



## Hurricane Delia affects crude supply to refinery

People in the middle Mississippi River valley may not think that a storm or other occurrence a thousand miles away could affect anything here, but it can and did.

In a July speech, Shell vice president Charles Towers explained the delicate balance in petroleum refinery supplies. He said, "The American Petroleum Institute reports that American refineries are running at 99.3 percent capacity... but things can change. A major hurricane in the Gulf could limit production, impede shipping and imports and delay refinery operations."

A little more than a month after Towers' speech, Hurricane Delia came along. Operations in Shell's offshore wells near Louisiana were shut down for five days immediately before and during the storm for safety and environmental reasons.

Wood River Refinery receives crude from these wells, and this temporary shutdown required some adjustments. Warren Saunders, refinery superintendent, said, "While Delia did temporarily affect the supply of Louisiana crude to the refinery, we were able to minimize the effect and maintain our production at capacity. In fact, during September we experienced the highest average throughput in the history of the refinery. Our crude inventories

have been, and continue to be, at minimum levels. We are making product as quickly as we can get crude."

In addition to Hurricane Delia affecting operations in the Gulf, the Houston Refinery experienced two unrelated fires on September 19 which affected that refinery's crude capacity. One fire was an electrical failure which shut down the distilling unit. Repairs were completed about five days later. The other fire was at a hydrotreater. The unit was expected to be off the line for about four weeks.

The two fires at the Houston refinery and Hurricane Delia combined to eliminate Shell Oil Company's "cushion" in meeting demands of No. 2 heating oil for the coming winter.

"Shell still hopes to fill its storage tanks with heating oil by December 1," explained John Sheehan, vice president for manufacturing, "and we have adjusted our refinery runs to meet that goal."

Shell announced in September that it would have about the same amount of gasoline available for sale in October '73 as it did in October '72. The plan for the 1973/74 heating season is to provide each region of the nation with the same amount of home heating oil as it did in the 1972/73 season.

"We see no reason to change these proposals," Sheehan stated.

## Hofmeier notches 45 years

It was known as the Roaring Twenties when a young man from Edwardsville named Paul Hofmeier came to work at Wood River. This month Paul marked his 45th anniversary with Shell at Wood River, and his career has taken him from those Roaring Twenties through a depression and a world war, as well as a number of other world events and Wood River advances.

Although currently an engineering supervisor, most of Paul's long service has been in Alkylation, starting even before Alky was separated from Cracking into a department of its own. Paul said, "If you were going to work on the operations side, you were hired into the refinery lab, and after a few years you either moved to an operating department or progressed up through the lab."

He continued, "Because of the depression I elected to keep my place in the lab a little longer, but eventually went to the Alkylation Department in '33. Even now I have a close working relationship with Alky since my crews do the maintenance there."

There aren't many people at Wood River more familiar with what makes Alkylation tick than Paul. At one time or another he has worked virtually every job there from gauger to maintenance coordinator. He said, "When I was a young operator helper, we were expected to know the next job up the ladder in case the operator needed some coverage. I think it made us good helpers because as we got a feel for the whole operation we could do our helper jobs better too."

Paul's expertise is known in Shell beyond Wood River as well. In 1966 he was asked to help start up a new unit at Martinez, and spent several months there on that project.

Paul recalls how World War II influenced Alkylation's production. He said, "Prior to the outbreak of hostilities in Europe we had developed 100 octane aviation fuel and were producing it in Alky. But we could make only about 50



Paul Hofmeier  
Engineering Field  
45 years

barrels per day. When we took a sample to the lab for tests they returned what they didn't use, so we could put it back in the storage tanks. Every drop was precious.

"We worked real hard to provide av-gas to the Allies. Even with improvements in production and additional equipment, it took us a long time to make the amounts they needed. Imagine how we felt when we finally dispatched our first tanker, only to have it sunk by the Germans 30 miles out of New York City."

