

'Open enrollment' during April

Supplemental Life Insurance offered

Shell employees are getting an opportunity for more family protection through the Shell Group Life Insurance Program, which now offers supplemental coverage at group rates. Details on the additional coverage are spelled out in a letter mailed to all employees on March 22.

Generally, the amount of additional coverage offered under the plan—called Supplemental Group Life Insurance—ranges from a maximum of six times annual base pay at age 20 to one half annual base pay at age 64. Cost of the program, to be paid by employee contributions, is one percent of base pay for the maximum amount; or one-half of one percent for half that amount.

THREE BENEFIT PLANS

The new Supplemental Group Life Insurance complements three of the

major financial benefit plans offered by Shell. They are:

* The Shell Provident Fund, which provides for the investing of matching funds contributed by the Company and the employee.

* Shell's Survivor Benefit Plan which is designed for family protection. It automatically provides employees with free insurance coverage equal to 24 months base pay; employees over 55 with 20 or more years of accredited service receive free insurance benefits equivalent to 18 months base pay. This program is paid for wholly by Shell.

* Group Life Insurance, now known as the "Basic" plan, offers employees the opportunity to buy coverage, at group rates, with the amount of insurance approximately equal to a year's base pay.

EMPLOYEE PARTICIPATION NECESSARY

In order to make the Supplemental Group Life Insurance plan effective, a substantial percentage of employees must enroll during the solicitation period from April 1 to April 30, 1973. Continuation of the plan also will be dependent on sufficient participation.

Employees must be enrolled in the Basic Group Life Insurance plan in order to get Supplemental Group Life Insurance. And, since enrollment in the Basic plan is a prerequisite to participation in the Supplemental plan, there will be a period of "open" enrollment for both plans.

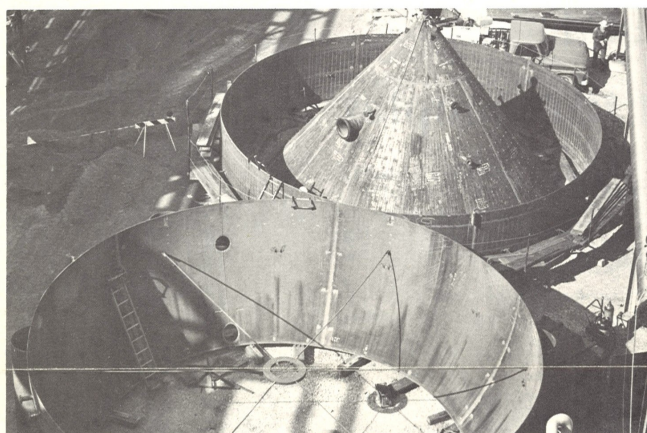
Employees not presently participating may sign up for Basic Group Life and the Supplemental Insurance without

submitting evidence of insurability during the solicitation period.

Employees contribute 60 cents per month per \$1,000 of insurance; post-retirement benefits are provided at no cost to employees.

The philosophy behind Supplemental Group Life Insurance is that family financial needs are generally greatest in earlier years and taper off toward the latter part of an employee's working life. Consequently, benefits under the Supplemental Plan decrease in amount annually until normal retirement age, when they cease.

See the back page for questions and answers on Life and Supplemental Life Insurance benefits.



Parts of the new water treater, constructed in Main Office Road, await transfer to the location site for assembly.

Road closed for treater construction

They are assembling a huge water treater in the middle of Main Office Road! Why? "Because it won't fit anywhere else," says Mike Boyle, the project engineer. The space allocated for the treater is mostly vertical, and the bulk of the unit does not permit construction from the ground straight up (total metal weight will be 110 tons). Various sections of the unit must be fabricated in the nearest open space, gently lifted by crane and fitted together until it reaches its final size of 67 feet in height and 35 feet in diameter. "It isn't the sort of thing you can trot down Main Office Road completely assembled," Mike notes.

In the Utilities Department, construction of the new boiler feed water treater is going to mean more than just expansion. It will result in modification of the process we currently use, and has already resulted in addition to and renovation of much boilerhouse piping.

