

WOOD RIVIER REVIER



WOOD RIVER MANUFACTURING COMPLEX

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Injuries minimal

Fire causes damage to unit

Editor's note: The August "Review" will feature additional information and photos of the KHT fire.

The word spread quickly throughout the Complex on June 26 — the Kerosene Hydrotreater Unit (KHT) was on fire. Smoke and flames were clearly visible and the question on everyone's mind was "Is anybody injured?"

The answer to that question, fortunately, was no one was seriously hurt. A Shell employee suffered a dislocated shoulder and a contractor's employee received second degree burns; both were treated at local hospitals. Several others working near the unit had minor scrapes and burns and were attended to at the Complex hospital.

The fire began shortly after 11 a.m. and within minutes a St. Louis television station was interrupting its scheduled programming to report "an explosion and large fire at Shell's Wood River refinery." Reporters from area newspapers, and TV and radio stations filled the Main Office lobby to await updates from Shell spokespersons. The switchboard operator was busy handling phone calls from anxious spouses and relatives of employees who inquired about the extent of injuries.

The fire occurred when a 12-inch process line failed and the leaking product ignited. Aromatics East operators responded to the emergency by cutting off the supply of kerosene going into the unit. Meanwhile, the Fire Crew directed streams of water at the KHT and to structures in the immediate vicinity. Maintenance craftsmen later installed isolation blinds to prevent oxygen from entering the process and vessels, reducing the possibility of other fires in the unit.

Employees at the scene controlled and extinguished the fire in less than one hour. Their quick response minimized the hazard to the work force and damage to the unit, said **Harry Rollins**, manager - Safety and Industrial Hyaiene.

Cleanup took place the following week and unit demolition began July



Smoke billows from the Kerosene Hydrotreater Unit during a fire on June 26. The Fire Crew promptly responded to the emergency and extinguished the fire in less than an hour. The fire broke out when a 12-inch process line failed and the leaking product ignited. (Photo by John Badman, Alton Telegraph)

5, according to **J. I. Smith,** process manager — Aromatics East. Extensive inspection is under way to determine why the process line failed and to pinpoint the operating conditions at the time of the fire.

The fire caused major damage to KHT piping, and electrical, instrumentation and utilities equipment. A fur-

nace used in the mineral spirits operation was also damaged, Smith said. Hydrodesulfurization Unit-2 is being considered as an alternate process in purifying kerosene while the KHT is repaired.

This was the first incident at Aromatics East in 11 years that required a fire alarm

Retirement program improved

The Shell Retirement Program has undergone significant improvements.

A full pension is now available at age 60, two years sooner. Pensions for those retiring early will now be reduced 5 percent for each year prior to age 60, instead of 62. That means someone retiring, say, at age 57 now receives 85 percent of the regular pension, instead of 75 percent under the old plan.

In addition, Average Final Compensation (AFC) for pension purposes has been expanded beyond the former limit of base pay up to a maximum of 40 hours per week. AFC now includes certain payments for night-shift bonus, hours in excess of 40 per week that are part of an established normal work schedule, and payments under the Incentive Compensation

Also improved is the plan for spouse's pension. The former 50 percent spouse's pension now becomes a 100 percent joint and survivor lifetime benefit if an employee age 50 or over dies with years of service plus age totalling 80 or more, or one age 55 or

(Continued on page 2)

Cracking exceeds one million safe hours, closing in on 10-year mark

One goal down, another to go and then on to bigger goals. Cracking employees achieved one million safe work hours on June 5 and are closing in on Sept. 27 which will mark 10 consecutive years without a lost-time injury.

"Cracking operators and foremen have a 'we can do it' attitude that contributes to their safe work performance," said **Dan McNeill**, process manager. "Years ago, they accepted the responsibility of working safely and that means looking out for each other as well as themselves."

Of the approximately 48 Cracking employees, 29 have worked in the department for 10 or more years — they were around when the Cracking safety record was zero hours. Soon after reaching one million hours, several operators and a foreman were asked to comment on safety.

Dan Perkhiser - "We are safety conscious because of the potential hazards we face each day. Working with hot and pressure equipment requires careful attention. Our more experienced operators work closely with the new people, showing them the ropes. This has worked well and our safety record bears that out."

Ed Cox - "If one of us is not sure about a job, we ask for assistance. I've never seen a Cracking operator refuse to help. We are like a team, we pull together. Safety films and meetings emphasize the importance of safety."

