SHELL NEWS

JUNE 1955

SEA-GOING SURVEYOR

EMPLOYEE BENEFITS

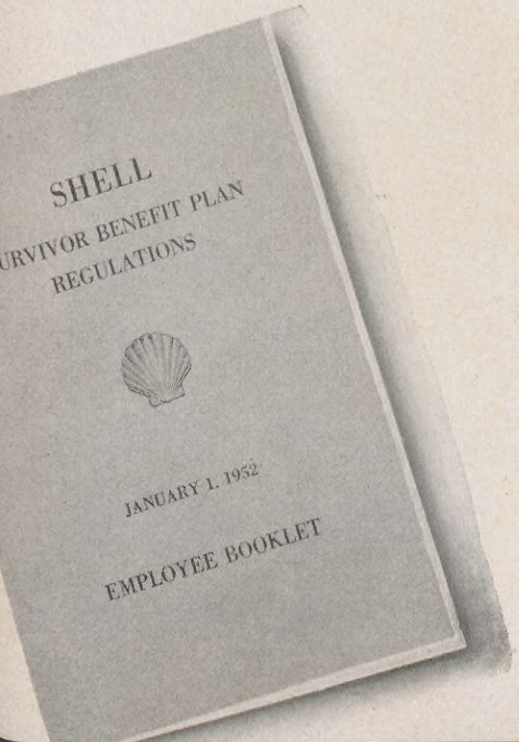
At Shell, That Extra Something That Doesn't Show

Up on Your Pay Check Is One of the Biggest In Any Industry

IF, every hour on the hour during the working day, you dropped about 75 cents into a piggy bank—thus setting aside a reserve for family emergencies, security later in life, and for vacation and holiday fun—you'd have a tidy sum in no time at all.

To most folks, being out-of-pocket 75 cents each working hour, even for security's sake, would be hard—but that is the figure which represents Shell's expenditures for employee benefits, expressed as an average hourly sum for each of Shell's 36,750 employees. These extras or "fringe benefits" cost Shell more than 57 million dollars last year. They represent approximately 30 per cent of the payroll or 30 cents for every dollar paid for hours worked. Put another way, employee benefits cost Shell more than $450 a minute every working day.

Employee benefits may be divided into three groups. One group includes the statutory benefits required by law. These are (1) the Company's share of Social Security taxes, (2) payments to provide Unemployment Compensation, and (3) Workmen's Compensation expenses for occupational injuries. These three statutory benefits cost Shell $4.2 million in 1954.



A second group includes those benefits which provide payments to employees for time not actually worked. This group includes payments for vacations, holidays, and authorized leaves of absence with pay, and payments made to employees during periods of sickness or disability under the Shell Disability Benefit Plan. In 1954, Shell's cost in payments for time not worked amounted to $17.3 million.

The third and most costly group of employee benefits includes the Shell Pension Plan and the Shell Provident Fund, and also the Survivor Benefit Plan, the Hospital-Surgical-Medical Program, and Military Leave payments.

It cost Shell more than $35.7 million to provide this third group of benefits in 1954. For example, Company contributions to the Provident Fund during last year amounted to almost $15 million, and since the Fund was established, Shell's contributions have totalled almost $148 million.

The 1954 cost to Shell for the Pension Plan was over $19.6 million. From the inception of the Plan in 1938 Shell has contributed a total of $119 million. These sums have been invested by the Shell Pension Trust to provide pension payments for those employees who have retired or will retire in the future. There are currently more than 3,000 pension checks being mailed every month to retired Shell employees.

A nation-wide study made last year by the U. S. Chamber of Commerce covering the 1953 operations of 940 companies, including Shell and 17 other oil companies, revealed that the oil industry provides more in the way of employee benefits than any other industry. What's more, Shell's benefits are substantially above those of the oil industry average.

SHELL NEWS

VOL. 23—No. 6 **JUNE, 1955**

Dedicated to the principle that the interests of employees and employer are mutual and inseparable

Employee Communications Department
New York, N. Y.

contents

Published by Shell Oil Company (H. S. M. Burns, President; A. G. Schei, Treasurer; J. A. Horner, Secretary) for its employees and those of Shell Chemical Corporation, Shell Development Company and Shell Pipe Line Corporation. Address communications to Employee Communications Department, Shell Oil Company, 50 W. 50th St., New York 20, N. Y.

SEA-GOING SURVEYOR

Shell surveyors locating drilling sites off the coast of Texas in the Gulf of Mexico must spot a floating marker as many as 15 miles offshore. The marker is a "crystal ball" made of mirrors and mounted on a buoy composed of two painted oil drums. On this month's front cover, Surveyor D. Hugh Adams, of the Houston Exploration and Production Area, walks past such a marker as he carries brightly colored floats (also used in the surveying) to a boat. A story about Shell's latest well staking technique begins on page 18.

WHERE 10 MILLION YEARS

Shell Development Company's Radiation Laboratory at Houston Uses an "Atom Smasher" to Age Rocks in an Intensive Study of Their History

ROCKS, especially the porous sedimentary variety in which oil accumulates, are getting rough treatment from Shell Development Company's new "atom smasher," which recently was installed in the Exploration and Production Research Division Laboratory in Houston. The machine bombards rock samples with atomic particles in studies designed to trace the pattern of rock alteration through the ages.

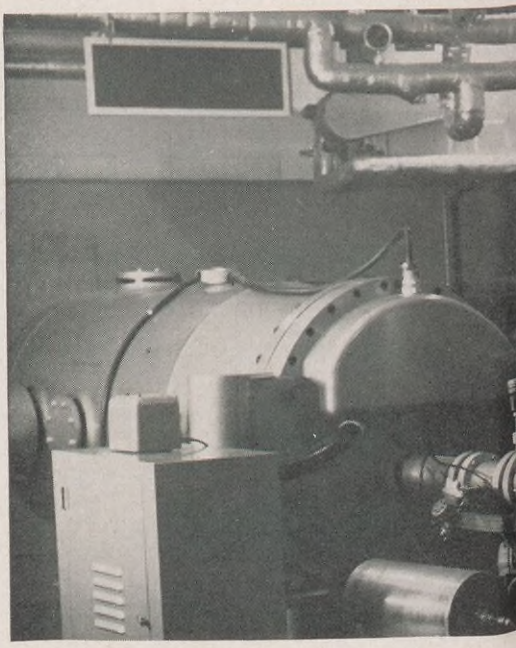
Scientists long have known that there are natural radioactive materials deep in the earth that constantly give off radiation into surrounding rocks. With the Laboratory's new machine, called a Van de Graaff® particle accelerator, Shell researchers can now duplicate these radiation processes with fantastic speed. The accelerator can reproduce in a week the amount of radiation a rock may have had during 10 million or more years in nature. A series of tests made on rocks thus "atomically" aged are revealing information which is being accumulated toward the day when it may be possible to reconstruct accurately what took place underground in past geological ages.

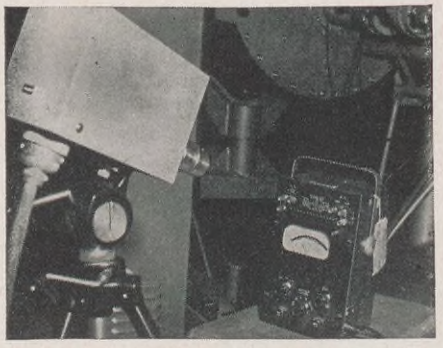
Conceivably, this could help tell where to find oil—or not to find it. But until this is possible, Shell Development's new research tool is an instrument of fundamental studies of the modification of rocks rather than a working tool in the day-to-day search for oil.

The Van de Graaff particle accelerator at Houston, which is manufactured by the High Voltage Engineering Corporation and is the most powerful machine of its type in the oil industry, belongs to the family of "atom smashers" used in atomic energy research. The accelerator takes nuclear particles tens of thousands of times smaller than atoms (which themselves are about 1/100,000,000 the size of a child's marble) and accelerates them to velocities approaching the speed of light. The machine produces an intense, constant stream of these particles, which can be fully controlled.

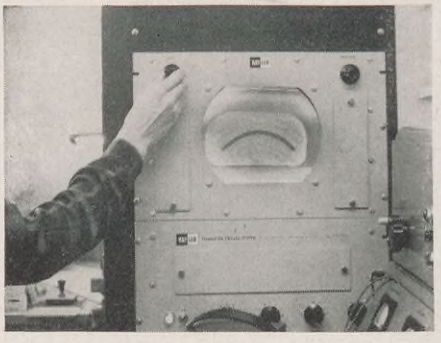
Directed at a selected rock target, the particles collide with tremendous impact to produce changes in the rock's structure. These changes may be in the structure of the atoms that make up the rock itself, or they may be actual disintegration of atoms.

Information gained about these changes is correlated with similar findings from the naturally irradiated rocks which may help determine such important details as the age of the naturally irradiated rocks and the

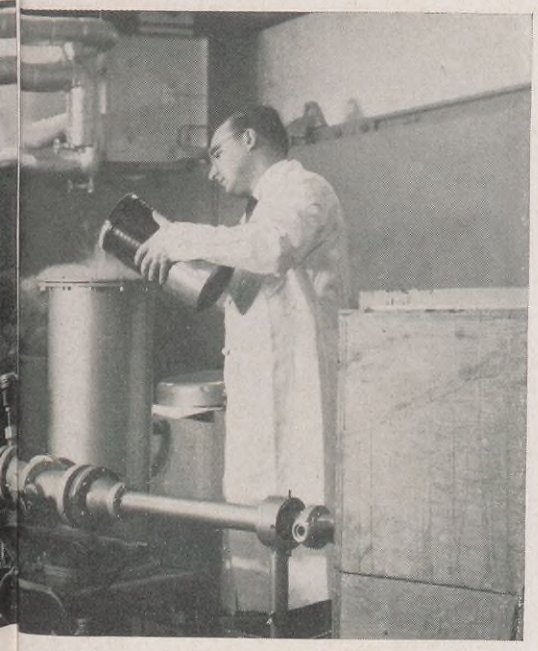


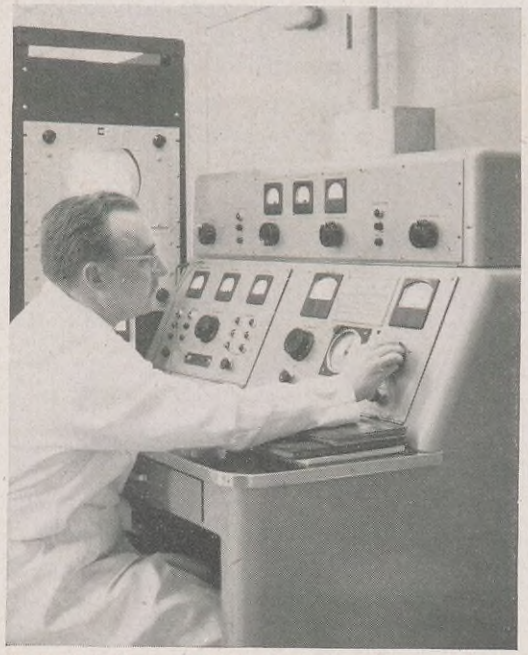


A closed circuit TV camera, above, transmits instrument readings from inside the accelerator room to a viewing screen outside, below.

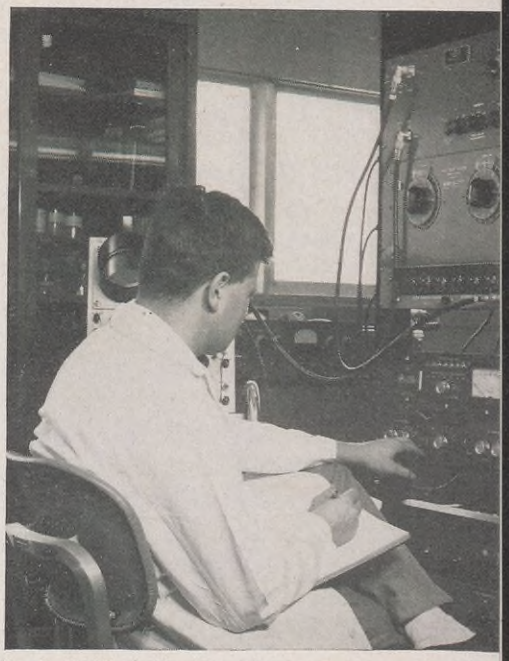


PASS IN A WEEK





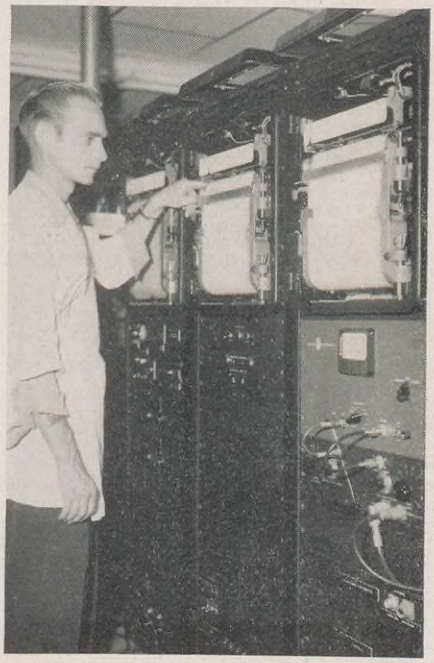
Dr. D. R. Lewis, Senior Chemist, above, makes an adjustment on the control panel which operates the particle accelerator by remote control. The panel is just outside the accelerator room, along with a TV viewing screen.