According to F.E. Novitskie, Engineer in Utilities, we want water for use in the boilers which is as close to zero hardness as is practical because hardness causes scaly deposits which impair the efficiency of the boilers and require more frequent shutdowns for cleaning. The current treatment method calls for heating of the water, adding various chemicals, and sending the combination through the treaters. Much of the "hardness" (minerals) is extracted from the water at


this point. If left untreated, these minerals would cake to the inner workings of the boilers much like they do in your teapot.


The current operation calls for this treated water to filter down through graded coal beds to further remove solid particles which escaped the initial process. More chemicals are added to condition the water, and it is then ready for the boilers to generate steam, a necessary substance in making the refinery go.

Steam produced by the boilers has several important functions. It provides the power to run turbines which generate electricity, or in some cases, run pumps and compressors directly. Steam is also used as heat for various processes in the refinery.

A new treater will increase our capacity for supplying feed water to the boilers. But in conjunction with this construction, we are modifying the way in which water is to be processed through all of the boiler feed water treaters. In the future, certain chemicals which are difficult to control, as well as being somewhat costly, will be eliminated. Instead, a second step in the process will be added. This step includes "zeolite softeners" wherein sodium zeolite resin acts to remove hard minerals much like a home water softener does.

(continued on page three)

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New Shell product puts the lid on insects

A new product for families concerned with control of insects in the home will soon be marketed by Shell Chemical Company, the manufacturer of NO-PEST® Strip Insecticide.

Can Care® Insecticide/Deodorant will appear this spring in supermarkets, discount stores, and variety and hardware stores. The new product will contain two strips which attach in holders to the underside of garbage can lids. One masks unpleasant odors, the other kills flies, gnats, roaches and ants. The strips work continuously and will last throughout the insect season.

"This is the first product that conveniently fights and controls obnoxious and harmful insects where they feed, and in the case of flies, where they breed," said W.H. Knapp, consumer products manager.

"We believe that this is the only sensible way to combat both insect and odor problems. Scrubbing is back-breaking, time-consuming, and not too effective. Aerosol sprays must be remembered and kept near at hand. Can Care strips are easily applied and forgotten; and they continue to work for several months."

*Shell Trademark



High tide

If spring rains and snow thaws cause the Mississippi River to overflow its banks, shift change at the Hartford Docks takes on a new ritual. Shown exchanging life jackets for the boat trip are from left: V.W. Schuette, Jean Pile, Hallie Laycock, and Andy Knopik. Blackie Blackston looks on. All are from Dispatching.

'It's the berries'



John Allison and Ray Thrasher wonder whether their coffee tree will ever stop growing. The blooms have opened and the berries have appeared. Next is the harvest.

Sports and shorts

NEW EDITOR

Bill Gibson is the new Editor of the *Shell Review*. Bill received his B.S. and M.A. degrees in Business Administration and Personnel from the University of Nebraska, and joined Shell here at Wood River in June, 1969. Prior to being named Editor, he had been assigned to a variety of positions in Employee Relations.

EASTER EGG HUNT

The SRA's annual Easter egg hunt will be held Saturday morning, April 14, at Kendall Hill. Children and grandchildren of SRA members are welcome to join in the search for holiday candy and prizes.

Activities will begin at 11 a.m. There will be plenty of hot coffee, donuts and hot chocolate for participating children and adults. In case of bad weather, the hunt will be held the following Saturday, April 21.

GOLF LEAGUE

Play will start April 30 in the SRA golf league. Matches will be held at Belk Park again this year. Linksters interested in playing but not yet associated with a team should contact Ray Robinson in Engineering Projects or Jim Maynard in the Research Laboratory.

TRAPSHOOTING

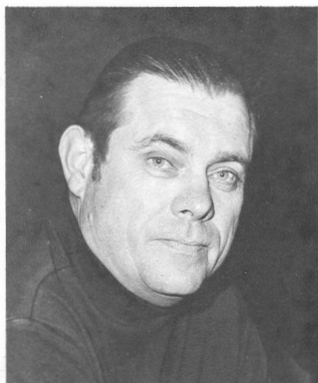
The first shots will be fired sometime in late April in the SRA trap league. Organization is now underway. Shoots will be held at the Olin trap grounds. Anyone interested in joining a team should contact Phil Belanger in Utilities.

