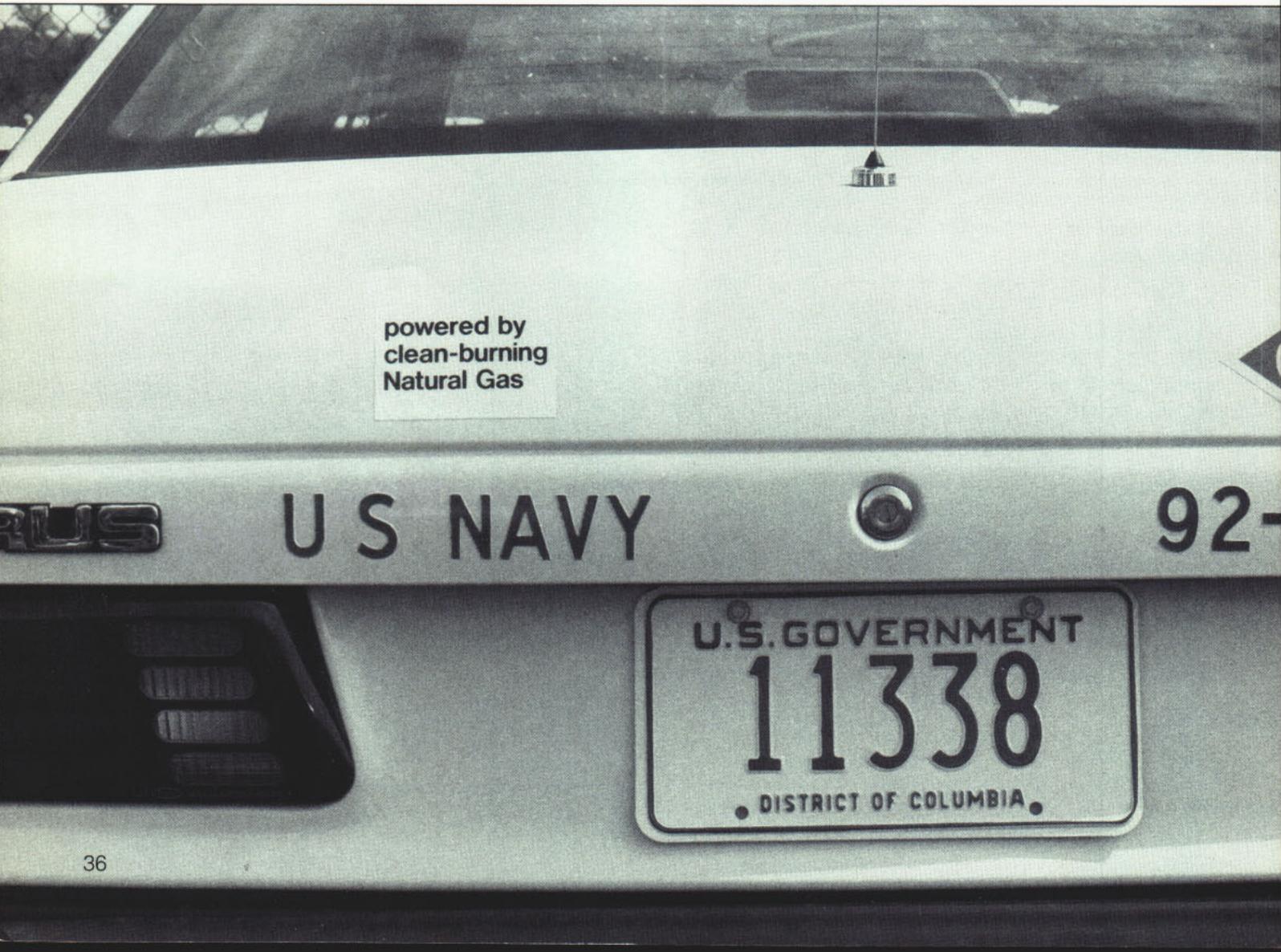
**I** magine fueling your car for about 55 cents a gallon. Sound like a distant memory or a fantasy? For Bob Gill, director of the Public Works Center (PWC) Washington, it's a reality.

One of PWC's Navy vehicles runs on an alternate fuel — compressed natural gas (CNG). Within the next year, PWC will have 20 of these vehicles.

The federal government issued an executive order mandating DoD to cut fuel consumption by 20 percent and phase in use of alternative fuel sources.

Other alternative fuels include methanol, M85 (a blend of 85 percent methanol and 15 percent premium unleaded gasoline), ethanol, gasohol, liquefied petroleum gas (LPG), reformulated gasoline and diesel, electricity and hydrogen. So why CNG?

"I recommended CNG from an economic and operability standpoint," Gill said. "Washington Gas will bring in a 'gas station' to provide the fuel. Many safety tests



powered by  
clean-burning  
Natural Gas

U S NAVY

92-

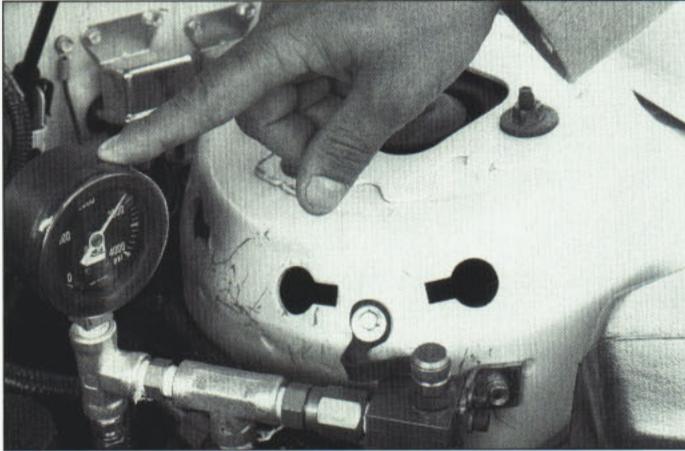
U.S. GOVERNMENT

11338

DISTRICT OF COLUMBIA

were performed and it is much, much safer than gasoline.

