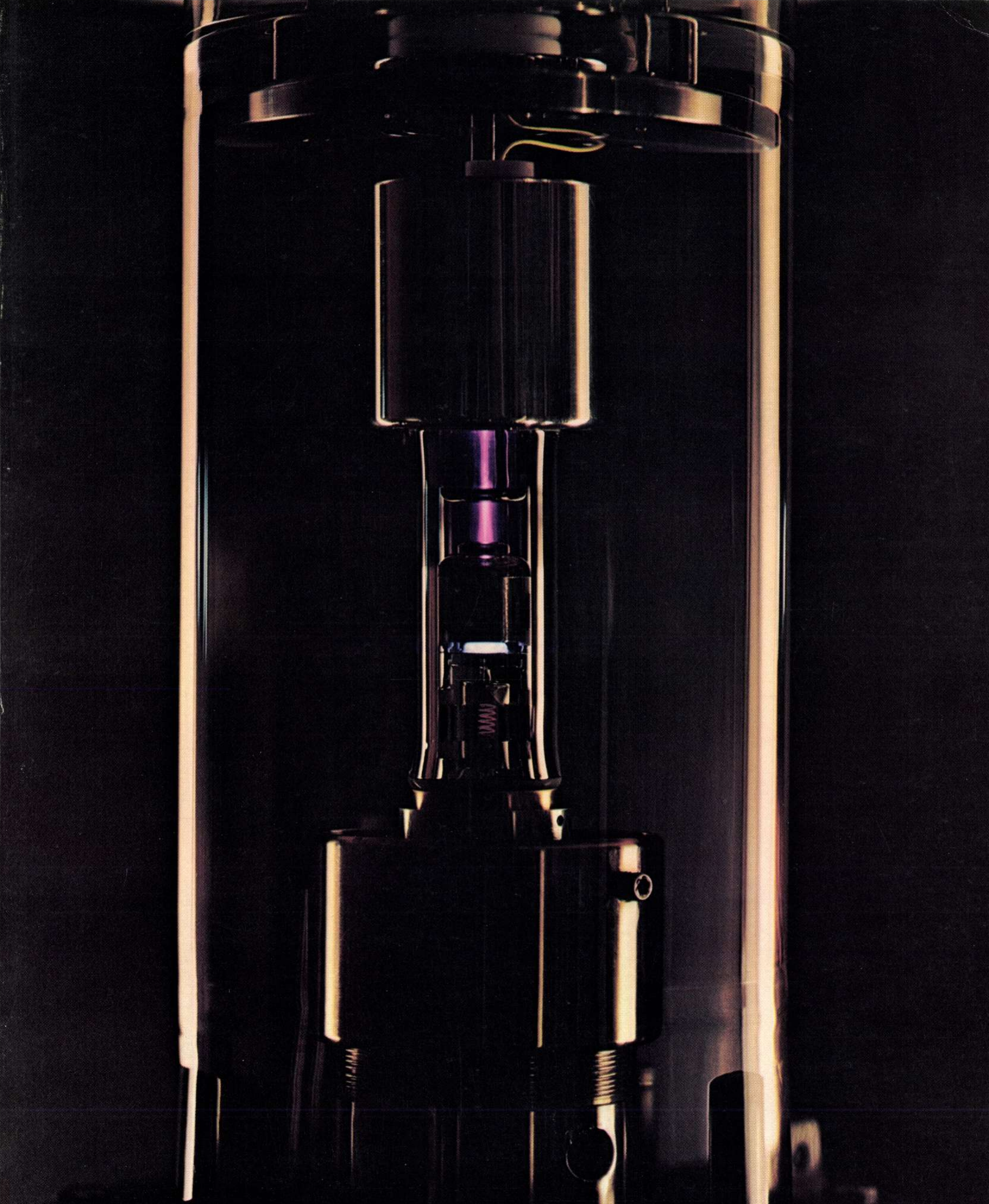


Schlumberger Annual Report 1966

Operating Subsidiaries and Divisions

Wire Line Services

Schlumberger Well Services, Houston, Texas
President: M. E. Loy

Schlumberger of Canada, Calgary, Canada
Manager: V. Carson

Schlumberger Surenco, Caracas, Venezuela
President: L. E. Magne

Société de Prospection Electrique Schlumberger, Paris
Schlumberger Overseas, London
President: P. Majani

Allied Oil Field Services and Products

Johnston Testers, Houston, Texas
President: A. Morazzani

Vector Cable, Houston, Texas
President: K. W. McLoad

Forex, Paris
President: A. Maratier

*Dowell Schlumberger**, London
President: R. Génin

Electronics and Instrumentation

Electro-Mechanical Research, Princeton, New Jersey
President: G. S. Sloughter

Weston Instruments, Newark, New Jersey
President: W. W. Slocum

Solartron Electronic Group, Farnborough, England
Chairman and Managing Director: E. R. Ponsford

Société d'Instrumentation Schlumberger, Paris
Chairman: J. Miller; President: J. Babaud

Heath Company, Benton Harbor, Michigan
President: D. W. Nurse

Furniture Division

Daystrom, South Boston, Virginia
Virtue, Compton, California
General Manager: F. A. Piechota
Manager of Virtue: R. S. Fogarty

*Associated Company 50% owned.

Schlumberger in 1966

Contents

ON OUR COVER: Shown under test is a high flux neutron generator developed at our Ridgefield Research Center. This atom smasher is used in Schlumberger radioactivity logging in the search for oil and gas.

Photo By William Vandivert

In Brief

	1966	1965	1964
Operating Revenues . . .	$343,136,000	$318,106,000	$302,367,000
Operating Income	45,712,000	44,682,000	43,111,000
Net Income	28,149,000	27,087,000	24,606,000
Dividends Paid	8,938,000	7,719,000	5,752,000
Per Share			
Net Income	$3.71	$3.52	$3.18
Dividends Paid	$1.17	$1.00	$ .73
Shares Outstanding			
(After 3-for-2 split) . .	7,595,958	7,693,135	7,726,435

To the Shareholders

This year's revenues of $343,136,000 and net income of $28,149,000 were both higher than in 1965. Earnings per share of $3.71 compares with $3.52 for the previous year.