Dr. P. K. Weyl, Physicist, above, monitors radiation intensity inside the accelerator room with a sensitive electronic instrument. This also is done remotely.

At left, Dr. Lewis pours liquid nitrogen into the accelerator's vacuum cold trap to remove moisture that might impede particles as they shoot through the tube from the accelerator, left in photo, to the target box, right. The box holds a block of paraffin in which rock samples are placed.

Among several tests on bombarded rock is a radioactivity check, above, conducted by Laboratory Assistant Theresa Chan. Rock sample is placed inside the lead-lined jug, center, which transmits a reading to instrument, right. Small placard cautions employees of presence of radioactive material.



Another test on irradiated rock is made by sensitive light intensity recorders, which Laboratory Assistant A. F. Roscoe, above, checks.

where 10 million years pass in a week (cont'd)

maximum temperatures to which they were subjected underground.

Safety precautions in Shell Development's radiation laboratory are as elaborate as the particle accelerator itself. In fact, safety techniques for working in such laboratories have been so successful that insurance companies do not classify the occupation as hazardous. Nevertheless, employees in the laboratory have a healthy respect for the radioactive materials and equipment with which they work.

The laboratory occupies a building of its own, and a special room houses the particle accelerator. A one-ton block of paraffin surrounds rock samples during their bombardment. The paraffin absorbs neutrons that careen off the target.

Walls of the accelerator room are as much as four feet thick. A 9-ton steel and concrete door shuts off the room from the rest of the building when the particle accelerator is operated. The door, so thick and heavy that it is mounted on a railroad-type track, is opened and closed electrically.

The accelerator is operated from a control panel just outside the door. Installed here also is a closed circuit television screen for watching the operation inside since no one is allowed in the accelerator room when the machine is on. The transmitting camera is a lightweight, portable type that can easily be set into place for viewing anything in the accelerator room that researchers desire. The television system is indeed the eyes of the researchers since there is no other means of seeing what goes on in the room.

Every conceivable precaution is taken to prevent the machine from being turned on while anyone is in the accelerator room. During the minute it takes the door to roll into place, a loud horn sounds a warning inside the room. Anyone who may be detained there can press a button that prevents the machine from being turned on.

Each person working in the laboratory wears an easy-to-read pocket radiation recorder resembling a fountain pen, and, as an added precaution, a sensitive film badge. The badges are checked weekly by a company specializing in this work. In addition, each employee has a complete blood count every three months, and a thorough physical examination every year.

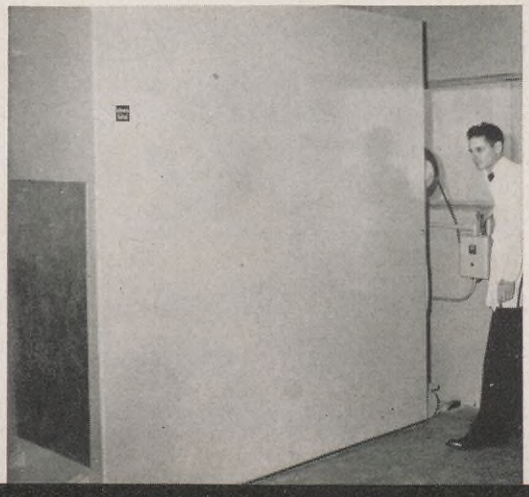
Fastidious care is taken in the laboratory in areas where radioactive materials are handled. Geiger counters and more sensitive scintillation counters are employed to check employees' hands, shoes, and clothing when they leave. A shower and clothing change room also are provided. Smoking and eating are not permitted in these areas.

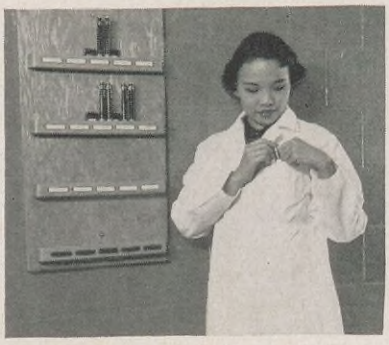
The entire laboratory was designed and built for the utmost in cleanliness. The walls are covered with two coats of a special Shell EPON® resin-based paint that is easily cleaned. The sinks are foot-operated and surgical rubber gloves are worn during many of the experiments.

The radiation laboratory has a special air filtering system that virtually makes impossible the escape of any radioactive particles into the outer air. The filters in the system are so fine that ordinary dust in the air will clog them. Any clogging in the filter sets off a warning bell that cannot be turned off until the filter is replaced.

Shell Development's radiation laboratory was designed with an eye to the future. Such foresightedness is required for this broad, new, and unexplored field into which Shell scientists are delving, for they cannot predict exactly in what direction their study of reservoir rocks, geological formations, or still other allied research will take them.

Elaborate safety precautions are taken throughout the laboratory. Below, Engineer C. W. Chapman operates the door that seals off the accelerator room when the machine is operated. The door moves on a railroad-type track.



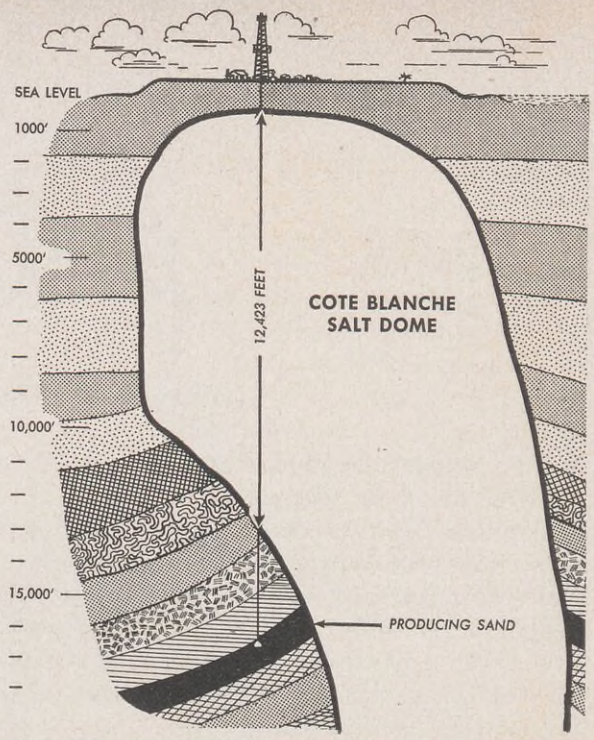


Like Miss Chan, above, all employees in the laboratory wear pocket instruments that detect radiation, as well as sensitive film badges as a double check.

Employees use Geiger counter, above, to check their clothing before leaving areas where radioactive materials are handled. The counter warns against even a trace of radioactive material.

Salty Success Story

Shell Brings In a Gas and Distillate Discovery Near the Louisiana Coast After Drilling Through Thousands of Feet of Salt



This cross-section, of Shell's newest Louisiana discovery shows what geologists estimate the general shape of the salt dome to be.

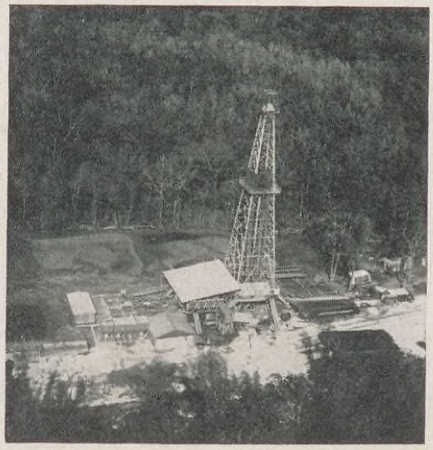
IT is common knowledge that oil and gas are often found in close association with salt domes, those huge, plug-like masses of salt that have been thrust up from deep in the earth at many places throughout the coastal areas of Louisiana and Texas. If there is oil or gas in a porous rock formation pierced by a salt dome, it is trapped at the point where the salt seals off the fractured end of the rock layer.

Once again, Shell's New Orleans Exploration and Production Area has reaffirmed this general rule with a new gas and distillate discovery—brought in on the north flank of what is known as the Cote Blanche salt dome in St. Mary Parish of Louisiana. The new well not only proved the presence of production next to the dome, but did it the hard way by first penetrating thousands of feet of salt in a mushroom-shaped overhang of the dome. It is believed that this is the first time a well has been drilled successfully through a salt overhang more than 12,000 feet thick.

On production tests the Cote Blanche discovery, called Shell, Caffery et al No. 1, flowed at a rate of 6.3 million cubic feet of gas and 177 barrels of distillate per day. The well was drilled to a total depth of 16,479 feet and the producing interval is from 16,410 to 16,415 feet. Only the Weeks Island Field, 4½ miles to the northwest, and the Coles Levee Field in California have deeper production. The Weeks Island Field is also adjacent to a salt dome, with wells ringing the dome like a halo.

The success of the Cote Blanche discovery is as much a triumph of geologists and geophysicists as it is of drilling personnel. But combined teamwork of all concerned, plus experience gained at Weeks Island, brought in a well in this unusual geological structure. After detailed seismic and gravity studies, Shell carefully calculated the contour of the salt dome's overhang, then staked the drilling site on top of the salt mass so that the drilling bit would emerge from the bottom of the overhang directly above the estimated position of the prospective producing formations.

Drilling began on October 6, 1954, and the hole entered the top of the salt dome eight days later at 565 feet. On the fifty-fourth day of drilling the bit emerged from the salt at a depth of 12,988 feet. It entered the gas and distillate bearing formation 3,370 feet farther down.



Shell's new Company Rig No. 4 brought in the Cote Blanche well on its first assignment.

Drilling a straight hole through thousands of feet of salt to the target area also involved special problems. One was to prevent washing large cavities in the salt which might result in deflection of the drill string. The drilling crews used a drilling mud so saturated with salt that it could not pick up more salt in solution—and very few cavities occurred.

Shell's success at the Cote Blanche dome is all the more remarkable in view of the 50 dry holes that previously have been drilled by other companies into the top or around the flanks of the dome. About two dozen of these dry holes are located within a mile of the discovery well. The nearest production is about one and a half miles away on the opposite flank of the dome, a flank which has no overhang.

A second Shell test has been staked near the Caffery et al No. 1 well, and additional drilling is planned to determine the extent of the discovery.

