



Houston Refinery

# Shellegraph

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## ENERGY CONSERVATION, SUBSIDENCE, WHAT DO THEY HAVE TO DO WITH YOU?

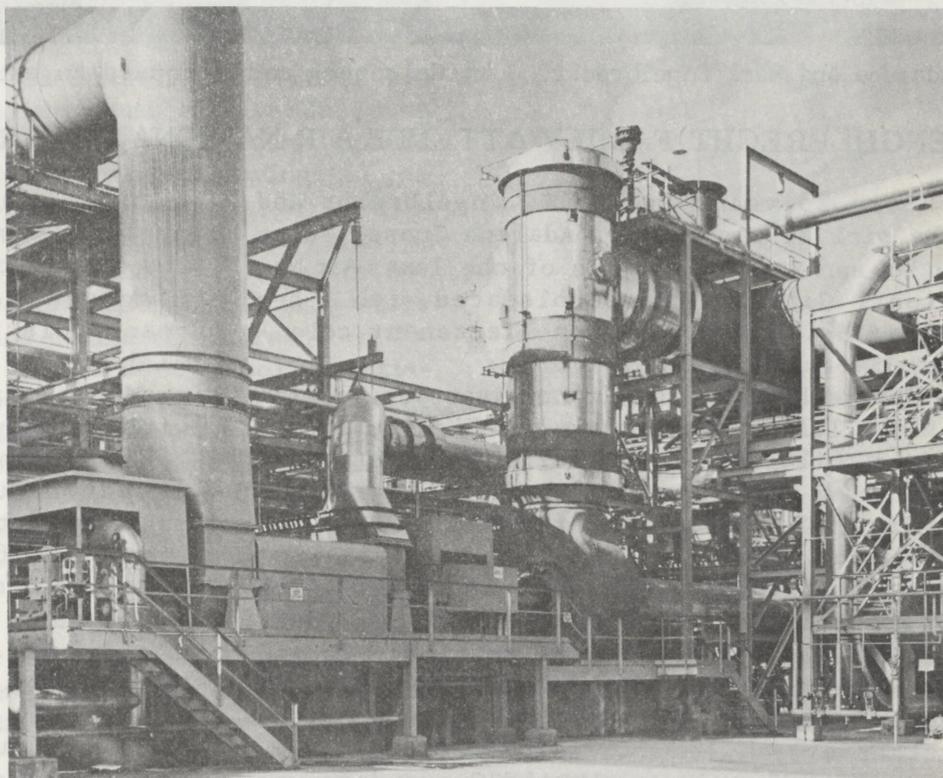
Revisions in process streams and equipment throughout Shell installations have cut energy costs.

Here energy conservation studies are underway and new resource economy measures are continuously being taken. Revisions have been made in furnaces. Projects are under consideration for recovery of effluent streams to be reused in cooling and firewater systems thus reducing our total water demand.

Efficiency of our fuel gas burning heaters has been improved by using heat recovered from exhaust gases to preheat the air to be burned and to generate steam for other uses.

The continued heavy withdrawal of subsurface water has aggravated subsidence in the area and has caused flooding of lands adjacent to the chan-

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This power recovery system on a Martinez Refinery Cat. Cracker saves about \$685,000 annually in energy costs.

## POWER RECOVERY ON PROCESS STREAMS CUTS \$3 MILLION FROM ENERGY COSTS

Power recovery from process streams in Shell refineries have cut energy costs by \$3 million to \$3½ million a year, S. S. Braun, Manufacturing Engineering, Head Office, reported during a presentation on energy conservation at the recent meeting of the American Petroleum Institute's Division of Refining in Philadelphia.

These are the savings accruing from the 60,000 horsepower recovered from liquid and gas streams: 50,000 horsepower in Shell U.S. refineries and 10,000 horsepower in other countries.

Braun explained that most of these savings are the result of a Shell invention for removing solid particles from

the hot, high pressure waste gases of catalytic cracker units so the gases can be expanded through a turbine for the production of mechanical energy used to drive an air compressor.

