VOL. 36 NO. 6

WOOD RIVER REFINERY

JULY, 1973

Doing it the safe way

Last month you learned how an idle Alky column was dismantled, modified and moved to Gas, where it was then erected and put into service again.

Safety plays an important everyday part in the running of our refinery, but have you ever considered exactly how a specific job is planned and followed through to insure safe execution? Let's go back and see just how carefully the Alky/Gas move was made

Before the Alky column was dismantled, it was thoroughly purged and ventilated. And before craftsmen were allowed to enter or work on the column to dismantle it, special equipment was used to check the atmosphere.

This "sniffer" equipment assures there are no combustibles around which could be ignited, and makes sure there is sufficient oxygen for the craftsmen. Tests are also made to assure there are no residual chemicals present. If anything is unacceptable, work does not begin until the situation is corrected.

Careful planning took place before the Alky column was cut in half and brought to the ground for further preparation. Things such as column weight and crane capacity had to be calculated, not to mention the workable area for the crane and its intended load.

Moving massive weights as were involved here (the upper section weighed 94,000 pounds and the lower 150,000 pounds) is a measured process. It is done very slowly and very carefully. Every move is pre-planned and followed to the letter. The crane operator is assisted by many pairs of watchful eyes from start to finish

Still at the original Alky site, the column once brought to the ground, was stripped and refurbished for its move. For instance, platforms and walkways ringing its exterior were removed to facilitate the move through the refinery as well as to allow it to rest more securely on the trailor.

Security personnel assisted in mapping out the best route from Alky to Gas and controlled traffic flow while the loads lumbered slowly toward their destination. The two sections were transported individually, a few days apart.



While crane operator Ernie Felkel surveys crane activities, craneman helper Rich Showalter keeps in radio contact with the craftsmen working on the column.

Upon arrival at the new site, planning and preparation similar to the dismantling of the column at Alky was put into effect—more or less in reverse. Two cranes were used to lift each section off the trailer and erect them on their foundation. One crane lifted while the other guided the bottom of the intended column forward. When the column piece was in the proper alignment, the larger crane took the load and set the section.

Precise advance planning is necessary in such moves because a crane with a boom 190 feet high, moving a 75 ton, 8-foot by 90-foot mass of metal is no dainty operation. (Continued on Page 4)



Each employee giving blood had an opportunity to win one of the dozen savings bonds donated by the refinery. While Carol Stevenson of Treasury draws another of the lucky winners, Boots Walters of Treating assists. Boots is a member of the exclusive "Four Gallon Club" of blood donors.

Handle with care! That's my paycheck

Our paycheck. What single item is more universally important to all of us when we think of our jobs? It isn't the only thing, to be sure, but just try and skip us one time and see how we react.

We take it for granted that our mailbox will greet us every couple weeks, right on time, with that welcome gray envelope rewarding us for our efforts in Shell Oil's behalf. What few of us realize, however, is that a great deal of coordination and work has been done by many people to achieve this end. And that's how they earn their paychecks.

Let's look into some of the behind-the-scenes action that takes our pay from our toil to our pocketbooks.

After each pay period our departments are charged with the responsibility of accounting for the time we have worked. Ultimate responsibility for this rests with supervision. Time cards and time sheets are certified and dispatched to the payroll section of the Treasury Department where several cross references are made.

For instance, if we took a vacation or were ill during a pay period, this time must be accounted for separately. The department initiates this notification also, but sends it to payroll by way of Employee Relations where supporting documents are checked.

Payroll specialists take these documents from the various sources and put the information into a format conducive to key punch operations. Key punch employees prepare IBM cards which translate the information into computer language for machine calculation of the payroll.

As was said earlier, payroll and accounting people check and double-check all information prior to running the actual payroll. Second only to no paycheck at all is an incorrect one. Payroll incorporates manual and computerized methods to minimize such problems.