John Elmendorf - "We owe our safety record to luck and hard work. Without proper training and procedures, there



Dan Perkhiser



Jim Faries



Ed Cox



John Elmendorf



Gary Perkins, Cracking foreman (left), discusses business with operator Doug Muich. Perkins, who has worked at Cracking for 17 years, says to do a job right it has to be done safely.

is a greater potential for accidents. During our safety meetings we talk about all kinds of on-the-job precautions. Safety equipment is also important. We know where it is and how to use it."

Jim Faries - "Safety is not taken for granted. Whenever a close call occurs, we get together and talk about it. Maybe one experience will prevent someone else from being exposed to a similar risk. I find that proper display of caution flags and other markers is a good way of reinforcing safety

awareness."

Gary Perkins - "No one wants to get hurt or see anyone else get hurt. To do a job right it has to be done safely. Cracking operators are safety minded and this is a quality that begins development from their first day in the department. People who work here learn early that we do things safely."

"The Operating employees are the ones who made this safety record possible," pointed out McNeill. "I am proud of everybody for what they have accomplished."

Retirement . . .

(Continued from page 1)

over dies with a minimum of 20 years service.

This new benefit assumes that an employee retired on the first of the month in which death occurred, having elected a 100 percent joint and survivor annuity option. The amount of the revised spouse's pension varies, depending on the age of the employee and that of the surviving spouse.

Another innovation concerns supplementary payments to pensioners, which have been subject to annual approval by the board of directors and paid out of general company assets. Under the new plan, the current level of payments approved for pensioners (including beneficiaries and spouses) who retired prior to January 1, 1984, will be funded in the Shell Pension Plan, and the payments will be made from the Pension Trust. The company will review this program periodically to determine whether it is appropriate to increase the level of benefits or expand the class of eligible participants.

And, finally, there is a new option to defer settlement of the Shell Provident Fund and Shell Employee Stock Ownership Plan. Terminating members may now elect to defer settlement of their accounts up to March 1 of the next calendar year after termination. Members retiring on an immediate pension may defer settlement up to five years.



Working with a new Total Disbributed Control (TDC) system at the Utilities Control Center are Ron Smith, energy systems operator (left), and Earl Nailor, boiler operator. TDC is replacing the boiler control boards shown behind the operators.

TDC system offers more precise control of processes

For years, **Earl Nailor** has monitored and operated the Complex boilers from the control boards at Utilities Control Center (UCC). He is comfortable with the procedure and had mixed feelings this spring when the boards began to be replaced with operator stations — CRT units and keyboards.

"Going from a setup that had a panoramic display of control boards to a small screen is taking some getting used to," said Nailor. "But with each week that passes, I can see the advantages for both UCC operators and Utilities operations."

Sam Effinger, Instrument craftsman, is excited about the new computer control equipment at UCC. He said being a part of the installation phase and ongoing maintenance is a great experience because "... the system is state-or-the-art, it is what is happening in the industry right now."

Nailor and Effinger are two of the many Wood River employees involved with a series of Major Projects activities tied into a Honeywell Total Distributed Control (TDC) system and related process control computer systems. The starting point was UCC in April, to be followed by Distilling Unit-2 (DU-2) this

fall, and the Gas Plant, DU-1 and Vacuum Flasher - 1 (VF-1) in 1985. Also affected will be Visbreaker Unit (VBU), Visbreaker Flasher (VBF) and the Refinery Fuel Pitch (RFP) operation.

TDC technology has been in existence for more than seven years and is in use at Westhollow Research Center and the Norco, Louisiana and Deer Park, Texas manufacturing complexes. The Martinez, Calif. complex is considering the changeover to TDC, said **Gary Barber**, EOS. It is a digital microprocessor controller system that has two primary functions at Wood River:

(Continued on page 4)



(Continued from page 3)

1) to control operation of various process units and the steam boilers; and 2) to collect utilities consumption data from control points throughout the Complex. A controller measures and compares flow, temperatures, pressures, etc. with set points and decides if an adjustment is needed.

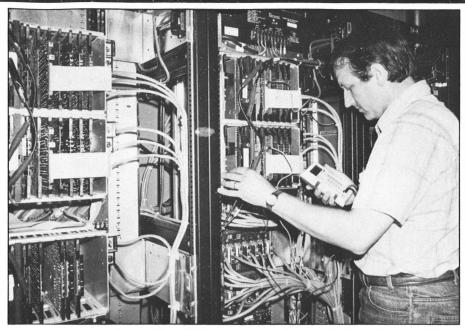
The scope of the TDC projects requires close coordination among Maintenance, Operations, Engineering and Head Office groups. Training of Wood River employees is provided by onthe-job and classroom instruction by Shell personnel who have attended Honeywell courses. Honeywell instructors also teach training classes at the Complex. Spare TDC and computer systems that simulate actual processes are used in training, according to **Hodge Raburn**, EP&S.