There are six of these units in operation in Shell refineries and three units have been licensed to other oil companies. Shell's largest installation, a system recovering 15,500 horsepower, was integrated in a new catalytic cracker built at the Martinez refinery in 1966. Although such a unit costs \$1.25 million, yearly net savings in power of \$685,000 means that the unit paid for itself in less than two years.

Power recovery from refinery process streams is only one of the means of conserving

energy in refineries in the program being stressed by Shell currently.

The Manufacturing Organization formed a steering committee last year to intensify efforts for energy conservation in Shell refineries. Manufacturing's energy bill at that time was about \$80 million a year, and has increased significantly in the past several years as a result of rising fuel and electricity prices and the high energy demand of new process units.

The steering committee, headed by H. L. Franzel, Manager Design, Manufacturing Engineering Department, works with representatives from the refineries in seeking out and applying energy saving practices and projects.



Adalene and Mark Engelbrecht, John Helenberg and Marquard Engelbrecht reminisced at reunion.

### ENGELBRECHT FAMILY ATTENDS AIR NATIONAL GUARD'S 50th ANNIVERSARY

Some 25 years ago M. A. Engelbrecht and the girl he was dating, Adalene Gross, went to an anniversary reunion of the Texas Air National Guard. They double-dated with her widowed father who was a lieutenant colonel in the Guard.

This weekend at the 50th anniversary reunion of the 111th Observation and Fighter Interceptor Squadrons and the 147 Fighter Interceptor Group, they returned with their son, Mark, a senior at The University of Texas, to renew acquaintances.

Marquard Engelbrecht, who was in the 147th Fighter Interceptor Group from 1937-1941, met John Helenberg at the reunion. He and Helenberg, whose daughter worked at the Refinery some years ago, would carpool together every week for Guard masters.

Reminiscing about the old Guard days was on the agenda for the reunion which included a dinner dance, open house and barbecue.

Marquard and Adalene both agreed that the Guard has been a big part of their lives. "We were taught when we were very young to love America and to take part in defending

it," Adalene said. "It may sound corny, but my father who was a lieutenant colonel in the Guard, believed that we should love our flag and country. And we have tried to teach this to our son. Now, Mark says he might like to go into the military when he graduates from college," she added beaming with pride.

From "Jennys to Jets" is the slogan the squadrons use since they were originally mustered into service as the 111th Observation Sq., 36th Division in Houston in 1923. They became airborne with Curtis JN4-H Jennys and moved to Ellington Field in September of that year. Adalene's father L. E. Gross was in the original squadron.

Pictures of many of the men who have been in the Guard over the years were on display at the open house which included photos gathered from scrapbooks kept by the Engelbrecht and Gross families.

An air show featuring take-offs and fly-bys of F-101s, F-102s, and T-33s was on the open house agenda and the crowd looked at the Confederate Air Force Aircraft displays.

Other Shell employees have been active in the Guard says Marquard, a pipefitter no. 1, Engineering Field. He says Bob Haldane, who retired from the Refinery as chief engineer, served as a pilot for some years in the organization.

### CORPORATE ADVERTISING CAMPAIGN FEATURES U.S. GASOLINE SHORTAGE

Shell Oil Company, in conjunction with its advertising agency, Ogilvy and Mather Inc., began on June 25 a new advertising campaign based on the present nation-wide gasoline shortage.

The campaign theme, "A Report from Shell," will begin with two print ads appearing in late June and early July dealing with consumer questions about the gasoline shortage and offering tips on fuel conservation over the coming summer months.

Shell is also scheduling a series of TV commercials offering similar information on the shortage for airing in selected markets during the summer season. Actor Richard Basehart is Shell's spokesman.



When Jimmy Dykes came back a few weeks ago for his official retirement presentation, he was given the Dykes No. 1 derrick among gifts from fellow employees presented by Charlie Evans.