FISHING CONTEST

Copies of the rules and regulations for the 19th annual SRA fishing contest are available in the Main and South gate clock houses. The contest will run from now until October 15. Prizes will be awarded for three species: bass, crappie, and bluegill.

SHELL/WESTERN BOWLING TOURNEY

Shell keggers fell short in this year's annual encounter with Olin at Bowl Haven in Alton. Nine teams from each side bowled and the victor was decided by total pin fall. Bob Garner of Alkylation garnered Shell's high three-game series with a 643, and Charlie Hoffstetter of Engineering Services had the high single game of 256. Bowlers and guests then retired to the Westerner Club at Olin for refreshments.



Moody joins Safety Committee

Al Moody, Boilermaker 1st, has been named to the Refinery Safety Committee. He joins six other members, three from the crafts and three from operations.

Other members are: Joe Barra, Carpenters; Willie Coffman, Pipefitters; Dave Grieve, Refinery Lab.; Erv Keister, Dispatching; Boyd Kennedy, Field Machinists; and George Myers, Cracking.

There's a bloomin' coffee tree in main office!

Although they are not prepared to keep the office coffee pot full of beans, John Allison and Ray Thrasher of Engineering Office are justifiably proud of the Arabian coffee tree they have nurtured to full maturity. Office relocations resulting from the Main Office expansion in 1971 found the young tree without a home, so John and Ray agreed to adopt it.

Just three inches tall in early 1969, and only 18 inches tall when it settled into its new surroundings, the tree has now grown to a height of nine feet. John observed that it reached the ceiling on March first, and Ray intends to prune the upper branches to maintain it at this height. On plantations, trees are trimmed at about six feet for easy berry harvesting.

"Maxwell", as the tree is lovingly referred to, has bloomed fragrant white flowers and produced numerous berries. Each berry contains two coffee beans. In its natural environment a coffee tree yields an average of one pound of coffee a year.

Although there may be some doubt as to Ray's assertion that Maxwell has flourished due to the "mountain grown" atmosphere of the Main Office third floor, everyone agrees that he and John have given the best of care and feeding to their botanical roommate. Good soil (with a low pH factor), a well aerated pot, water every other day, and occasional plant food should produce a healthy coffee tree, according to Ray. It has certainly worked in Maxwell's case!

New heater added to CR-1 complex

The construction of a new interreactor heater at Catalytic Reformer Unit No. 1 is nearly complete. This heater (or furnace) will assist CR-1 in converting lower octane naphtha to a higher octane for gasoline blending components.

Naphtha in vapor form reacts with catalyst at CR-1. To achieve the desired results, the naphtha must be maintained at proper temperatures. This new furnace, referred to as H-7, will provide the necessary boost in temperature between reactors to do this.

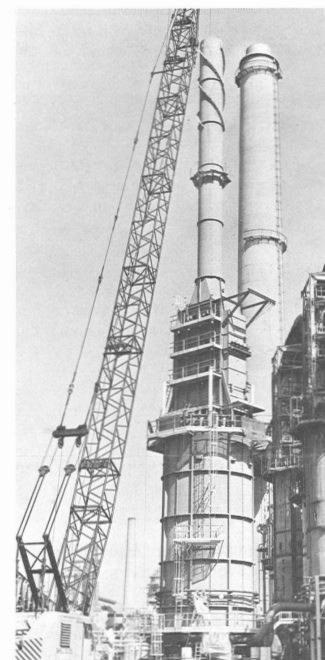
According to Ralph Wink, the project engineer, the vaporized naphtha will pass through tubes in the radiant section of the furnace and be re-heated before returning to the next reactor. Shown in the picture as the cylindrical lower part of the furnace, the radiant section was fitted together in eight large outer panels. The inner walls are coated with refractory, a two part component "gunned" on under pressure. This provides insulation which enhances heat retention as well as protects the metal outer shell.

In order to further utilize the heat generated in H-7, a 33-foot convection section stands atop the radiant section. Its purpose is to generate 600 pound steam for use throughout the refinery. The convection section was prefabricated in three parts weighing a total of 100 tons. The parts were hoisted individually by crane, and bolted together. The 88 foot stack which weighs another 16 tons was hoisted in two parts. The height of the entire structure is 189 feet.