The economy was strong throughout the world and the oil business participated in the growing economy. Healthy demand for oil products, firmer prices and increased capital outlays were prevalent for most oil companies.

Specific factors, however, had a direct impact on oil production and exploration. For the past several years, drilling for oil in the United States has been shifting from land operations to offshore, from shallow to deeper drilling. This year a further decline in land drilling was accelerated by the tight money conditions, with particular impact on the independent operators. Similar trends are developing outside the United States in most areas of the world; offshore exploration increased in the North Sea, in the Niger delta, the Persian Gulf and Alaska, while land exploration decreased in Venezuela, Libya, Algeria and Australia.

As more Schlumberger services are needed for offshore and deep wells, we were successful in achieving a slight increase in oil field revenues in 1966. However, net income from wireline services was slightly lower, as the decrease in land operations was more severe than had been anticipated.

In our electronic and instrumentation operations, further improvements in gross and net were significant at Weston, Heath, and Solartron. We had substantial losses at the telemetry and computer divisions of Electro-Mechanical Research, and at Société d'Instrumentation Schlumberger in France. Management reorganization and increased order backlogs at the end of the year should improve these situations in 1967.

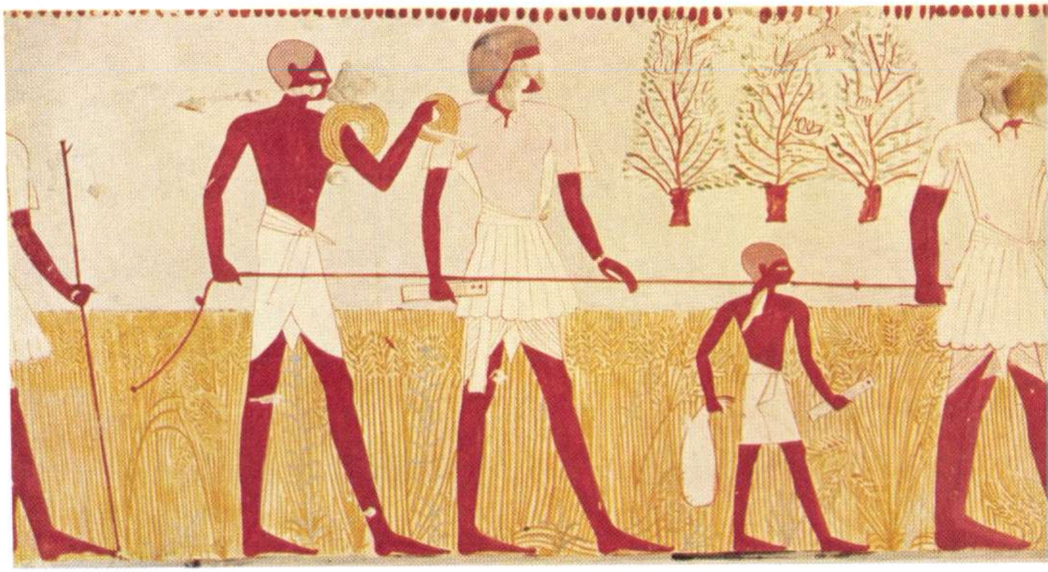
Looking ahead, in the oil field service business, we expect to improve our profit margin and look for a moderate increase in revenues. For electronics, we expect continued sales growth and improvement in earnings is likely to be significant.

In February of this year, we contracted to purchase the assets and business of Plastic Applicators of Houston. This company supplies pipe-coating and inspection services to the petroleum and chemical industries, with current annual sales of over $6.0 million. The purchase price is to be approximately $3.5 million, payable in Schlumberger Limited treasury shares.

Jean Riboud
Jean Riboud *President*

H. G. Doll
H. G. Doll *Chairman of the Board*

March 10, 1967



By courtesy of the Metropolitan Museum of Art

Schlumberger and Measurement

Modern science started with measurement. But measurement started earlier. It started when man first learned that he could not trust his senses to tell him, "How much?" So he used his own body to measure. Perhaps he wanted to make a spear like his brother's, and noticed that the spear he would copy was twice the length of his arm. Thus, the "arm's length," the "hand" and the "foot" became some of man's oldest measures.

Man started to till the soil, and call his piece of land "his." In ancient Egypt, the flooding Nile each year washed away landmarks, so there came into being land measurers, who learned to tie knots in a rope in elbow-to-finger-length units, and thus count units of distance and make right angles.

Counting is the cornerstone of measurement and of physics. Early man—Assyrians, Egyptians, Chinese—also counted the days and related the count to the motions of the sun and stars, and made calendars. The inquisitive Greeks learned to use stars as reference points to measure the earth, and at the famous Alexandria Museum Eratosthenes calculated the earth's circumference by measuring sun angles, and came within 50 miles of truth.

Yet only a few men of antiquity measured nature in this way, and scholars in general tried to describe nature by reason – seldom verified by measured observation. Science had to wait for the Renaissance, when scholars began rediscovering Greek and Arabic manuscripts. Printing began and astronomy again grew. Old feudal estates were breaking up, which required surveying. Sailors began adventuring, which required navigation. All these steps required instruments. By the late 1500s a new craft had emerged: the instrument maker.

As this new craft developed, a whole new class of men of science was also developing, men like Galileo, Kepler, Boyle, Descartes and Harvey, asking new questions of nature. And they now needed new kinds of

apparatus and instruments, for they were learning that measured observation and verifiable experiments are necessary for accurate descriptions of nature—that man can use but not rely on his reason.

Until this time, scholars like these had never mingled with mere workmen. But these new men of inquiry cast off old tradition. Beginning around 1600 they commonly ventured into the workshops of the new instrument makers, both to learn and to demand ever better apparatus. The resulting partnership in the space of just 100 years produced the telescope, pendulum clock, thermometer, barometer to measure atmospheric pressure, pressure gauges, microcaliper, spring balance, photometer to measure light and—an inspired use of a piece of paper—the graph.