The cost of converting the automobiles is relatively inexpensive — about \$1,500 to \$2,000 per vehicle. Tanks, which require periodic inspection, can be leased.



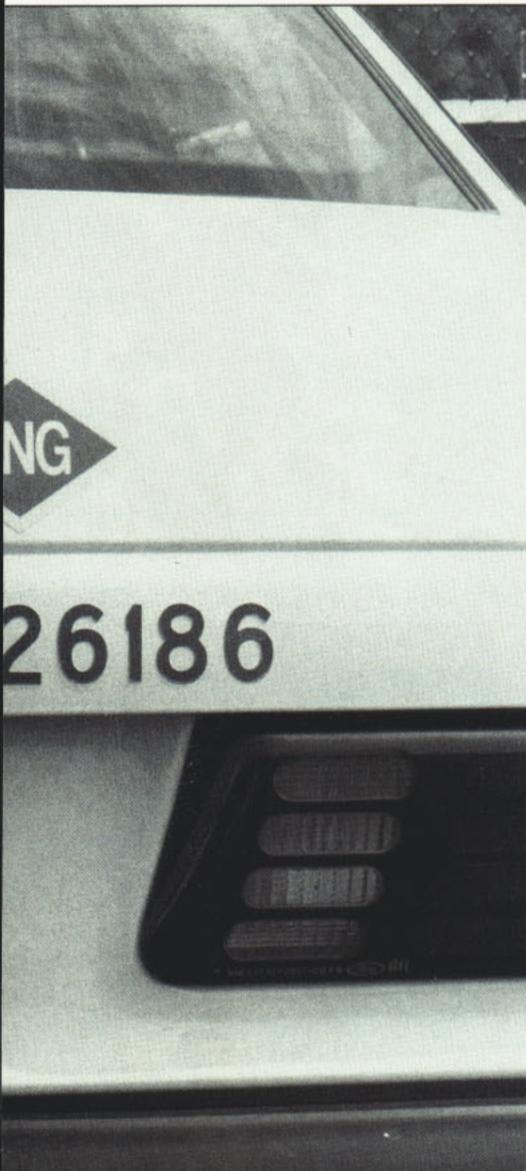
Washington Gas provides all training and hands-on installation assistance free of charge on site."

The savings potential is quite high. The average vehicle burns \$492 of gas a year. Once converted, a vehicle will use only \$197.20 worth of natural gas. Of course, the more vehicles, the higher the savings. Based on 20 vehicles, the annual cost savings is \$5,890.

As a result, the Navy will save money and reduce air pollution through use of natural gas-powered vehicles. "The Navy has been tasked to be at the forefront of all DoD activities," Gill said. "We can do two things — we can do it, or let it be done to us and be behind the power curve."

A sign is prominently displayed in Gill's office that reads, "Positive Thinking Done Here." Obviously, he isn't used to being behind the power curve. □

*Aud, a former staff writer for Sea Services Weekly, is now assigned to USS Forrestal (AVT 59). Lambert is a photographer for Sea Services Weekly.*



**Left:** Stickers on the trunk mark the car as being powered by compressed natural gas. **Top:** The CNG filling fitting and pressure gauge are located under the hood. **Above:** Bob Gill fills the bi-fuel vehicle with CNG at a commercial gas station.

Juan Sanders, an equipment cleaner at NADep Norfolk, uses a high-pressure sodium bicarbonate/water system to clean an aircraft part. The new stripper is quicker, cleaner and more environmentally safe than chemical strippers.



Back  
to

# BASICS

# “We can even selectively strip off top layers of paint without taking off the lower layers. Chemicals are not as selective.”

Story and photo by JO1 Steve Orr

**W**hen combined with high-pressure air and water, it can blast grease, oil and paint from aircraft landing components in record time. It reduces risk to workers, washes away with water and is a snap for water treatment plants to process.

It's also a familiar household item, used to absorb refrigerator odors and added to some toothpastes to whiten teeth.

It is called sodium bicarbonate, commonly known as baking soda. According to John Van Name, an environmental engineer with Naval Aviation Depot (NADEP), Norfolk, baking soda is also a low-cost, environmentally-safe alternative to dangerous chemicals normally used to clean aircraft parts.

The baking soda blasting system is just one of the methods NADEP is using to save time, money and the environment as well as reducing safety risks. Other measures include the installation of a closed-loop parts washer (“a giant dishwasher on steroids,” Van Name jokes) and an innovative paint spray ventilation system. “Our sodium bicarbonate blasting system is a relatively new machine to us,” Van Name said. “We’re still learning what we can and can’t do with the system.”

“When components are removed from the aircraft we service,” Van Name continued, “the parts require cleaning before they can be processed. We have to remove grease, oil and carbon, then strip the paint down to the bare metal.”

To accomplish this task, workers would normally use solvents that not only pose a danger to people, but also pose a hazard to the environment. With the sodium

bicarbonate system, the hazard to workers and the environment is significantly reduced.