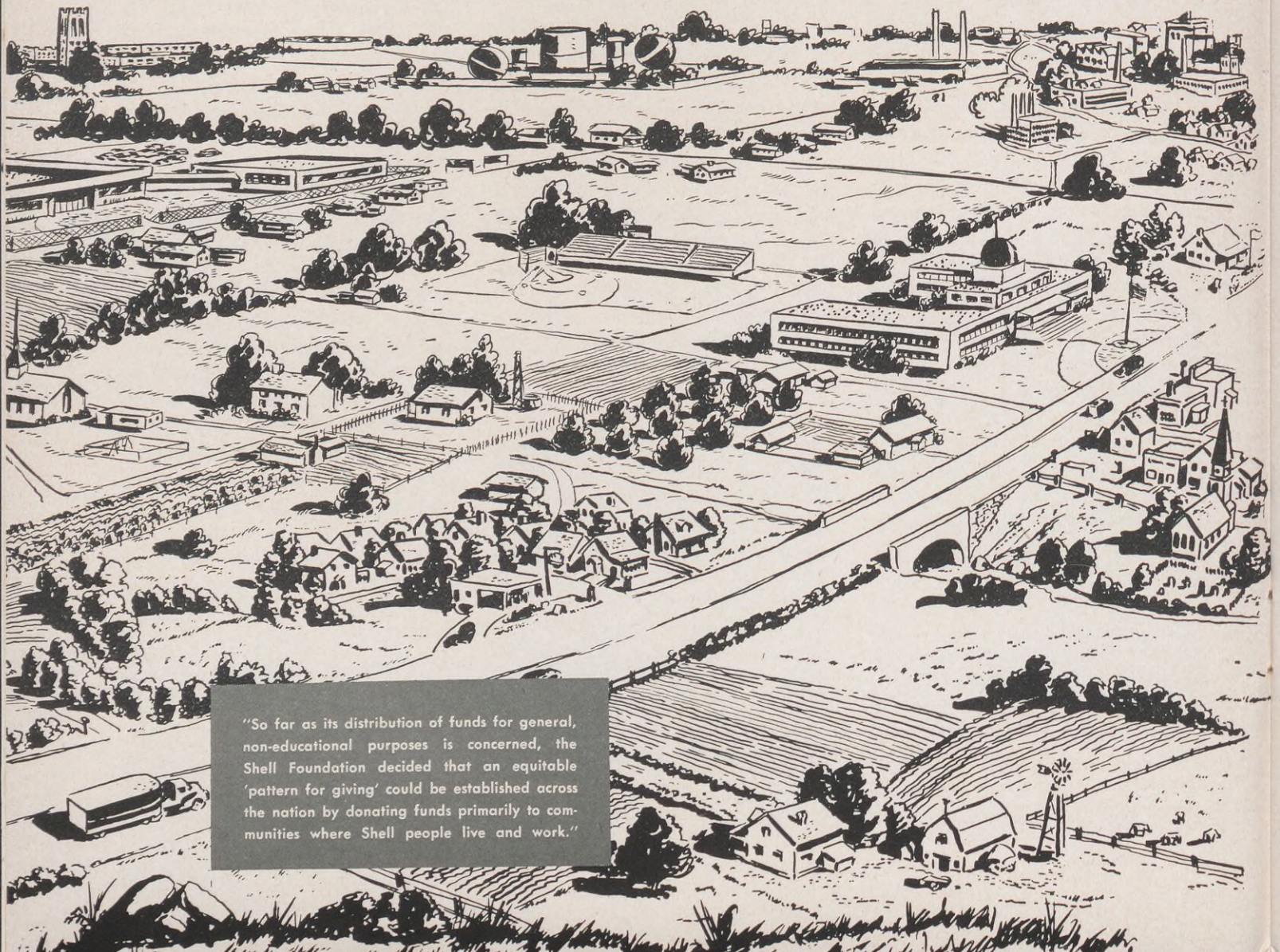
partners in CITI

Communities Where Shell People Live, Voluntary Welfare Agencies and Schools

IT'S a strange thing about a name. The Shell name, for instance, means many things to many people. It may mean a sales office in Spokane, Washington; a refinery in Wood River, Illinois; a land office in Salt Lake City, Utah; a pipeline terminal in East Chicago, Indiana; or a research laboratory in Union, New Jersey. And the number of Shell people in any one community may vary from a handful to a few hundred, up to several thousand.

But this year, whatever special significance the Shell name has from place to place, every community where Shell people live and work will share in more than $1,000,000 set aside for contributions to charitable, educational and religious organizations. An important part of this sum will go to familiar charities like local Community Chests or United Funds and the American Red Cross. Sizeable portions will go to less widely known charities like the National Association for Mental Health. Some will be used to support fellowships and research grants in 41 colleges and universities.

While these gifts are not intended to replace charitable donations by individual employees, they do underscore the Shell companies' fundamental be-



"So far as its distribution of funds for general, non-educational purposes is concerned, the Shell Foundation decided that an equitable 'pattern for giving' could be established across the nation by donating funds primarily to communities where Shell people live and work."

ZENSHIP

are Among Groups Sharing in More Than $1,000,000 in Shell Gifts This Year

The New York Times

College class observes a chemistry experiment. With expanding enrollments and ever-increasing financial problems, many schools, particularly those privately supported, lack funds to do the educating job needed. This year, Shell will contribute to 41 schools by way of fellowships and research grants.

lief that their interests are inseparable from those of the communities which Shell people call "home."

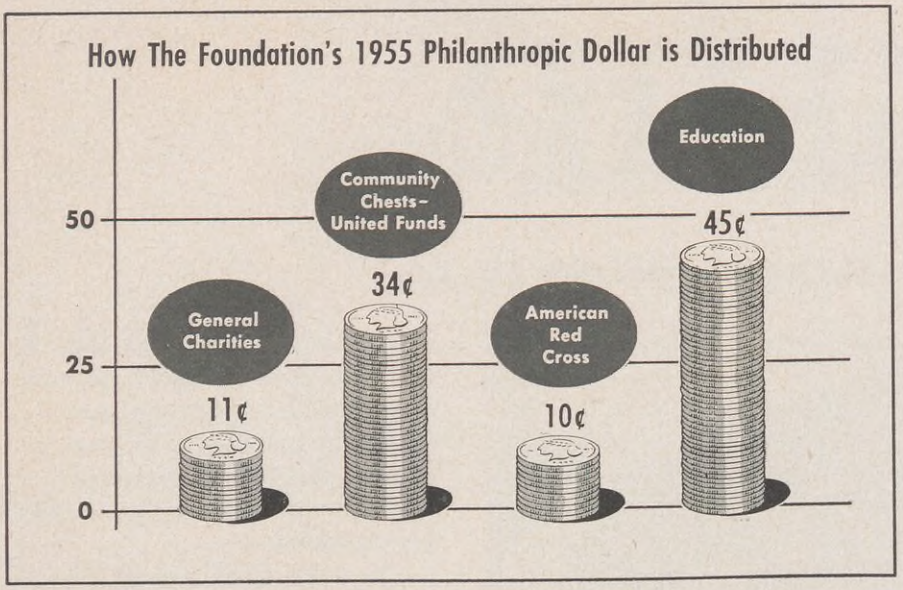
This community partnership between a company and its employees indicates a fairly new trend in civic responsibility. During the last half century, technological innovation has helped bring widespread prosperity to the American people. Moreover, it has brought corresponding social and cultural changes, not the least of which is a shift in the characteristic way of viewing community problems. Such projects as health, education, and social and cultural welfare, once considered the domain of small fund-raising groups, of government or of individuals willing to dispense their private fortunes among charities and institutions, today are recognized by citizenship-minded people as something which should be everyone's responsibility—corporations' as well as private citizens'. Underlying all this is the traditional American sense of fair-play—an instinctive belief in helping one another in time of trouble.

Furthermore, American communities have become largely interdependent. Community-consciousness nowadays cuts across geographic zones. Appeals from a disaster or disease-epidemic area in New England, for example, are almost certain to win quick response from areas that not too long ago had been days or weeks distant—possibly from Missouri, Louisiana and California.

Modern education has much the same sort of far-reaching effect. The test-tube discoveries made in research laboratories at Northwestern or Stanford University might eventually have a hand in improving the lives of people in towns thousands of miles away. Besides this, educated men and women are called on to fill responsible jobs in business, government or agriculture far from the places they went to school.

The three Shell operating companies (Shell Oil Company, Shell Chemical Corporation and Shell Pipe Line Corporation), recognizing this ever-increasing inter-dependence of interests, have established a noteworthy reputation nationally by joining their employees and those of Shell Development Company in offering tangible support to philanthropic causes. Up until recently, most Shell company-donations had been made individually through Shell refineries, plants or offices to communities in their own immediate localities, or through Shell's Public Relations Department in New York.

IN 1953, the Shell Companies Foundation, Incorporated, was established. Its purpose is to make donations for worthwhile charitable, scientific, educational, religious and literary purposes. The Foundation, 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, began its work with little fanfare. One of its first efforts was to insure an equitable distribution of funds available for charitable purposes in all Shell communities. It launched a series of continuing



studies of Shell's entire philanthropic program. Some questions to which it sought answers were these:

Was Shell, in relation to its number of employees and the widely varying communities they live in, giving its proper share of financial support to Community Chests, United Funds and the American Red Cross? Were comparatively equal funds being allotted to charitable enterprises in all Shell communities regardless of their size? Were there possible improvements that could be made in granting assistance to education?

The initial answers were encouraging. Shell's overall philanthropic program, compared with others in industry, seemed an excellent one. Where the studies revealed aspects of the Shell program which could be strengthened as funds became available, the Foundation made plans to act on them.

Shell operating companies participate in the Foundation by contributing funds to it and by recommending worthwhile organizations they believe qualify for Foundation support. In turn, after the Foundation has decided to make donations, local Shell people often present them in their own communities on behalf of the Foundation.

As the core in a sustained program of company giving, a Foundation such as this offers many advantages. Funds can be accumulated in years of good business so that donations can be continued in less profitable years, when the needs of charitable agencies actually may be more acute. In addition, since Shell's preference is to contribute to community-wide projects, Foundation screening of contribution requests provides strong assurance that groups and organizations which Shell wants to support are not neglected. Shell people may be proud of the public good will a Foundation bearing the Shell name creates in the communities which benefit from the funds it distributes.

So far as its distribution of funds for general, non-educational purposes is concerned, the Shell Foundation decided that an equitable "pattern for giving" could be established across the nation by donating funds primarily to communities where Shell people live and work. This pattern uses the number of Shell people in each place, related to the total local population and its charity need or quota, as a yardstick for deciding how much Shell's philanthropic responsibility to that community should be.

Thus, in allocating an over-all sum for distribution to multi-agency local charities like Community Chests or United Fund Drives, the Foundation works like this: A budget of $250,000 for Community Chest-United Fund donations was decided on for 1955. Of this total sum, the portion each Shell community should rightfully get was determined by applying the Foundation's "pattern for giving" from place to place. The $70,000 budgeted as the Foundation's 1955 gift to the American Red Cross was allocated in the same way.

Both these budgeted sums compare favorably with donations of the nation's leading companies. Combined with the individual contributions of Shell people to their communities, it is believed that they fulfill Shell's total responsibility to these far-reaching charities.

The remaining $80,000 of Foundation funds budgeted for general, non-educational donations during 1955 will be distributed to groups and organizations judged on their individual merit. There are 33 of them, selected from a large number of worthwhile programs on about the same basis a Shell employee may choose those charitable agencies to which he can afford to make individual donations. Direct contributions to several national health programs, like the American Heart Association and American Cancer Society, Incorporated, will aid in health research projects.

Closely related to the Shell Foundation's broad program of assistance to philanthropic agencies across the nation is Shell's wide interest in higher education. While the diversity of America's educational system — privately supported institutions alongside tax supported schools, small colleges and big universities — has long been one of this country's great

strengths, many schools, particularly those privately supported, find themselves today without adequate resources to do the educating job expected of them.

This year, direct aid of $350,000 will be provided by the Shell Foundation and Shell companies to more than 40 colleges and universities, most of them not supported by public tax funds. The Shell 1955 educational fund is one of industry's largest and the highest sum ever contributed by Shell in its continuing program of assistance to higher education.

Most of the funds currently earmarked by the Foundation for educational purposes will be used to support 49 graduate fellowships and 20 basic research grants in 41 different schools, on the recommendation of the Foundation's Fellowship and Research Grants Committee. Since the Shell fellowship-research grant program was started in 1947, about $1,500,000 has been provided for 407 scientific fellowships and 89 research grants. The fields in which work will be done this year include chemistry, chemical engineering, geophysics, mechanical engineering, physics, plant science, business administration, engineering mechanics, metallurgy- corrosion, mathematics, geology and petroleum production engineering.