The results? Galileo used the telescope to discover the moons of Jupiter and the star-universe of the Milky Way. He measured the motion of falling bodies—he used his pulse beat to time a pendulum. Kepler measured planetary paths and established the earth's humble place in the universe. Newton arrived at his laws of gravitation and force.

Soon man's ideas about matter and energy began to change. In 1791 Allesandro Volta, an Italian physics professor, learned to produce electric current at will. André Marie Ampère, French physicist, studied the magnetic field that accompanies an electric charge and invented the electricity-measuring galvanometer, in which an electric current deflects a needle. George Ohm, German schoolmaster, used a galvanometer to show that current flow is affected by the nature of the wire it passes through, somewhat as water flow is affected by the size of a pipe.

Modern physics grew out of these and other discoveries in the following years, years crammed with measurement of these new electric forces—in units now called *volts, amperes and ohms—of light rays and atoms, atomic particles and radioactivity. The dawn of the Atomic Age came less than 350 years after the dawn of the age which first joined scholars and instrument makers.*

The most important thing that had happened in this period? Not even atomic energy but rather the birth of modern science. Science joins insight with quantitative investigation to arrive at data. Then it joins insight and mathematics to arrive at laws.

Pointer readings on measuring instruments, said Sir Arthur Eddington, are the reality of the universe. Once man understood this, the Industrial Revolution soon flourished.

And measurements flourished. One new form started in the late 1920s: oil well logging, seeking oil by lowering instruments down a bore hole to measure the physical properties of the earth. This was the invention of two brothers, Conrad and Marcel Schlumberger, and the start of Schlumberger Limited, from the beginning a measurement company.

A measurement company today—and anyone who measures—must look on measurement as a system, a system capable of handling not just the length of a caveman's spear but thousands of far more sophisticated measurements. Measurement systems, further, are tending to become closed loop systems, leading at the end to some control action, human or automatic, taken on the basis of measured information.

The elements of a typical closed loop measurement system are sensing, transmission, display, recording, analysis and control—and Schlumberger is now involved in them all.

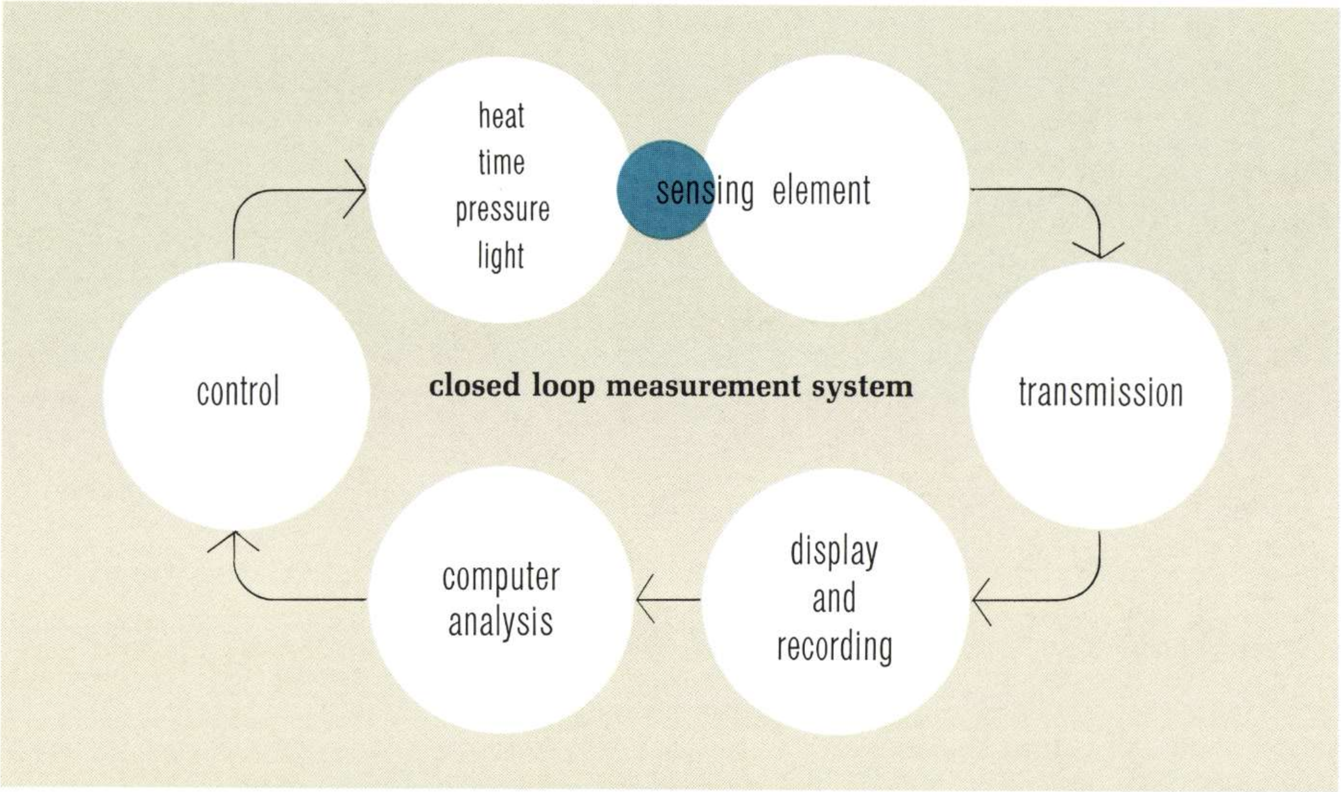
In plants in the United States and Europe: Schlumberger makes **sensing elements** *or* **transducers**. *Space satellites track the stars with a sensitive EMR photomultiplier, a light-multiplying tube. A Schlumberger induction logging probe is lowered down a hole to seek oil-bearing formations. It creates an electromagnetic field around it, then measures the currents this induces in the earth. Weston bimetal industrial and laboratory thermometers join two metals that expand or contract differently, to a precisely measurable extent, when heated or cooled.*

