



# shellegram



SHELL OIL COMPANY  
HOUSTON REFINERY

SHELL CHEMICAL CORP.  
HOUSTON PLANT

VOL. 20, No. 10

HOUSTON, TEXAS

OCTOBER 1955

## United Fund Campaign Set for Week of October 10

### Many Activities Planned for Oil Progress Week, Oct. 9-15

Houston Refinery will participate in a big way this year in Oil Progress Week.

Scheduled from October 9 through 15, Oil Progress Week gives the men and women of the oil industry an opportunity to report on their stewardship of a vitally important industry to their friends and neighbors.

Oil Progress Week was originated by the American Petroleum Institute after it conducted a nationwide public opinion survey in 1946 which indicated that many persons had little knowledge of the oil industry—what it is, what it does and how it does it.

These annual observances of Oil Progress Week are credited with giving the American people a clearer picture of what free men and competition are contributing to this nation's social and economic progress.

Actually, the observance of OPW at Houston Refinery is off to a running start. A 29-minute motion picture covering various operations of the oil industry, entitled "Barrel Number One," is being shown to refinery employees.

These showings, which began on September 28, will continue until October 26. This interesting film was prepared by the American Petroleum Institute especially for Oil Progress Week.

A letter from Refinery Manager John Tench explaining the importance of Oil Progress Week and a copy of "The Story of Petroleum" will be mailed to the homes of all employees in advance of Oil Progress Week. "The Story of Petroleum" was produced by Shell and is written and illustrated in such a way that it may be enjoyed by both adults and school children.

In addition, a cutout kit of modern oil industry installations, designed especially for distribution as a souvenir of OPW, will be made available to employees free of charge.

An assembled kit has been placed on display in the cafeteria. Order blanks have been placed near the kit for the convenience of employees who wish to order one.

Included with the cutout kit is a copy of the illustrated booklet, "The Story of Colonel Drake." This booklet pictorially tells the story of the man who established in 1859 that oil could be obtained in abundant quantities by drilling for it.

Bumper stickers bearing the appropriate slogan "Oil Serves You" will be placed on company vehicles.

Also on the agenda for OPW is a tour of Houston Refinery by members of the press.



Refinery United Fund Committee members study last minute details. Left to right, seated: H. K. Kaiser, R. F. Kissinger, J. H. Smith and G. B. Dunn. Standing: R. E. Bishop, E. R. Watson, H. J. Lewis and H. B. Jarrett.



Chemical Plant United Fund Committee members prepare for what they hope will be a successful 1956 campaign. At the table are J. H. Ware, J. W. Peters, C. L. Martin, J. F. Taylor and P. F. Quinn, left to right.

### Once-A-Year Drive Helps 54 Agencies

The United Fund Drive, the once-a-year opportunity to contribute to as many as 54 welfare agencies at the same time, will be conducted this year during the week of October 10 at the Refinery and Chemical Plant.

Solicitors chosen by the Refinery and Chemical Plant Managements and by the O.C.A.W. Union Local 4-367 will contact their fellow employees during the drive to ask them to open their hearts and their pocketbooks to assist the local and national health, welfare and youth UF agencies which depend upon voluntary contributions for their support.

Employees again will be able to contribute by means of payroll deduction—a method which proved very popular last year when it was introduced. These deductions will begin in January, and they may be continued over a six-month period, if the contributor so desires.

This once-a-year campaign to raise funds for deserving welfare agencies has proven to be highly popular with employees of the Refinery and Chemical Plant. In fact, last year's drive was one of the most successful in history—both in participation and in contributions.

A total of \$24,305.02 was pledged at the two installations during the year 1955. This represents an increase of \$3,164.25 more than was raised during the previous year.

To serve on the Refinery Steering Committee for the 1956 UF drive, O.C.A.W. Union Local 4-367 selected J. H. Smith, H. B. Jarrett, R. E. Bishop, E. R. Watson and G. B. Dunn, representing hourly operating and maintenance personnel. Refinery Management nominated R. F. Kissinger, H. K. Kaiser, J. J. Station and Fred Wichlep to represent staff personnel.

Smith and Kissinger will serve as campaign managers and H. J. Lewis will serve as coordinator between the Steering Committee and Refinery Management.

J. H. Ware and P. F. Quinn are co-chairmen of the Chemical Plant UF Committee.

C. L. Martin, J. W. Peters and J. F. Taylor will represent staff personnel.

(Continued on page 7)

### Hughes Succeeds Watson as Houston Plant Superintendent

H. E. Hughes has been selected as the new Superintendent of the Houston Plant. He will replace F. G. Watson, who has been promoted to a new assignment in Head Office. Mr. Watson will be the Assistant to the Vice President, Manufacturing. These moves were announced on September 15th by Mr. Purcell.

Both Mr. Hughes and Mr. Watson are long standing employees at the Houston Plant. Mr. Hughes, who has twenty-one years with Shell, came to Houston in 1951. He took over the newly created position of Assistant Superintendent-Technical in November of 1954. Mr. Watson, who has been with the Company thirteen years, came to Houston in 1945. He was promoted to Superintendent in February of 1954. Before that time he had held many other positions with the Operating Departments.



HUGHES



WATSON

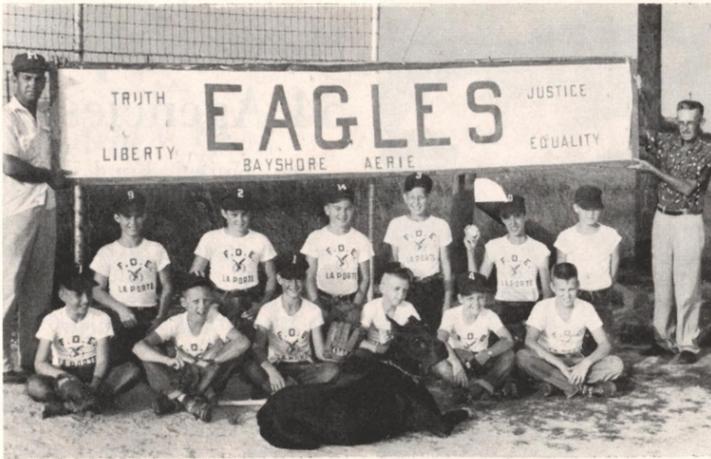


Bonnie Adams, Treasury, applies one of the devices that will be used to publicize Oil Progress Week, an annual observance scheduled for October 9-15.

# REPORTERS' ROUNDUP

Congratulations are in order for Tommy Roye of the Refinery Dispatching Department, who managed the Bayshore Area Eagles Little League baseball team to the La Porte championship. With the help of several little Shellites, Tommy's team won 13 out of the 15 games played this year.