Paul intends to work until next April when he reaches 65. He said, "I've enjoyed my work at Wood River and am proud to have had the chance to log over 45 years here."

Proud he should be. Paul now stands as the elder statesman of Wood River's active employees and, until Clyde Hitch of Distilling reaches the 45 year mark next January, is the only one on the rolls with 45 years' service.



UNITED FUND Co-chairmen for this year's United Fund drive at the refinery, Erv Keister of Dispatching (left) and Wayne Strickland of Treasury note that donations are nearing the goal, while Teresa Beiermann of Hydroprocessing and Mary Shultz of Research (left to right) point out the refinery goal is \$28,000.

## New HDU exchangers help conserve fuel

Conservation of fuel is a subject very much on the minds of us all these days. But efficient operation and the search for methods to conserve fuel have long been important subjects to the petroleum industry which, in order to produce various fuels for others, must itself use large amounts of fuel.

Another example of how Wood River Refinery is attuned to fuel conservation has recently been installed at the Hydrodesulphurization Unit No. 1 (HDU-1) in Aromatics East.

HDU-1 is a feed preparation unit for the Catalytic Reformers. Its prime function is to remove sulphur from feed stocks before they are processed through the Reformers to become high octane gasolines. In desulphurizing the feed, the HDU requires heat. This is achieved by using heat exchangers and a gas fired furnace. In the exchangers, feed passes through the shell adjacent to heated product going through it within tubes. The feed is heated while the product is cooled and condensed back to a liquid.

A couple of years ago, H. T. Chao, then an engineer in Technological, studied the feasibility of adding more heat exchangers to the HDU. If enough furnace fuel could be saved to justify the cost of the exchangers, H. T. reasoned it would be a worthy project. H. T. was later transferred to Hydroprocessing, but the project continued. Now H. T. has

found himself on the operations side, where the benefits of his original study are being realized. Dick Keeler, process engineer in Hydroprocessing, acted as departmental coordinator for the installation.

Three new heat exchangers have been installed at HDU-1, which roughly doubles the heat transfer area available in that unit. Because more feed can be stepped up in temperature through this natural exchange process, there is less need for furnace heat to raise feed stock temperatures to the level required for the reactors.

This, simply, saves fuel in the furnace because it doesn't have to work so hard. It has been estimated that installation of the new exchangers at HDU-1 will save approximately 12,000 barrels in furnace fuel during the next year. This can be increasingly more important as the demand for this fuel continues to rise.

Just slapping in additional heat exchangers doesn't automatically result in fuel savings, however. As mentioned, H. T. Chao has been involved in this project since 1971, and a good number of other people are also responsible for its successful design and installation.

Dale Appleby, of Engineering Office, was the project engineer and he said, "One doesn't always realize how many people with different specialties work

(Continued on page 4)



BET THEY GET BETTER GAS MILEAGE THAN YOU DO. World records were set and then broken in this year's MILEAGE MARATHON®. For a picture story of the events, turn to page 3.

## Sports and shorts

### Fall Dance

The annual SRA Fall Dance will be held Friday, November 2, at Collinsville Park. Tickets, which can be purchased at the door, for \$4 for SRA members or \$7 for non-members, will be good for dancing, refreshments and food from 8:30 pm to 1:00 am. Six turkeys and other door prizes will be awarded.

### Astronaut recovery

Lieutenant (jg) Dennis Kruckeberg served as backup helicopter pilot during the recent recovery of astronauts Bean, Garriott and Lousma in the Pacific after their record space mission. Dennis, who was assigned to the USS New Orleans on this trip, will also be on hand after the next space mission which is scheduled to splash down in December. Dennis and his father Kenny of Engineering Field were featured in last month's issue for their flight to Alaska in a small plane.



Pam Kingery

### Masters Degree

Pam Kingery, daughter of Joe Kingery of Engineering Office, received her Masters Degree in elementary education August 31 at SIU-Edwardsville. She teaches second grade at Whiteside school.