“The system uses compressed air to blast a high-velocity stream of water and baking soda through a nozzle,” said George Smith, supervisor of the cleaning shop. “The stream hits the surface of the aircraft part. It removes not only the grease and oil, it can also remove paint down to the bare metal.”

“The process is controllable,” he continued. “We can even selectively strip off top layers of paint without taking off the lower layers. Chemicals are not as selective. They tend to take it all off in one shot.”

“This system is a lot better than doing it the old way,” said Juan Saunders, an equipment cleaner at NADEP. “It’s a lot quicker, it’s cleaner — we just wash things down with water. The system is safer, too — if you come into contact with chemicals, you

can get seriously burned. We don’t have those worries with this system.”

The benefits of using baking soda have become more evident as NADEP increases its use of the system. “The blaster makes the job go quicker,” Van Name said. “It reduces processing time by eliminating some of the preparation steps.”

“We probably save 30 percent of production time per piece of equipment when we clean with the sodium bicarbonate,” Smith added. “The biggest advantage of this system is that we don’t have to deal with toxic chemicals.” □

Orr is assigned to NIRA Det 4., Norfolk.



# Environmentally sound . . .

Story by JO1 Lorraine Elliot

**O**ppportunity knocks but once. Alert Navy leaders answered that knock when given the chance to design a submarine base from the ground up in northern Washington state. Every step was taken to make Naval Submarine Base Bangor environmentally sensitive before the first shovel full of dirt was turned.

According to Marvin Frye, director of Bangor's environmental department, "We had the opportunity to think it through, get organized and develop a systematic approach to dealing with environmental concerns before the first submarine arrived," Frye said. Since 1977 Bangor has been at the forefront of Navy efforts to develop and maintain successful environmental programs and has often shown the rest of the Navy how to do it right.

Examples of environmentally sensitive design abound. When the newly-commissioned sub base needed to build piers and a dry dock, the environmental impact study showed a pier close to the shoreline would have a negative impact on one of the area's native species, young chum salmon.

"As a result, all the new piers are built out into the water," said base biologist, Tom James. "That was done for two reasons. One was a completely environmental reason. Young chum salmon are three-quarters of an inch long and hug the shoreline to avoid predators. They are very reluctant to go through or between an obstruction so the piers were built to avoid obstructing their passage. The second reason is the Navy also saved



**Above:** Installation restoration projects on Subase Bangor involve cleaning up sites where such things as empty pesticide containers were disposed of during the 1940s and 1950s, before anyone knew the dangers.

# Subase Bangor



**Above:** Sample wells located along Bangor's waterways allow monitoring the water table for possible contamination. **Below left:** Subbase Bangor's recycling program has raised more than \$150,000. Loring Larm, a retired Navy lieutenant, does his part by returning cardboard to the recycling center.



money on dredging costs."

Storm drains for rain water are another environmental feature of the piers. "In 1977, storm drains were not regulated, but we felt uncomfortable about the fact that the pier was an industrial area, so we built a big tank underneath the dry dock. The tank collects water from the piers' storm drains. We use pumps to drain the tank out, but the water level is never allowed to drop to the level of the outlet. If there's an oil spill [on a pier], we can skim the oil right out of the tank.

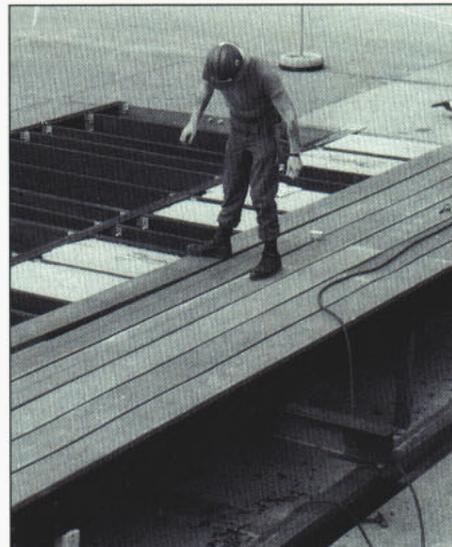
"It's not required by law, but it turns out that it saves us a lot of money. Accidents can happen and things could get spilled in those drains. Chasing an oil slick around Hood Canal could be very expensive," he said.

Another idea that has paid off for the base is the oil booms placed around submarines when work is being done. The booms contain any spill that may occur.

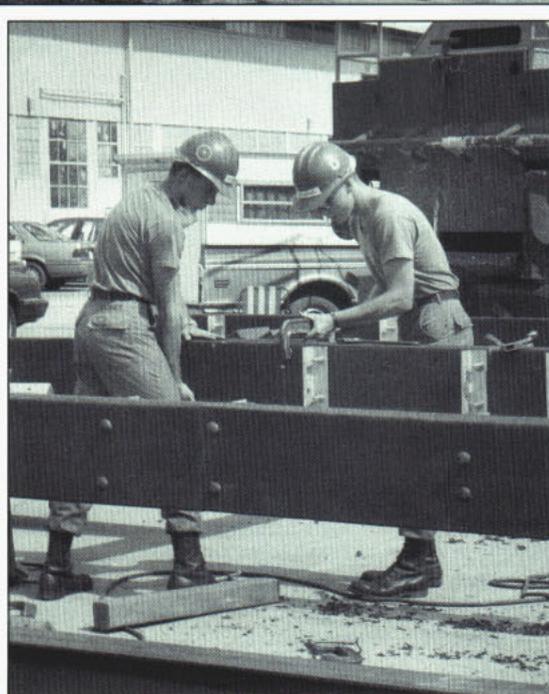
"I feel very strongly about [environmental] programs," Frye said. "We've been lucky, we've had some opportunities and I think we've done well with them." And based on the numerous awards Bangor's programs have won over the years, others agree. □

*Elliot is assigned to the Navy Public Affairs Center, San Diego.*

# Navy floats recycled plastics



**Above:** The new plastic lumber pier (far right) floats next to old wooden piers in Santee Basin at the U.S. Naval Academy. **Right:** SeaBees prepare plastic lumber planks for new pier construction at Annapolis, Md. **Top:** The pier is constructed with lumber planks made from recycled plastic waste.