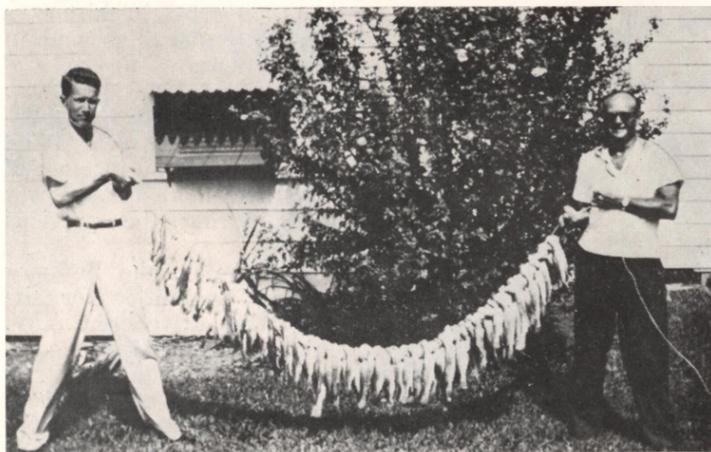
The Shell boys on the team include Norris Weir, brother of Marjie Weir, Construction; Harry Faulkner, son of B. J. Faulkner, Engineering; Doug Parsons, nephew of Ed Clarke, Engineering; Leonard Carr, son of H. L. Carr, Engineering, and "Cotton" Christensen, son of K. E. Christensen, Engineering. W. W. Wechtenhiser, Pipe Shop, was assistant manager of the team.



Here are the Eagles, La Porte Little League champions. Front row: Langston, Lee, Weir, Parsons, Holland and Carr. Second row: Coach Roye, Jobson, Crate, Faulkner, Hardy, Hill, Moser and H. S. Root, F. O. E. secretary. Shellite Cotton Christensen missed the picture. They won 13 out of 15 games.



Several Researchers and their guests were pictured enjoying their barbecue during the recent Research Lab picnic at the SERA property.



Anyone for speckled trout? Al Garner, left and Harold Lewis, both of the Lube Department, proudly show off their string of 120 trout caught in Lavaca Bay.

## Shell to Donate Over \$1 Million To Worthy Causes

Shell Companies Foundation, Inc., is donating about \$320,000 this year to the Community Chest, American Red Cross, and United Fund campaigns in locations where Shell employees live. In all, the Foundation and Shell Oil Company and its subsidiaries will make contributions totalling more than \$1,000,000 to charitable causes and to education throughout the U.S. during 1955.

The Foundation was established in 1953 to provide donations for worth-while charitable, scientific, religious and literary purposes. It is the newest expression of Shell's long-standing policy of contributing liberal sums to philanthropic enterprises that promise to benefit large and diverse groups of Americans. The Foundation supports higher education largely through a program of fellowships and research grants.

### Support Funds

Shell Oil Company, Shell Chemical Corporation and Shell Pipe Line Corporation participate in the Foundation by contributing funds to the Foundation and by recommending, along with Shell Development Company, worthwhile organizations they believe qualify for Foundation support.

The Foundation prefers to make its contributions to community philanthropic organizations through Community Chests and United Funds. The Foundation believes these types of campaigns generally have good control and fair distribution of funds as a result of the leadership of local citizens.

### "Pattern of Giving"

The amount of the contribution to any Community Chest or United Fund campaign is based on Shell's nation-wide "pattern of giving." This pattern uses the number of Shell employees in each campaign area, related to the total population of the area and its charity needs or quota, as a yardstick for deciding how much Shell's philanthropic responsibility to the community should be.

The Foundation gifts are not intended to replace charitable donations by individual employees. But they do underscore the Shell companies' belief that their interests are inseparable from those of the communities which Shell people call "home." In this way, the Company and its employees become "Partners in Citizenship."

### Report Minor Injuries

Leaving even minor injuries unattended can result in loss of time from the job, and eventual loss of income. All injuries on the job, no matter how minor they may be, should be reported when they occur.

## New Refinery Supervisors



R. R. Lambert  
Shift Foreman  
Cat Cracking

R. B. Morelan  
Zone  
Foreman

F. G. Slott  
Craft Foreman  
(Boilermaker)



R. J. Griffin presents the API's Holmes Award to Ray Wilson, Chairman of the Research Laboratory's Safety Committee, in recognition for Research's million man-hours without a disabling injury. Others pictured, left to right, are Research Director W. A. Bailey, Ben Post, R. A. Tickner and J. A. Covington, who are representing the Research Laboratory Safety Committee.

## Research Employees Presented API's Joseph A. Holmes Award

Research Laboratory employees were recently presented the American Petroleum Industry's Joseph A. Holmes Award in recognition for working one million man hours without a disabling injury.

Research passed the million hour mark on October 15, 1954, and the certificate from the American Petroleum Industry arrived last month. R. J. Griffin of the Safety Department presented the award to Ray Wilson, Chairman of the Research Safety Committee, who accepted it in behalf of the Research personnel.

In making the presentation, Mr. Griffin commended Research employees for "their day-to-day vigilance while engaged in all types of experiments to discover new methods to improve refinery operations."

Mr. Wilson also stressed the importance of each Research employee's efforts in making the record possible.

Research's fine injury-free record was still intact at press-time. Approximately 170 Research employees have worked 1,455 days and 1,314,600 hours without a disabling injury.

## FINISH TRAINING COURSE



These smiling carpenters recently completed a training program. Bottom row, left to right: G. Callahan, J. R. Carroll, R. L. Phillips; Top row: Instructor Joe Hinton, V. Vassilico and Foreman I. G. Loomis. D. L. Langdon missed the photo.



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**FRED WICHLEP, Editor**

**JO KELLEY, Associate Editor**



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M. McGinnis and J. E. Harris surface weld a frog on a railroad track by means of the oxyacetylene method, which is the most common of the gas welding process.



E. E. Vogelsang and W. T. Ervin return a sawway scaffolding to the stack after renewing all bolts with stainless steel and installing a ladder for safety purposes . . . one of welders' special projects.

# Welders Proud of Progress of Their Craft

While for thousands of years man has been using metals to advantage, his ability to join pieces of metal together skill-

fully has a much briefer history. His first solution seemed to be that of joining metal in the

same manner he used to join pieces of wood — by making holes in the metal and driving pins through the holes. Before long, these pins were referred to as bolts or rivets.

It was not until about 60 years ago that welding was discovered, enabling man to join castings to castings, forgings to forgings or forgings to castings in the manner in which they should be joined: as a homogeneous structure.

### New Process Developed

Thus a new fabricating process was developed — the first this world has known in probably 3,000 years, according to the James F. Lincoln Arc Welding Foundation.

As a result of this development, man has been able to produce many items of necessity and convenience that were just a dream in the not too distant past.

For a splendid illustration of the progress that has been made and is being made in the field of welding, one need look no further than Houston Refinery, where the welding craft has made giant strides in techniques, effectiveness and versatility within the past 20 years.

In manpower alone, the craft has grown from 13 welders and nine helpers to 35 welders and 22 helpers as of today.

Twenty years ago, the equipment belonging to that craft consisted of four field machines and 12 shop machines. Today, the welders have 16 pieces of equipment in the field and 22 in the shop.

When the Refinery was in its infancy, knowledge of the techniques and processes in the welding field was still limited. Today, through study and application, the refinery welder is a versatile, informed craftsman, able to use skillfully a number of different types of welding apparatus.

### Perform Many Jobs

One needs only to glance about the refinery to account for the growth of this craft. Daily the welders are called upon to perform cutting and welding work pertaining to the fabrication, repair or salvage of stacks, pressure vessels and structures.