### Bowling -- first quarter winners

Dispatching grabbed the first quarter title in the Monday night SRA bowling league, and Engineering Field turned the trick in the Wednesday night league.

### Dr. Mitchell receives honor

The refinery's physician, Dr. M.F. Mitchell, recently became a Founding Fellow of the American Academy of Family Physicians. Dr. Mitchell received his medical degree in 1947, and has been in private practice in Alton since 1953. To receive this honor, Dr. Mitchell completed 500 hours of postgraduate study in addition to maintaining his private practice as a family physician.

### Honored for service during flood

The same four employees featured in the May issue of the *Review* for their efforts during the flood were also given public service awards by the American Radio Relay League Inc. Those receiving certificates were: Bus Howell of Engineering Field, Tom Colgate of Engineering Office, Bill Fruit of Technological and Jerry Manis of Research.

### Attend management course

Ray Lopez, superintendent of operations, Light Oil Processing, and K. Tamaribuchi, manager of Fuels in Research, attended the three-week Shell Management Course at Fairway Farm near San Augustine, Texas. The course includes presentations by senior managers of all Shell Companies, and outside authorities on topics of current managerial interest.

### World-wide bridge contest

The SRA Bridge Club will participate again this year in the Shell World-Wide Bridge Tournament, playing hands dealt by a computer at Amsterdam and distributed to all Shell locations. The tournament will be held Sunday, November 4, at 2 pm in the cafeteria. All Shell employees, pensioners and their families are eligible. To enter, just show up.

## Guns can be dangerous to your health

Autumn in Illinois and Missouri finds hunters of every description moving through field and wood, or crouched intently in blinds in pursuit of a variety of game. Unfortunately, autumn also finds many of these gamesters injured or killed by the very weapons they had intended to use on their prey.

These accidents should not happen. Inattention or downright disrespect for the dangers of firearms cause such tragedies. If you intend to partake in the invigoration of the hunt this fall, practice the Ten Commandments of Shooting Safety outlined below and return home with your limit, safe and sound.

### TEN COMMANDMENTS OF SHOOTING SAFETY

1. Treat every gun with the respect due a loaded weapon.
2. Watch that muzzle! Carry your gun safely; keep the safety on the weapon until ready to shoot.
3. Unload guns when not in use, take down or have actions open; guns should be carried in cases to shooting area.
4. Be sure the barrel is clear of obstructions, and that you have ammunition only of the proper size for the weapon you carry.
5. Be sure of your target before you pull the trigger; know identifying features of your game.
6. Never point a gun at anything you do not want to shoot; avoid all horseplay.
7. Never climb a tree or fence or jump a ditch with a loaded gun; never pull a gun toward you by the muzzle.
8. Never shoot a bullet at a flat, hard surface or water; at target practice be sure your backstop is adequate.
9. Store guns and ammunition separately, beyond reach of children.
10. Avoid alcoholic beverages before or during shooting.



A BLOOMIN' SUCCESS. "Van" Van Babber of Dispatching explains some of the characteristics of his various prize winning dahlia blooms to an appreciative Jeanne Boyer, refinery nurse. Van presented a bouquet to the refinery hospital.

## Dispatching operator dabbles in dahlias

Dean "Van" Van Babber, operator in Dispatching, doesn't consider himself to be what is now popularly termed as a "member of the flower generation," but no one can deny he is an expert grower of flowers-dahlias to be exact.

Van has just completed another successful season of cultivating championship blooms, as witnessed by his nine first-place, six second-place and one best-in-division ribbons he won in the Greater St. Louis Dahlia Show held at Shaw's Gardens in September.

For 15 years Van has been growing, nursing and experimenting with 30 or so varieties of dahlias in order to get the biggest, most colorful and most perfect blooms possible. His garden, complete with canopy to protect the plants from mother nature's more aggressive tendencies, has always been behind his home in Rosewood Heights.