**Story by Kathy Kaplan,  
photos by Martin Sheehan**

**I**t reminds you of a barnraising — good neighbors providing moral support and combining skills to get a job done quickly. Only this Annapolis group was building a floating pier made from plastic refuse that had been collected from Navy ships and family housing and recycled into lumber.

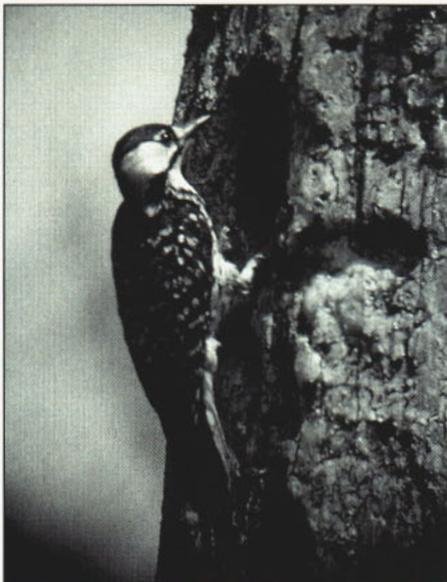
The pier joined a long list of recycled plastic products already at Annapolis, including picnic tables, benches and parking lot car stops.

Environmental engineers coordinated the pier project with the director of the U.S. Naval Academy's (USNA) Sailing Program. Academy professors and midshipmen tackled the design, and actual construction was done by Construction Battalion Unit 403 SeaBees stationed at the Annapolis Naval Station.

Norfolk Naval Base provided the plastic waste for this pier to an Iowa recycler. The recycler produced the lumber according to design specifications and shipped it to Annapolis.

The pier took only a few days to build and is expected to last 20 years. When finished the 16- by 34-foot pier was towed across the Severn River to the Academy's sailing center. □

*Kaplan was assigned to PAO and Sheehan is assigned to visual services branch, Carderock division, Naval Surface Warfare Center.*



# Endangered Species Update



U.S. Fish and Wildlife Service photo



U.S. Fish and Wildlife Service photo

**Top:** Navy foresters at NWS Charleston, S.C., work to save the endangered red-cockaded woodpecker. **Right:** The manatee is in waters off NAS Jacksonville, Fla., and Subase Kings Bay, Ga. **Above:** Bald eagles find a peaceful refuge in Navy wetlands.

## What is an endangered species?

According to the Federal Endangered Species Act, an endangered species is "any species which is in danger of extinction throughout all or a significant portion of its range."

## What is a threatened species?

A threatened species is "any species which is likely to become endangered within

the foreseeable future throughout all or a significant portion of its range."

- In 1970, one specie became extinct every day.

- In 1990, one specie became extinct every hour.

- At the present rate of extinction, 20 to 50 percent of all known species existing today will be lost by the year 2000.

- If present land use trends continue, 1 million more species will become extinct

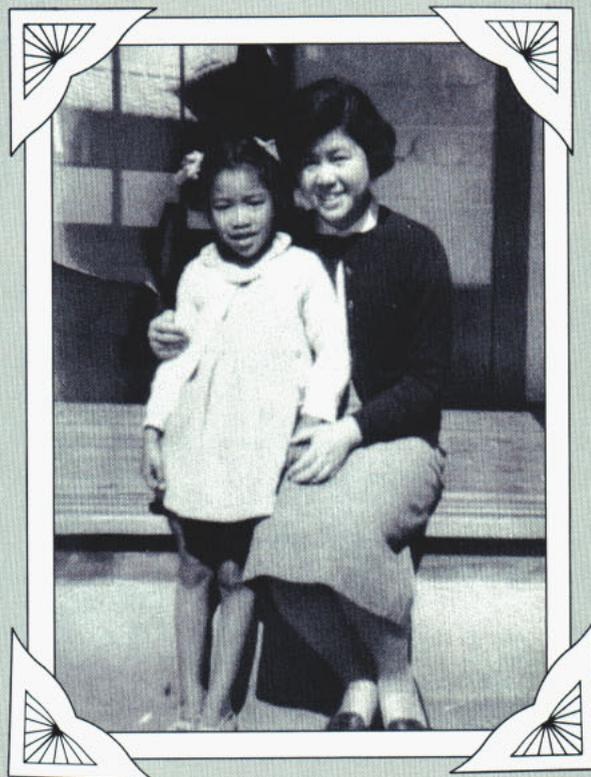
before the year 2000.

- Species known to have become extinct in their natural habitat since 1970 are: Dusky seaside sparrow, Palos Verde blue butterfly, Spix macaw, Socorro snail

- The list of endangered species recognized under the U.S. Endangered Species Act has grown to 1,056 since the law passed in 1973. □

*Information provided by World Wildlife Fund, Washington, D.C.*

# Searching for roots with light from above



Story by LT Larry Miles

**T**hose who don't believe in the power of divine intervention won't get support from Master-at-Arms 1st Class Pamela F. Medearis, of USS *Flint* (AE 32). She credits faith with helping reunite she and her birth mother after nearly 38 years.