Wink indicated that the new heater has been in the planning stages since November, 1971. Construction began February 5, 1973 with completion scheduled for mid-April. Shell craftsmen will connect the furnace to the CR-1 Unit during a shutdown this fall.

U. S. oil reserves

U. S. proved reserves are estimated at 38 billion barrels (including 9.6 billion barrels of North Slope oil which are not being produced due to a lack of transportation facilities). This represents only an 11.5 year supply, at current rates of production.



The final section of the 88-foot stack on the new interreactor heater at CR-1 is hoisted into place.

New oil blend

Shell is coming out with a new oil blend, and Wood River Refinery will be blending it. Conceived and perfected at the Wood River Research Laboratory, X-100 Multigrade 10W-40 will replace both Super Shell 10W-40 and X-100 Multigrade 10W-30.

Shell X-100 Multigrade 10W-40 is a premium all-season engine oil specially formulated to provide quick starts in cold weather and to meet the lubrication requirements of passenger cars under all types of driving conditions. In all types of service, it provides excellent protection against rust and wear to critical engine parts. Under the severe operating conditions of short stop-and-go service, it helps keep engines and PCV valves clean. In high temperature service, it provides excellent resistance to oxidation, thereby controlling thickening and helping to keep the engine clean.

Shell X-100 Multigrade 10W-40 meets API Service Classification SE. This is the most severe service station motor oil classification and satisfies all U.S. automobile manufacturers' performance requirements.

Chemical Plants alert to environment

(Editor's Note: This is the final article in a series on Shell's environmental conservation.)

Environmental conservation measures at Shell's Chemical Plants are as varied as the products produced. The products range from plastics to pesticides, detergents, solvents, and many other chemicals and petrochemicals, and each plant requires specialized equipment and processes to ensure satisfactory air and water quality.

At the Denver plant, which produces a number of agricultural chemicals, work is under way on new facilities which will separate the Shell effluent system from that of the Rocky Mountain Arsenal where the plant is located. An incinerator/scrubber system at the plant removes 99 percent of the hydrogen chloride from the off gases of several processes.

Shell's Houston plant is a large, integrated facility making a wide range of oxygenated chemicals, resin products and petrochemicals. Primary and secondary treatment facilities for aqueous effluent combined with in-plant changes and a monitoring/prevention program have reduced bacterial oxygen demand load in the aqueous effluent by 98 percent from the 1966 level.

In air conservation, two additional Claus sulfur units were constructed to provide for removal of hydrogen sulfide from process vent streams. Facilities for collection and disposal of hydrocarbon vapors in petrochemicals and solvents manufactured were also provided.

The Norco plant near New Orleans is a substantial, integrated manufacturing facility for solvents and oxygenated chemicals. A major new addition to the plant, the VCM-II Unit, has pollution abatement facilities for aqueous effluent treating and emergency chlorine handling.

The Geismar plant, also in Louisiana, began production of detergent products, ethylene oxide and glycols, and glycol ethers in late 1967. Being a modern plant, it was designed for a minimum of waste emissions, both to the air and water. Major pollution control facilities included in the original plant were vent scrubbers for ethylene oxide, chlorine and acid vapors; oil skimming facilities, neutralization facilities for acidic waste water; separate collection systems for rainwater and process waste water; and ground level smokeless waste oil burners. Nevertheless, several additional projects have been completed since the plant's startup and others are planned for the future.

In California, the Dominguez plant manufactures a variety of solvents and oxygenated chemicals, while the Martinez plant manufactures diverse chemical solvents and solid catalysts.

At Dominguez, in addition to previous upgrading of waste water treating facilities and air pollution control facilities, last year additional facilities for reducing air contamination were installed and piping changes were made to allow recovery of alcohol from the neutralizer-spent soda. New projects at Martinez include air and water pollution control facilities for a new process unit, a waste gas incinerator and effluent system modifications.

