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CLEAN CHANNEL ASSOCIATION NOW OPERATING NEW OIL SKIMMING BARGE

The Clean Channel Association has announced operation of a new, advanced oil skimming barge. Gordon Reno, chairman of the local oil spills co-operative and manager of the Environmental Conservation department at the Refinery, says the new barge can permit quicker and more efficient recovery of oil spills on the Houston Ship Channel.

The barge was recently acquired by Marine Maintenance of Houston which has been retained by the co-operative to supplement clean-up capabilities of member companies. According to Reno, the new equipment is part of the Association's continuing program to improve its ability to prevent as well as recover oil spills. At present, the Association has about \$1/2 million worth of containment and clean-up equipment that can be quickly put into operation.

The 19-foot barge was developed by Shell Oil Company's Pipeline Research and Development Laboratory in Houston and is equipped with several advancements in oil spill control technology. Among these is a unique design called articulation which allows various barge components to flex with waves and currents. As a result, the barge is capable of recovering oil from inland waterways at speeds up to 2.75 feet per second with 95% efficiency. This is about twice the capability of many conventional skimming devices. Marine Maintenance has been granted a license to build the barge.



Leonard Milholland says there's an interesting legend about this West Texas mesa. See Page 3.

Several devices used on the barge evolved out of the extensive oil spills research program at Shell's Pipeline Laboratory. It incorporates innovations in containment booms, surface collecting agents, and oil recovery techniques. Ray Ayers, senior research engineer at the lab, is the inventor and project leader for development of the barge.

Flexible Baffle System

One of the features of the barge is a flexible--articulated--baffle system located in the collection area at the center of the vessel. These baffles are designed to reduce turbulence in the collecting area--where the oil is separated from the water.

The articulated baffles consist of horizontal tubes and grates which regulate the flow of oil and water into the collection area. They are hinged so they can conform to waves and currents. By reducing turbulence in the collecting area, the oil can be recovered from the water quickly and efficiently.

At the front of the barge is a 20-foot wide, v-shaped diverter boom which intercepts the oil slick and channels it toward the barge. This diverter is especially designed to prevent oil from spilling over or flowing under the device.

The diverter consists of two separate booms--an outer vertical skirt boom and a forward boom made of 6" round Ethafoam cylinders. This entire structure is supported by an elastic truss system which permits the diverter to move with wave and current forces.

In most instances, the oil follows the forward boom toward the barge. However, if waves or currents cause the oil to flow past this boom, the escaping oil is captured between the two booms and is directed toward the skimmer.

Oil Herder^R Used

The barge is also equipped to use a surface collecting agent called Shell Oil Herder^R during recovery operations. Nozzles at the tips of the diverter are capable of spraying Oil Herder up to 40 feet in front and to the sides of the barge. This biodegradable chemical can reduce the size of a floating slick--sometimes hundreds of times smaller than the original slick. When the chemical is sprayed onto the slick, it herds the oil toward the mechanical diverter, thus increasing the effective sweep of the 20-foot diverter to about 50 feet in width.

This skimmer barge can handle several types of materials from light oils to heavy,

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DORIS GILLIAM EXPRESSES ARTISTIC TALENT IN DIFFERENT HANDICRAFTS



Doris Gilliam is surrounded by many of her artistic projects.

Although it may be a little early to think about Christmas gifts and all the shopping required during the season, Doris Gilliam, artist wife of Kent Gilliam, Refinery Lab, already has a head start on most of us.

Doris, who has always been surrounded by people who could work with their hands, is interested in many facets of arts and crafts and often makes many gift items. When this reporter visited her home recently, she exhibited some of her handicrafts. She had tole paintings, a few oils, painted plaster domes, three dimensional pictures painted on glass, hand decorated purses, straw flowers mounted in plexiglass boxes, crochet jewelry, and silverleaf designs, to name a few.

"I would have had more to show, but someone always asks me for my favorite pieces, and so I give away more than I keep," she said.