### The early years

In 1952 Dr. Lamar Wise, a Marine Corps physician, was stationed at Futuoka Marine Corps Air Station, Japan, where he met Junko Yasuda. They fell in love. Yasuda became pregnant. Then, as now, marriage to a foreign national required passing through myriad of bureaucratic obstacles. Medearis was born Sept. 22, 1952, before her parents could marry. Four days later Wise was killed in a shipboard accident.

When Wise's brother reached Japan to escort the body

**Above: MA1 Pamela Medearis, then Etsuko Yasuda, with an unidentified orphanage worker.**



back to the United States, he would have nothing to do with Yasuda or Wise's new daughter. Yasuda raised her daughter, Etsuko Gloria Yasuda, as best she could.

When Etsuko was 18 months old, authorities placed her in an orphanage run by American missionaries. Yasuda never saw her daughter again.

Etsuko was adopted when she was 6 by the Rev. Victor Medearis, a Baptist minister, and his wife Gladys. Etsuko Gloria Yasuda became Pamela Faye Medearis.

### Finding her heritage

In early 1992, Medearis, now in the Navy, learned *Flint* was deploying to the western Pacific, including visits to Sasebo, Japan. When Medearis told her adoptive parents about the trip, her mother handed her some papers and a small photograph of a child and a pretty Japanese woman. "I think this is [you and] your mother," Mrs. Medearis said. "Perhaps you can find her in Sasebo."

It was the first time Medearis had seen the photograph or the documents from the orphanage. The only thing in English was her parents' name — not much to go on.

During *Flint's* first visit to Sasebo in April 1992, Medearis was introduced to Hank Nakamura, a lifelong Sasebo resident. She also met Gunner's Mate (Guns) 2nd Class Gary Clark who spoke fluent Japanese. Both Nakamura and Clark promised to help Medearis search.

Within the week, Clark had the name of Mr. and Mrs. Huggins, American missionaries who ran an orphanage

**Above: Phares and Lucile Huggins with some of the orphans they watched over. Medearis is the second child from the right.**

in the 1950s. When *Flint* returned to Sasebo in June, Medearis followed the lead and visited the orphanage.

Mrs. Huggins had photographs of Medearis and told her about her life in the orphanage, and what little she could recall about her mother.

### A reunion nears

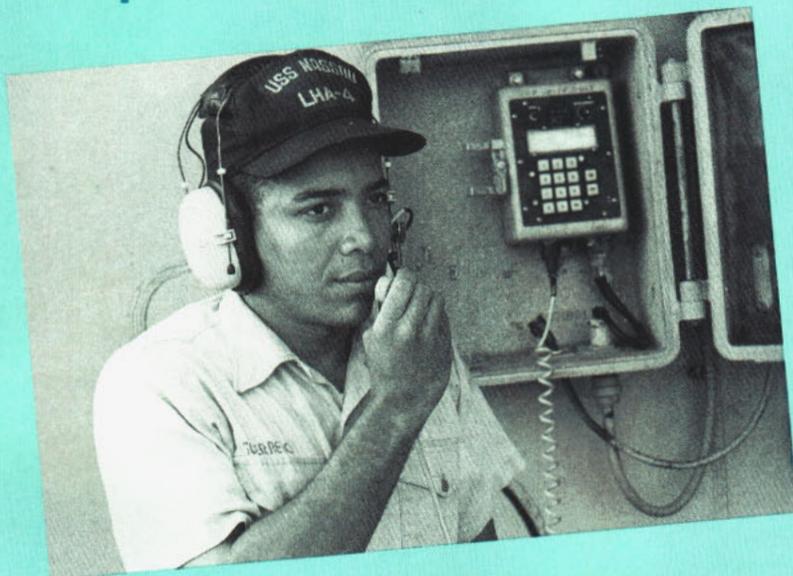
During *Flint's* final visit to Sasebo, Nakamura called the ship and left an urgent message for Medearis. Her mother had been located, but the ship was scheduled to get underway that afternoon for Yokosuka. It was at this point that divine intervention took place. It had been raining all day, with lightning hindering ordnance transfer and Medearis prayed for more rain. At 1 p.m. the decision came for *Flint* to remain in Sasebo overnight.

Medearis was on the phone immediately. That evening she waited anxiously at Sasebo Fleet Landing for her mother's arrival. At 8:30 p.m., she received word that her mother was at the train station, but wanted no publicity, so a quick rendezvous was set up at the Huggins' home.

There, after 38 years, mother and daughter were reunited. Her reunion was very short and her mother speaks very little English, leaving many questions unanswered. □

*Miles is an engineering officer aboard USS Flint (AE 32).*

## Nassau sailor returns to birthplace of his freedom



**BMSN Alejandro Guerrero, a crew member on board USS Nassau (LHA 4), recently revisited the site where he first experienced freedom.**

When USS *Nassau* (LHA 4) recently pulled into Guantanamo Bay (Gitmo) Naval Base, Cuba, most of the crew considered it just another port visit. But for Boatswain's Mate Seaman Alejandro Guerrero, it was a bittersweet homecoming.

On Dec. 29, 1988, after swimming for seven hours, Guerrero reached the shores of freedom at Gitmo.