These are fields in which it is of critical importance to our American economy that our resources of educated people and knowledge be maintained at a high level. Although the supported fields of study are closely related to Shell's immediate interest, both fellowships and research grants are assigned and administered independently by the schools receiving them. Neither the Shell companies nor students receiving support are obligated as to future employment. There are no restrictions on any phase of the research projects undertaken by the schools, including the publication of the results of studies. This is in line with Shell's belief that the pri-

FELLOWSHIPS

California Institute of Technology
- Chemistry
- Mechanical Engineering

University of California (Berkeley)
- Chemistry
- Mechanical Engineering

University of California (Los Angeles)
- Geophysics
- Geology

Carnegie Institute of Technology
- Chemical Engineering

University of Chicago
- Chemistry
- Physics

Colorado School of Mines
- Geology

Columbia University
- Geophysics

Cornell University—New York State School of Agriculture
- Plant Science

University of Delaware
- Chemical Engineering

Duke University
- Physics

Georgia Institute of Technology
- Chemical Engineering

Harvard University
- Physics
- Chemistry

Illinois Institute of Technology
- Chemical Engineering

University of Illinois
- Chemical Engineering
- Geology

Iowa State College
- Chemistry

University of Kansas
- Geology

Louisiana State University
- Geology or Petroleum Engineering

Massachusetts Institute of Technology
- Mechanical Engineering
- Physics

University of Michigan
- Chemical Engineering
- Mechanical Engineering

University of Minnesota
- Chemistry
- Geology

University of Nebraska
- Geology

Northwestern University
- Geology

Ohio State University
- Chemical Engineering

University of Oklahoma
- Petroleum Production Engineering

Oregon State College
- Mechanical Engineering

The Pennsylvania State University
- Chemical Engineering
- Chemistry

Purdue University
- Chemical Engineering
- Mechanical Engineering

Rice Institute
- Physics

Stanford University
- Geology

Texas A&M
- Petroleum Production or Mechanical Engineering

University of Texas
- Petroleum Production Engineering
- Geology

Washington University (St. Louis)
- Physics

Wharton School of Finance and Commerce, University of Pennsylvania
- Business Administration

University of Washington (Seattle)
- Chemistry

University of Wisconsin
- Chemical Engineering
- Chemistry

Yale University
- Geology

RESEARCH GRANTS

California Institute of Technology
- Chemical Engineering
- Physics

Carnegie Institute of Technology
- Chemical Engineering

University of Chicago
- Chemistry

Cornell University
- Chemistry

Harvard University
- Chemistry
- Physics

Massachusetts Institute of Technology
- Mechanical Engineering
- Physics
- Metallurgy-Corrosion

New York University
- Mathematics

Northwestern University
- Chemistry

Notre Dame University
- Chemistry

Princeton University
- Chemistry

Rice Institute
- Mechanical Engineering

University of Rochester
- Chemistry

St. Louis University
- Geophysical Engineering

Stanford University
- Geology
- Engineering Mechanics

Yale University
- Geology

mary roles of higher education must be to educate young people and increase the store of fundamental knowledge, rather than to direct students' talents to the solution of specific problems.

Of Shell's $350,000 program of assistance to higher education this year, $150,000 is budgeted by the Foundation for research grants. The $150,000 will be divided in this way: $5,000 to help expand research in each of 20 departments at 15 schools, plus an additional sum of $2,500 in connection with each grant, made to the school itself for assistance in meeting general expenses. The Foundation budget for fellowships for the post-graduate training of 49 outstanding students in 36 schools amounts to $125,000. It will be divided in this way: $1,500 for the personal use of each "fellow" in attaining an advanced degree, with tuition and fees to be paid separately by the Foundation, plus an additional expense grant of up to $1,000 made to the school itself in connection with each fellowship.

THE allocation of expenses grants like those mentioned is made because Shell well realizes that a school's overall facilities, over and above those a student uses in his immediate course of study, make important contributions to the student's well-rounded education.

The remainder of the Foundation's educational fund will be given to organizations such as the National Fund for Medical Education, the National Science Teachers Association and the United Negro Fund.

Besides the needed sums budgeted by the Foundation for charitable and educational purposes, philanthropic donations by the individual Shell operating companies will bring the total amount of Shell gifts for 1955 to well over $1,000,000.

Shell People

C. C. COMBS

C. C. COMBS has been elected a Vice President of Shell Pipe Line Corporation. A native of Everett, Washington, Mr. Combs joined Shell Oil Company in 1923 as a service station attendant in California. In 1927, he was named an Auditor in the Financial Organization, and subsequently served in Financial positions of increasing responsibility in the Los Angeles, San Francisco and Honolulu Marketing Divisions and at the Martinez Refinery. In 1940, Mr. Combs was named Assistant Secretary in the New York Head Office, and was appointed to the additional position of Assistant Treasurer in 1942. He became Assistant Treasurer and Assistant Controller of Shell Oil Company in the San Francisco Office in 1949. Since 1950, Mr. Combs has been on special assignments including three years as Controller of Shell Oil Company of Canada, Ltd.

J. CHALMERS

F. GOLDSTONE

In connection with recent changes in the Head Office Exploration Organization, some related changes have been made in the organization of the Technical Services Division in Houston. Effective April 1, the former Division was divided into two parts, Production Technical Services and Exploration Technical Services, each headed by a Manager who reports to Head Office.

J. CHALMERS, as Manager Production Technical Services, will continue to be responsible for all Technical Services function which relate to Production matters, and will report direct to R. W. Bond, Manager Production in New York. Mr. Chalmers will also be responsible for those administrative functions of the Technical Services group which are used by both Exploration and Production.

Effective April 1, 1955, **F. GOLDSTONE** has been appointed Manager Exploration Technical Services, reporting direct to R. E. McAdams, Manager Exploration in New York. Mr. Goldstone and his staff, in Houston, will assist Head Office in providing technical advice and assistance to the Areas on all Exploration matters, including those which require coordination among the Areas and the Exploration and Production Research Division of Shell Development Company.

P. M. LUDWIG

P. M. LUDWIG, formerly Senior Financial Accountant in the Head Office Financial Organization, has been assigned to the Secretary's Office of Shell Oil Company and appointed an Assistant Secretary of the Company. Mr. Ludwig, who studied at the City College of New York, joined Shell in St. Louis in 1923 as a Clerk in the Head Office Refinery Accounting Department. He became a Cashier in 1928 and served subsequently in financial positions of increasing importance in St. Louis and New York. He was named a Senior Accountant in 1949.

Synthetic Rubber Sales Group Formed

A SYNTHETIC Rubber Sales Division, with headquarters in Torrance, California has been formed in Shell Chemical Corporation's Marketing Organization to deal exclusively with sales of products from the newly acquired rubber producing facilities. The management of the new Division is as follows:


J. P. CUNNINGHAM


J. E. TOEVS


F. W. HANNSGEN


H. E. SPARKS


D. E. FULLER


R. D. SULLIVAN

Name	Former Position	New Position
J. P. Cunningham	Department Manager, Product Development, Head Office	Division Manager
J. E. Toevs	District Manager, Los Angeles	Sales Manager
F. W. Hannsgen	District Manager, Newark	Department Manager, Sales Development
H. E. Sparks	Supervisor Distribution, Head Office	Department Manager, Distribution-Operations
D. E. Fuller	Chief Accountant, Ammonia Division, San Francisco	Treasury Manager
R. D. Sullivan	Chemist, Shell Development Company, Emeryville	Department Manager, Technical Service

Shell Chemical Expands Manufacturing Development Department

DUE to a broadening of Shell Chemical Corporation activities in several new projects, including acquisition of synthetic rubber producing facilities at Torrance, California, another position of Assistant Department Manager has been established in the Manufacturing Development Department.

H. I. WOLFF has been named as the new Assistant Department Manager. He will be responsible for coordination and guidance of plant improvements and expansion programs, and for process evaluation and design for new products and processes. Mr. Wolff joined Shell in 1934 as a Laboratory Assistant in Shell Development Company's Emeryville Research Center. He joined Shell Chemical Corporation in 1943 as Chief Technologist at the Torrance Butadiene Plant, and later served in similar positions at the Shell Point and Houston Plants. He was appointed a Section Leader in the Head Office Manufacturing Development Department in 1953.

G. A. GRIMMA will continue in his present position of Assistant Department Manager and will be responsible for functions involving economic evaluation, research and long-range development programs, and unit process and unit operations studies. He will also have administrative direction of the Technical Library and Technical Files and all clerical personnel of the Department.


H. I. WOLFF


G. A. GRIMMA

It looked like dry land, but swamp water quickly filled the ditch dug by a machine called a back hoe, above. A board mat kept it from sinking into the swamp. In the distance a dynamite explosion can be seen, one of many blasts set off to clear stumps and sunken logs from the pipe line's path.

PIPE

NOT enough water and too much land. Too much water and not enough land.

This was the paradox Shell Pipe Line Corporation faced recently when laying part of a new 64-mile products line from Shell's Norco Refinery to a point near Baton Rouge, Louisiana.

Shell Pipe Line and its construction contractors have tackled mountains and roaring streams to lay their lines, using time-proven techniques for the respective operations. But the swamp project, an 11-mile section of the new line, presented an unusual situation. The root-matted swamp had too little water for a water operation and too little firm ground for a land operation. So both land and water techniques

Ditch inspectors used a small metal boat to move through the cut as they took soundings in the ditch, checking for cave-ins and other obstructions. The level of water in the swamp was affected by nearby Lake Pontchartrain.

Pipe used in the swamp was coated with 1½ inches of concrete reinforced by chicken wire. Coated at a central location, pipe sections were moved to various points in the swamp where they were joined and pushed into the ditch.

Pipe was laid from "islands" built of boards along the line's path in the swamp. Above, at one of the sites, workmen move lengths of pipe into place for joining. About one mile of pipe was laid in either direction from each island.

LINE THROUGH A SWAMP

Shell Pipe Line Overcame Unusual Difficulties in Laying a New Line in Louisiana

were used, with certain innovations to overcome the boggy terrain.

Some of the important steps in laying the swamp section of Shell's newest products line are shown in photographs on these pages.

The swamp section of the new line was laid first. Work on the remainder of the line, a normal land operation, should be completed early this summer.

When completed, the line will move products from the Norco Refinery to Plantation Pipe Line's Maryland Tank Farm, near Baton Rouge. Products will be moved from there into the Plantation Pipe Line System which serves the Southeast.

Side boom tractors, above, moved back and forth over a board island as they shoved the pipe out into the ditch. Two lengths were joined at a time and the line was pushed farther along the ditch to make room for two more joints. Below, the sealed end of a long section of line was guided along the ditch as it was pushed from the assembly island. With the end sealed, the pipe line had buoyancy, making it easier to maneuver along the water-filled ditch.

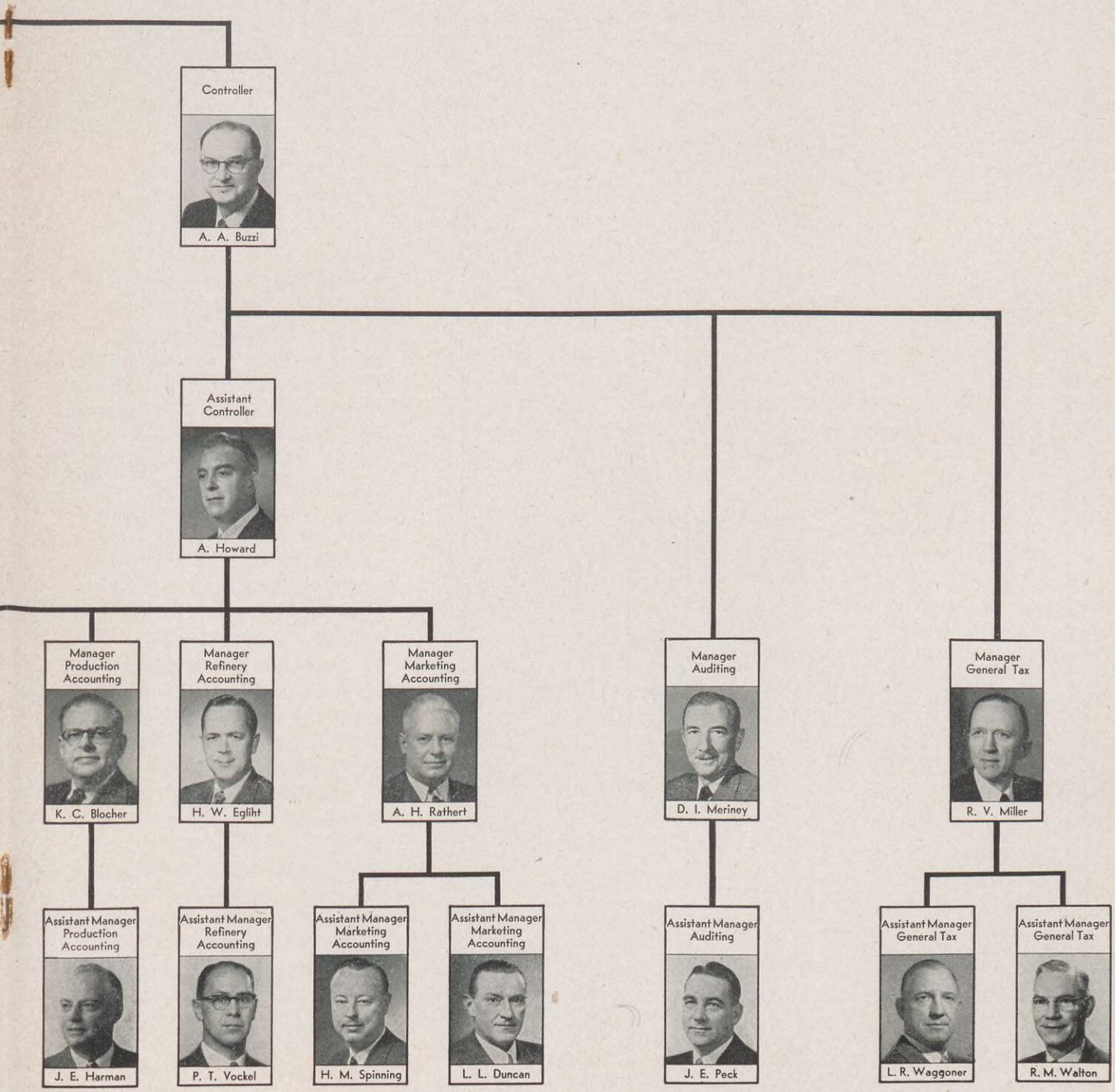
Workmen, above, used a "line-up" clamp to join two lengths of pipe for welding. Below, Inspector A. G. Krause inspected a weld, using a mirror to check the under part. The field joint was covered with chicken wire and cement before the pipe went in the water-filled ditch.