Advantages of TDC compared to conventional control board instrumentation include: 1) more precise control of processes: 2) conversion of operating data to computer form for easy access by other computer systems; 3) compact instrumentation which allows consolidation of control rooms; 4) operators can monitor a larger seament of their plants (the equivalent of eight board mounted controllers can be displayed on a CRT screen, with overview of 288 control points); 5) it permits a system of alarms on all operating points to call attention to disruptions; 6) TDC generates written, chronological reports when alarms and disruptions take place; 7) flexibility of modifying the CRT displays; and 8) ability to change control systems by changing the programming or software.

UCC IS THE FIRST

The transition of UCC to TDC and a Digital Equipment Corporation VAX 11/750 process computer system is proceeding on a "one boiler at a time" basis, stated Mike Riener, process manager - Utilities. Boiler 13 operation changeover was made in April, Boiler 12 in May and Boiler 11 in June. This schedule will continue until seven boilers are on the new system. He said the current control scheme is slightly different than what was originally designed for the first boiler conversion. Even with on-stream changes, though, UCC foreman and operators are accepting the system with few reservations.

"These systems require a great deal of technical support for startup and the initial period of operation," Riener pointed out. "I am extremely pleased



Sam Effinger, Instrument craftsman, makes voltage adjustments to the TDC unit at Utilities Control Center. Effinger is part of a four-person Maintenance team assigned to the Utilities-TDC project.

with the efforts of the technical people and our operators in making the operating adjustments."

While TDC operates the boilers and gathers utilities usage information, the computer will serve as an energy management tool by analyzing TDC data and providing control, optimization and information services. **John Mangoff**, EOS, said approximately 300 operating points in the Complex will be monitored for utilities consumption.

The UCC computer system is designed to decrease Complex utilities consumption through monitoring of steam, fuel, electricity, water, nitrogen and compressed air. Increased energy efficiency will result from improved information accessibility and direct control of boiler air-to-fuel ratio, boiler blowdown, steam letdown and the electricity generation level. A two-story extension to the west side of the UCC building is being built to house the new computer equipment for UCC and the Cat Cracking units.

"TDC and the computer are assisting UCC operators by maximizing the efficiency of utilities usage," pointed out **R. E. Barker**, Operations foreman. "Instead of turning dials to adjust the output of utilities, the computer will make the changes based on TDC monitored data."

Barker went on to say that TDC capability will allow operators to improve their control of Complex utilities. They will have more opportunities to optimize distribution of utilities as a

result of having more information at their disposal. Utilities savings are expected primarily from improved boiler fuel usage and decreased consumption, electrical power peak shaving and substitution of pitch for natural gas.

Concurrent with the orientation of operators to the TDC is the training of Maintenance teams assigned to process units where the new systems are being installed. To date, two teams consisting of a foreman and three Instrument craftsmen have been formed for UCC and DU-2. Additional teams will be formed in the near future. Team members are selected on the basis of their knowledge of electronics and field experience.

The UCC team of Dave Lewis, foreman, and Sam Effinger, Sherman Adams and Martin Culp is the first to go through TDC implementation. The DU-2 team of Larry Moore, foreman, and Dave Crockett, Joe Davis and Steve Grissom is assisting with UCC maintenance and startup which is proving to be invaluable for gaining TDC experience, said Moore.

Lewis and Moore agree that the UCC and DU-2 TDC conversion projects present their own unique challenges. UCC boiler control changes are being made gradually, but DU-2 will be shut down completely while TDC is installed and then brought up again in full service. A third type of TDC implementation will take place with the Gas Plant, when conversion and



consolidation of four control rooms are done while the units are operating.

"The accuracy of TDC is far superior to the equipment it is replacing at UCC," said Lewis. "In fact, its accuracy has actually led to new maintenance problems such as meter calibration. Certain troubleshooting methods that were effective before TDC are now no longer appropriate."

A LOOK AHEAD

TDC will replace DU-2's 15-year-old electronic control board instrumentation. Technical advantages offered by TDC are comprehensive computer compatibility, sophisticated instrumentation and flexibility to easily modify DU-2 control functions.

The project is part of a sequence of process control activities that center around the DU-2 control room. It involves consolidation of four Gas Plant control rooms, and the DU-1/VF-1, VBU, VBF and RFP control boards into the DU-2 control room.