When asked to enumerate the various prizes he has won over the years, Van laughed, saying there are too many ribbons and trophies to count anymore. He does recall, however, that he has won the most perfect bloom three times, and the largest bloom in show "a couple times." Last year, for instance, he sired a bloom 14 inches in diameter and eight inches deep.

"I am just a small grower," said Van, "with 70 to 100 plants. Each plant has four to six blooms. Some people have plots with 400 plants or more. I enjoy competing against these 'big boys', and have been able to hold my own against them."

The "big boys" seem to have recognized Van's skill and expertise in the field because in addition to being a member of the National Association of



PRACTICE PROPER FIREARM SAFETY. John Fields and Truman Hargiss, pipefitters, carefully check their guns before heading out to shoot trap or game.

Dahlia Growers, he is an accredited judge for their competitions.

But the pleasure of helping mother nature get the full potential out of her dahlias and winning ribbons and trophies, is not the most satisfying aspect of Van's hobby.

He said, "I get more pleasure out of sharing my flowers with people who need the cheering up only a colorful bouquet can bring. Every year I visit hospitals, nursing homes and shut-ins and leave behind as many good blooms as I can spread around. Sure, I visit people I know, but also a lot of people I have the pleasure of meeting for the first time."

The blooming season for dahlias is now over, but the work hasn't finished. With the first freeze, Van's neighbors will find him out back cutting the stalks, digging up the roots, and tagging them. He then will store them in sand boxes down in his basement until next spring when he will plant them again in May.

Who knows how many *biggest and best-in-shows* are sleeping in the sand? Chances are, a number of them.

## SRA schedules

## Board election

In mid November there will be an election for ten positions on the SRA Board of Governors. SRA members will be asked to vote for 3 candidates from operations, 3 from the crafts, 2 from staff and 2 women representatives.

Any SRA member interested in becoming a candidate for this election should contact Barb Black, secretary of SRA, in Payroll, or any of the present board members.

Candidates thus far are:

**OPERATIONS**  
Robert E. McDonough - Distilling  
Winston Wallace - Refinery Lab.  
David R. Webster - Lubricants

### CRAFTS

Louis A. Bleier - Truck Dispatching  
William L. Bright - Insulator  
Glenn W. Crockett - Pipefitter  
Harold J. Ellis - Pipefitter  
James K. Rensch - Truck Dispatching

### STAFF

Charles W. Gibson - Engineering Field  
Gene Lawson - Research Lab.  
Charles H. Rose - Engineering Field

**WOMEN REPRESENTATIVES**  
Clo Laird - Light Oil Processing  
Judy Sasek - Employee Relations  
Marella Zaganelli - Treasury

## Researchers set new mileage records in MARATHON



With his wife Karen and son Riley navigating from the sidecar, Ed Brown rode his BMW through the Illinois countryside to a ton-mile trophy in the motorcycle division.



A familiar scene in the starting pits . . . parts, tools, rags and instruments. Last minute super-tuning was the order of the day.



A winning combination. Ben Visser watches as his wife Carolyn ('Toots') hooks up the gas supply. Martin wasn't here this year, but the Visser/Toots entry broke two world records.



Entries of every size and description ran in the Marathon. Two classic sportscars waiting for the start are Ed Rosenquist's 1955 MG (foreground) and the 1956 Austin Healey of Gene Lawson.

It all started in 1939 with a friendly bet between Research Lab employees on who could get the best gas mileage with their family cars. "And it still is a friendly contest," says Jack Armstrong, research director, "but now it has expanded into a family day affair, and some of the entries are highly modified vehicles using extreme driving techniques."

The recently completed MILEAGE MARATHON® brought 39 entries in five divisions ranging from motorcycles to family cars to unlimited-modified wheelers, which in some ways actually resembled automobiles. All were driven by employees or retirees of the lab, or members of their families.