The fourth in a new series of organization charts

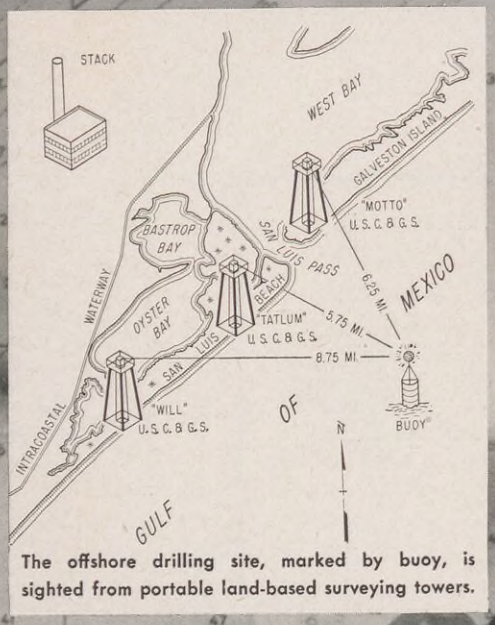
Shell Oil Company

June 1955

Financial Organization Chart



SETTING THEIR SIGHTS ON THE SEA



The offshore drilling site, marked by buoy, is sighted from portable land-based surveying towers.

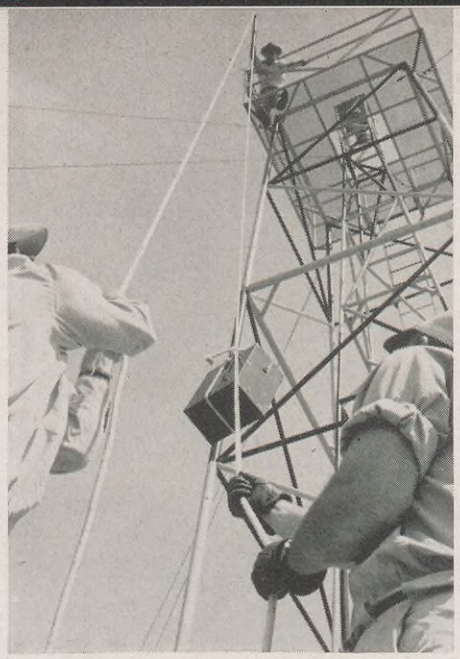
Pinpointing Offshore Well Sites Can Be a Baffling Job, But Shell Survey Crews Have Turned Out An Ingenious Set of Gadgets to Help Things Along

Surveyor D. H. Adams, Chief Surveyor L. P. Carr, Head Production Draftsman W. T. Harless and Engineer F. L. Dornier check equipment.

OFF the Texas coast, Shell surveying crews are using an unusual kind of "crystal ball" to help pinpoint drilling sites out in the waters of the Gulf of Mexico. Although it cannot reveal whether or not the drilling bit will eventually strike oil, this crystal ball is of remarkable assistance to surveyors stationed onshore in their exacting task of accurately plotting well locations 10 to 15 miles out in the water.

On land, locating a well site on Shell-leased tracts is a fairly routine matter for skilled surveyors. There are always surface configurations to help them get their bearings. It's different, and far more difficult, when wells must be staked in submerged lands beneath a body of water like the Gulf. Underwater well sites must be measured from fixed points along the shore—usually from U. S. Coast and Geodetic Survey markers. And, depending on weather conditions, accurate location might take as many as six days. Not only must land-based surveyors have clear vision for long distances out on the water, but they must, in effect, create "surface configurations" on which to set their sights. Then they must have available

Adams fastens a discarded tool joint, to serve as an anchor, on this Styrofoam buoy. Such "homemade" devices are proving better than purchased equipment. The buoy will mark drilling site.



Above, delicate surveying instruments are hoisted to the tower platform. At center of the platform is a built-in tripod on which instruments are mounted.

Above, Adams trains the surveying "transit" seaward, watching for the service boat.

an assortment of seaworthy markers to indicate the spots they plot—markers to serve as guides for the offshore rig which will later drill the test.

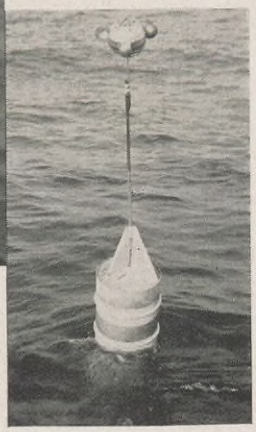
The crystal ball, along with tall, portable sighting towers and several types of marking buoys, were devised by men in the Surveying Section of The Houston Exploration and Production Area to help solve offshore surveying problems. The standard equipment these items replace is both costly and only partly satisfactory. Fashioned from simple materials, Shell's ingenious home-made devices are being used with such success that they are attracting the interest of other oil companies.

Take the crystal ball, for example. It was modeled on the crystal reflectors commonly seen in ballrooms. Attached to an anchored buoy out in the Gulf, it revolves and gives off flashes of sunlight that are clearly visible to land-based instrument men miles away, even on dull days. Three teams of instrument men, stationed in sighting towers at predetermined points along the shore, line up their sights on the ball. The shore-based teams communicate by radio with an auxiliary service boat. On instructions from shore, the boat crew fastens the ball atop a buoy and jockeys the buoy around until it intersects the line of vision of all three instrument men. The precise well site is thus found.

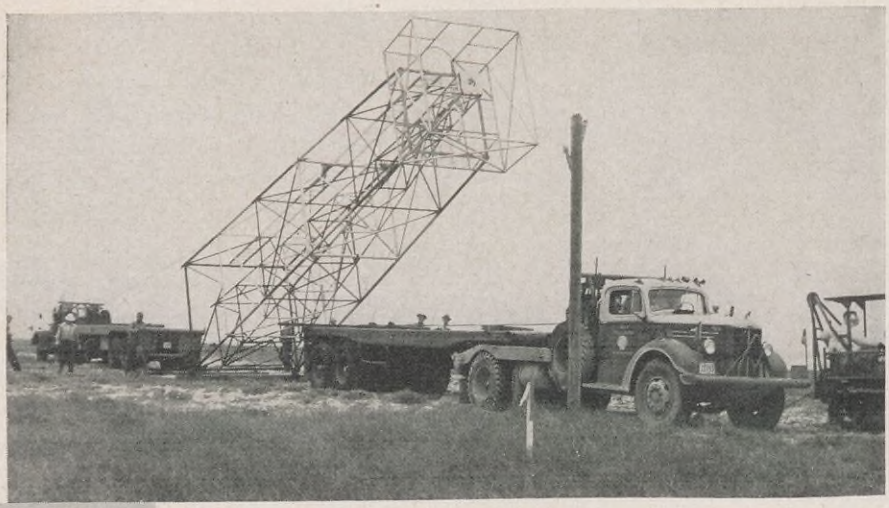
The ball was made by welding together two stainless-steel mixing bowls. Rows of small mirrors were cemented to it, wind-catching cups were attached to the sides of the ball to make it revolve, and the whole device was secured to a rod which could readily be fastened to a buoy. In offshore service, the ball has proved far more serviceable than the more commonly used "flagging," or brightly colored cloth, which is sometimes invisible on shore when haze settles over the Gulf. A variation of the ball, a blinking electric lantern also devised by Shell men, is used for night survey work.

Shell men devised an easy way of building buoys, some of which are used to support the crystal ball, or lantern. They welded two 30-gallon oil drums together, poured in some cement for ballast, added a special

Aboard the service boat, sailing out into the Gulf of Mexico off the Texas coast, Carr studies map of the area to be surveyed as Harless communicates by radio with the surveying towers on shore. Harless relays instructions for reaching the proper location to M. W. Erekson, boat captain, left.



Above, as the boat reaches a point intersected by the lines of vision of the three instrument men stationed on shore, a painted buoy is dropped into the water and Carr stands ready to place the mirrored sighting target on it. The "crystal ball," right, revolves and sends off light flashes visible to men on shore, even on hazy or cloudy days.



Above, one of the surveying towers Shell men devised from scrap pipe is lowered by power winch to a flat bed truck for removal to a new location. Left, Design Draftsman O. J. Watkins and Harless discuss the tower removal project.

Once marker buoys were set as a guide to the portable drilling platform which would drill the test, a professional diver, shown in photo at right, descended to inspect the floor of the Gulf where the huge base of the platform would rest. Because of Gulf currents such work often takes two divers several days to finish.

material to keep it afloat, provided it with a 600-pound anchor and painted it silver and Shell yellow. Buoys of this kind cost less than one-tenth their commercial counterparts.

Smaller, inexpensive marker buoys were devised by Shell men to replace plastic balloons which sometimes burst when exposed to the hot sun. Slabs of a buoyant plastic material called Styrofoam were bolted together to form cubes, and a place was provided for attaching anchor ropes. These were painted red or yellow. Anchors for these spot markers were made from discarded tool joints.

Not the least of offshore surveying problems is the provision of sighting towers which not only are tall enough to compensate for the curvature of the earth but stable enough to support the instrument men and the optical instruments, or transits, with which they make their readings. Wooden towers have ordinarily been used and abandoned once a well had been located, a costly procedure. But Shell men, using scrap pipe, constructed towers nearly 50 feet high. The towers are actually two structures in one—the outer structure supporting a platform on which instrument men stand; the inner, a separate, built-in tripod on which to mount instruments so they won't jiggle as the men move around. They can be easily anchored to the ground, and later lowered, loaded on a truck and transported to another location. They can be raised in three hours.

This versatile equipment had its first real test this spring when it helped surveyors locate the Houston Area's first offshore well site in Block 249, 15 miles east of Freeport, Texas. The pictures on this and the preceding two pages illustrate the exacting work accomplished by Shell surveyors before "Mister Gus", a huge offshore drilling platform owned and operated by the C. G. Glasscock Drilling Company, began drilling the well—48 feet below the surface of the Gulf.

EXPANDING MARKETS IN CANADA

New Service Stations in Calgary and Edmonton Will Market Shell Gasoline Refined from Light Condensate Production at the Jumping Pound Gas and Sulfur Plant

Condensate, extracted from wet gas at Shell of Canada's Jumping Pound Gas and Sulfur Plant, above, will be used to produce Shell gasoline.

SHELL service station signs will flash on for the first time this summer in the Province of Alberta's two major cities—Calgary and Edmonton.

Planned by Shell Oil Company of Canada, Ltd., as part of a program to expand retail operations, the new stations will be serving western Canadian motorists in areas where Shell products have not previously been sold.

The new service stations are being built by Alberta contracting firms to Shell design and specifications. When completed, they will be leased to local operators. In addition, agreements to market Shell automotive products in Calgary and Edmonton are being signed with a number of private operators who already have established service stations.