Jack Fisher, Major Projects, said the TDC system for DU-2 was tested in June at a Honeywell facility in Fort Washington, Penn. Preparations are under way in the control room for eventual TDC installation. DU-2 operator training began July 9 and will initially focus on TDC orientation: what it does, how it works, how to read the CRT screen and other general information, said Betty Maslo, Major Projects.

The four Gas Plant control rooms range in age from 30-50 years and are remotely located from each other. Decentralization has caused inefficiency and difficulties in operations. The instrumentation/alarm systems are also antiquated, unreliable and difficult to repair due to a lack of spare parts.

Honeywell is in the process of assembling Gas Plant TDC equipment for installation in the DU-2 control room in early 1985. Factory testing is planned for October and conversion to the system in April 1985, according to **Owen Ross**, LOP — Gas Plant. The Gas Plant consolidation and conversion project will not interfere with the DU-2 shutdown, he added.

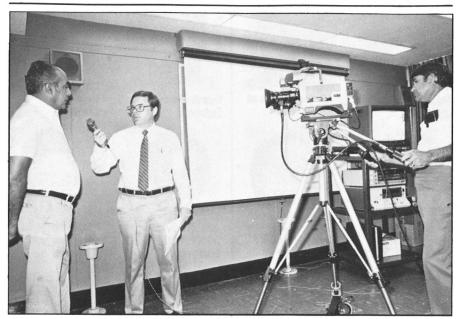
Shell has also approached Honeywell with specifications for the size and physical layout of the DU-1/VF-1 TDC equipment, said **Steve Emig**, Major Projects. The units will be put online in the same manner as DU-2: shutdown, conversion and then startup. He said there is capability for conversion of the VBU, VBF and RFP units either before or after the DU-1/VF-1 TDC pro-

ject. The approach to be taken depends on available manpower and scheduling.

Startup of the TDC facilities is expected in late 1985. Both DU-1/VF-1 and DU-2TDC monitoring facilities will be tied into Distilling computer control equipment by early 1986. These new computer control facilities will further enhance energy conservation and yield improvement efforts in Distilling.

A third computer project involving the Cat Crackers and Gas Plant will be completed in 1986. The existing Cat Cracker computer system provides reactor/regenerator control and optimization, limited Main Fractionator computer control and an overall information system. It does not have sufficient capacity or capability for extension or modernization. A new system is to be installed which will extend its control/optimization functions to the Main Fractionator and the Gas Plant.

Future issues of the "Review" will include updates of TDC and computer projects as well as other Major Projects activities.



The camera is on Joe Sapienza, Maintenance foreman and Wood River Response Action Team (RAT) member. A training course for area Shell RAT members was held June 6-7 at the Complex and included an exercise on dealing with the media. Above, he responds to questions from Mike Killenberg, an SIU-E professor who served as a TV reporter. Cameraman is Ollie Schwallenstecker, Maintenance training.

Response Action Team trains at Wood River

Wood River hosted a regional training session June 6-7 for Response Action Team (RAT) members from the Complex; Argo, III. Chemical Plant; El Paso, III. Chemical Plant; and Head Office Transportation Safety & Regulations.

Response Action Teams manage Shell's role and provide technical assistance during incidents involving oil and chemical product spills or leaks.

The session included field training at the propane loading area, class-

room discussions and a half-day exercise on how to effectively deal with the media. **Don Baker** and **Dave McKinney**, of Midwest Community Relations, conducted the media segment which featured on-camera interviews of RAT members under simulated emergency conditions.

Wood River employees who participated in the two-day RAT session were: Cliff Woodford, Al Larsen, Bob Brannon, Jim Grizzle, Jack Ridinger, Virgil Icide, Joe Sapienza and Art Caldieraro.

New to WRMC



Jeff Bannister Financia!