Depending upon which division they were in, vehicles drove either a 38 mile course through the Illinois countryside or a 14 mile course along the River Road. The modified and unlimited divisions allowed "marathon driving techniques" such as coasting, whereas others were required to maintain a relatively steady speed.

Mileage is measured in two ways for the contest. First is the most obvious to the driving public—straight miles per gallon. The other is ton-miles per gallon.

"Ton miles per gallon is really a better measure of efficiency," said Pete Van Benthuyzen, research engineer and member of this year's marathon committee. "It measures gas mileage per ton-weight of the vehicle. If one car weighs one ton and gets 20 miles per gallon, it would also get 20 ton-miles per gallon. But if another vehicle weighing two tons also gets 20 miles per gallon, it's twice as efficient and would get 40 ton-miles per gallon."

Several records fell to the onslaught of this year's lightfoots, mostly in the Unlimited Division. The only record breaker outside this division was Dave Barker, senior lab technician, who got 124.701 ton-miles per gallon in his 1969 Barracuda. This bested the record for the Modified Sedan (standard transmission) Division.

After the dust settled in the Unlimited Division, however, archivists were seen scurrying for their pens because this year's entrants rewrote the record books. In an early run Carl Hendrickson, supervisor in Fuels, and Dale Wilpers, research chemist, coaxed Carl's 1968, 327 cubic inch Corvette (modified for the event) to a new ton-mile record of 332.9.

Doug Carlson, research engineer, and Rich Trokey, senior lab technician, followed by breaking the straight, miles-per-gallon record when they squeezed 304.17 m.p.g. out of their modified 1959 Fiat.

These records were not destined to stand, though, as Ben Visser, research engineer, coasted across the finish line in his highly modified 1959 Opel with not just one, but two world records to his credit. Ben, whose pit-crew partner is his wife Carolyn, shattered the existing miles-per-gallon and ton-miles-per-gallon records by posting 376.59 m.p.g. and 451.90 t.m.p.g. respectively.

This year's event drew national attention, presumably because of the gasoline situation and everyone's interest in achieving better gas mileage, but to those who participated it was no less the good clean competition and family get together it has been for years.



"What do you mean—do I know what I'm doing?" Research Director Jack Armstrong makes some last minute adjustments to his gas guzzling Pinto.



SUPER SHELL, in carefully measured amounts, awaits use by the contestants.



When you plan to do a lot of coasting, every pebble in your way can slow you down. Doug Carlson (left) and Rich Trokey sweep a clear path through the gravel near the starting line.



The Visser entry (foreground), a 1959 Opel, shattered the previous records in both miles-per-gallon and ton-miles-per-gallon, while the Carlson-Trokey entry, a 1959 Fiat, captured second place honors in miles-per-gallon.

## Heat exchangers . . .

(Continued from Page 1)

together on a project like this. It's a real team effort."

Unraveling reams of drawings and "spool sheets" Dale said, "Some people may think the engineer makes all these complicated blueprints, but he doesn't. We have highly skilled draftsmen who do this vital work, and it would be mighty hard to get a job done without them. They have to be as familiar with the project as I am to be able to do work of this caliber. Ed Hickey is the senior draftsman who did these."

Designing a workable piece of equipment is only part of the "design" work necessary. It has to fit into the area available for it, and that usually isn't just a matter of setting it in place.

Engineering Projects Group, in close coordination with Engineering Field, was charged with the responsibility of installing the equipment. Jules Weshinsky, engineering supervisor, guided this part of the project.

Jules said, "At one time or another nearly every type craftsman in Engineering Field worked on the installation and hookup of these exchangers. And the Safety Department was with us all the time. Because the area was already pretty full of working equipment, it was no easy job. In addition to the large amount of pipe fabrication necessary, one of the more challenging things was getting the 30-ton exchangers into place.

"About two months of planning by several people went into just figuring how to get those massive things into place without disturbing the existing equipment. When it came down to

actually getting everything in, all went fine, thanks to the skill of our craftsmen, the guidance of Safety, and the fine cooperation of the Aromatics people."