Doris usually has several projects going at once, starting something new whenever she sees a new idea. If she sees something she might want to learn to do, she often takes courses in the craft. Doris has caught on to one of the latest crafts to be revived from the 18th century called quilling. Quilling is the process of making paper filigree patterns by winding paper strips around a quill. (A full description of the process was carried in the Sunday Houston Post.)

"This is really easy to do," she said. "All you need is a needle (instead of a quill) with the end snipped off, some quarter-inch paper strips and glue. A paper strip is wound around the needle into a tight little coil, removed, the end is glued, then shaped and applied to a picture to form flowers."

Doris says the material can be purchased in a hobby shop or you can make your own. She makes so many things in quantities and, therefore, is always looking for ways to cut costs. "You can cut your own paper strips, and make your own pattern pictures. If you have a particular picture you want to reproduce several times, you can have copies

made at a quick copy store and then put in the colors with a felt tip pen or other paints yourself.

The whole Gilliam family, including daughter, Janice, and son, Neal, are often involved in some of the projects. "In fact, we often get together with my mother and sisters and exchange ideas and work on handicraft projects," Doris said. This summer the Gilliams had a house full of relatives, and they passed the time being instructed by Doris on some of the new ideas she picked up.

Although she often gets into Kent's workshop and cuts out designs in wood, she can count on Kent for help with larger projects such as intricate designs for backgrounds for tole paintings. Kent is also very adept at hand tooling leather goods.

"One year we tackled the project of printing our own Christmas cards. I'll have to say it was a major project because that was back when we sent out something like 300 cards."

Another idea for people who have some talent in painting is the plaster domes which can be painted and mounted to make a nice picture. Smaller domes can be painted with scenes and then mounted inside hollow filigrees much like cameo pins.

More complicated projects that Doris has undertaken include painting designs on porcelain eggs and wooden egg cases which can be used as jewelry boxes.

If you are still looking forward to Christmas, she also offers an idea for decorating a tree. She and Kent have cut out in wood and hand painted little figures of dolls, angels and other Christmas characters which can be used as ornaments. Last year as part of a PTA project she and Kent mounted pictures of all the students in Janice's class on round discs which were then hung on the class Christmas tree.



Wooden Christmas ornaments are fun to make. Note the three dimensional flowers on glass in the purse in background.

TREASURE HUNTERS TURN PILOTS FOR A DIFFERENT KIND OF VACATION

A flying treasure hunting vacation with a few stops to see relatives is the way Leonard Milholland and his wife, LaVerne, described their recent trip.

The couple, who are part-owners of a Cessna 182, took advantage of their flying skills, they both hold pilot's licenses, and flew to San Angelo, El Paso and Albuquerque during a two-week period. While they were in the air, they checked out treasure-hunting locations and their gold claim in New Mexico.

"While we were on the ground, we visited relatives, but I don't know how long we'll be able to do that," Leonard admitted. "Our relatives did enjoy the brief rides we gave them in the plane, though."

Leonard and LaVerne are always hearing stories about likely spots for hidden caches, so they took many aerial photographs of places they passed over. He tells an interesting story about a mesa where bandits supposedly hid out after raids. "I don't usually like to spread the word around until I have a chance to check the location out myself, but this story has probably circulated around a lot so any cache will probably be gone by the time I get out there again," he