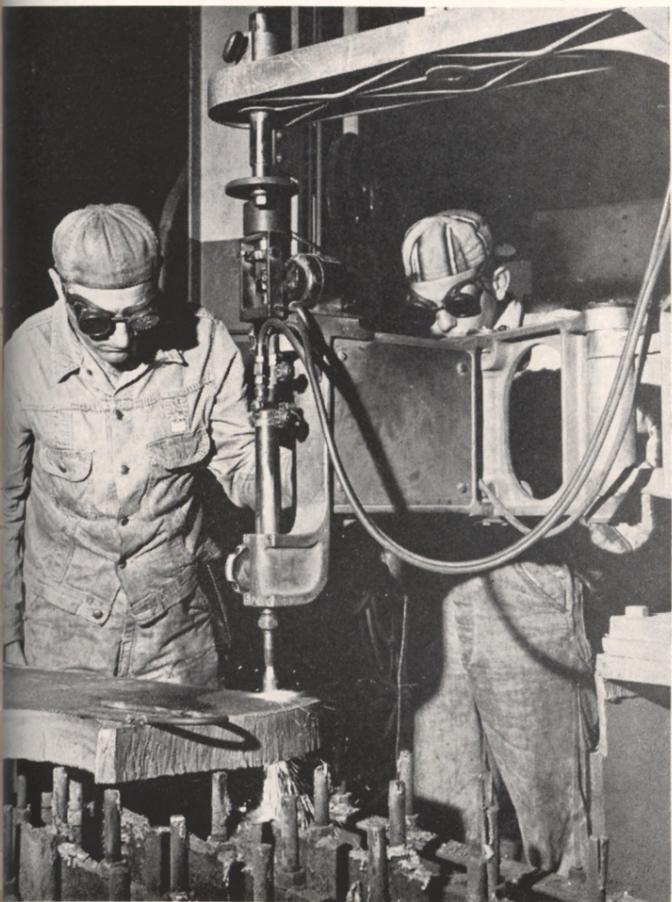
According to the American Welding Society, there are 37

different processes by which metals may be joined. Basically, the methods used in the refinery fall into one of three

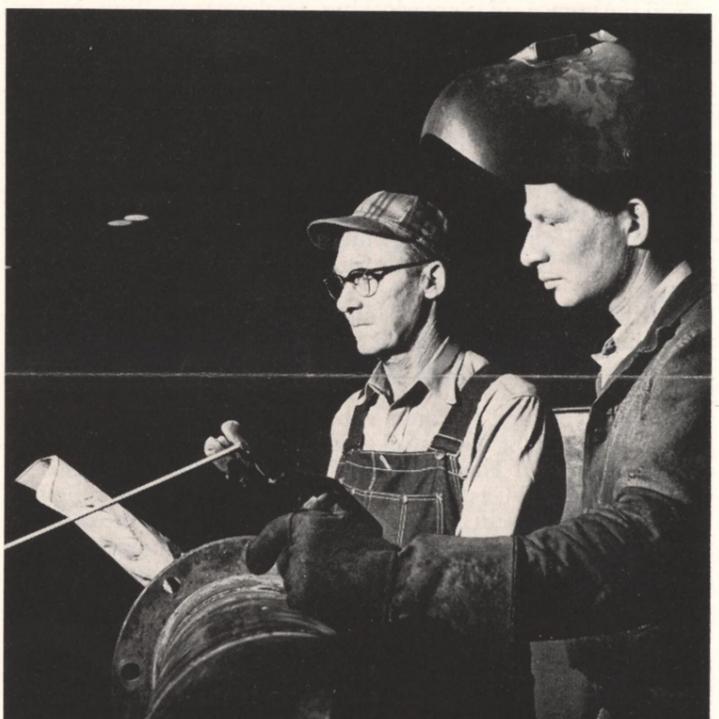
categories: (1) Oxy-acetylene, used to weld mild steels, types of stainless steel tubings and (continued on page 8)



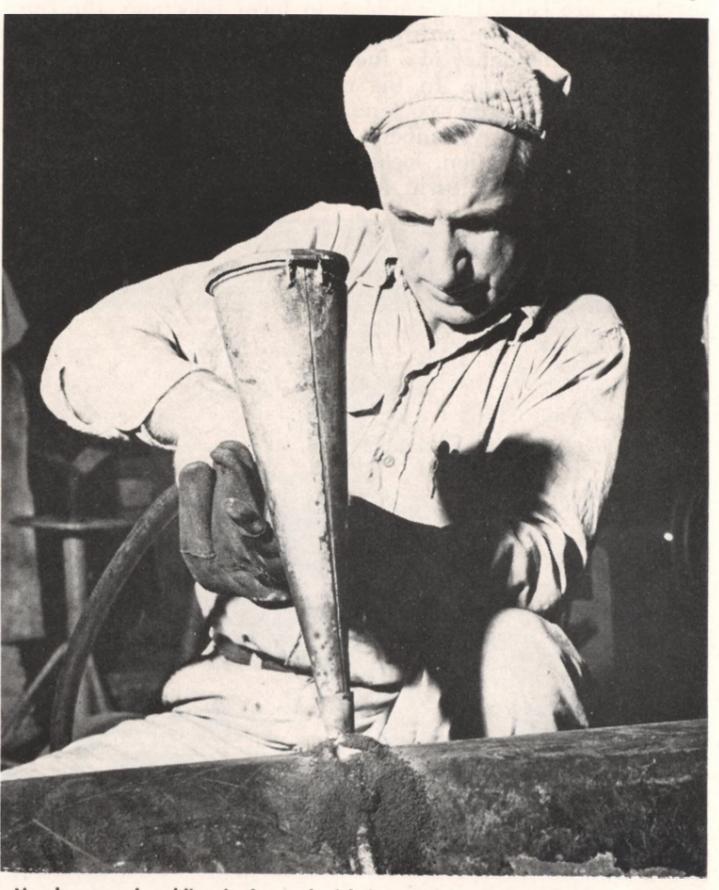
L. Shoemaker welds a road drain as H. E. Powers stands by to assist.



C. F. Brandt and W. S. Norred use this pattern cutting machine to cut a hole in this three-inch thick piece of steel boiler plate.



Hugh Granberry and J. W. Morrison study the blue print before fabricating



Lincoln manual welding is the method being used by W. H. Wheeler to double joint this section of pipe for construction. The arc is invisible under the granular flux, which gives the process its name of submerged-arc welding.

# Aircraft Fuels Are Major Products . . .

By MARX ISAACS

Normally, the words "Shell gasoline" bring to mind the motor grades used in automobiles and available at every Shell filling station. Although less highly publicized and occupying a more remote position in our daily lives, another very important class of "Shell gasoline" includes the several grades of aviation gasoline we manufacture. A relatively new type of aircraft fuel is used for gas turbine drives and is called "jet-propulsion" fuel. Even though this product contains light gas oil in addition to naphtha and gasoline stocks, it will be described in this article, which discusses all aviation fuels produced at Houston Refinery.

First, let's talk about the duties and quality requirements of aviation fuels. There is no such thing as an all-purpose aircraft fuel which will perform satisfactorily under any conditions and in any type of engine. A fuel suitable for a piston-type engine, currently found in some aircraft and in all automobiles, will not work in a Diesel engine, and vice versa. Diesel fuel, however, is a reasonably satisfactory fuel for aircraft gas turbines used in jet planes, which are less sensitive to type of fuel used than any other kind of aircraft engine. As mentioned in the opening paragraph, Houston Refinery supplies jet propulsion fuel containing gas oil.

## Aviation Gasolines Have 5 Important Qualities

In aviation gasolines, the most important qualities are:

1. Volatility (ease of evaporation in air).
2. Octane or performance number (smoothness of burning; relative lack of "knock").
3. Absence of vapor-locking tendency (boiling in fuel lines, causing stoppage of supply to engine).
4. Stability (resistance to decomposition in storage).
5. Non-corrosiveness (according to chemical composition).