Vector Cables **transmit** *signals up an oil well or along an undersea cable to an oceanographic research station. EMR round-the-globe telemetry stations faithfully extract information from the faint radio waves telemetered from craft far out in space. These stations do far more than pass these signals along. They process them to identify and sort out the intelligence that reports temperature, radiation, micrometeorite hits and other data the space scientist wants to obtain.*

Weston meters on an aircraft instrument panel **display** *facts of flight to a pilot. In a Schlumberger oil field mobile laboratory, our engineer—and very likely the customer's geologist looking over his shoulder—watch a light beam that tells them what a Schlumberger probe is finding underground. The same beam makes a record on a moving reel of film for careful study.*

The same signals can be digitized (converted into numbers) for another record on magnetic tape. This information on the tape is then transmitted by Data-Phone to an EMR computer for **analysis**. *In another example of analysis, Solartron analog computers analyze production measurements to help control many industrial processes—temperatures and pressures, for example, in chemical plants.*

Control *is the final step in the complete measurement loop more and more characteristic of our automated age. An EMR computer has just been linked to an EMR telemetry system to help test a huge new military aircraft. The computer can automatically check out or test the telemetry receiver, giving it a test signal, then automatically adjusting it—controlling it—to improve its signal-sorting capability. An SIS thermostat, on the basis of measurement information, completes or breaks an electric circuit in a power plant. Weston-Boonshaft and Fuchs makes powerful shakers—used to test missiles, for example, to make sure they can withstand severe vibration and shock. The B&F system measures the missile's responses while it's being tested, then—guided by this feedback—automatically orders changes*



in shaking horsepower and rate.

For the total task of measurement, Schlumberger adds still other elements. Weston, SIS and EMR build quality components—potentiometers, electric motors, electronic frequency filters—as well as entire sub-systems, like computer memory cores and instrument panels for nuclear power plants. Heath makes Heathkits from which amateurs or engineers or students can build their own instruments. Weston-Rotek voltage standards are used to calibrate U. S. Air Force measuring instruments.

So go some modern measurements, and some of the many performed or made possible by Schlumberger—today a world-wide group of companies with 20,300 employees including more than 2,100 engineers and scientists working in 52 countries every year. Schlumberger today is half an oil field business, half a group making sophisticated electronics for industry, space and the public. Measurement is what Schlumberger companies have in common.

Measurement pervades our economy, our industries, our offices and our homes. We all measure. We all are measured. Twenty billion measurements (so estimates the U.S. Department of Commerce) are made in the U.S. alone every day.

Without measurement, modern industry could not exist. More than $10 billion was spent by world industry for measurements in the last measured year (1963), and the amount is now increasing faster than ever in the highly technological forefront industries, the industries Schlumberger mainly serves.

Measurement is growth industry. Measurement is knowledge.

Oil Field Wireline Services

The world's search for oil continued to turn offshore in 1966. Drilling—and down-hole logging, our business—are more difficult there. Waves, storms and the difficulties of transporting men and instruments increase operating problems. Here, and at the bottom of today's deeper and deeper wells offshore and on shore, at temperatures approaching 500°F and pressures up to 22,500 pounds per square inch, our instruments must perform.

And they do. Where conditions are toughest, Schlumberger benefits. Since an offshore well can cost anywhere between $1 million and $4 million to drill, the operator wants to eliminate all possible guesswork and risk. He wants the best possible down-hole surveys. He wants a highly precise completion, another Schlumberger service, to prepare his well for production. You will find Schlumberger units on most of the world's offshore rigs, working there for months or even years.

From Alaska to Australia during 1966, successful offshore rigs appeared where no drill had operated before. Activity started in continental shelf waters off every major land mass. Rigs in U.S. waters grew to 152; those abroad totaled 65. Important oil and gas discoveries have been made in the North Sea; in the Cook Inlet, near Anchorage, Alaska; off Nigeria; and in the Persian Gulf. Successful operations continued in the Gulf of Mexico.

The world's shelf areas are huge. They contain a submerged land mass as large altogether as the entire United States. The seas are one area where there is certain growth ahead for the oil industry and Schlumberger.

A Schlumberger mobile laboratory proceeds to a job in an oil field in southern Iran. In 52 countries, more than 850 such field and offshore units perform Schlumberger services 24 hours a day, every day of the year. These units, and all Schlumberger oil field service instrumentation, are manufactured at our plants in Houston, Texas and Clamart, France.

Research and Engineering

At the end of the wireline — the popular name for Schlumberger's electric cable—go an array of tools to provide a report on sub-surface formations, in the form of a log or foot-by-foot graph.

Hydrocarbons (oil and gas) are found in pores in compacted sand and other rock. Water, usually salt water, is also found in such pores. Anyone seeking oil or gas must know: What kind of formation is the drill penetrating? What is its porosity? Does it contain oil or gas, or just water? If oil or gas, how much? And is the formation permeable—can we get the oil out?

Different kinds of formations, oil, gas and water, all differ in many properties—resistivity to electric current; spontaneous electrical potential; ability to transmit sound; natural radioactivity; response when bombarded with neutrons. Schlumberger lowers sondes or sensors to probe all these. It also measures temperatures, pressures, depths and hole shape. It measures the "dip" and angular direction of the formations the hole intersects; this helps geologists map the whole field. Other Schlumberger tools sample underground formations and fluids.

When the driller is satisfied he has a "well," he sinks a steel casing to seal the entire length of the hole. Then a Schlumberger perforating gun shoots a series of shaped charges at precise spots in the casing to get at the "pay." When production drops off at a well, Schlumberger is often called in—for production logging, diagnosis and recompletion services to find the problems and help rejuvenate the well.