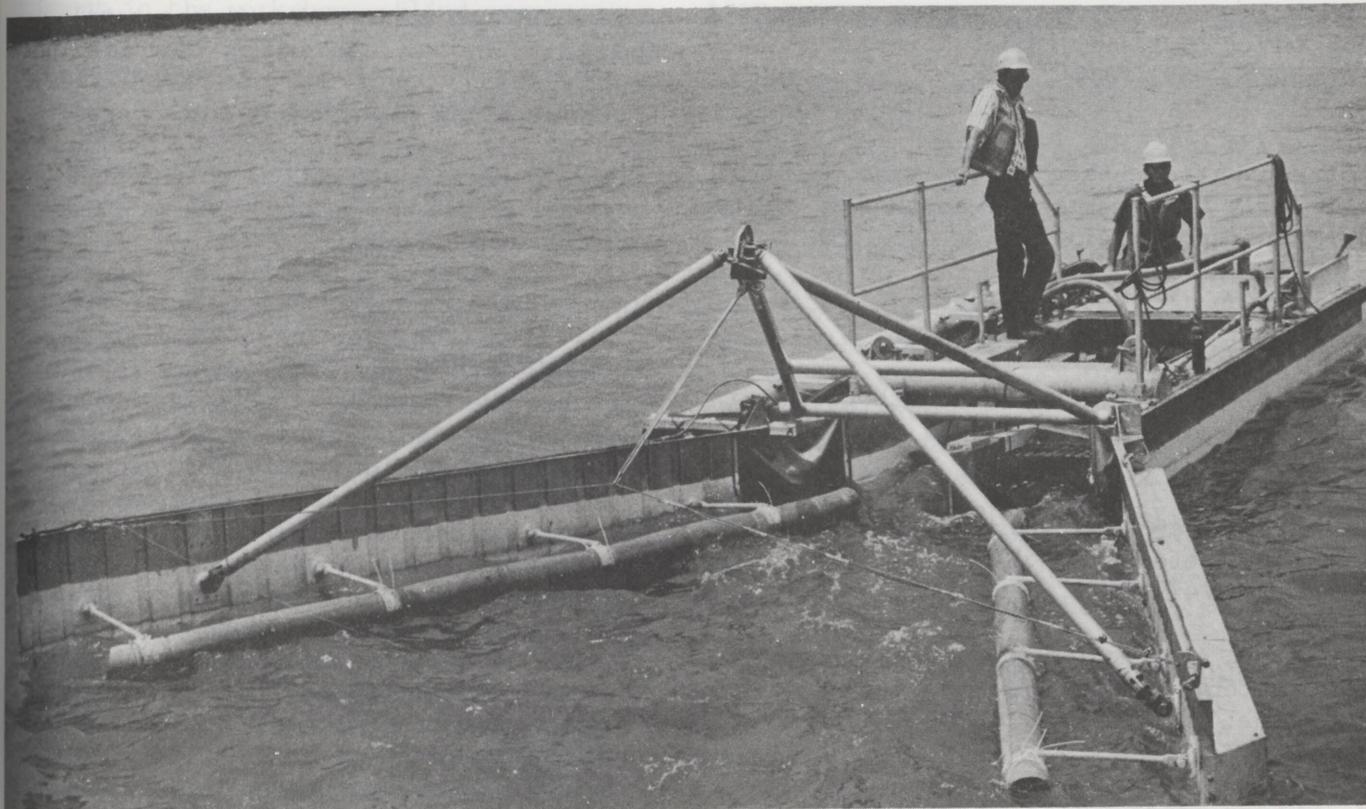


LaVerne and Leonard posed beside their plane at El Paso where they spent several days. Leonard is an Instrumentman No. 1.

said.

Leonard and LaVerne took turns in the pilot's seat, and he reports the plane did very well. Leonard does much of the maintenance work on the plane himself.

CLEAN CHANNEL ASSOCIATION BUYS NEW OIL SKIMMING BARGE--



This advanced skimming barge incorporates several recent innovations in oil spill control technology. Developed by Shell Oil

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weathered crudes. It can also be built as a self-powered vessel or may be used alongside a work boat.

The Clean Channel Association consists of nine member companies: Atlantic Richfield Company; Charter International Oil Company; Crown Central Petroleum Corporation; Ethyl Corporation; Humble Oil & Re-

fining Company; Petro-Tex Chemical Company; Shell Oil Company; Texaco, Incorporated; and Warren Petroleum Company, a division of Gulf Oil Corporation. In addition to serving members, the co-operative is also prepared to offer assistance to government agencies and non-member companies along

the Houston Ship Channel.

the Southeast Saturday, January 13 between 9 and 12 noon.