In meeting these rigid requirements, or specifications, for the various aviation gasoline grades produced at Houston Refinery, several stocks must be blended in the proper proportions and the right quantities of certain additives injected. This calls for close control all the way from the original fractionation of the crude oil on the topping units until the last drop of lead (ethyl) fluid is added to the finished aviation gasoline before shipment.

All Houston aviation gasolines contain alkylate, isopentane and toluene. The lower octane grades also include depentanized base stock, with less alkylate than in the higher octane types. Of the important quality requirements noted above, the volatility and tendency to cause vapor lock are regulated both in the fractionation of these stocks and by the proportions in which they are blended. These phases of production are controlled by the Distilling and Gas Departments (fractionation) and the Dispatching Department (blending). Of course, the Control Laboratory's tests guide all departments involved in meeting these and other quality specifications for aviation gasolines.

## Alkylate Important Ingredient

Alkylate is a highly important ingredient of aviation gasoline, with respect to both its quality and proportion in the blend. A brief outline of how alkylate is made is in order at this point.

In alkylation, two light gas components, isobutane and butylene, are caused to combine to form isooctane, the compound on which the entire octane number system is based to express the tendency of a fuel to cause knocking while being burned in an engine. In the most widely used system, the octane number of pure isooctane is 100. The more a fuel knocks, the lower the octane number.

Houston alkylation, located in the Gas Department, is a process employing sulfuric acid as a catalyst, or reaction pro-

## Many Employees Involved In Manufacture Of Aviation Fuels



K. M. Mathis, above, checks one of the many controllers in the Refinery's alkylation plant control room.



T. L. (Foots) Wilson determines the amount of tetra-ethyl lead that is to be added to the aviation gasoline and checks whether all specifications and requirements have been met.

motor which is actually just a bystander rather than a reacting member. A low temperature (45-55° F) maintained with liquid ammonia is essential to satisfactory alkylation without undesirable side reactions.

The crude alkylate, after settling, is neutralized with caustic soda to prevent acid carryover which might affect the corrosiveness and other properties of the finished aviation gasoline blend. After fractionation to remove heavy ends, finished alkylate ready for blending is produced.

Octane or performance number of aviation gasolines is adjusted by:

1. Blending the component gasoline stocks in certain proportions.
2. Adding sufficient tetraethyl lead (ethyl) fluid to reach the desired knock rating.

## Dispatching Plays Key Role

Both of these operations are controlled by the Dispatching Department, which is also responsible for storage and loading of finished aviation fuels for shipment (mostly by water). The knock testing section of the Control Laboratory supplies Dispatching with information on lead requirements, after testing samples from the storage tank for octane number before and after adding lead fluid at the laboratory.

Ethyl fluid is added by weighing the calculated necessary amount into a slip-stream of gasoline withdrawn from the storage tank then returned to mix with the tank's contents. Lead fluid addition takes place in one of two buildings located near the tank-car loading rack and Distilling Department areas, respectively. Color is also a specification for each grade of finished aviation gasoline; the proper dye is added (also by weight) at these ethylizing locations.

Non-corrosiveness of aviation gasolines is assured by using components from "sweet" crude sources which contain no corrosive sulfur compounds or by removing such compounds with chemical treatment. For instance, "sour" (sulfur-containing) butylenes which go into the making of alkylate, are caustic soda treated in the Gas Department before alkylation. As mentioned above, neutralization of crude alkylate removes possible corrosivity from any sulfuric acid remaining.

Stability of aviation gasolines is protected by the addition of an inhibitor, a chemical compound or mixture which prevents oxidation in storage. Oxidation causes formation of gum (which would make engine valves stick) and a sizeable loss in octane number; it may also result in haziness and sediment in the gasoline.

## Control Lab Tests Samples

To insure thorough mixing after all blending and additive injection steps, the Control Laboratory obtains and tests samples from the top, middle and bottom of the storage tank before the finished blend is shipped.

The most important qualifications for jet fuel (designated JP-4) are gravity, distillation, vapor pressure, freezing point and smoke point. To meet these requirements at present, JP-4 is produced from a mixture of low-grade gasoline or naphtha, light sour gas oil (treated to prevent corrosion) and normal pentane. A rust inhibitor is added. As with the aviation gasolines, the Dispatching Department handles jet fuel blending, additive injection and loading for shipment.

It would be difficult to convey just how much effort goes into the manufacture of these products, with such careful handling at every step in the processing, not forgetting the intensive research involved in such features, for example, as alkylate quality and selection of additives, before processing even begins. The gratifying end-result of these efforts is the high quality line of aircraft fuels bearing the well-known Shell trade-mark.

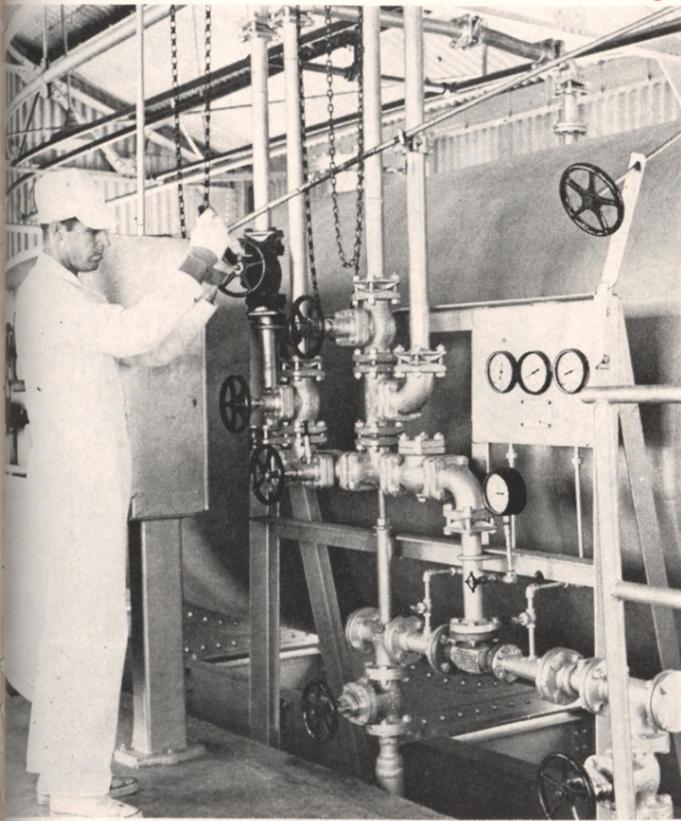


A Shell tank truck is a familiar sight at major airports. Here one is supplying fuel for Capital Airlines' Viscounts, the first turboprop planes to go into service on the route of a United States air carrier.

# At Our Refinery



- REFINERY**
- Control Lab**  
W. R. Laney, Chemist.
- Engineering**  
Pat Jo Brown, Operator Blue Print Machine.  
R. W. Ellison, Clerk.  
R. M. Mechura, Clerk.
- P & IR**  
Carolyn Smith Hyman, Nurse.
- Research**  
J. M. Hays, Jr., Lab. Assistant.  
Doris Juerges, Stenographer.  
R. G. Lutz, Research Chemist.
- Treasury**  
Karen Rosemary Heiman, Jr., Operator Duplicating Machine.  
R. M. Odom, Jr., Clerk.  
Helen Delores Smith, File & Mail Clerk.  
Jane Kelly Smith, Stenographer.