Born in Santiago de Cuba, Guerrero was 23 years old when he finally escaped. He made his first attempt several years prior, but was picked up by a Cuban patrol boat and was sentenced to one year in prison.

Undaunted by his first failed attempt, Guerrero, along with several friends, made his second attempt to reach freedom in 1986. Again he was picked up and sent to prison.

It wasn't long after his release that Guerrero began his physical training regimen for his third attempt to swim to Gitmo. This

time everything went as planned and he was successful.

"When I first came ashore, a U.S. Marine saw me and challenged me," Guerrero said. "When he realized I had escaped from communist Cuba, he said, 'Welcome to freedom.' I began crying tears of joy."

After being granted political asylum, Guerrero was flown to Miami. Unable to speak English, he studied the language and eventually joined the Navy.

As *Nassau* pulled into Gitmo, a flood of emotions engulfed the man who fled his home.

"The last time I was here all I had to my name were the swimming trunks I was wearing," he said. "Now I come back as a member of the U.S. Navy." ■

*Story by JO3 Don Pollard, photo by PHAN Tyler Swartz, both assigned to USS Nassau (LHA 4).*

## Navy helicopters pluck survivors from the sea

A sailing adventure for five Canadians turned into a nightmare when their 38-foot sailboat did a complete 360-degree roll in the Atlantic Ocean. The five said they were lucky to be alive and thanked the U.S. Navy and Coast Guard.

The boat's captain, Ian Bruce, suffered broken ribs during the roll, and Donald Bishop had a cut forehead, others suffered minor bruises.

A "freak wave" had pulled the boat under and broke the mast into three pieces. Several hours later, a Coast Guard plane flew over and dropped a radio to the crew.

USS *Peterson* (DDG 989) and USS *Kauffman* (FFG 59) deployed helicopters to the scene.

The Canadians were taken to *Peterson*, where they received medical attention and dry clothes.

"I can only describe them as extraordinary professionals," Bruce said of the rescue team. "It's not everyday you pick people out of the ocean, but they did it like it was routine." ■

*Story and photo by SN Jason D. Minnix, assigned to USS Seattle (AOE 3).*

**Crew members from USS Peterson (DDG 989) help the survivors of a sailboat accident into a CH-46 Sea Knight helicopter as they are transferred to USS Seattle (AOE 3).**



ALL HANDS

## George Washington stays ahead in the computer age

USS *George Washington* (CVN 73) is taking advantage of modern computer technology.

The ship's automated data processing (ADP) division helps make



DP3 Benjamin Sharp, a member of USS *George Washington's* (CVN 73) automated data processing division, mounts a magnetic computer tape reel.

sense from the jumble of acronyms, like SUADPS, SAMS and GWIS.

The supply automated data processing computer system (SUADPS) helps supply petty officers locate parts and supplies while at sea.

The *George Washington* Information System (GWIS) is a fiber optic network designed to make the carrier a paperless ship.

Two paper-saving uses of GWIS are E-mail and SAMS. E-mail stands for electronic mail and is designed to distribute message traffic and replace the standard Navy memo.

The stand alone medical database program (SAMS) gives medical personnel quick access to a sailors' medical records. With GWIS workstations located throughout the ship, critical patient information is always nearby. ■

Story by JO3 Charles Achord, photo by PH3 John Sokolowski, both assigned to USS *George Washington* (CVN 73).

## Sailors aid Malaysian home for the handicapped

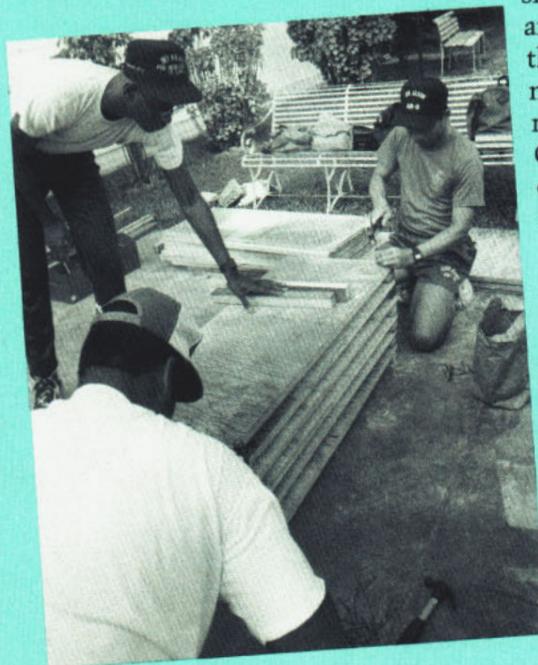
More than 30 USS *Jason* (AR 8) sailors volunteered their liberty time to assist the Penang Cheshire Home in Malaysia, a residence for physically and mentally challenged citizens.

Before leaving San Diego, *Jason* on-loaded four pallets of Project *Handclasp* supplies, containing pharmaceuticals, hygienic supplies and sewing machines.

"We didn't know where we would be needed," said Chaplain (LT) Thomasina Yuille, *Jason's* *Handclasp* coordinator. "We had to be prepared to provide assistance anywhere."

With help from the Malaysian U.S. Defense Attache officer, Yuille and crew tackled the Cheshire Home.

Once the projects were identified, the call went out for volunteers. "I was concerned that with the short notice I was able to give the crew, there wouldn't be many volunteers," said Yuille. To her surprise and delight, the



response was overwhelming. Sailors completely refurbished the home's storage rooms; made shelving units; repaired walls; and cleaned a pool used for hydrotherapy. *Jason's* medical department also pitched in, treating a number of residents and training Cheshire staff members to recognize and treat some of the more common ailments.