The stations also will market a complete range of other automotive products, and full lines of tires, batteries and other accessories.

Until now, the Company's marketing activities in Alberta have been concentrated in Jasper, in the western sector of the Province, and Banff, in the southwest. Shell marketing operations here and in other provinces have been based on the availability of economical means of transporting products from Shell of Canada's refineries at Montreal, Quebec, and Vancouver, British Columbia.

Now, however, arrangements have been made to market gasoline refined from condensate separated from natural gas at the Jumping Pound Gas and Sulfur Plant, a short distance from Calgary. The Jumping Pound production will be processed locally to Shell specifications for both premium and regular grades. Both will contain TCP*.

To serve the expanded markets in Alberta, the Calgary District of the Vancouver Marketing Division recently was formed. Its staff will be responsible for Shell retail operations throughout Alberta.

Establishment of the new Calgary Marketing District underscores Shell of Canada's wide interest in western Canada, which has become an increasingly important center of exploration and production activity. Operations of the Calgary Exploration and Production Area of Shell Oil Company now extend into all four western provinces —British Columbia, Alberta, Saskatchewan and Manitoba—as well as the Northwest Territories.

* Trade-Mark

a photographer attends

Shell Oil Company's

Shareholders register as they arrive for annual meeting . . .

Vice President W. F. Kenney greets Director L. E. Clark as President Burns and Secretary J. A. Horner confer . . .

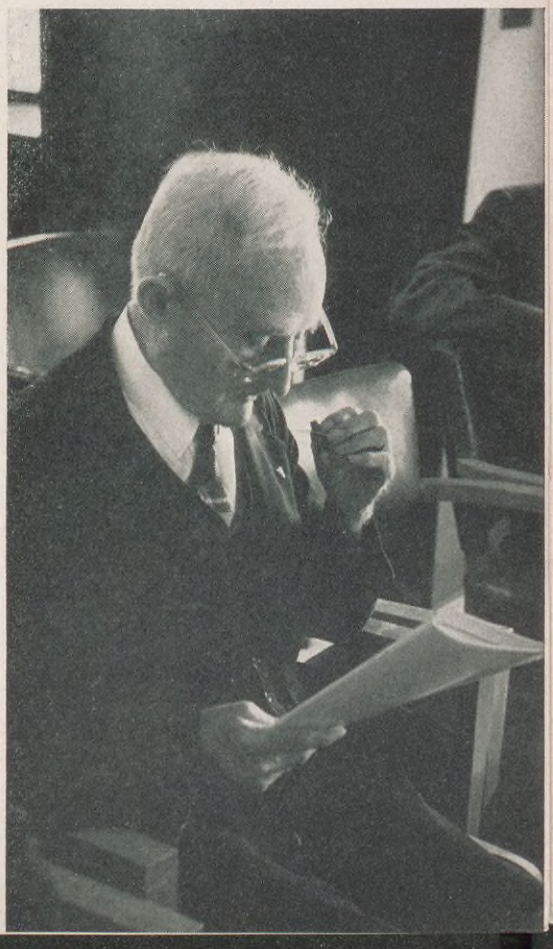
After President's some shareholders

ONCE yearly, shareholders of Shell Oil Company meet at Head Office in New York for a firsthand report from the Board of Directors on the previous year's business. Not all of the more than 18,000 shareholders are able to attend the meeting, however. Instead, they file proxies beforehand, indicating to the Directors how they wish their ballots to be cast on any of the varied matters scheduled to be taken up.

President Burns reports progress made in 1954

At this year's meeting on April 28, President H. S. M. Burns reviewed the record of 1954 operations of Shell Oil Company and its subsidiaries and forecast a continued high level of activity during the current year. Some shareholders had questions to ask about new processes and products, then they elected Directors to represent them throughout the year.

The candid pictures on these pages were taken as the two-hour meeting progressed.



As the meeting progressed . . .

Annual Shareholders' Meeting

Assistant ponders meeting agenda

report on Shell's 1954 operations, have questions . . .

They ask about new processes and products, about the outlook for 1955, and then elect directors . . .

. . . some shareholders referred often to Shell's Annual Report

Woman shareholder, right, listens attentively

YOU, TOO, CAN

MAKE A KILLING AT HOME

Aldrin and Dieldrin, Two of Shell Chemical Corporation's Big Scale Insecticides, Are Now Available to Home Owners in Packaged Form

FOR some time now Shell Chemical Corporation's lethal pair of insecticides—aldrin and dieldrin—have been making enviable reputations for themselves as pest killers on a grand scale. After exhaustive tests on farms throughout the United States, and under the critical eye of state and university agencies and the U. S. Department of Agriculture, these potent bug killers have been turned loose commercially to wreak havoc among the populations of grasshoppers, boll weevils, corn rootworms, cinch bugs, and scores of other crop destroyers.

Aldrin, sprayed on grasshopper hordes in Montana and Wyoming, is estimated to have saved enough grass to produce 11 million pounds of beef. Dieldrin has saved countless acres of food crops from army worms. And on a world-wide scale the pair was used effectively against pests that attack food crops and people themselves in Europe, Asia, and South America.

Until recently, knowledge of all this big scale murder-by-the-millions has been small comfort to a housewife busy stalking a roach in her kitchen, or to a home gardener who, despite his efforts, sadly watches his prize roses wither on the vine. Now, however, Shell Chemical has announced that its two potent pest killers, aldrin and dieldrin, are available to do-it-yourself bug hunters in the form of packaged insecticide formulations. Now the housewife and the gardener can rid their homes and lawns of insect pests with new and effective weapons. Dieldrin formulations have been approved by the U. S. Department of Agriculture for use in homes for spot spraying as well as outside. Aldrin formulations have as yet received approval only for outside use.

The new formulations are manufactured by several companies and are being sold through garden and hardware stores in three forms: liquids, dusts, and granules. The words dieldrin and aldrin seldom appear in their titles, for they are sold under such brand names as BLACK LEAF, ORTHO, LAWNTROL, REAL KILL, BUG SHOT, and DE PESTER. But the dieldrin and aldrin contents are listed in the required formulation printed on the packages and bottle labels.

In the home, these dieldrin insecticides are murder when used against such creeping, crawling pests as ants, roaches, silverfish, carpet beetles, and even termites. In liquid form, they should not be used as a general space spray but they can be applied as a spray or with a paint brush to baseboards, cracks in walls and floors, and to dark, damp spots where insects

Dieldrin and aldrin formulated insecticides can be applied in several ways, some of which are illustrated below. As liquids, they can be used in hand spray guns or in tank sprayers, left, or applied directly with a paint brush, center. As dusts they can be spread by hand or spreader, right.

thrive. Applications to these areas also can be made with the formulations in dust or granule form. In any case, the dieldrin insecticides will rid trouble spots of insects for several months without further applications.

Pests that invade the home from the outside—like wasps, mosquitos, fleas, chiggers, ticks—can be stopped before they enter by spraying door and window frames and nearby vegetation. Since the best defense is a good offense, Shell Chemical suggests the insecticides, wet or dry, be poured directly into ant hills in the yard.

Both dieldrin and aldrin formulations are ideal for use on lawns and in gardens. Used directly on plants as a spray or dust, they will kill off marauding beetles, aphids, worms, and mites that devour leaves and stems. But, more than that, these new pest killers can be used underground to get at the root of many garden headaches. Sprayed or dusted on the ground, or mixed with fertilizers, the formulations will penetrate the soil around the roots of plants, killing the grubs and worms. They are sure death for Japanese beetle grubs, white grubs, sod web worms, army worms, all of which sap the vitality of plants by attacking their root systems. In all cases, the lawn and garden areas

Dieldrin formulated granules, below, can be scattered where marauding insects enter the house.

FORMULATORS WITH NATIONAL DISTRIBUTION OF SMALL PACKAGE DIELDRIN FORMULATIONS

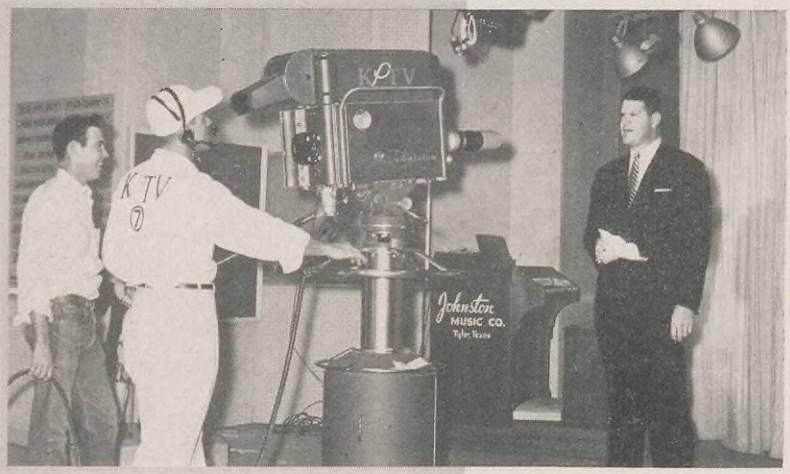
NAME	BRAND NAME
Virginia Carolina Chemical Corp. Richmond, Va.	"Black Leaf"
Cook Chemical Co. Kansas City, Mo.	"Real-Kill" formula D
California Spray Chemical Corp. Richmond, Calif.	"Ortho"
Boyle-Midway, Inc. Los Angeles, Calif.	"Lawntrol" "Antrol"
Acme White Lead Chemical Co. Detroit, Mich.	"Acme"
Thompson-Hayward Chemical Co. Kansas City, Mo.	"Dieldrin 5%" granular

FORMULATORS WITH REGIONAL DISTRIBUTION OF SMALL PACKAGE DIELDRIN AND ALDRIN FORMULATIONS

SOUTH and SOUTHWEST	
Carolina Chemicals, Inc. West Columbia, S. C.	"Flight Brand"
Planters Chemical Corp. Norfolk, Va.	"Planters"
Dawson Chemical Corp. Dawson, Ga.	"Master"
Davison Chemical Co. Baltimore, Md.	
Cotton States Chemical Co. Monroe, La.	"Key-to-Kill"
Coalhoma Chemical Co. Clarksdale, Miss.	"Red Panther"
Agricultural Chemicals of Dallas Dallas, Texas	"De Pester"
Ok-Tex Chemicals, Inc. Lubbock, Texas	"Aldrin 23"
Klauss-White Co. San Antonio, Texas	"Green Light"
MIDWEST	
Missouri Farmers Association Columbia, Mo.	"Roach and Ant Spray"
Wm. Cooper & Nephews Chicago, Ill.	"Cooper D" "AL-RIN"
McConnon & Co. Winona, Minn.	"Mackwin"
Science Products Chicago, Ill.	"Dieldrin EC 15"
WEST COAST	
Pacific Guano Co. Berkeley, Calif.	"Soil Aldrin 3"
A. L. Castle Mountainview, Calif.	"Aldrin Soil Insecticide"
Durham Chemical Co. Los Angeles, Calif.	"Dieldrin 2½% Granules"
Cooke Laboratories Products Co. Pico, Calif.	"Bug Shot"
Artco Products Co. Wilmington, Calif.	"Artco Emulsifiable Dieldrin"
Miller Products Co. Portland, Ore.	"Dieldrin 5% Granules"

treated with dieldrin and aldrin insecticides should be thoroughly drenched with water immediately after application so that the insecticides can be soaked into the soil.

It is good news, then, that an insecticide that has been used in thousand-gallon lots on big areas all around the world is now available for the private home and the corner lot. One important thing, Shell Chemical points out to users of the new packaged dieldrin and aldrin insecticides, is to follow carefully directions on the labels. It is estimated that 70 per cent of all insecticides sold in retail stores are wasted because the application instructions are ignored.