To develop new methods and make established ones more accurate, we spent $8.0 million on research and engineering in 1966 at our Ridgefield, Conn., research center and our Houston and Paris engineering centers. An important development of our research center was placed in commercial service last year, when we were able to record logging data in digital form on magnetic tape at the well site, for electronic computer processing and analysis. Data from two or more underground sensors are merged for fast computation and analysis that would take an engineer endless hours.

This new procedure begins at the drill site with compact advanced instrumentation: a quantizer and a specially designed magnetic tape recorder. The taped data is then transmitted by phone to our Ridgefield log proc-

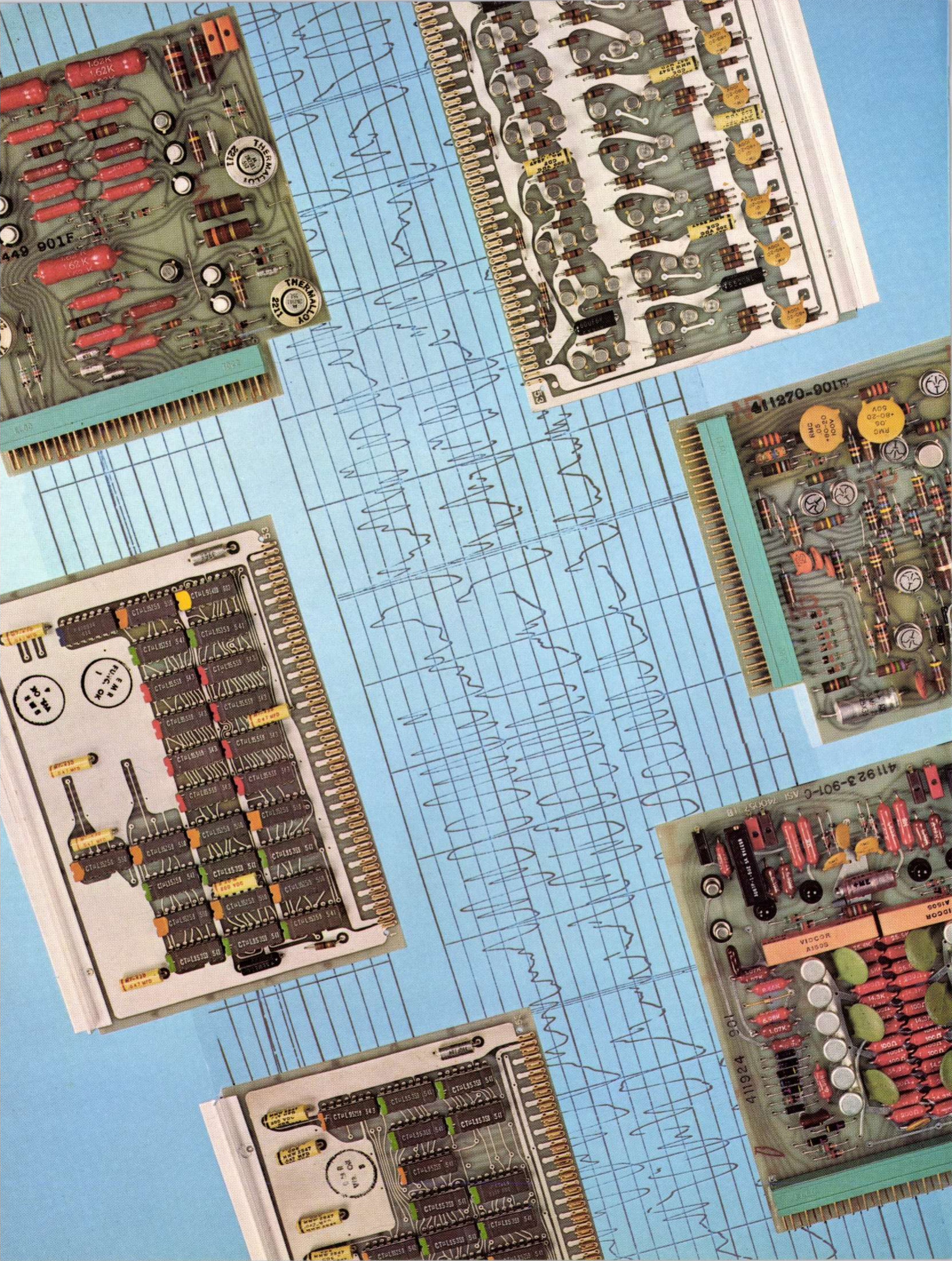
For precision measurement: a technician at our Paris engineering center calibrates an inclinometer for a dipmeter which measures the inclination from the horizontal of the formations intersected by the drill hole. These data assist in identifying underground geologic structures.

essing center for analysis by an ADVANCE 6050 computer made by the EMR Computer Division in Minneapolis. A second log processing center with an EMR computer for log analysis has been placed in operation at Houston; a third will be located in Paris.

The result—in eastern New Mexico, for example, in one of the world's most complicated underground areas—is a single set of graphs showing both lithology (formations encountered) and porosity, with an indication of the movable hydrocarbon. We have thus wed our oldest strength, logging, with one of our newest, using our own computers, designed and programmed for this purpose.

The year also saw continued development of logging instruments like the Sidewall Neutron Porosity tool (which bombards the formation with neutrons from a plutonium-beryllium source), a Thermal Decay Time tool (measuring the rate at which neutrons are captured by the atoms in the rocks) and the High Resolution Dipmeter.

All the tools we use are made in our Houston and Paris plants; in 1966 they produced more than $31 million worth of equipment and supplies.



Field Operations

North America

The U. S. oil industry's capital expenditures for drilling and production were the same as in 1965. But capital for land drilling was reduced by a continuing shift to costlier offshore and deep drilling. Total drilling thus continued a downward trend, to less than 37,000 wells, 10 per cent fewer than in 1965.