R. Smith, Ethyl Blender, adding tetra-ethyl lead to the aviation gas blend.



M. Patterson, left, takes a reading on the super-charge knock testing machine in the knock-testing lab to determine whether the aviation gasoline meets customer specifications while Foreman W. O. Hopper stands by.



Dockmen W. P. Miller, left, and P. F. Jegust stand by to begin pumping aviation gasoline into the specified tank of the Tanker S. S. Fruitvale Hills.

**CHEMICAL**

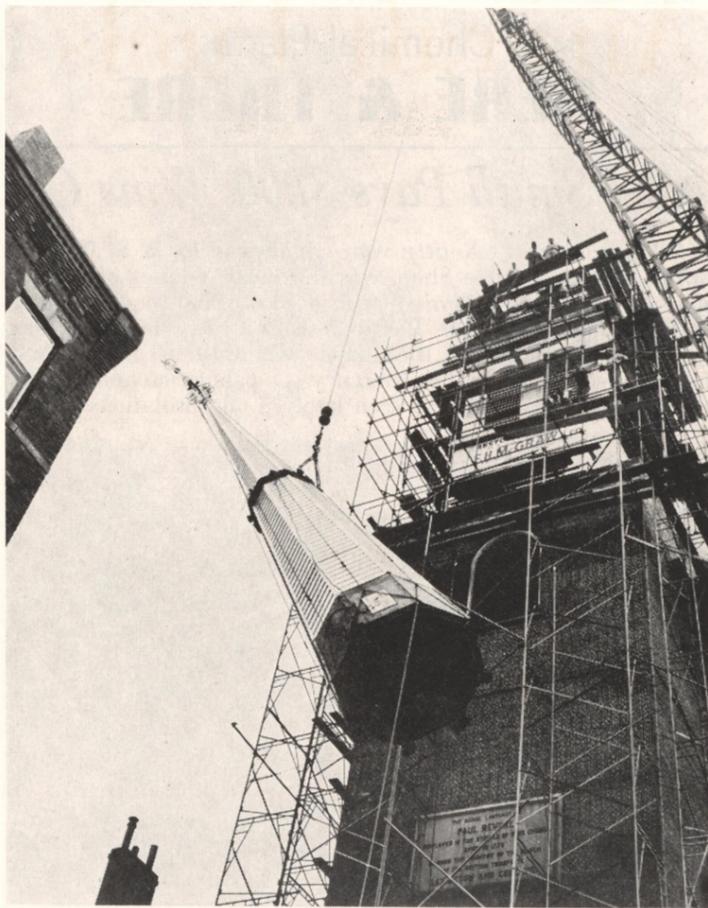
- Engineering**  
P. W. Auzenne, Laborer  
F. H. Brady, Laborer  
W. J. Flood, Laborer  
R. S. Holcomb, Engineer  
C. R. Hull, Laborer  
L. R. McLain, Laborer  
R. E. Martin, Laborer  
C. C. Meacham, Laborer  
G. W. Ray, Laborer  
H. Sidney, Laborer  
J. B. Smith, Laborer  
M. C. Trovas, Engineer  
D. A. Weathers, Laborer
- Laboratory**  
L. H. Barclay, Chemist  
L. R. Bitner, Chemist  
C. H. Bloom, Chemist  
J. P. McCann, Chemist  
G. C. Smith, Chemist  
W. J. Wirkus, Chemist
- Treasury**  
M. M. Dykes, Stenographer  
D. M. Emanuel, Jr., Duplicating Machine Operator  
B. N. Holman, File Clerk  
R. P. Parks, Clerk  
P. Y. Rinehart, Jr. Clerk  
J. M. Tinkle, Jr. Clerk  
N. S. Weston, Jr. Clerk  
S. D. Wilson, Stenographer  
C. N. Woodliff, Clerk

## SERA Fall Dance Set for Nov. 4

Buddy Yannazzo's first offering as the SERA's new dance chairman will be a western and blue jean style dance on Friday, November 4 at the Paladium, located at Old Spanish Trail and South Main.

Featuring the music of Shell's own Joe Kennerty and his Paladium Play Boys, the dance will be held from 8:30 to 12. Admission will be \$2 per couple for members and \$2.50 per couple for non-members, with tax included. Setups will be available at popular prices.

Wearing of western clothes to the dance is encouraged, Yannazzo said, but not required. Kennerty's band is set to play any type of music from western to popular upon request.



Newly coated with EPON® resin XA-200 finish, the spire of the Old North Church in Boston is hauled back into place to complete restoration work.

## EPON Resin Finish Shields Old North Church Steeple

An EPON® resin finish donated by Shell Chemical Corporation was chosen over all other surface coatings for the spire of the recently-restored steeple of the Old North Church in Boston. It was a lantern signal from this church

which started Paul Revere on his famous ride to warn of the British march on Concord and Lexington.

After Hurricane Carol toppled the spire and severely damaged the rest of the steeple last year, contributions came from groups and individuals across the country to help rebuild it.

## C U Management Course Offered

A complete course in Credit Union Management and Operations will be conducted at the University of Houston, beginning Tuesday, October 18 and ending December 6. Expert instructors will be in charge, and certificates will be awarded on completion.

However, the Lantern League, which sponsored the restoration work, was faced with the problem of finding the most durable coating for the spire, inasmuch as no funds are available for regular maintenance work.

Credit Union members who are interested in attending this course are requested to contact Vivian Tucker of the CU Planning Committee for further details. She can be reached at Chemical Plant Phone 244.

After investigation of all possible surface coatings, EPON resin XA-200 finish was chosen to protect the spire, which is made of iron, sheathed in lead-coated copper. Two white coats of the EPON resin finish were used to protect the spire—the first coat was brushed on and the second sprayed on.