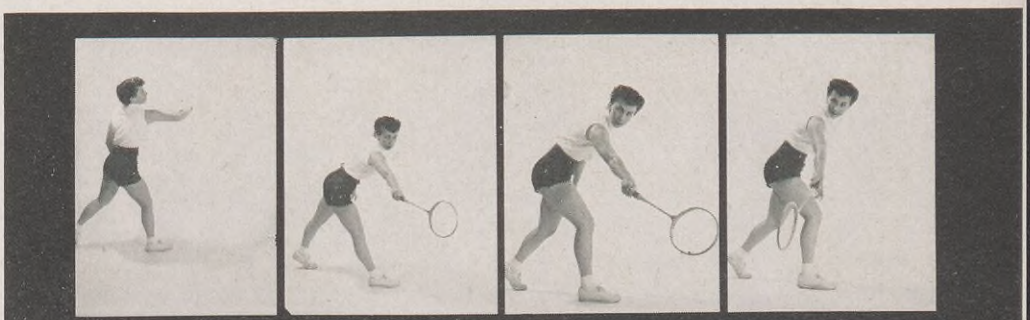
Shell Land Man R. E. Blount, right in photo at left, of the East Texas Division, Houston Exploration and Production Area, recently conducted a 15-hour "telethon" on TV station KLTV in Tyler, Texas, and raised more than $10,000 in contributions for the Gonzales Warm Springs Foundation for Crippled Children. Blount, a former Texas State Legislator, stayed on the air from 10 p.m. until 3 the next afternoon. The funds that were thus raised will benefit crippled children in Texas.

At meetings all across the nation, Shell people gathered during April to view Shell's filmed annual report, "Shell's Progress in 1954." Here, F. S. Clulow, Vice President—Manufacturing, conducts a meeting during which the color film was shown to members of the Head Office Manufacturing Organization in New York.

SHELL COAST TO COAST

A first prize at the Grand National Livestock Exposition in San Francisco was won by Alfred Gates, 18, of Chico, California, rear, for this steer bought last year with a livestock merit award from Shell Chemical Corporation. Myron Holdenried, 17, of Kelseyville, California, left, won this year's $125 award to be used toward the purchase of livestock.

Hard to Beat in Badminton



Peggy Candianides demonstrates the badminton skill which has won her competitive laurels.

AT least three evenings a week, Peggy Candianides doffs her office garb in favor of sports clothes and turns up at the Ventura, California, High School gym to sharpen up her badminton game. A member of the Surveying and Drafting Department in the Pacific Coast Exploration and Production Area's Ventura Office, Peggy is known among Southern California badminton players as the No. 2 women's player in the Tri-County Badminton Association. This league comprises Ventura, San Luis Obispo and Santa Barbara counties.

The mantel in her parents' Ventura home is overflowing with the medals and trophies Peggy has won at matches in a number of Southern California communities. Some medals are mementos of her having held large, rotating trophies, like those awarded her at one time or another by the Santa Barbara Badminton Club for excelling in singles, doubles and mixed-doubles play. Other trophies have, for example, come from the City of Los Angeles Department of Recreation and the Ventura Badminton Club.

As an enthusiastic supporter of the sport, Peggy terms badminton "the world's fastest game." She explains that in India, where it originated, it was known as "Poona." It reached England in the 1860's, and took its present name from the Duke of Beaufort's country estate, a place called Badminton, where it frequently was was played. It wasn't until 25 years ago that the game was brought to the United States.

Peggy, an all-around athlete, became interested in badminton as a student in Ventura High School. Although the sport resembles tennis in many ways, it requires lighter rackets and a higher net. Instead of the conventional tennis ball, a feathery shuttlecock, which has a cork base, is bobbed back and forth over the net. The shuttlecock's odd paths and sudden, unanticipated drops make the game one of great skill and speed.

Shell people of the Boston Marketing Division and the Metropolitan Boston District Offices are shown at the sixteenth annual Service Award Dinner. The banquet was held on March 29 in Boston's University Club and was attended by 126 persons.

They Have Retired

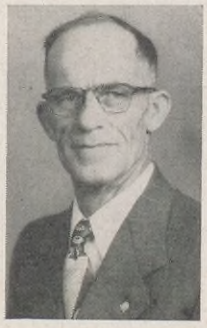
R. L. ALDRICH
Pacific Coast Area
Production

H. L. BALLARIS
Sacramento Division
Sales

J. S. BLANCHARD
Norco Refinery
Dispatching

A. G. BOUTON
San Francisco Division
Treasury

G. M. CAMERON
Atlanta Division
Sales



G. CAUDLE
Wood River Refinery
Engineering

L. R. COLYAR
Wood River Refinery
Utilities

M. CROUCH
Wood River Refinery
Utilities

H. A. DEEM
Wood River Refinery
Utilities

L. FORD
Sacramento Division
Operations

J. E. GUMM
Tulsa Area
Production

F. H. LEE
Wilmington Refinery
Engineering

E. MILLER
Wood River Refinery
Engineering

B. R. POWELL
Houston Refinery
Engineering

O. ROBINSON
Tulsa Area
Production

O. E. ROSS
Tulsa Area
Production

J. R. SHEEHAN
Shell Pipe Line Corp.
West Texas Area

J. C. TRUESDALE
Wilmington Refinery
Distilling

R. L. WILKIN
Cleveland Division
Operations

C. R. WINETEER
Wilmington Refinery
Engineering

Service Birthdays

Forty Years

C. R. STRAIN
Martinez Refy.
Dispatching

Thirty-Five Years

H. J. BEST
Tulsa Area
Production

T. I. DEASY
San Francisco Office
Financial

H. L. ROLLI
Wood River Refy.
Thermal Cracking

E. F. SCHULTE
San Francisco Office
Purchasing-Stores

E. N. WOOD
Wood River Refy.
Distilling

Thirty Years

A. I. ARBOUGH
Wood River Refy.
Engineering

L. L. ARNOLD
Shell Pipe Line Corp
Texas-Gulf Area

L. B. BERRY
Midland Area
Crude Oil

L. W. BINGHAM
Portland Div.
Treasury

R. W. BOND
Head Office
Exploration & Production

G. K. BRUCE
Wood River Refy.
Engineering

G. W. BURTON
Shell Pipe Line Corp.
Mid-Continent Area

C. H. CHRISTIE
Pacific Coast Area
Production

K. T. CONNELL
Los Angeles Div.
Sales

T. R. CORREIA
Martinez Refy.
Engineering

D. S. DAY
Portland Div.
Sales

P. J. DUHE
Norco Refy.
Distilling

D. M. FARRELL
Shell Pipe Line Corp.
Texas-Gulf Area

W. F. GALLAGHER
Anacortes Refy.
Engineering

Thirty Years (cont'd)

H. R. HELVIE
Wood River Refy.
Lubricating Oils

B. KEENEY
Wilmington Refy.
Engineering

K. C. KINCADE
Head Office
Marketing

J. J. KUEHN
Products Pipe Line
Lima, Ohio

G. J. LANDWEER
San Francisco Div.
Sales

A. E. MARTIN
Detroit Div.
Operations

E. H. MAY
Portland Div.
Operations

J. McFARLAND
Head Office
Trans. & Supplies

H. N. NUNNALLY
Wood River Refy.
Lubricating Oils

T. C. PETERS
Houston Area
Exploration

J. W. REID, JR.
Wood River Refy.
Thermal Cracking

A. C. SANDSTROM
Wilmington Refy.
Effl. Control & Util.

H. C. TICKEL
Shell Pipe Line Corp.
Mid-Continent Area

L. E. WOLF
Wilmington Refy.
Thermal Cracking

Twenty-Five Years

C. J. BASSETT
Boston Div.
Operations

L. BEAN
Wood River Refy.
Lubricating Oils

G. J. BLEAKLEY
Norco Refy.
Pers. & Indus. Rel.

S. R. BRUCKNER
New York Div.
Sales

A. C. CARROLL
Head Office
Prov. Fund & Pension Trust

E. L. CURTIS
Houston Refy.
Engineering

T. W. EVANS
Shell Development Co.
Vice Pres. & Dir.

G. E. FITZGERALD
Boston Div.
Operations

C. S. GARVIN
San Francisco Office
Marketing

R. C. HEIDINGER
Wood River Refy.
Thermal Cracking

H. J. HERZOG
Albany Div.
Operations

G. W. HOEL
Shell Pipe Line Corp.
Mid-Continent Area

T. HOFFMAN
Shell Development Co.
Emeryville

E. F. HOLEMAN
Tulsa Area
Production

J. C. HOLZWORTH
Detroit Div.
Sales

E. R. HOWARD
Boston Div.
Operations

H. K. HUBBARD
New Orleans Area
Gas

C. H. HUMRICH
Wilmington Refy.
Effl. Control & Util.

A. L. KEENEY
Houston Refy.
Utilities

F. L. KNAUER
Los Angeles Div.
Operations

H. A. KORNEGOR
Minneapolis Div.
Operations

J. F. LEDBETTER
Wilmington Refy.
Engineering

J. LEDERMEIER
Cleveland Div.
Operations

H. A. LUNDBERG
Seattle Div.
Operations

J. MacKINNON
Shell Chemical Corp.
Dominguez Plant

S. R. MARTIN
Houston Refy.
Engineering

C. A. MEYERS
Pacific Coast Area
Production

Twenty-Five Years (cont'd)

C. S. MORELAND, Portland Div., Operations
E. P. O'MAHONY, San Francisco Office, Marketing
E. D. PETERS, Shell Development Co., Emeryville
A. B. RAVERA, Chicago Div., Operations
F. C. REEVE, Chicago Div., Treasury
R. E. RIDGEWAY, Chicago Div., Sales
W. E. SCHUENEMEYER, Shell Pipe Line Corp., Mid-Continent Area
E. G. STAFFORD, Shell Pipe Line Corp., West Texas Area
H. J. STANKIEWICZ, Sewaren Plant, Engrg. & Maintenance

L. J. TAYLOR, Boston Div., Marketing Service
F. N. TURNER, Head Office, Financial
P. C. VELURE, Minneapolis Div., Operations
J. B. WEBSTER, Shell Pipe Line Corp., Mid-Continent Area
T. G. WESTBROOK, Houston Area, Production
F. J. WINKEL, Detroit Div., Operations

SHELL OIL COMPANY

Head Office

20 Years

H. R. Kemmerer.....Manufacturing
J. J. Pawol.....Marketing

15 Years

W. A. Enderson.....Manufacturing
Mildred Miller.....Personnel
R. L. Rankin.....Exploration & Production
J. B. St. Clair.....Manufacturing

10 Years

Marie V. Landa.....Economic Development
T. J. Quinn.....Financial
Marie A. Zeisel.....Financial

San Francisco Office

20 Years

F. R. Hatch.....Marketing

Exploration and Production

TECHNICAL SERVICES DIVISION (HOUSTON)

10 Years

N. W. Kusakis.....Drafting
J. L. Weil.....Geophysical

CALGARY AREA

20 Years

P. L. Kartzke.....Vice President

DENVER AREA

20 Years

F. J. Toth.....Production

10 Years

E. C. Russo.....Purchasing-Stores
T. E. Young.....Exploration

HOUSTON AREA

20 Years

R. J. Dobson.....Production
E. Fincher.....Production
S. Miron.....Production

10 Years

F. M. Bailey, Jr.....Production
H. R. Childs.....Automotive
G. H. Crawford.....Treasury
E. R. Fountain.....Gas
T. T. Gregg.....Production
F. F. Horn.....Production
M. M. Jolly.....Production
M. V. Peebles.....Treasury
E. Sikes.....Treasury
W. J. Taylor, Jr.....Exploration

MIDLAND AREA

20 Years

C. A. Cox.....Production

10 Years

F. W. Allen.....Treasury
V. M. Gayle.....Gas
H. A. Jones.....Production
J. M. Story.....Gas
A. E. Walkup.....Production
C. W. Wilde.....Production

NEW ORLEANS AREA

20 Years

F. J. Taylor.....Production
V. O. Wunstel.....Production

15 Years

L. P. Layman.....Production

10 Years

A. S. Delaune.....Production
A. Harris.....Land
P. V. Smith.....Production

PACIFIC COAST AREA

20 Years

R. B. Champlin.....Production
N. C. Cook.....Purchasing-Stores
W. S. Cook.....Production
H. L. Koch.....Exploration
Louise H. Schock.....Administration
R. G. Smith.....Production
G. York.....Production

15 Years

K. W. Plank.....Production

10 Years

G. B. Boatman.....Production
Irene D. Breckheimer.....Treasury
E. J. Burton.....Production
A. O. Champlin.....Production
D. L. Draper.....Production
O. S. Knapp.....Production
T. R. Smith.....Production