After everyone is satisfied that things are correct and ready to go, data processing personnel arrange for a telephone long-lines marriage between Houston's central computer and Wood River's terminal. On a signal from us, the Houston computer calculates your paycheck and all its deductions and directs Wood River's computer, over the phone, to print your name and amount on a certain check. Everything is done automatically between the two



Every effort is made to assure your paycheck is issued correctly and on time. Barb Black, Jan Hammond and Marg Stroud are shown reviewing supporting documents before making final payroll input. Barb and Jan specialize in hourly payroll while Marg handles staff.

This, by the way, is a unique situation in Shell. Wood River is the only location with the responsibility of printing and mailing its own checks. All the other 30,000 or so Shell employees across the country are paid out of Houston. Al Slivka, chief data processor in Treasury, said, "We feel this setup, at present, is best for the people at Wood River because we have more control over the actual process, and we can be more responsive and personal with our 'customers' as well."

Responsive--and busy--they are. For instance, every week there is an hourly payroll (operations one week--field the next) of from 600 to 700 people. On weeks when a staff payroll falls, this number is roughly doubled.

Documents must be generated by the departments or individual crafts, coordination made with intermediate stops like Employee Relations, information checked and cross-referenced, hundreds of IBM cards punched, computers matched up with Houston, and checks printed, enveloped and mailed. All of this takes place in about three days so that paychecks can be mailed in time to arrive on payday. If the mailman does his job, your paycheck is there waiting for you.

All those people who work to get you your paycheck are doing their best, because they share your desire for a timely and accurate paycheck.

Employees answer the call during annual bloodmobile drive

Thanks to a generous number of generous people, the Shell-sponsored Red Cross blood drive on June 21 and 22 brought in more units of blood (287) than in the last several years. As we all know, this blood will go a long way in helping save lives. Those who participated can be proud of their contributions.

At one point a Wood River cab, commissioned as shuttle bus, had to call for another to help with the steady stream of Shell donors.

Nurses and various Red Cross volunteers were on hand at the Rox-Arena in Roxana to screen donors and accept their blood. It was an orderly and swift operation, capable of handling many people simultaneously.

As good as Shell's turnout was this

year, it could have been much better. Those who perhaps considered participating but changed their minds at the last minute are encouraged to go through with this painless, worthwhile experience next year.

Those who participated in this year's drive were eligible for a drawing of U.S. Savings Bonds presented by the refinery. Winners of \$25 bonds were: George Blackston, operator, Dispatching; Elton Bloemker, garage mechanic; Ernie Bolen, truckdriver; Don Elliott, carpenter; Jess Grover, foreman, Engineering Field; Irwin Halcom, boilermaker; Russ Helmich, lab tech, Research; Steve Lash, boilermaker; Kent Loeffler, laborer; Warren Meyers, carpenter; Maurice Miller, field machinist; and Bob Neudecker, insulator.





Family picnic

One heck of a good time -- that's the only way you could describe it. The annual SRA Family Picnic was held this year at the Chain of Rocks Fun Fair Park, and judging from the comments heard during and after the event, this just may become a tradition.

It would be hard to estimate how many SRA families attended, but it is easily the best turnout in many years. The weatherman provided a typical St. Louis summer day on June 30th -- sunny and hot, and not a small number of those attending took advantage of the swimming pool at their disposal.

Although there were quite possibly upwards of a thousand Shell people at the spacious amusement park, there was virtually no waiting at the many rides and refreshment stands.

Charging for bingo or playing for cash is forbidden in Missouri, but that didn't dampen the enthusiasm of the capacity crowd which relaxed under the large pavilion and vied for packages of various Shell products donated by the refinery.

The SRA board will soon be making plans for next year's picnic. If you have any comments on whether this year's format was a good one or not, they would be happy to hear from you.











Operations personnel take PILOT training ... but not with airplanes

Recognizing that operations personnel need to remain current and competent in their highly technical field, Shell makes available to Wood River operators and operations foremen a self-instructional training program covering various areas of refinery operation.