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CLASSIFIEDS

FOR SALE

Full size pool table, balls, rack, etc. \$50.
2914 Dedman.
Telephone: 941-0349

1972 Chrysler Newport Royal, 2 door hardtop,
10,000 mi. Power steering & brakes. Air.
\$600 below dealer cost.
Telephone: 487-3497

Garage Sale, Sept. 2,3,4, 726 Edgebrook,
combination radio-b/w TV-stereo, Silvertone,
\$100. Early American dinette set with 6
chrome chairs, \$30. Hotpoint washer, \$40.
Miscellaneous items.
Telephone: 944-9646

1970 Yamaha 350 cc, R-5, street bike, ex-
cellent, two helmets included, \$600 cash.
Telephone: 946-1604

Brand new, never been used 30" Magic Chef
gas range & oven, harvest gold.
Telephone: 455-4688

1964 Austin Healey Sprite, convertible, with
white top, body is blue, with new battery
and starter just rebuilt. \$395.
Telephone: 473-2170

4 lots in Big Thicket Lake Estates. Equity.
Telephone: 472-8445

'68 Harley Davidson, 125cc.
Telephone: 393-1089

House for sale in Pasadena, 3-1-1, den,
covered patio, shady fenced yard, central
heat, unit air, assume \$103 month plus equity.
Telephone: owner 473-7315 or 472-1659

Sweet Sudan hay, 75¢ per bale.
Telephone: 471-1431 after 5 p.m.

20' shrimp trawl, complete with tow line,
\$30. Also 18' net only used twice, \$20.
Telephone: 645-2829

15 ft. Zinncraft boat, Husky tilt trailer, 35
hp. Johnson electric. \$375.
Telephone: 479-2445

Electronic test equipment, radio & TV parts.
freq. meter, \$300 and up.
Telephone: 393-1089

Smith Corona portable manual typewriter,
Sterling model. \$45.
Telephone: 477-1009

26 ft. '71 model Lifetime motor home, loaded,
sleeps six, low mileage.
Telephone: 487-0576

Bumper rack & foot pegs for mini bike. All
\$10.
Telephone: 645-1254

Couch, 2 chairs & ottoman, excellent cond.
\$180.
Telephone: 487-1381 or 472-3167

General Electric four burner counter stove,
push button controls. Rugs all beige--
12x19 all wool Karastan, 12x11 all wool, 12x7
synthetic. Make offer on above items.
Telephone: 723-8717

WANT TO BUY

1/3 hp. single speed attic fan elec. motor.
Pay up to \$5.
Telephone: 472-8445

**QUESTIONS YOU WANTED TO KNOW
ABOUT THE UNITED FUND...ANSWERED**

You may have some questions concerning
the United Fund and the campaign which
will be conducted here September 11-13.
Here are the most asked questions with
appropriate answers which will help you
during the drive.

Q. What is the United Fund?

A. The United Fund is a group of chari-
ties and organizations that work in the com-
munity for the betterment of the people.

Q. Why is it better to have one United
Fund than individual drives by each of the
42 agencies?

A. It's the economical way to raise money.
Many companies make contributions of per-
sonnel, printing facilities and money. All
these things go to make up the total cam-
paign. The 42 charities can get money
individually, but one centralized drive
cuts down on repetition and costs. The
cost of the campaign would be considerably
higher otherwise. With the United Fund, you
have one staff, one central collecting point,
one community effort.

Q. Can a person designate a particular
agency to receive his contribution?

A. If an employee feels strongly enough
to designate a specific agency, he should
make his check payable to that agency. How-
ever, this designation would not increase the
total contributions made to that agency.

Q. How much of United Fund money is used
for administrative costs?

A. Total operating and campaign costs of
the United Fund are only 7.8%, so that 92¢
out of every dollar donated goes directly
to the United Fund agencies for service to
citizens of Houston and Harris County.

Q. Are contributions to the Fund tax
deductible?

A. Absolutely. And you have an accurate
record of your giving if you use the pay-
roll deduction plan.

Q. Are working wives expected to contri-
bute?

A. Yes, both husband and wife give their
fair share according to their separate in-
comes.

**DON'T MISS
THE UNITED FUND FILM SHOWINGS
NEXT WEEK IN RESEARCH CONF. ROOM**