The Mobile, Alabama, plant was established in 1968 to manufacture agricultural chemicals. Pollution control efforts were initiated during the early process design and incorporated in the plant construction with an integrated and comprehensive waste treatment system to prevent air and water pollution. Additional pollution control equipment has been installed since initial construction. A new major project is the modification of the incinerator/scrubbing system, scheduled for completion by the third quarter of 1973.

The Marietta, Ohio, plant manufactures a variety of elastomers and plastic products. The plant has converted its coal source from nearby high-sulfur stripmined coal (5.5 percent sulfur) to deep mine coal with a sulfur content roughly half this amount.

The Woodbury, New Jersey, plant manufactures a range of polymeric products from hydrocarbon source materials. In addition to the current pollution control equipment, planning design for further aqueous treatment as needed to meet regulatory requirements has been completed.

(The previous four articles have detailed other Shell facility pollution activities. The series has been written to provide a better understanding of Shell's extensive environmental control activities. Further information on these activities can be obtained by talking with one of the many Shell environmental conservation representatives associated with activities in your area. Corporate policy on conservation is given in a position paper titled, "Environmental Conservation." It is available upon request from your local Public Relations Department.)

DEATHS

WILLIAM A. STONE, December 22. William was a Yardman at Compounding before retiring in 1958.

LOUIS C. SCHMIDT, December 24. Louis was a Pipefitter 1st before retiring in 1966.

MARTIN L. SCHLECHTE, December 30. Martin was a Yardman before retiring in 1956.

ANTHONY B. HOPPE, January 21. Anthony was a Janitor 2nd before retiring in 1955.

WILLIAM C. MANNING, January 23. William was a Pipefitter 1st before retiring in 1955.

ELBERT M. LEVI, January 27. Elbert was a Garage Mechanic 2nd before retiring in 1950.

HOBART P. TURLEY, January 31. Hub was a Special Tester in the Refinery Laboratory and had worked at Wood River Refinery since 1945.

JOSEPH W. SOUTHARD, February 2. Joseph was a Valve Repairer 1st before retiring in 1964.

HAROLD D. CHAPPELL, February 3. Harold was an Operating Assistant in Treating Effluent Control before retiring in 1961.

STANLEY E. BRZOSTOWSKI, February 4. Stanley was an Electrician 1st before retiring in 1969.

HENRY L. WAGENBLAST, February 8. Henry was a Compounder I and had worked at Wood River Refinery since 1946.

CAMILLE J. BRYAN, March 13. Camille was a Field Machinist 1st before retiring in 1961.

LLOYD R. MEARSCH, March 13. Butch was a Boilermaker Helper before retiring in 1971.

LEWIS B. BENSMAN, March 15. Lewis was a Pipefitter 1st and had worked at Wood River Refinery since 1948.

AUGUST H. FRANKE, March 23. Gus was a Patrolman and had worked at Wood River Refinery since 1956.

Treater . . .

(. . . from page one)

Boyle says that the improved water quality will modify the metallurgical and scaling properties of the water in the boilers. Efficiency will be increased because there will be more usable water coming from each of the treaters. And, more and better water means the boilers can generate more steam with the fuel they use.

The unusual logistics of this construction caused some special problems, but thanks to the efforts and ingenuity of Shell craftsmen, operators and supervisors these complications were overcome. Since it is necessary to maintain the supply of boiler feed water continuously, tie-ins had to be made without the luxury of a unit shutdown.

Boyle joins Tony Calcaterra, Senior Engineer, Engineering Projects, in extending their congratulations for a professional job, well done.

RETIREMENTS



Dale Ball
Hydroprocessing



Donnie Ballentine
Utilities



Ed Bean
Purchasing



Bill Drda
Engineering Field



Donald Eccles
Engineering Field



Charlie Hacke
Refinery Lab



Mike Mikeworth
Lubricants



Louis Purdy
Hydroprocessing



Milton Schiefer
Engineering Field



Bob Westbrook
Engineering Field



Bob White
Safety

Cliff Woodford speaks in D.C.

Cliff Woodford, Manager Dispatching, spoke before some 650 participants in the 1973 Conference on Prevention and Control of Oil Spills held in Washington, D.C. March 13-15. His speech, coauthored also by Bill Cline of Engineering Office and Larry Nieman of Technological, described the features incorporated into the Wood River Refinery docks to prevent oil spills.