"There is no greater feeling in the world than knowing you have helped make a positive difference in a person's life," said Patternmaker 2nd Class Reggie Powell. "Donating your time and energy to Project *Handclasp* gives you that opportunity." ■

Story by JO3 Phil Witzke, photos by PH2(AW) G.W. Barry, both assigned to USS *Jason* (AR 8).



## Bad credit

I have just recently been able to read a copy of the *Desert Shield/Storm* special issue of *All Hands*. I was a little confused when I read the article "Combat damage control."

As a crewmember of the Canadian Destroyer *Athabaskan* (DDH 282) during Operation *Desert Storm*, I was on duty when USS *Tripoli* (LPH 10) and USS *Princeton* (CG 59) both hit mines. The incidents with *Tripoli* and *Princeton* brought all naval participants back to reality — the mission may have been nearing completion, but there were still a lot of hazards in the Gulf.

I realize the Canadian Navy does not compare in size with that of our neighbors to the south, but our size certainly does not diminish from our abilities and/or the contributions we made to Operation *Desert Shield/Storm*.

Your article stated that USS *Beaufort* (ATS 2) and minesweeper USS *Adroit* (MSO 509) went to the rescue of *Princeton*, and this I believe is an error.

Your article should have read: Shortly after the mine strike, USS *Beaufort* (ATS 2) and HMCS *Athabaskan* maneuvered through the uncharted mine field to reach *Princeton*. Then *Athabaskan* guided *Beaufort*, with *Princeton* in tow, to safety through the maze of mines.

Let's give credit where credit is due. Not only did *Athabaskan* traverse an uncharted mine field to lend assistance, but we remained with our wounded comrade, providing much needed air and moral support, until she was out of harm's way.

Recently, a sailor who served on *Princeton* during the mishap was posted to our station. Once he found out I had served on *Athabaskan*, he offered me his thanks. If one sailor can appreciate our effort, don't you think you could afford us the same courtesy?

— PO2CR Edward Siteman  
Canadian Forces Station, Masset, B.C.

•Point well taken. Sorry for the unintentional omission of your laudable efforts. — Ed.

## Thresher — setting the record straight

*All Hands* article "Deep Submergence Rescue Vehicle (DSRV)," in December's issue contains information that implies the *Thresher* disaster occurred during deep-diving tests performed in conjunction with ballast tank

repairs accomplished at Electric Boat Division facilities in Groton, Conn.

In fact, *Thresher* was lost with all hands on April 10, 1963, while conducting initial sea trials after completion of a 10-month overhaul accomplished by Portsmouth Naval Shipyard, Portsmouth, N.H. Ballast tank repairs cited in *All Hands* were accomplished while *Thresher* was operational and many months before she entered Portsmouth Naval Shipyard for modification and overhaul. Additionally, those ballast tank repairs were minor in nature and external to the pressure hull. *Thresher* was lost due to internal, uncontrollable flooding. Causes and responsibility for loss of *Thresher* were determined by congressional hearings held during June and July of 1964.

The *Dictionary of American Naval Fighting Ships*, the reference source used for documenting the "DSRV" article in *All Hands*, is in error not by what it includes, but rather by what is blatantly omitted regarding responsibility for loss of *Thresher*.

On the morning of April 10, 1963, when *Thresher* was lost, I was on sea trials as a commissioning crew member aboard USS *Alexander Hamilton* (SSBN 617), having sailed from Electric Boat Division where *Hamilton* was built. I can, therefore, tell you with first hand knowledge that *Thresher* did not depart on her tragic voyage from Electric Boat Company as stated in the *All Hands* article nor was she overhauled or repaired in Groton at the time of the incident.

It is my hope that you will set the record straight for *All Hands* readers on which shipyard accomplished the modifications and repairs which were subsequently determined to be the cause of her loss. As a minimum, you should correct the impression in the *All Hands* "DSRV" article that Electric Boat Division was in any way connected to or responsible for the *Thresher* tragedy. Before being lost on the sands of time, some action should also be taken to include more facts on the loss of *Thresher* in the *Dictionary of American Naval Fighting Ships*, since it is an official record of U.S. Navy history.

— Herbert H. Loewenhardt  
Stonington, Conn.

•Thank you for clarifying *Thresher's* tragedy. We have passed your letter on to the Navy Historical Center. — Ed.

Acting Secretary of the Navy  
Chief of Naval Operations  
ADM Frank B. Kelso II  
Chief of Information  
RADM Kendell Pease  
CO Navy Internal Relations Activity  
CAPT Jolene Keefer  
XO Navy Internal Relations Activity  
LCDR Pamela A. Moulder  
Director, Print Media Division  
ENS Barbara Burfeind  
All Hands Editor  
Marie G. Johnston  
All Hands Assistant Editor  
JOCS Robert C. Rucker  
All Hands Staff  
JO1 Sherri E. Bashore  
JO2(AW) Laurie Beers  
JO2 Brett Bryan  
JO2(SW) Jim Conner  
PH1(AW) Joseph Dorey  
JO3 Angela L. Jenkins  
JO1 Steve Orr  
Patricia Swift  
JO2 Paul Taylor  
Production Director  
Michael David Tuffli  
Production Associates  
William E. Beamon  
DM1 Steven J. Eversole  
Leroy E. Jewell  
DM2 Keith Wilson  
NIRA Staff

Distribution: Garland Powell; Plans and Policy: LCDR Rob Raine, J.D. Leopold; Budget: Betty Williams; ADP: Joe Bartlett; Editorial: Jan Kemp Brandon, Catherine Bird; Administration: SK1 Jeff Bryan, Sandra Gray and YNSR Ned Prusila.