Despite this, our wireline operation revenues increased slightly. Among several responsible factors:

- Offshore drilling requires more of our services. Five years ago 12 per cent of our field revenue came from the U. S. offshore; the 1966 figure was 25 per cent.
- Wells were drilled on wider spacing–farther apart. This requires more of our services per well for full knowledge of the field.
- The market in work-over and recompletion of old wells is growing.
- Several new services were introduced or won wider acceptance. Notably:

The Sidewall Neutron Porosity Log — combined with the rapidly-developing Formation Density Log and the Borehole Compensated Sonic Log–has made it possible to determine porosity accurately in hard rock reservoirs. In complex reservoirs we often run all three.

A new four-arm machine-computed Dipmeter enjoyed growth limited only by its availability. Dipmetering becomes more important for future exploration as wells are drilled deeper and farther apart.

A sand consolidation tool offers real promise on the Texas and Louisiana Gulf Coasts where the oil reservoir is often a loose, flowing sand. An explosive charge perforates the casing, then plastic is forced into the reservoir to hold the sand in place while permitting oil and gas flow.

The Sharpshooter, a new casing perforator, is especially useful in hard rock reservoirs which require a number of accurately positioned single perforations.

Louisiana remained the largest offshore area, with offshore Texas and California becoming more active. Future offshore activity is contingent on federal lease sales of offshore acreage. Additional lease sales are expected in 1967 in both Gulf and California waters. As a result, we see a modest 1967 increase in our offshore business, with good long-term prospects.

Land drilling reductions were widespread, particu-

The curves are an example of the many Schlumberger logs, graphically representing the measurements by our instruments of physical properties of earth formations encountered in a well bore. The information displayed on the log is essential in the exploration for and production of oil and gas. Circuit panel boards are part of the instrumentation used in making the measurements.

larly in north Louisiana, Oklahoma, Kansas and north Texas, all shallow-well areas normally dominated by independent drilling. We expect no recovery here next year.

West Texas' Delaware Basin continued to be the most active deep drilling area. Forty-eight gas wells were drilled; half went 20,000 feet or deeper, and the other half were in the 16,000-foot range. Almost all were development wells in producing fields; only three were dry holes. Activity should continue at the 1966 level for the next several years.

Alaska operations took a decided upward turn, with most of the buildup in or near Cook Inlet. Though drilling conditions are severe, the oil reservoirs already discovered rank with the Western Hemisphere's best. Forty-seven wells were drilled in 1966; almost 90 are projected for 1967.

In Canada as in the U.S., demand and production were up, drilling down. Wells drilled totaled 3,400—9 per cent below 1965. Our operating revenues remained about the same, due to deeper wells and more wildcats; our net income was lower, due to increased operating costs. One of the most active areas for exploration is the Keg River region and the Rainbow Lake area in Alberta.

Central and South America

Our revenue improved slightly, but did not reach expected levels because of drastic reduction of activity in Venezuela. Oil companies there reacted to substantial tax claims by almost completely curtailing drilling. It now appears that the differences between companies and government have been resolved, and activity should increase appreciably in 1967.

Increases in Argentina and Brazil offset our lower Venezuelan income. Argentinian development drilling was stepped up when oil production failed to meet demand. Our activity was helped substantially and promises to be even better in 1967. Our excellent year in Brazil was due in part to high perforating activity. Many wells previously drilled were put on production. Brazilian drilling should continue at about the same level.

Revenues from Colombia and Trinidad increased moderately; those from Bolivia, Chile and Peru decreased moderately. Wildcat activity was renewed in two little-explored areas: the Caribbean and Central America. Exploration was resumed in Barbados, Surinam, Guyana, Paraguay, British Honduras and eastern Peru. Wildcat drilling is expected in 1967 in Guatemala, Nicaragua, Ecuador and offshore Colombia. Our Central and South American activity should improve in 1967.

Eastern Hemisphere

Our operating revenues increased moderately in the Eastern Hemisphere in 1966. Here, as in North America, the buildup offshore was the main factor.

With operations on three continents, the year naturally saw more activity in some areas, less in others. Among the bright spots:

- Fifteen rigs were drilling in the North Sea at year-end, compared to two at the end of 1965. At least five gas fields and one oil field have been discovered off the United Kingdom.
- Successful Nigerian oil exploration, on shore, on inland waters and offshore, has focused attention on the great potential of the Niger River delta.
- Our Middle East business increased.