This program called PILOT (Programs in Learning Operating Techniques) is offered under the auspices of the American Petroleum Institute and the Resources Development Corporation.

Participants study on their own time with materials and a course of study similar to correspondence school. They are assisted in their studies by departmental trainers. A number of different subjects are offered such as the nature of heat, furnace operation, practical distillation, and the mechanics of fluids.

Courses carry hours of credit for successful completion. Accumulation of

sufficient hours entitles the individual to a certificate recognizing his level of achievement. Recently a number of Wood River people reached the 50 and 100 hour plateaus and are being recognized by the refinery and the American Petroleum Institute. They are:

Alkylation

Dale Ball, Maxy Maxfield, and Skeeter Wright.

Lubricants

Jack Cherry, Joe Dallas, Eb Eberhart, Doc Elam, Deno Filippini, Ben Koch, Carl Mosser, Emil Schneider, Ed Wargo, and Ben Wohlert.

Utilities

Terry Abernathy, Al Amrein, Lennie Condellone, Everette Cooper, Bob Dealey, Ed Depping, Vaile Drum, Virg Huber, John Merkel, Earl Nailor, Charlie Payne, Burt Schneider, Art Schnelten, and Joe Slaby

Experts suggest how we can get better mileage

Hitting the road this summer? Here are some ways the experts suggest you might save gasoline:

Maintenance-

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

Driving-

- 1. Travel at 50 miles per hour instead of 70. The lower speed will result in an approximate 20 percent saving in gasoline consumption.
- 2. Avoid unnecessary trips by combining visits to the supermarket, cleaners, drug store and department store.
- 3. Form car pools for traveling to and from work. Cut down on cars containing

only one person on the freeways.

- 4. Avoid "stop and go" driving by planning ahead when approaching traffic lights.
 - 5. Do not "ride the brakes."
- 6. When stopped at a railroad crossing, turn off the engine and restart it when the crossing is clear.
- Make certain the parking brake is fully off; driving with the parking brake partially engaged uses extra gasoline.
 - 8. Maintain a constant speed.
- 9. During warm-ups, let the engine idle only long enough for proper lubrication.
- 10. Follow car manufacturer's recommended starting procedure to avoid flooding.
- 11. Maintain even acceleration when climbing hills.
- 12. Avoid unnecessary use of the air conditioner.



Glassblower practices ancient art in modern lab

Like the origins of fire itself, the exact discovery date of glass is lost in history. But historians tell us it was at least 4,000 years ago when some dumfounded individual first noticed this crystalline substance lying in his spent bonfire.

Manufacture of glass, likewise, is an art more ancient than many of us realize. At first, glass was used chiefly for jewelry and ornaments and remained this way for centuries. Experts say that sometime around 20 B.C. glassblowing was invented which paved the way for glass in industry.

Except in specialized companies, there really aren't many glassblowers in industry today, but we have one here at Wood River. He is Dale Williams, and he performs his interesting feats in the

Dale didn't begin as a glassblower -rather he is a self-taught artisan. Ironically, his first Shell job in 1951 was bottlewasher, but he soon moved to lab assistant; working with engines, fuels and other products not related to glass manufacture

When the incumbent glassblower left to return to school in 1963, Dale sought that position and won it. Glassblowing being the specialized field it is. Dale was pretty much left on his own to develop his technique.

"I studied books and practiced hard," said Dale. "But some things can't be learned from a book because each situation is different. You have to use your imagination.'

"For instance," he said, "I recently made an apparatus which incorporated a tube within a tube, all enclosed. To suspend the inner piece while working on the outer one, I inserted a copper screen. After the inside tube hardened and could maintain its own position, I introduced a nitric acid solution which dissolved the copper but didn't affect the glass. Then, I just 'poured out' the copper, sealed it, and the piece was complete."