**ENERGY CONSERVATION, SUBSIDENCE, WHAT DO THEY HAVE TO DO WITH YOU?**

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nel. The Refinery is in an area which has experienced as much as 6-8 feet loss in elevations since 1940.

Since 1955, the Refinery has curtailed use of underground water when subsidence became evident. Shell joined with other major water users in the area and began using surface water from Lake Houston for our utility needs. Shell constructed a water treatment plant in conjunction with Phillips Petroleum which was designed to supply over 50% of our water needs.

When the Trinity River conveyance system has been completed adjacent to the Refinery, we would anticipate taking almost all our water from surface systems rather than relying on wells to supplement our water needs.

In addition, we are faced with the possibility of major expenditures to raise our docks and other channelside facilities to a level where they won't be flooded by normal high tides.

Although the Refinery generates about 25 percent of the electricity it consumes, we still buy power from Houston Light & Power at a cost of some \$500,000 a month. What happens if the Light Company has a shortage?



Energy, water conservation, subsidence, fuel shortages, high costs--what do these issues have to do with you and me? What can we do to conserve energy?

The obvious is certainly to turn off lights when not in use. Or stop indiscriminate use of water. But here's more suggestions:

- o Put a brick in your water closet to cut volume of water needed to flush a toilet.
- o Drive your car conserva-

tively, don't speed if possible. Here are some ways the experts suggest you might be able to save gasoline:

- Maintenance--
  - o Make certain the car is properly tuned.
  - o Replace fouled or burned spark plugs.
  - o Maintain proper tire inflation.
  - o Maintain proper idle speed.
  - o Adjust brakes properly to reduce drag.

- Driving--
  - o Travel at 50 miles per hour instead of 70. The lower speed will result in an approximate 20 percent savings in gasoline consumption.

- o Avoid unnecessary trips by combining visits to the supermarket, cleaners, drug store and department store.

- o Form car pools for traveling to and from work. Cut down on cars containing only one person on the freeways.

- o Avoid "stop and go" driving by planning ahead when approaching traffic lights.

- o Do not "ride" the brakes.

- o When stopped at a railroad crossing, turn off the engine and restart it when the crossing is clear.

- o Make certain the parking brake is fully off; driving with the parking brake partially engaged uses extra gasoline.

- o Maintain a constant speed.

- o During warm-ups, let the engine idle only long enough for proper lubrication.

- o Follow car manufacturer's recommended starting procedure to avoid flooding.

- o Maintain even acceleration when climbing hills.

- o Avoid unnecessary use of the air conditioner.

- o At work, fix leaks of steam or just a leaky water faucet. Did you know that a 1/8-inch drip from a leaky faucet can waste some 82,000 gallons a month? While a 1/2 inch drip can waste a million gallons.



- o Watch equipment that uses energy or recovers energy to make sure it is functioning efficiently. If it is not, make the condition of equipment known so that it can be repaired.

- o Ladies, turn off your typewriters when you're not using them.

The list could go on and on and you probably have some suggestions you want to make. Bill Loveless of the Utilities Department says any energy saving suggestions you might have are welcome.

**PROVIDENT FUND NEWS**

The following are the Provident Fund values:

Equities Fund

June 20, 1973 - \$2.769

**ALMOST ALL WATER VESSELS MUST HAVE PERSONAL FLOTATION DEVICES ON BOARD**

If it floats and you're in it, chances are you had better have a Coast Guard-approved life saving device with you.

Texas Parks and Wildlife Department law enforcement officials say any vessel designed for transportation is subject to personal flotation device requirements, and this includes canoes, kayaks, pedal boats, rubber rafts and foam pontoon boats.

An example of a vessel which has no PFD requirement is the

innertube. It is not designed as a means of transportation.

Each person on board a vessel designed as a means of transportation must have a PFD. If the vessel is less than 26 feet long and powered by a motor, children 12 years of age and younger must wear a vest-type PFD.

Otherwise, a Coast Guard-approved boat cushion fills the legal requirement for passengers 13 years of age or older on all recreational boats until Oct. 1, 1973.