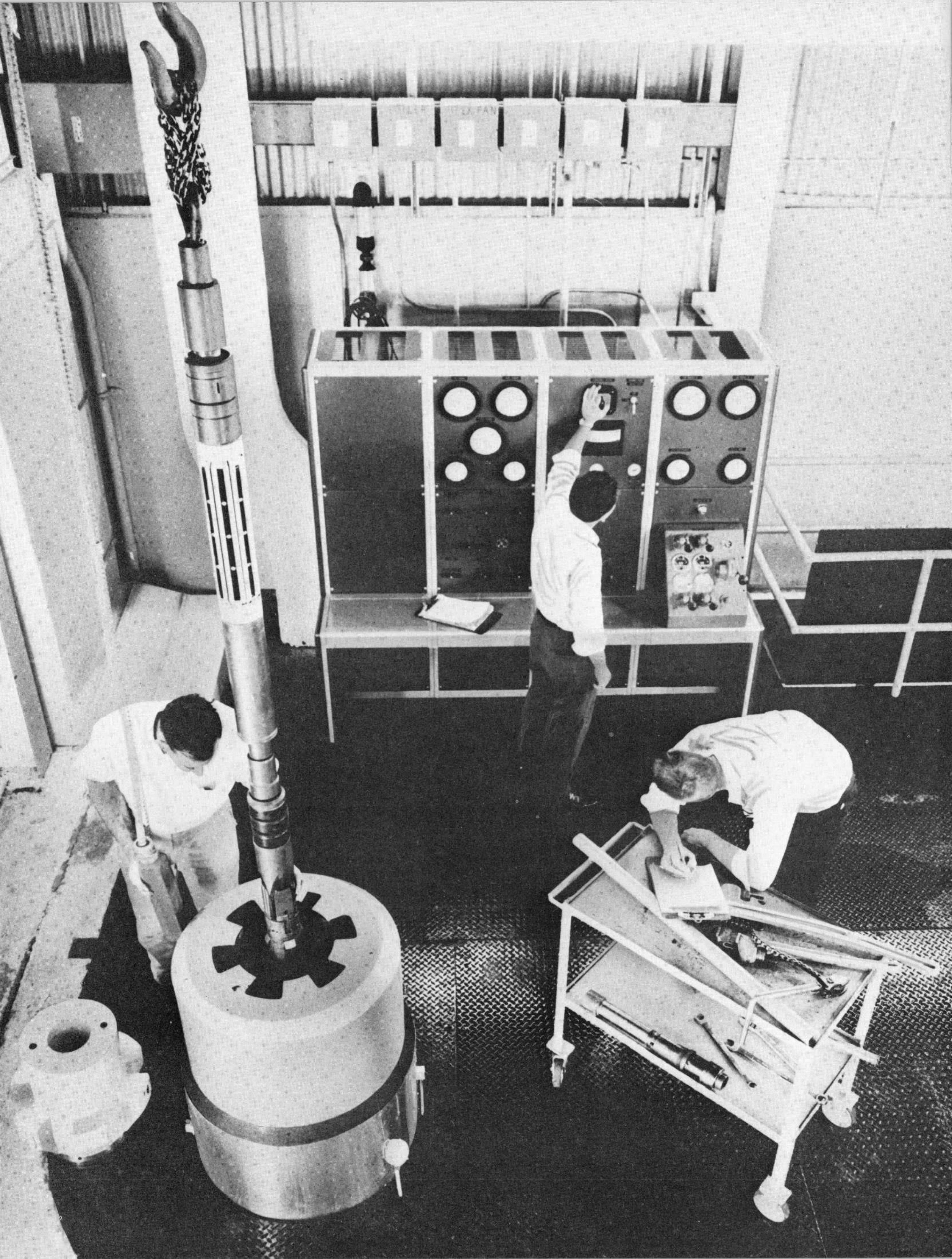
The following areas saw significant decreases:

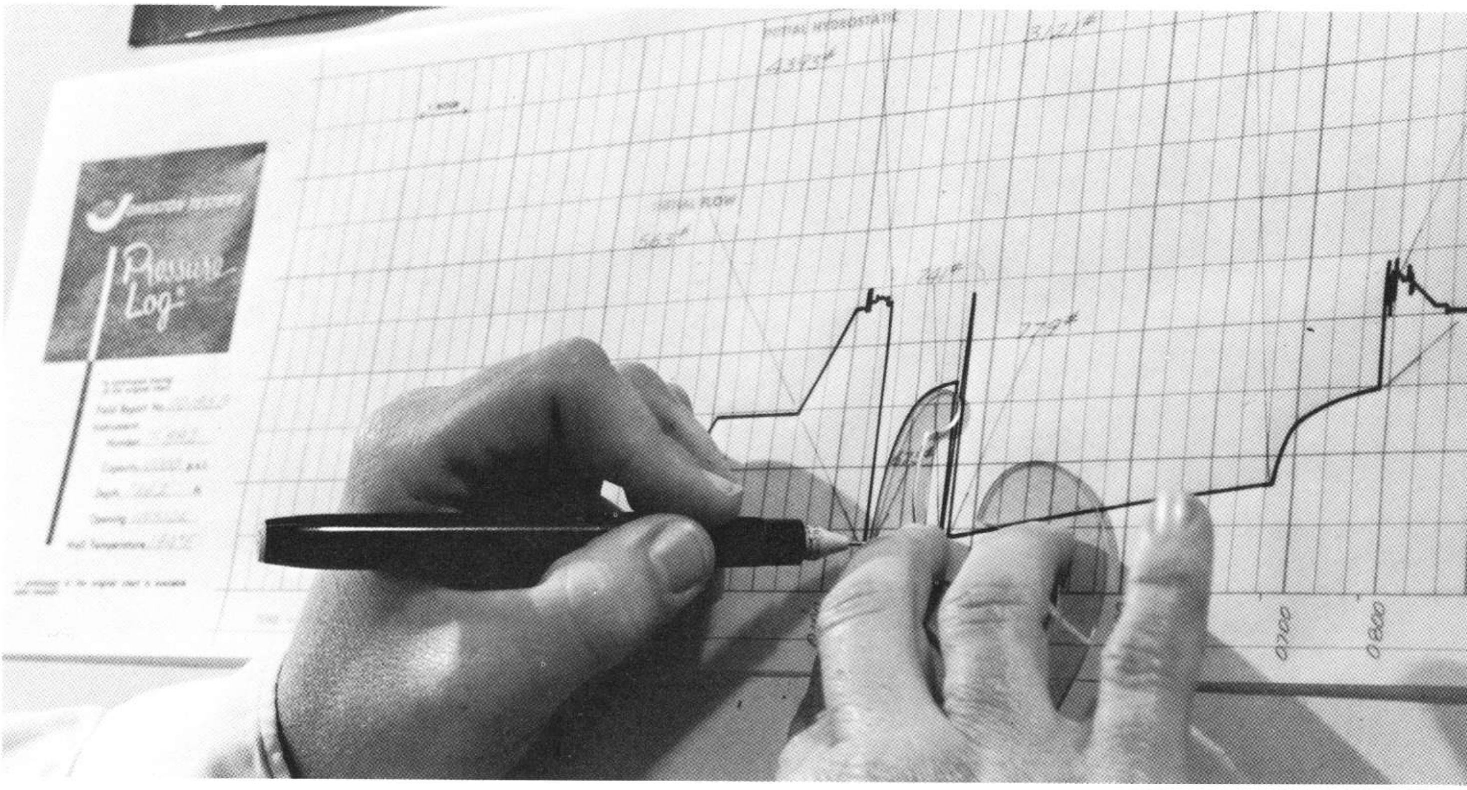
- Algerian drilling declines continued. Drilling could increase this year; new exploration programs were launched in late 1966.
- Libya suffered a 35 per cent drilling decline.
- Australian land drilling declined. Queensland's Great Artesian Basin saw no important discoveries, discouraging many operators. Offshore prospects look promising, however, especially in the Bass Straits between mainland Australia and Tasmania.