Not all of Dale's assignments are that complicated, but glassblowing in general does require imagination and planning. "Some pieces are just like puzzles," said Dale. "Sometimes you get three-quarters finished and have to start over because to formulate one last part you'd have to break another part to get to it." He admits that has happened to him, but at least he learns from his mistakes.

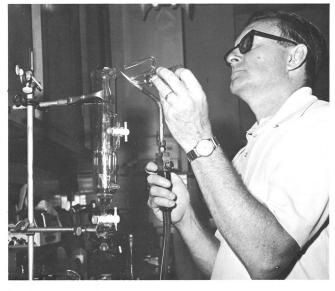
Dale displayed a box full of what would be described by the uneducated eye as "junk". In fact this "junk", born by necessity, is an important part of Dale's job. He said, "There is equipment specially designed for glassblowing, but often you have to make your own tools, holders, and so on, for a specific situation. These are what I have used in the past. I'd never throw them away because you never know when you may need them again."

Dale repairs damaged lab pieces as well as making a number of specialized pieces not available through glass equipment suppliers. "The engineers and chemists draw up what special piece they want, and it's up to me to figure out how to make it," said Dale. "A couple years ago I made an unusual piece and later saw essentially the same thing in a catalog. I'm sure it hadn't been listed before.

"A lot of people think of glass as being very breakable and only used as beakers, tubes, and the like," said Dale. "But in fact, once heated, glass is very flexible. I can heat a standard tube and draw it out into a thin wire 1/20,000 of an inch in diameter-yet capable of carrying substances through it like any other tube.

"A book I read says the strongest glass, formed into a 2 inch cube, can withstand 350 tons before being crushed. That's pretty strong!"

Flexible but rigid. Fragile but strong. Glass is indeed an interesting substance, and Wood River's Dale Williams knows and respects its capabilities.



Complex glass apparatuses, tailor made to your needs. Dale Williams performs his highly specialized skills at the Research Lab. Dale is shown heating and forming glass to make a unique piece of equipment used by lab chemists.

ANNIVERSARIES



Burns Gross Refinery Lab 35 years



Ray Mellies Technological 30 years



Paul Montgomery Engineering Field 30 years



Tom Sawyer **Engineering Field** 30 years



Harold Wagner Engineering Field 30 years



Everette Cooper Lubricants 25 years



Marty Davis Dispatching 25 years



Darrell George Light Oil Processing 25 years



Leonard Lovejoy Lubricants 25 years



Lorman Maxwell **Light Oil Processing** 25 years



Phil McGuire Treasury 25 years



John Menzie **Engineering Services** 25 years



Ray Penrod Hydroprocessing



Lester Poos Hydroprocessing



Warren Saunders Ref. Superintendent



Pete Slaten **Engineering Field**

Safe boating is no accident

Many of us are boating enthusiasts. Whether we captain our own vessel or serve as a member of another's "crew", we have at our disposal many good rivers and lakes in this area to do our summer boating.

All boaters should know the nautical "rules of the road", but the most important one is common sense. Here are a few tips on how to avoid boating mishaps, according to the Outboard Boating Club of America.

- 1. Check before you go out to be sure you have: life saving devices for each person aboard, proper lights, a fire extinguisher, a horn or whistle, anchor, line, paddle, first aid kit, flashlight, tool kit, an extra tank of gasoline and a flare. This may take a little time, but in the long run it will be worth it if you
- 2. Check the weather forecast before casting off. Bad weather is boating's worst enemy. If the water gets too choppy, have your passengers take a seat in the bottom of the boat, near the centerline, head into the waves and reduce your speed. Of course, try to get to shore as soon as is prudently possible.
- 3. Keep movement in a small boat to a minimum. If you must change seats, move slowly, keep low and grip the sides with both hands. Never stand up unless your boat is big enough and stable enough to support you.
- 4. Reduce your speed before turning -- a sharp turn at high speeds can dump you and your passengers overboard. It's a good idea to check your passengers to see they are all prepared for your intended turn.
- Watch for rocks, logs, snags and other objects that may lie under water. If you notice floating debris or driftwood, slow down and be alert.
- 6. Don't overload your boat. Seating accommodations are not necessarily the only indicators of how many people you can safely handle. Overloads can swamp a boat. Distribute the weight evenly.
- 7. Use extreme care when fueling. Extinguish any smokes or open flames. Place portable tanks on a level surface outside the boat. Mix gas and oil thoroughly, tighten cap and vent. If possible, use a second can to mix the fuels and then transfer the mixture to the tank. Use only approved containers for fuel. Wipe up all spillage immediately.