If you go by the area in Aromatics where the new heat exchangers are located, they fit so snugly among the other equipment, chances are you won't even notice them. But don't be fooled; a great deal of planning and expertise went into their design and installation, and they are doing a whale of a job, in their own way, to help conserve precious fuel.

## Pollution control

Modern refineries are designed to include pollution control equipment which greatly reduces air and water pollution. Air cooling of process units has greatly reduced cooling water requirements, and recycling has resulted in greater efficiency in water use. Water treatment devices include separators, skimmers, aerators, filters and holding lagoons.

### IN REMEMBRANCE

VAN MILTON BECK, September 7. Mr. Beck was a pumper in Dispatching before retiring in 1963.

WILLARD JAMES SHIRLEY, October 4. Mr. Shirley was a boilermaker before retiring in January, 1972.

### ANNIVERSARIES



John McConnell  
Engineering Field  
35 years



Charlie Stanley  
Engineering Field  
35 years



Leroy Meininger  
Engineering Field  
30 years



John Carmody  
Engineering Services  
25 years



Grover Egmon  
Hydroprocessing  
25 years



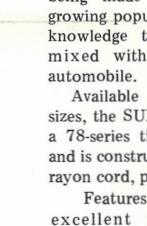
Jack Evans  
Hydroprocessing  
25 years



Ed Fontana  
Purchasing  
25 years



Harold Kendall  
Engineering Field  
25 years



Ray Sieve  
Engineering Field  
25 years



Harry Young  
Engineering Field  
25 years

### CLASSIFIED ADS

#### FOR SALE

Regulation pool table and cue rack. Two years old. New it was \$375. Will sell for \$150. Brenda White. 618-259-1864.

Hand carved African chess set. Make offer. Karen Snyders. 618-463-1356.

Duncan Phyfe drop leaf table. Two extra leaves. Table pads. Perfect condition. \$100. L.A. Brooks. 618-465-3077.

Trumpet and case. Holton Collegiate. Good condition. H.C. Schwab. 618-233-8748.

Underwood desk typewriters. Both with elite type. Manual, \$95. Electric \$200. C. Baker. 618-345-4525.

Olivetti calculator. Add, subtract, multiply and divide. \$250. C. Baker. 618-345-4525.

Mercury Monterey station wagon. 1972. Air conditioning. Power steering and brakes. Uses regular gas. Jack Spaulding. 618-462-0171.

Chevelle SS 396. 1969. Four speed, new linkage and shifter. Runs good. Henry Vassar. 618-465-9054.

Two Firestone 500 tires. Belted, 78x15. Many miles left. Best offer. Tom See. 618-466-7867.

Large wooded corner lot. 179' x 113'. Located in one of Alton's finest residential areas. Fairview Drive off Humbert Road. Don Page. 618-466-0317.

WANTED  
Garden roto-tiller. Harold Davidson. 618-462-6308.

### RETIREMENTS



Tom Krepel  
Engineering Field



Leon Little  
Engineering Field



Marlin Packard  
Engineering Field

## Shell offers Radial Snows

Winter is not far off and now is the time to consider purchase of snow tires, before you find yourself hub cap deep in snow and unable to move. Shell has introduced a radial snow tire as a companion to the popular SUPER SHELL Steel Radials.

The SUPER SHELL Radial Snow is being made available because of the growing popularity of radial tires and the knowledge that radials should not be mixed with other type tires on an automobile.

Available in the seven most popular sizes, the SUPER SHELL Radial Snow is a 78-series tire made with rayon fabric and is constructed with two radial plies of rayon cord, plus four rayon cord belts.

Features of the new tire include excellent traction, braking power, stability, cornering, mileage, fuel economy, road hazard resistance and the new .38 inch single white stripe whitewall.

### SHELL OIL COMPANY

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 **Review**

Wood River, Illinois



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WOOD RIVER REFINERY

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Bill Gibson, editor

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