## Personnel Changes

- CHEMICAL**
- G. G. Barnes.....Clerk, G to Clerk, Utilities.  
W. H. Bonham.....Technical Assistant, P&R to Technical Assistant, G.  
R. A. Brand.....Chemist, Research to Engineer, Engineering-Development.  
B. C. Brown.....Chemist, Laboratory to Union Laboratory.  
R. J. Cavalier.....Engineer, Engineering-Development to Torrance Plant.  
J. K. Cravey.....Rigger Helper, Engr. Field to Operator, A.  
L. B. DeLozier.....Pumper Gauger, G to Operator No. 1, G.  
W. E. Dykes.....Engineer, Engineering-Development to Torrance Plant.  
G. D. Edwards.....Chemist, Laboratory to Research Chemist, Research.  
W. B. Elmer.....Chemist, Laboratory to Research Technologist, Research.  
R. L. Fenelon.....Engineer, Engineering to Engineer, Engineering-Development.  
E. E. Frizzell.....Chemist, Laboratory to Technical Assistant, G.  
B. F. George.....Technical Assistant, A to Technical Assistant, Shipping.  
D. E. Haupt.....Technical Assistant, G to Head Office—Manufacturing Development.  
J. M. Hazel.....Engineer, Engineering to Technical Assistant, Utilities.  
R. J. Johnson.....Janitor, Engineering Field to Truck Driver, Engineering Field.  
P. A. Kenney.....Engineer, Engineering to Engineer, Engineering-Development.  
J. F. Kottenstette.....Chemist, Laboratory to Technical Assistant, P&R.  
R. N. LaFaver.....Clerk, P & IR to Analyst, P & IR.  
L. Macha.....Research Technologist, Research to Technical Assistant, A.  
W. B. Mikeska.....Head Stenographer, Treasury to Clerk, P & IR.  
D. R. Mitchell.....Engineer, Engineering to Engineer, Engineering-Development.  
W. A. Morgan.....Clerk, P & IR to Analyst, P & IR.  
C. M. Noble.....Chemist, Laboratory to Chemist, Research.  
M. A. Radliff.....Stenographer, Treasury to Stenographer, Engineering-Development.  
E. G. Schumacher.....Chemist, Laboratory to Shell Oil Company, Anacortes, Refinery.  
R. S. Thomas.....Technologist, Tech. to Head Office, Development Department.  
F. P. Thompson.....Supervisor, Personnel to Supervisor, Industrial Relations, P & IR.
- REFINERY**
- Ruby Allen.....Steno, Treasury to Steno, Utilities.  
Jean Ament.....Steno, Eng. to Hd File & Mail Clerk, Treasury.  
N. W. Christensen.....Shift Foreman, Cat. Gas to Zone Foreman, Eng.  
Shirley Eckman.....File & Mail Clerk, Treasury to Steno, Control Lab.  
E. W. Kern.....Technologist, Tech to Technologist Thermal Crkg.  
Delores Lezak.....Steno, Control Lab to Steno, Treasury.  
Bonnie McLennan.....Dup. Mch. Oper., Treasury to Typist, Stores.  
D. D. McManus.....Clerk, Eng. to Clerk, Lube.  
M. M. Yarosky.....Technologist, Thermal Crkg. to Technologist, Tech.

## Chemical Plant HERE & THERE

### Noel Smith Pays \$1.00; Wins Car

Did you hear? *Smitty* won a new car for a \$1.00. *Noel Smith*, Chemical Pipe Shop, was the lucky winner of a brand new 1955 Mercury. *Smitty* took a \$1.00 chance on a recent raffle sponsored by the Baytown Elks Club. He had almost forgotten about having the chance when they called him to come collect his prize. The Mercury is a pale green and is really the sharpest thing we have seen lately. Congratulations *Smitty*.



The McCulloms and friends prove that the fishin' was good.

Many Shell families traveled to wonderful places this summer. *L. R. McCullom* of Engineering Field, his wife, *Gladys* and daughter, *Billie Jo*, took a long trip to Canada to try their luck at fishing. The McCulloms joined old friends, the Dietls in St. Paul, Minn., and set out for Saparva, Ontario. They took in all the sights along the northern border. They camped in a lake shore lodge for seven days and with the help of an Indian guide, found a lake where the fish were really biting. They enjoyed the climate, but the water was too cool for swimming; it stayed about 38 degrees.



Hazel and Henry Waddell found Shell well advertized in Havana

*H. L. Waddell* and his wife, *Hazel*, took a warmer route for their vacation. They journeyed to Havana, Cuba, on their two weeks off. *Henry*, who had been in Cuba before, while in the service, had a good time showing *Hazel* the scenery. They stopped their tour by the unusual Shell sign. *Henry* is in the Machine Shop.

*L. E. Morris* went up to New York City for a visit this year. It was their first trip to the East Coast, so they tried to see all of New York. They visited with relatives there and then decided to take a trip to Niagara Falls. *Morris* and his wife, *Lillian*, crossed the border into Canada at Buffalo and traveled across the Canadian Coast of the Great Lakes until they crossed back in the U. S. at Detroit, Mich. The *Morris'* visited with relatives in Detroit before starting home to Texas.

## SERA Sponsors Teen-Age Club

Many Shell folks have heard their children or young friends state over and over again that in our area there is a need for a suitable place for teen-agers to have parties and dances for just their age group. The SERA has made a step to remedy this problem, at least for the teen-agers of SERA members.

The Board of Directors has approved plans for a teen-age club at the SERA grounds in Friendswood, and Mr. and Mrs. T. L. Billingsley have been appointed advisors for the group.

The club will be opened on certain dates for the teen-agers and their guests. All teen-age children of SERA members and all teen-age SERA members are eligible to join. They are invited to attend the get-togethers which will be held every other Sunday afternoon from 2 p.m. til 5 p.m. at the Club House. The next meeting will be October 9th.

### Forty Teen-Agers Present

Some forty teen-agers were present at the September 11 meeting. After a short discussion and get acquainted session the group went to work and elected temporary officers to serve until the end of the year. They appointed a Planning Committee to plan at least two dances and parties for the fall.

Officers elected were **Benny Stephenson of Deer Park, son of N. L. Stephenson, Chemical Electric Shop, president;**

**David Dean of Houston, son of R. W. Dunlap, Refinery Engineering Field Office, vice-president;**

**Patricia Westover of Houston, daughter of Willie Dee Westover, Refinery Engineering, secretary, and**

**Helen Duncan of Houston a Stenographer at the Chemical Plant's Treasury Department, chairman of the planning committee.**

The officers will serve on the Planning Committee along with *Mary Anne Duncan*, *Robert Robinson*, *Shelby Graves* and *Laura Phipps*. After the business meeting the group enjoyed refreshments, danced, played ping pong, pitched horse shoes and got better acquainted.

### Plan Halloween Dance

Final plans are in the mill for a Halloween dance to be held on Saturday night, October 29, 1955. So watch for the announcements.



John Dever, Paint Shop, and Doris Wilmoth, Treas., check over the schedule for night school classes at the University of Houston . . . a chore that many Houston Plant and Refinery employees experienced this fall. Like many other Shell employees John and Doris are working on college degrees in night school classes. John is a Sophomore and Doris is a Freshman.

## M. A. Elledge's Son Becomes Youth Rodeo Champion

Marshall Elledge, Jr., the 18-year-old son of M. A. Elledge of the Chemical Plant Boiler Shop, has made quite a name for himself in the Youth Rodeo circles this season. Marshall, a senior at Stephen F. Austin High School in Houston, has been riding and roping for about two and a half years. His specialty in the arena is break-away roping, but he also enters the tie-down roping competition.

This summer, Marshall won several prizes. In Wharton's Youth Rodeo he received a horse blanket and has won spurs and two bridles. But his big event of the year was the Robstown Rodeo, September 4th; this was the Nueces County Championship Youth Rodeo. Marshall took top place in the break-away roping contest. His timing was 10 seconds flat for three calves. He caught the animals in 3.5, 3-1 and 3.4 seconds respectively. He came home with the championship title and a beautiful hand-tooled leather saddle.

The day after his triumph in Robstown, Marshall entered the Alvin High School Youth Rodeo. The Champions of Champions Rodeo it was titled because only previous saddle winners could enter. Matching for the top were the



Marshall Elledge displays the Championship saddle which he won in Robstown at the Youth Rodeo.

winners from Alice, Hallettsville, Alvin, Angleton, Port Lavaca, Wharton, Rosenberg and Robstown. Marshall tamed the calf in 4.1 seconds to win again.

Unusual for a city boy, roping seems to be a natural with Marshall. He owns a quarter horse, a bay which he rides every chance he gets.

## N. Buggs Dies In Accident

Newvell Buggs, an employee of Shell since December, 1953, was killed in an automobile accident August 30. The accident occurred near his home town of Mansfield, La. He was a Special Yardman at the time of his death. He is survived by his wife, Ethel Lee Buggs and their four children.