The conference, sponsored jointly by the American Petroleum Institute, the Environmental Protection Agency, and the United States Coast Guard, was attended by virtually all of the major oil companies and suppliers of petroleum equipment in the country.

SERVICE ANNIVERSARIES



Bob MacDuff
Technological
40 years



Chet Hendrick
Engineering Field
35 years



Andy Anderson
Dispatching
30 years



Frankie Carroll
Engineering Field
30 years



Bill Dennis
Lubricants
30 years



Morris Dresch
Engineering Field
30 years



Ed Fry
Engineering Field
30 years



Henry Kuhlman
Refinery Lab
30 years



Barney Ranek
Refinery Lab
30 years



Earl Runyon
Hydroprocessing
30 years



Guy Womble
MTM Research Lab
30 years



James Baker
Dispatching
25 years



Les Books
Engineering Services
25 Years



Fritz Burger
Engineering Field
25 years



Carl Campbell
Dispatching
25 years



Bob Cruthis
Engineering Field
25 years



Reba Earhart
Engineering Field
25 years



Bob Mayfield
Engineering Field
25 years



Joe Vallina
Engineering Field
25 years

How does this apply to me?

Answers to questions about the new Supplemental Life Insurance

Q. Supplemental Life Insurance provides diminishing protection, but isn't it possible for one to actually have more insurance as the years progress?

A. This is true. For example, an employee earning \$6,000 a year at age 20 would have \$36,000 of insurance. That same individual making \$15,000 a year at age 40 would have \$52,500 of insurance.

Q. Supplemental Life benefits can be paid to a beneficiary in a lump sum, as can Basic Life Insurance. Is there any way to provide a monthly income for a beneficiary?

A. There are a number of settlement options available under both Basic and Supplemental Life Insurance, including a monthly benefit payment

option.

Q. Why is Supplemental Life Insurance much cheaper than a comparable individual policy?

A. Sales, administration and other expenses are much less under a group plan. For example, expenses to run a plan for a group of 30,000 people are much less than those for providing the same coverage under 30,000 individual policies.

Q. Why is it important to sign up right away?

A. The enrollment period is actually from April 1 through April 30, 1973; a substantial percentage of participation is required to make the plan effective.

Q. What happens to an employee's Supplemental Insurance during a leave of absence?

A. For employees on leaves of absence with pay, the coverage will continue and contributions will be withheld from their pay.

Coverage will also continue for employees on leaves of absence without pay, due to disability. Their contributions will be paid by Shell.

For other leaves of absence without pay, except for military leave, Supplemental Insurance may be continued, depending upon the type of leave, for up to 24 months, provided monthly contributions are paid by the employee, in advance, to the local payroll office.

CLASSIFIED ADS

FOR SALE

Pair of new chrome foglights with six inch faces. \$5. (\$8.90 new.) H. Krapf, 618-288-9442.

Westinghouse AM radio with clock, glo-light, and memory alarm. Ivory color. Excellent condition. \$15. 314-838-0878.

Gas refrigerator for a camping trailer. \$75. Fred Owen, 618-585-4817.

RCA wind-up Victrola (about 50 years old) plus 80 playable records. Good condition. \$85. Climax treadle sewing machine. \$15. Frank Zapf, 618-466-4980.

Philco stereo with AM/FM radio. Hoover porta washer and dryer. 618-465-4801.

Air-Stream trailer, fully contained, air conditioned and carpeted. 618-786-3813.

1972 Honda SL-70. \$285 or offer. Dick Dreith, 314-878-4972.

1965 T-Bird. Good condition. 1964 Mercury 4-door sedan. Less than 21,000 actual miles. Burt Schneider, 618-462-0524.

FREE

Good watch dog for a good home, spayed female which likes children. Also, 30 gallon electric hot water heater, good condition. H. Krapf, 618-288-9442.

FREE SERVICE

Joel Schell, an engineering cooperative student would like to "house sit" for anyone away on vacation in exchange for free rent. He will be working at the refinery between May 5 and August 25. Interested persons should call Margaret Middlecoff on plant phone 849.



Review

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Bill Gibson, Editor