*All Hands* (USPS 372-970; ISSN 0002-5577) (Number 913) is published monthly by Navy Internal Relations Activity: Naval Station Anacostia, Bldg. 168, 2701 S. Capitol St., S.W., Washington, D.C. 20374-5077. Second-class postage paid at Washington, D.C. 20374.

**Subscriptions:** Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Price: \$17, U.S. and FPO; \$21.25 foreign. Make checks/money orders payable to: "Superintendent of Documents, GPO."

**Postmaster:** Send address changes to *All Hands*, Naval Station Anacostia, Bldg. 168, 2701 S. Capitol St., S.W., Washington, D.C. 20374-5077.

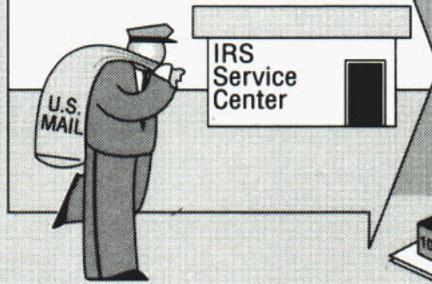
**Editorial Offices:** Send submissions and correspondence to: NIRA, Print Media, Attn: Editor, Naval Station Anacostia, Bldg. 168, 2701 S. Capitol St., S.W., Washington, D.C. 20374-5077. Phone (202) 433-4171 (DSN 288-4171).

**Message:** NAVINREACT WASHINGTON DC.

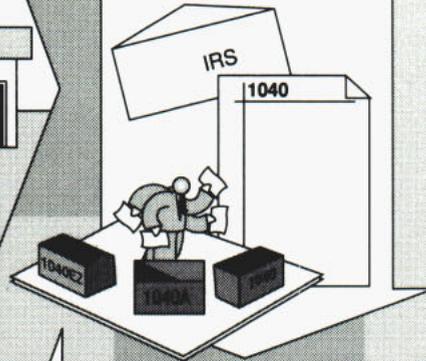
**Authorization:** The Secretary of the Navy has determined that this publication is necessary in the transaction of business required by law of the Department of the Navy. Funds for printing this publication have been approved by the Navy Publications and Printing Policy Committee.

# Processing Federal Tax Returns

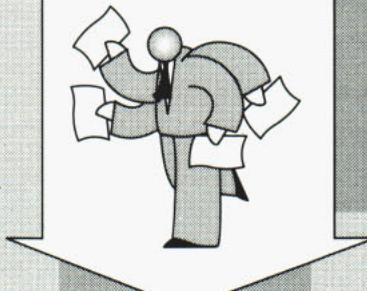
**1.** Tax returns are delivered to the IRS service centers.



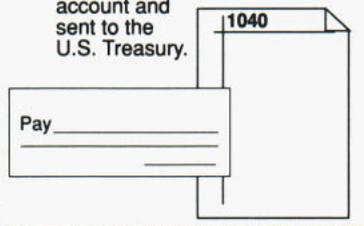
**2.** Returns are opened and sorted by return type.



**4.** Returns are coded and edited for computer input.



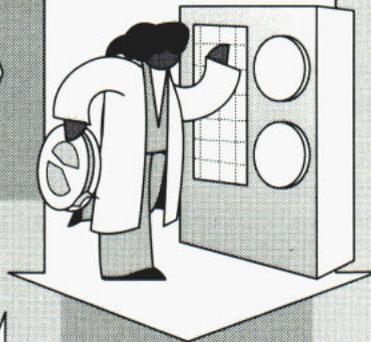
**3.** Payments are compared to the return, credited to the taxpayers' account and sent to the U.S. Treasury.



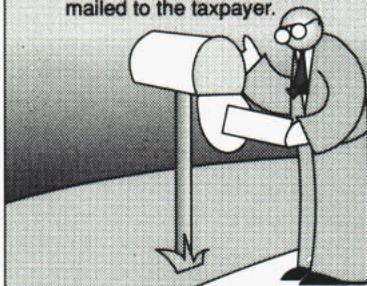
**5.** Coded information is placed on magnetic tape.



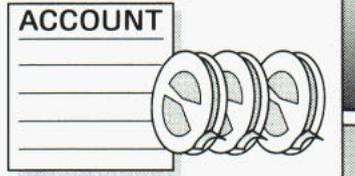
**6.** IRS computers check math and information accuracy.



**8.** Refund tapes are sent to the Treasury Department Regional Financial Centers where the refund checks are mailed to the taxpayer.



**7.** Tapes are sent to the IRS Martinsburg Computing Center where the final return information is recorded on taxpayers' accounts.

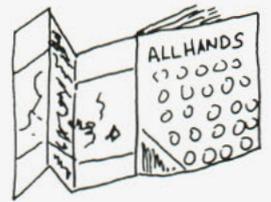


Here for the FIRST time we present the  
**ALL HANDS FOLD-IN**

A ▶

◀ B

The environment is assaulted from all sides. To find out how you can do your part for the Navy's environmental efforts, simply fold the page as shown in the handy picture at the right.



Since the beginning of time people have spread pollution and waste on the planet. Clean-up can't wait for the future. The Navy must recycle and end pollution without delay or the environment will not be around for the FUTURE!!

A ▶

◀ B