TULSA AREA

20 Years

B. O. Prescott.....Exploration

15 Years

E. W. Triplett.....Production

10 Years

G. A. Nylander.....Gas

Manufacturing

HOUSTON REFINERY

20 Years

T. L. Billingsley ..... Engineering
N. W. Christensen ..... Gas
C. K. Collins ..... Distilling
C. N. Evans ..... Engineering
B. Green ..... Engineering
R. J. Griffin ..... Fire & Safety
T. B. Harris ..... Lubricating Oils
B. T. Hutson ..... Engineering
J. Kandal ..... Dispatching
W. W. Myers ..... Control Laboratory
T. W. Osburn ..... Dispatching
M. L. Shipper ..... Distilling
C. L. Stewart ..... Gas

15 Years

E. Manning ..... Research Laboratory
J. C. Tillis ..... Engineering

10 Years

E. H. Karstedt ..... Engineering
J. M. Martin ..... Research Laboratory
G. W. McGinnis ..... Engineering
R. Mitchell ..... Engineering
J. W. Morris ..... Gas
T. L. Walton, Jr. ..... Gas
C. L. Wheat ..... Research Laboratory
M. M. Yartosky ..... Thermal Cracking

MARTINEZ REFINERY

20 Years

W. P. Coward ..... Dispatching
C. L. Grover ..... Engineering
C. H. House ..... Control Laboratory

15 Years

A. M. Kraintz ..... Distilling

10 Years

R. L. Lichti ..... Engineering
A. Mehlhaff ..... Engineering

NORCO REFINERY

15 Years

J. R. Dufresne ..... Pers. & Indus. Relations
C. Simoneaux ..... Engineering

10 Years

J. R. Bowen ..... Gas
F. T. Petit ..... Engineering

WILMINGTON REFINERY

20 Years

N. A. Cowan ..... Engineering
F. Hunter ..... Engineering
C. A. Jefferay ..... Fire & Safety

10 Years

L. G. Bruns ..... Stores
A. Cusick ..... Thermal Cracking
H. A. Davy ..... Engineering
C. Gardner ..... Engineering
W. E. Hall ..... Engineering
G. S. Irvin ..... Thermal Cracking
E. O. Jackson ..... Engineering
J. C. Molina ..... Engineering
A. A. Moore ..... Engineering
R. O. Peterson ..... Engineering
W. D. Roberts ..... Effluent Control & Utilities
T. Rumple ..... Catalytic Cracking
R. M. Zeigler ..... Experimental Laboratory

WOOD RIVER REFINERY

20 Years

J. R. D. Creekmore ..... Engineering
T. C. Harris ..... Engineering
C. E. Lexow ..... Control Laboratory
G. McConnell ..... Engineering
J. H. Mourning ..... Engineering
J. L. Nagy ..... Engineering
A. J. Otte ..... Engineering
A. E. Sanders ..... Engineering
W. J. Schipkowski ..... Engineering
R. P. Skinner ..... Catalytic Cracking

15 Years

M. H. Brecht ..... Control Laboratory
W. B. Bryant ..... Gas
E. A. Campbell ..... Distilling
B. C. Cole ..... Fire & Safety
J. L. Decker ..... Control Laboratory
L. A. Dye ..... Alkylation
N. E. Everett ..... Dispatching
B. E. Jardin ..... Engineering
G. G. Lamb ..... Distilling
J. A. Marshall ..... Aromatics
H. G. Mead ..... Lubricating Oils
I. B. Metheny ..... Engineering
D. W. Miller ..... Alkylation
R. C. Rathert ..... Control Laboratory
G. L. Shaver ..... Engineering
R. E. Waugh ..... Alkylation

10 Years

H. H. Ballard ..... Compounding
V. J. Brinker ..... Engineering
C. H. Broer ..... Engineering
H. E. Hentz ..... Effluent Control
O. A. Mizell ..... Distilling
S. Tassinari ..... Railroad Section

Marketing

MARKETING DIVISIONS

20 Years

J. G. Cleary ..... Boston, Sales
B. W. Parmenter ..... Boston, Sales
W. M. Smith ..... Chicago, Sales
A. T. Bartlett ..... Cleveland, Sales
G. A. Akers ..... Los Angeles, Operations
W. D. Kerr ..... Minneapolis, Sales
F. L. Kinchen ..... New Orleans, Operations
P. Rohack ..... New York, Operations
M. J. Schamerhorn ..... Seattle, Sales

15 Years

T. Fredericks ..... Albany, Operations
R. E. Glatzel ..... Baltimore, Treasury
W. C. DeCosta ..... Boston, Operations
V. R. McCubrey ..... Boston, Sales
F. M. Cookson ..... Los Angeles, Sales
T. Grieve, Jr. ..... Los Angeles, Sales
P. L. Herrick ..... Los Angeles, Sales
Aubrey S. Smith ..... Los Angeles, Operations
W. F. Otey ..... Portland, Operations

10 Years

Christine M. Brooks ..... Boston, Treasury
N. R. Abernathy ..... Chicago, Sales
F. T. Rose ..... Cleveland, Operations
G. H. Waren ..... Indianapolis, Sales
F. J. Gammie ..... Los Angeles, Operations
W. C. Webber ..... Los Angeles, Operations
R. B. Pinc ..... Minneapolis, Operations
L. B. Simpson ..... New Orleans, Sales
W. R. Eagan ..... New York, Operations
H. C. McCarty ..... New York, Operations
S. D. Leblanc ..... Seattle, Operations

SEWAREN PLANT

15 Years

F. M. Maniscalco ..... Terminal
L. V. Moffitt ..... Terminal
F. Nagy, Jr. ..... Chemical

10 Years

T. J. Gerity ..... Treasury
J. L. Papp ..... Compound

Products Pipe Line

15 Years

G. D. Harden ..... East Chicago, Ind.
R. A. Harvey ..... Zionsville, Ind.

SHELL CHEMICAL CORPORATION

20 Years

R. K. Mead ..... Agricultural Chemicals Div.
W. O. Morgan ..... Dominguez
Doris S. Ramos ..... Head Office
L. R. McCollum ..... Houston
W. E. McCord ..... Houston
A. W. Williams ..... Houston

15 Years

L. J. Caten ..... Shell Point
O. J. Hollinger ..... Shell Point
B. W. Huie ..... Shell Point

10 Years

C. C. Adams ..... Houston
G. Braden ..... Houston
D. Dickerson ..... Houston
R. H. Hilbert ..... Houston
C. D. Holleman ..... Houston
O. P. Holt ..... Houston
D. C. Kestenbaum ..... Houston
A. M. Osborn ..... Houston
S. Sesher ..... Houston
F. H. Stephenson ..... Houston
W. T. Urquhart ..... Houston
K. C. Walker ..... Houston
B. J. Bruce ..... Shell Point
A. O. Woodyard ..... Shell Point

SHELL DEVELOPMENT COMPANY

20 Years

J. W. Givens ..... Emeryville

10 Years

E. C. Darensbourg ..... Emeryville
P. F. Carpenter ..... Houston
C. W. McBeth ..... Modesto

SHELL PIPE LINE CORPORATION

20 Years

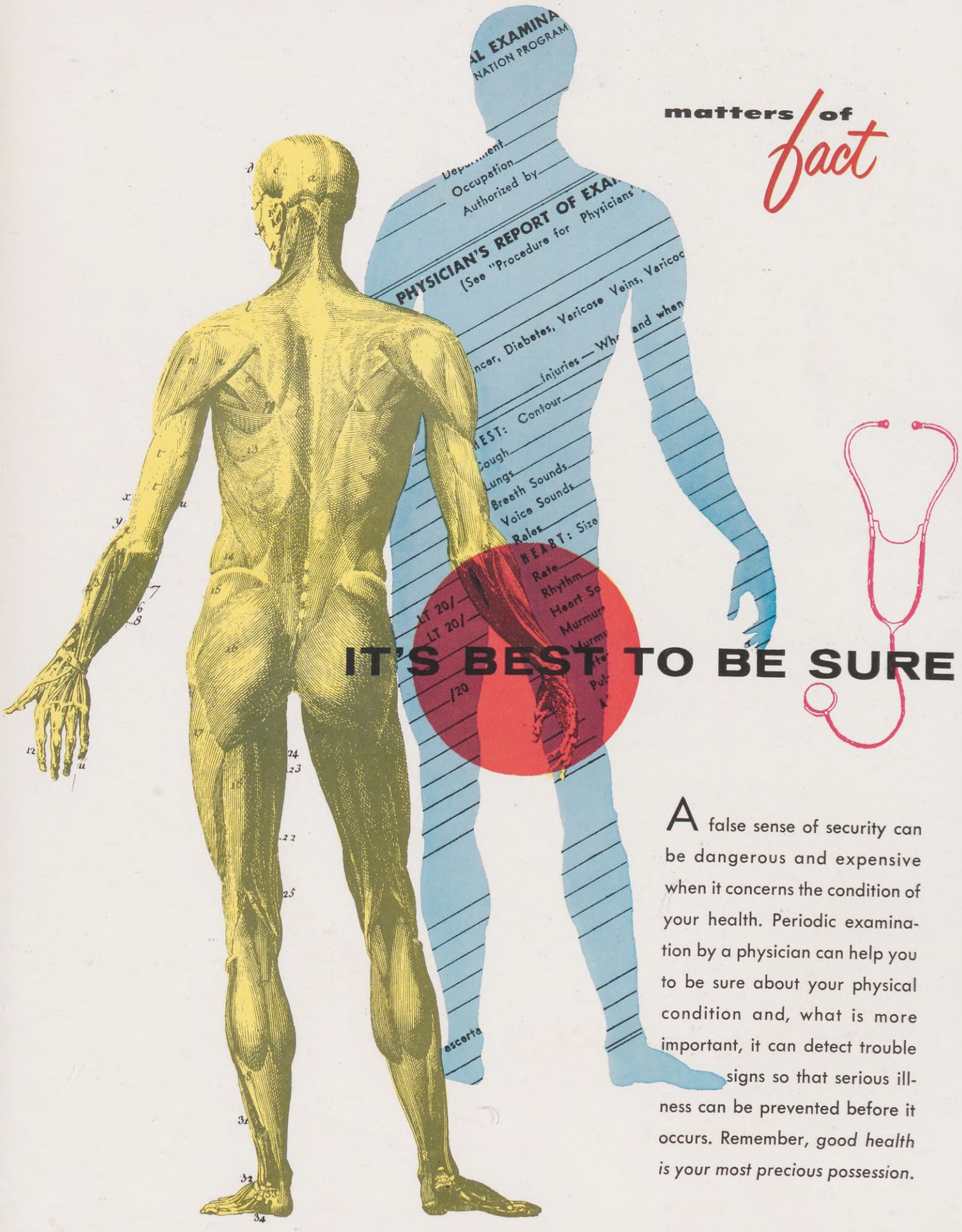
W. H. Bugg ..... Mid-Continent Area
C. W. Gold ..... West Texas Area
J. Kerr ..... Bayou System
W. C. Mund ..... Texas-Gulf Area
G. Owen ..... West Texas Area
M. D. Pool ..... West Texas Area
F. Rhay ..... Mid-Continent Area
C. B. Shell ..... Head Office

15 Years

H. D. Burton ..... West Texas Area
C. H. Dawes ..... Mid-Continent Area
R. Hunsucker ..... Mid-Continent Area
B. E. Miller ..... Texas-Gulf Area
F. L. Smith ..... West Texas Area

10 Years

G. T. Dutel ..... Head Office



A false sense of security can be dangerous and expensive when it concerns the condition of your health. Periodic examination by a physician can help you to be sure about your physical condition and, what is more important, it can detect trouble signs so that serious illness can be prevented before it occurs. Remember, *good health is your most precious possession.*

SHELL OIL COMPANY
50 West 50th Street
NEW YORK, N. Y.
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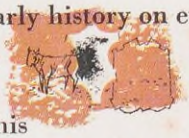
4710 Bell
Houston, Texas

SCC

SHELL *around the Nation*

BOSTON

With mementos of the nation's early history on every hand, Boston today is the cultural, industrial,  medical, fishery and wholesale merchandising hub of the New England states. Though steeped in tradition, this colorful city of almost a million people is also a major industrial center, with emphasis on metal working, clothing, printing, shoes and other leather goods, furniture, and sea foods.

 Shell's Boston Marketing Division Office is the distribution nerve center for Shell products from Connecticut to Maine. 

The Division has 130 employees in its Boston offices; 370 more throughout its five Districts. The major portion of the Division's product throughput is funneled through 780 service stations, 426 jobber-dealers, many big  fuel oil users, several large aviation accounts, and a host of industrial customers.