BUGGS



L. E. Morris and his wife Lillian paused in a scenic spot in Canada

# OCTOBER SERVICE BIRTHDAYS

## TEN YEARS

### Refinery

- F. Brandt, Engineering.
- A. Gersteman, Engineering.
- C. Hudson, Research.
- W. Macek, Automotive.
- A. Martin, Research.
- S. Paul, Engineering.
- P. Peterson, Engineering.
- E. Tucker, Engineering.
- H. Wielkens, Treasury.
- L. Williams, Engineering.

### Chemical

- C. Chambers, Operations.
- D. Hibler, Engineering.
- M. Nenno, Engineering.
- R. Stone, Engineering.
- B. Tapley, Engineering.



25 YEARS  
W. F. Arnold  
Dispatching



20 YEARS  
G. L. Boatright  
P & IR



20 YEARS  
T. L. Massey  
Utilities



20 YEARS  
W. R. Moeller  
Engineering



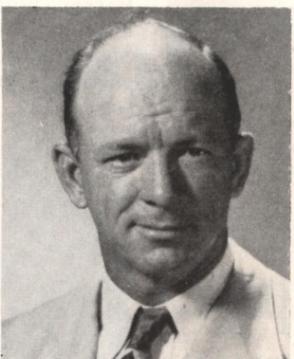
20 YEARS  
F. H. Murillo  
Engineering



20 YEARS  
R. E. Schroeder  
Engineering



20 YEARS  
Engineering  
J. A. Sullivan



15 YEARS  
B. J. Faulkner  
Engineering



15 YEARS  
V. Harris  
Engineering-Chemical



15 YEARS  
C. W. Reid  
Distilling

## W. P. Bryan New Distilling Department Asst. Manager

W. P. Bryan, Senior Technologist in the Thermal Cracking Department, has been named Assistant Manager of the Distilling Department.



BRYAN

He succeeds D. C. Lehwalder who has been transferred to Shell's Wood River Refinery as Assistant Manager of the Lubricating Oils Department, effective September 1.

Bryan joined Shell in 1942 and since that time has worked as a technologist in the various departments of the Refinery. He moved from Senior Technologist in the Technological Department to the Thermal Cracking Department in May of this year.

Prior to his move to the Distilling Department earlier this year, Lehwalder had been a Technologist in the Refinery Lubricating Oils Department.

## Shellites' October Calendar

October may well prove to be the busiest month of the year for Refinery and Chemical Plant folks.

A wide variety of activities, ranging from Service Club dances and style shows to Oil Progress Week and the annual United Fund campaign.

The schedule of major events reads:

**October 1**  
Third Chemical Plant Service Club Party (Barbecue and Rice-LSU football game), and Refinery Service Club Party (Barbecue and Rice-LSU football game).

**October 8**  
Annual SERA style show. Luncheon at 1 o'clock in the

afternoon followed by the style show at 2 o'clock at the Rice Hotel's Crystal Ballroom. Fashions by Sakowitz and music by Organist Freddie Gibbons. Tickets are \$2.50 for members and \$3.50 for non-members.

**October 9-15**  
Oil Progress Week begins on Sunday, October 9, with a nationally televised program to be carried locally over KPRC-TV from 2:30 until 3:30 p.m.

**October 10**  
The annual Refinery-Chemical Plant United Fund drive will be held during this week.

**October 10**  
Second Refinery Service Club celebration. (Dinner at San Jacinto Inn.)



### CHEMICAL

May 24: John Craig, son of Mr. and Mrs. J. W. Stephens (Tech. Dept.).

July 26: Jaime Ann, daughter of Mr. and Mrs. J. O. Spencer (G Dept.).

July 27: Suzan Loraine, daughter of Mr. and Mrs. V. G. Jacobson (Laboratory).

Aug. 1: Jesse Lee, Jr., son of Mr. and Mrs. J. L. Ballard (G Dept.).

Aug. 4: Sharon Rene, daughter of Mr. and Mrs. H. H. Vaughan (G Dept.).

Aug. 5: Jeanine Sue, daughter of Mr. and Mrs. D. B. Goodson (E Dept.).

Aug. 11: Linda Sue, daughter of Mr. and Mrs. J. F. Cabler (P&R Dept.).

Aug. 13: James Randolph, son of Mr. and Mrs. M. R. Wells (Machine Shop).

Aug. 15: Jimmy Ray, son of Mr. and Mrs. R. G. McNeely (A Dept.).

Aug. 16: Connie Lynn, daughter of Mr. and Mrs. N. Edwards (Carpenter Shop).

Aug. 26: Mary Ann, daughter of Mr. and Mrs. L. B. Rains (Boiler Shop).

Aug. 27: Tony Eugene, son of Mr. and Mrs. R. E. Dial (Pipe Shop).

Aug. 31: Pamela Jean,

## Jack O'Neal Wins Petroleum Chemistry Award for 1956

M. J. (Jack) O'Neal, Research, has been named to receive the Precision Scientific Company Award in Petroleum Chemistry for 1956, it was announced at the 128th National Meeting of the American Chemical Society in Minneapolis, Minnesota, last month.

Jack thus becomes the first Shell research scientist and the first Texan to be accorded this honor, which is the top award of petroleum chemistry in the country, according to Houston Research Director Dr. W. A. Bailey.

The award, which consists of \$1000 and a certificate, has been made annually since its establishment in 1948 by the Precision Scientific Company. Its purpose is to recognize, encourage and stimulate outstanding research achievements in the field of petroleum chemistry in the United States and Canada.

Jack was selected as winner of the 1956 award on the basis of his development of high-temperature mass spectrometry and its application to the knowledge of the composition of petroleum.

Although mass spectrometers have been used for years

daughter of O. J. Pomykal (Boiler Shop).

Sept. 12: Sandra Lynn, daughter of Mr. and Mrs. R. S. Holcomb (Engineering).

in the analysis of gases and gasolines, it was O'Neal who had the imagination, determination and courage to solve the tremendous problem of applying mass spectrometry to the analysis of heavy petroleum products such as lube oils and waxes. As a result of his development of this powerful analytical tool, significant advances in the knowledge of chemical composition of petroleum have already been made and certainly will continue to be made.

Upon being notified of his selection, Jack said that he was grateful "not only to the American Chemical Society, but also to my co-workers in the Research Lab who made my selection possible."

## United Fund—

(Continued from page 1)

resent operating, maintenance and staff solicitors, respectively.

Ware, Martin and Peters are members of O. C. A. W. Union Local 4-367. Ware is Vice President Shell Chemical Group; Martin is chairman of the Workmen's Committee and Peters is a member of the Workmen's Committee.

Quinn is Chief Accountant and Taylor is Manager of "A" Department.

A complete list of solicitors at both installations will be announced in the November issue.

## Joe & Moe

G. B. DUNN  
Carpenter Shop

IT'S AMAZING THE WAY PEOPLE TAKE CHANCES, JOE!

SO MANY PEOPLE ARE KILLED ON THE JOB! MOSTLY ON THE ROAD!

SEE WHAT I MEAN! TRAFFIC DEATHS ARE INCREASING MONTHLY!