**CLASSIFIEDS**

FOR SALE

Pool table, 4x6, with equipment, \$25.  
Telephone: 485-3064

1969 Plymouth Roadrunner, 383 cu. in., air, power steering, bucket seats, console, vinyl top, good tires, good condition, \$1095.  
Telephone: 472-8410

Honda QA-50 (60cc) bike, small non-street type, 28 mph top speed, '71 model, excellent condition (less than 25 hours use), \$115. Bike helmet w/clear full face visor, worn twice, \$20. Just right for youngster.  
Telephone: 424-7382

1965 Plymouth truck--formerly a station wagon. Completely rebuilt engine and body. Built-in cabinets, ideal for carpenter, plumber, electrician, etc.  
Telephone: 333-2620

Bargains, small antique table, \$14, inlaid coffee table with drop leaf, \$70; ping pong table, \$15; curved glass top dressing table, \$10.  
Telephone: 941-4051

'67 Ford Galaxie 500, air, power, \$550; 19 ft. lapstroke boat with outdrive. Heavy duty trailer, \$650.  
Telephone: 645-0448

Sears Belt massager, good condition, \$20.  
Telephone: 944-6556

Quail for sale, 2914 Dedman St., Pasadena, \$1 each.  
Telephone: 487-2151

3 residential lake lots on Lake Palestine, average 75x140 each, \$1800 all 3 for \$5,000.  
Telephone: 498-4390

18 ft. travel trailer, fully self-contained, air conditioned, gas-electric refrigerator, hot water heater, sleeps six. \$1800.  
Telephone: 488-3397

Falcon tri hull fiberglass, boat, top, walk through windshield, 40 hp Johnson electric motor. Galvanized tilt trailer. Some skiing equipment. Boat has back to back seats. 16 ft. Fan travel trailer, sleeps 6, gas refrigerator, self contained, like new. AIR CONDITIONED.  
Telephone: 479-1168

1/3 hp electric motor with 1/2 inch shaft. Comes with 2 pulleys and an on-off switch. \$15.  
Telephone: 946-6273

Registered German shepherd, 3 months old, black and silver, great granddaughter of Rin Tin Tin, \$75.  
Telephone: 460-3211

PERSONALS

Please accept my thanks for the nice and useful retirement presents. I shall always cherish them and your friend-

ship, through our long association.

Jim Dykes

Thanks to all my many friends. I have purchased a Polaroid camera and fine tackle box with the cash gift and am looking forward to using them now that I have retired. One of the things I appreciate most in life is the many friends I made during my years at the Refinery. I will always treasure your friendship.  
Howard Wisenbaker

For Personal Status Report

**MARRIED EMPLOYEES ENCOURAGED TO COMPLETE BENEFACTS CARDS**

In these days of inflated prices and devaluation of the dollar, many people probably wonder about their financial security. To assist employees in planning for present and future security, a computerized statement reflecting personal status as it relates to the benefit plans under which they are covered, will be mailed to each one's home.

This confidential statement is prepared each year by Benefacts, Inc., of Baltimore, Maryland.

Before the statement can be prepared and mailed in October, employees with families must complete and return the Family Composition card. This card applies to employees who have a spouse and/or children under 18 years of age. Upon completion, the card should be returned to Employee Relations no later than July 12.

The data indicated on the card will be used to compute the benefits to which the employee and his family would be entitled under Social Security.

Employees are not required to complete and return the card, but the card is needed so that information regarding the value of Social Security benefits may be reflected correctly.

**YLINEN TRANSFERS TO DEVELOPMENT COMPANY AS SR. RESEARCH ENGINEER**

R. E. Ylinen, senior engineer, operations-west, transferred to Shell Development Company, Corporate Research and Development-Engineering, Mathematics and Computer Sciences Department, as a senior research engineer recently.

Robert Ylinen who holds B.S. and M.S. degrees in chemical engineering, joined Shell at Torrance, California as a research technologist in 1965.



SHELLEGRAPH

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Mrs. Josie Ochoa--Editor