Bon voyage!











The safe way ...

(Continued from Page 1)

a safer one.'

everything is, and what to be alert for. We

want to get the job done, but safely. We

try to avoid any situation that might expose anybody." Graham added, "That

includes housekeeping. A well kept area is

have been secured together, but before

the unit is to go on stream, extensive

testing is done by operations and

finish, and then continually thereafter,

safety is a most important consideration

of this or any job in the refinery. It

worked well in the Alky/Gas trade, and

thanks to a lot of people it works well

Calculations are made, double checked

and coordinated before action is taken.

Shown making a final review of the

figures are engineering supervisors (from

left): Johnny Parjanie and George Mateer,

Engineering Projects, and Wimp Davis,

4000

Engineering Services personnel.

throughout the year also.

After the two parts of the column

So there you have it, from start to

Location of pipe racks, power lines and operating units must be noted and avoided.

When the upper portion of the column was lifted into place, further precautions and procedures were necessary.

Because the ladders and platforms had been removed for better transport, a work platform had to be provided. Carpenters built a bracket scaffold to rigid Shell safety specifications, and boilermakers then used this scaffold to bolt, and later weld, the two large pieces back together as one column.

While the other craftsmen were working above, the cranemen remained at their controls keeping the pieces steady, and poised in position, as well as standing ready to offer other assistance in a se cond's notice. A portable two-way communications system provided constant voice contact between the craftsmen above, and those below.

Every aspect of this complicated job was carefully calculated and considered beforehand-not just from an engineering standpoint, but from the craft, operations and safety standpoints, too. Maurice Graham, senior safety inspector, stressed, "We had many discussions and close coordination between the designers. operating departments, field department and safety. It couldn't be done properly any other way. The job went very smoothly."

He continued, "It's very important that the craftsmen and others involved know exactly what the status of



10 and over



RETIREMENTS



Bill Brodley Refinery Lab

Boyd Kennedy

Engineering Field



Bill Fansler Lubricants



Bob MacDuff Technological



River since 1932.

CLASSIFIED ADS

618-259-3628.

Boat, motor and trailer. 14 foot Wolverine runabout. Moulded plywood with mahogany deck. 25hp Evinrude motor. All for \$275. Fred Jones.

1970 Honda 350CB. Many extras. Excellent condition. Darrell Nash. 618-498-5640. 12 Lambs. H.C. Kuhlman. 618-888-2427.

14½ Forrester trailer. Sleeps 4. Gas or electric refridge. Brenda White. 618-259-1864.

ALTON W. MAY, June 24. Alton was a

foreman in Gas and had worked at Wood

FLOYD GEORGE TRAVIS, July 14.

Norman Mercer **Engineering Field**



Mik Mikkelson **Employee Relations**



Harold Simmons Engineering Field



Charles Slavik Lubricants



Everett Swinney Engineering Field



Automotive

VOL. 36, NO. 6

WOOD RIVER REFINERY

JULY, 1973

Published monthly for the employees and pensioners of Shell Oil Company's Wood River Refinery and Research Laboratory.

Bill Gibson, editor

SHELL OIL COMPANY P.O. Box 262 Wood River, Illinois 62095

Bulk Rate U.S. Postage PAID Wood River, III. Permit No. 229