Rebecca Bell Laborer



Becky Bertani EOS



David Blanc Purchasing



Janet Blotevogel Financial



Kevin Broo Purchasing



Kenny Clark Laborer



Jackie Cockrell MPO



Frank Cornell Laborer



Dan Crim Laborer



Tim Cusick EOS



Jerry Davis Machinist



Tom Doran Machinist



Gary Fields Machinist



John Garis Laborer



Jim Gregory Laborer



Diana Gross Purchasing



Mark Hanfelder Machinist



Randy Hard Cracking



Mark Heiderscheid Laborer



Larry Judge Ind. Relations



Jack Keith Machinist



Mike Krug Distilling



Mark Lanzerotte Laborer



Greg Larsen EOS



Paul Lotts Personnel



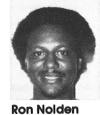
Jim Meisenheimer Cracking



Don Meyers Machinist



Marvin Monk Laborer



Cracking



Monie Palmer Laborer



Jan Peppink EP&S



Steve Ray Emp. Relations



David Rull Purchasing



Chester Schilling Laborer



Joe Shea EP&S

New to WRMC



Mark Sitko Laborer



Bob Stairs Cracking



Dean Lovell Maintenance 35 years



Anniversaries

Francis Herzog **EOS**



30 years



Ed Witis

LOP

Ed Gray Maintenance



Retirements

Reba Earhart Maintenance 36 years



35 years



Jim Allen HOP 30 years



Jack Calderwood Lubricants 30 years



John Strasen Instrument

Tom Waghorn

Pipefitter



Dan Townsend Laborer



Ginger Wright Arom. East



Don Hosler

LOP

Mary Henley Safety & Ind. Hyg. 25 years



Virg Icide

LOP

Bob Parish, Jr. Maintenance 25 years

In remembrance



W. W. Bradshaw



C. F. Gunter



J. J. Gieszelmann



M. E. Harris



T. Stipcak

Wayne W. Bradshaw, 68, died June 12. Mr Bradshaw was a shop machinist 1st, Engineering Field before retiring in 1972 after 27 years of service.

Charles F. Gunter, 72, died June 9. Mr. Gunter was an engineering foreman, Engineering Field before retiring in 1969 after 32 years of service.

Melbourne E. Harris, 73, died June 1. Mr. Harris was a special tester, Refinery Lab before retiring in 1973 after 36 years of service.

Thomas Stipcak, 71, died June 13. Mr Stipcak was an engineering foreman, Engineering Field before retiring in 1975 after 33 years of service.

Julius J. Gieszelmann, 71, died June 19. Mr Gieszelmann was an operator 1, Aromatics before retiring in 1968 after 25 years of service.

Classified Ads

For sale: round walnut finger-carved pictorian side table. Original finish, excellent condition. \$285. J. N. Weshinskey, 887-4379

For sale: 3-bedroom, newly-decorated home located on Cedar Lane, Rosewood Heights. For sale by owner, H. J. Leamy, 618/259-1349.

Retiree's marriage a long and happy one

There is no secret to a good marriage, say **Calvin** and **Helen Smith**, but it does take plenty of patience, forgiveness and understanding.

The Smiths might be considered



Hartford residents Calvin and Helen Smith pull together through life's ups and downs—perhaps one of the reasons their 65-plus year marriage has been a happy one. Calvin retired from the Complex in 1962. experts on the subject considering they will celebrate their 66th wedding anniversary this November. Calvin, 86, retired from the Complex in 1962 after working as a laborer and then a pipe-fitter helper for 27 years. The couple resides in Hartford.

Calvin and Helen grew up in rural Pennsylvania where they lived during the first 12 years of marriage. In 1930, at the peak of the Depression, they moved to Hartford at the urging of Calvin's brother and in anticipation of finding employment. Following a progression of jobs including a year at a railroad, Calvin was hired at Shell in 1935 for \$3.98 a day.

"Helen and I have experienced a lot of happy times and hardships," commented Calvin. "We always work together to pull through the ups and downs of life. I take care of Helen, and she takes care of me."

The Smiths have a son who lives in South Roxana and a daughter in Hartford, six grandchildren and seven great grandchildren. The families spend time together and enjoy each other's company. Calvin also keeps in touch with his friends from Shell and cherishes the fellowship of his former coworkers.

"Nearly 66 years of marriage, that is a long time," said Helen. "I guess that shows we were meant for one another."

SHELL SHORTS

Pensioners' Dinner

The annual Shell Wood River Pensioners' Dinner will be held Wednesday, Sept. 26 at the American Legion Hall, Edwardsville. The 18th annual get-together begins at 11 a.m. and ends at 4 p.m., with the meal served at noon. The cost is \$6 per person. The August issue of the "Review" will contain a reservation order form.

SRA Golf Day

The annual SRA Golf Day took place June 9 at the Oak Brook Golf Club in Edwardsville. One hundred thirty-eight active and retired Shell employees participated and the scores ranged from 70 to 126. Individual award winners were Jack Cherry, low gross; Gil Baxter, closest to the hole (7'); Clarence Horton, longest drive; and Kelly Sitton, blind bogey (52).

Camera Club

The SRA Camera Club will meet at 7:30 p.m. Tuesday, Aug. 7 in the Cafeteria. The program will be open for attendees to talk about any five or less of their slides or prints. The slide/photo contest theme is "people at work or play."

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