**BULLETIN**

MOTOR-VEHICLE DEATHS			
1955	1954	CHANGE	
MAY 3,080	2,910	+6%	
5 MOS. 13,560	13,360	+1%	

WORK DEATHS			
1955	1954	CHANGE	
MAY 1,000	1,100	-9%	
5 MOS. 5,300	5,400	-2%	

J F M A M J J A S O N D J F M A M J J A S O N D



M. F. Johnston, W. W. Myers, P. W. Gudgell, P. R. Scott, D. O. Henry, K. M. Richards, all of the Control Lab, see stars through Myers' 20-inch telescope, which is reported to be the world's largest portable telescope.

## Woody Myers Buys World's Largest Portable Telescope

A Shell man is the owner of what is believed to be the world's largest portable telescope. With it, he hopes to stimulate interest in astronomy in Houston.

He is W. W. (Woody) Myers of the Control Laboratory, a veteran of almost 21 years of Shell service and a long-time SERA sparkplug.

Woody purchased the giant, 20-inch telescope recently from its designer and builder, Frank Manning, an amateur astronomer from New Orleans.

The instrument magnifies the moon 1200 times, and through it, craters of varying depths have been seen at a distance of from 230,000 to 260,000 miles.

Manning completed the huge viewer in 1952, after several years of hard work, at which time he estimated its value at from \$10,000 to \$15,000 in published reports.

Woody said that he paid Manning close to \$20,000 for

it and has it insured for \$25,000.

The telescope, which is mounted on a large truck bed, is the second largest in Texas, smaller only than the 82-inch instrument at McDonald Observatory. However, the McDonald telescope is stationary.

No one has disputed the claim that this instrument is the world's largest portable telescope. As a matter of fact, that is exactly the way it is described in technical astronomy magazines.

Manning was told — before he built it — that no telescope of that size could be made portable.

The advantage of a portable telescope? "It can be taken to the people; they don't have to come to it," is the way Woody puts it.

"The biggest thing happening now as far as astronomers are concerned is the approach of Mars," Woody said. About this time next year, it will be about 35 million miles from the earth — closer than it has been for the past 77 years, he said.

Woody recently was elected president of the re-organized Houston Astronomers Association.

A number of Shell employees have already notified Woody of their willingness to be of assistance in forming this association, and he welcomes any others that might be interested.

### ON MILITARY LEAVE

#### REFINERY

J. P. Rollins, Clerk, Treasury, U. S. Air Force.

A. J. Ezzell, Clerk, Treasury, U. S. Army.

#### CHEMICAL

E. L. Plyler, Laboratory, Army.

## Sports Take First Place In Bowling

The Sports were in first place as the Chemical Mixed Bowling League rolled through its final week of summer play on September 1. Members of the Sports are: Fred Speer, Pipe Shop; Peggy and Stubby Nunn, Electric Shop; Sam Campbell, Tool Room; Don Parker, Boiler Shop; and Red Palmer, Welding Shop. The Sports won 37 and lost 19 games during the summer season. The Misfits and Rag Arms took second and third place respectively in the team events.

The Dobbbers won both high team game, 1015, and high team series, 2898, but split the prize money with the Rag Arms, who were second high in team game with 1013.

Ethel LaFont, Treasury, and Jo Jones, P&IR, sparked the season with a close race for high game for women. Jo rolled a 188 to set a new high game on July 28, only to find that Ethel, who finished three frames later, had topped her by rolling a 200 scratch. Ethel received her "200" pin and finished with high game and high series for women with a 244 game and 634 series.



Ethel LaFont shows off her "200" pin.

Since league rules permit a person to win only one place, Jo received the prize for high game with 234. Ethel bowls with the Dobbbers and has only been bowling since last winter. Jo bowls with the Ajays — she also joined the league last winter.

As for the men E. H. Van Vooren, A Department, was high for game with 269 and Red Palmer was high for series with 626.



T. H. Green, Research Computing Head, discussed the new IBM Magnetic Drum Data Processing Machine with Refinery Manager John Tench, left, and Research Director W. A. Bailey.

## New Research IBM Can Solve Toughest Problems In Minutes

Houston Research Laboratory has installed a new type electronic data processing machine which can complete calculations in minutes that a human being using conventional methods could not finish in a lifetime.

An IBM Magnetic Drum Data Processing Machine, the new machine can do mathematical calculations at electronic speeds of up to 60,000 operations per minute, and check itself for accuracy as it goes along. It can "remember" up to 20,000 digits and recall any of them in a split second.

The new machine will be an important aid in the search for more efficient methods of manufacturing improved products from crude oil. Moreover, it is expected to be a further step in freeing engineers from tedious mathematical calculations thereby permitting them to devote more time to work requiring human judgment which no machine can provide.

The computer will be used to determine percentage compositions of oil samples and yields from pilot plants in calculations involving hundreds of pieces of data and many complex mathematical equations. Several thousand of these calculations will be made each month, at a speed several hundred times greater than by ordinary means. In designing or studying fractionating towers the machine can be used to compute in a matter of hours compositions of oils within the towers. If done by desk calculator, a calculation of this type can take several months. Given complete information on Shell's refinery operations, the machines can be put to work to determine the best method of conducting future operations.

The two most significant features of the computer are

its ability to check the accuracy of its own computation and its magnetic drum "memory." The magnetic drum memory makes it possible for the calculator to retain up to 2000 numbers of 10 digits each. Instructions to the machine and data for the calculation are entered into the machine on a series of punched cards. The numbers represented by the punches in the cards are stored on the surface of the drum as tiny magnetized spots and each group of spots has an "address" so that any number — either data or instruction — can be called for and made available when needed. The drum, which is only 4 inches in diameter and 16 inches long, turns at the rate of 12,500 rpm. A result of this high rotational speed is that any one of the memory spots can be located and a number transferred to or from the drum is less than five one-thousandths of a second.

In doing a problem the calculator follows the stored instructions or program faithfully, taking numbers from input cards or the magnetic memory as needed, performing the calculations called for, and automatically moving on to the next step. At any time the operator may manually alter or add to the stored data or program instructions by setting knobs on the control panel. If an error is made, whether it be the machine's own mistake or a faulty instruction from the operator, calculations will immediately stop. An error light will tell the operator what has happened. Final answers are produced on punch cards. If the problem is a compound one with several answers, the machine may be reading cards, calculating, and producing answers simultaneously.

## Welders Proud of Their Progress

(Continued from page 3)

also for brazing, cast-iron and hard surfacing; (2) Electric, used to weld all of the alloys, stainless, monels, chrome and also for hard surfacing and (3) Manual Lincoln weld, a submerged arc process used to weld mild or high carbon steel.

Of course, special jobs require special processes, and the welders are frequently required to learn new ones. One of the special duties of the welding craft, but one that is carried on daily, is that of

cutting steel by means of a pattern cutting machine, which cuts quickly and accurately through metals as thick as four inches. This machine cuts metal according to the needs of the other crafts and also makes spectacle type blinds for use during shutdowns.

As metals are improved and changed, so must the processes and techniques of joining pieces of metal be improved to keep pace. The refinery welders take tremendous pride in their work, and it's safe to

assume they'll keep abreast of these changes.

Aluminum pipe welding recently accomplished by the Welding Dept. in this Refinery was a magnificent piece of work and a new process to the Houston Refinery. Although being done in the overhead racks and under adverse conditions the Welding Dept., in stride with progress, accomplished the project very satisfactorily.

For the Refinery welders, the only good weld is a perfect weld.

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