Deep drilling in Germany resulted in several gas discoveries. Spain had an oil discovery.

Our activities in the Eastern Hemisphere should continue to grow. Demand for oil products is increasing rapidly in this part of the world. We look for further revenue gains in 1967, with offshore operations again the leading factor.

A well in the Middle East: our operator places a radioactivity-measuring instrument in position for lowering into the well bore. This is one of more than 70 wireline services Schlumberger offers the oil industry for exploration and production.





A technician at Johnston Testers plots a pressure history obtained from a Johnston Testers drill stem test. The information supplied will help determine flow rates, permeability, reservoir pressure and possible formation damage. This will aid the operator to decide whether to complete or stimulate or abandon the well.

Allied Oil Field Services and Products

Johnston Testers

In contrast to wireline logging tools, which are lowered on the end of a cable, Johnston Testers tools are lowered on the drill pipe or tubing. They provide services to evaluate possible producing zones and rate of production and to solve other production problems.

Conventional drill-stem testing operations decreased. This was offset by increased operations with JT's new Multi-Flow Evaluator, which provides detailed data on well fluids and pressure. Several new sizes were introduced, adjusted to hole diameters, as part of JT's continuing effort to furnish more and better drill-stem test data on productive potential.

Sales of plugs and other products for oil-well completion, production and secondary recovery increased, particularly sales of Wasp permanent bridge plugs (to seal off sections of the well casing). Rentals of hydraulic jar tools in a larger variety of sizes also improved ("jar" tools loosen and retrieve stuck equipment).

Total revenues increased, and the company operated at a profit despite lower U.S. drilling activity. Research and engineering expenditures were continued at high levels to support new developments.

Johnston Testers engineers in Houston prepare to test the performance of a packer in the high-pressure test well simulating downhole conditions. Johnston Testers tools are lowered at the end of drill pipe to measure pressure and obtain other data about oil-producing formations.

Vector Cable

Vector makes a growing variety of electrical conducting cables, cable connectors and custom-engineered cabling systems for seismic exploration (oil-seeking), science and industry. Vector also makes the wireline or armored cable that carries logging signals up a drill hole.

Vector sales increased in 1966; the significant growth factor was sale of marine seismic exploration equipment to look for oil and gas offshore. Profits remained at a satisfactory level. Vector's plant was increased from 82,000 to 129,000 square feet. Operations of Marsh and Marine Manufacturing Co., acquired in 1965, have been consolidated in the main plant.

To provide a great variety of required cable characteristics in the right combination, Vector operates as an integrated producer "from the bare wire up." Basic cable-making processes—stranding, insulating, winding, shielding and moulding for sensor connections—are performed on specially-designed machines to Vector's own quality-control standards. In a typical process, one department will produce an insulated multi-conductor cable; another will apply a crush-proof, high tensile armor; another will install sensor mountings and connectors, pressure-test and deliver the completed cable system. This is an unusual integration of manufacturing capabilities.

The petroleum industry remains Vector's largest user. But Vector is also applying its special cable-engineering competence to others. Vector cables help the U.S. Atomic Energy Commission measure underground atomic explosions. At sea Vector provides cables and connectors for oceanographic stations. Its electrical cabling systems and high-pressure electrical connectors serve aboard the growing family of Navy and scientific deep-diving submarines—Aluminaut, Deep Quest, Deep Star, Alvin and Trieste.

Rotating rapidly, this Vector cabling machine combines many small wires into a spiral bundle. The cable will be sheathed and used in seismological exploration to carry electrical signals from sensors to recording equipment.

Forex

Forex, our drilling subsidiary, operates approximately 50 rigs, 20 of them heavy rigs for deep drilling. Operations are mainly in Europe and Africa. Forex revenues from land drilling declined approximately 15 per cent in Algeria, and activity in Holland ceased. On the other hand, revenues were higher in Nigeria, France and Tunisia.

Following the purchase of the rigs of an American drilling company in Libya late in 1965, Forex had abnormal initial start-up costs in that country and also faced a decline in drilling. By the end of the year, however, three drilling rigs were under contract in Libya, so that 1967 should show increased revenues and profits there.

Neptune, the 50 per cent-owned offshore drilling subsidiary of Forex, has one platform drilling in the North Sea and another in the Bay of Biscay, off the western coast of France. One offshore unit, Neptune III, sank off the West Africa coast in February. It was fully insured.

Neptune operates three tenders owned by the Arabian Drilling Company—Forex owns 25 per cent of its stock—and now drilling in the Persian Gulf. In addition, Forex in cooperation with another French drilling company has a three-year contract to operate the fixed platform rig to develop the large Shell-Esso gas discovery in the North Sea off the British coast.

Revenues and net in 1966 were equivalent to the prior year. They should improve moderately in 1967.

After an additional purchase of Forex common stock, our ownership in this company will be 60 per cent.

Dowell Schlumberger

This company, owned equally by Schlumberger and Dow Chemical Company, performs a variety of services—cementing, acidizing, fracturing and other well services—for the oil industry outside North America. Operating revenues were higher last year than in 1965, continuing the growth trend the company has experienced since it was formed seven years ago.

DS operations increased substantially in Nigeria and Argentina and improved in Trinidad and France. Activity in Libya declined as drilling was significantly curtailed. Venezuela and Algeria had slightly lower revenues.

The company started operations in Brazil, Kuwait and Angola during the year, and they should be profitable in 1967. Directional drilling and fishing services will be expanded in the North Sea and Nigeria in 1967, and will contribute new revenues. Continued growth of business is expected in Argentina and Nigeria. Operations in Libya and Algeria should improve, with increased drilling and work-over activity. DS expects to show 1967 increases in operating revenue and net.

Neptune's drilling platform "Gascogne," operating in the Bay of Biscay. Another Neptune platform is drilling in the North Sea, off the British Coast.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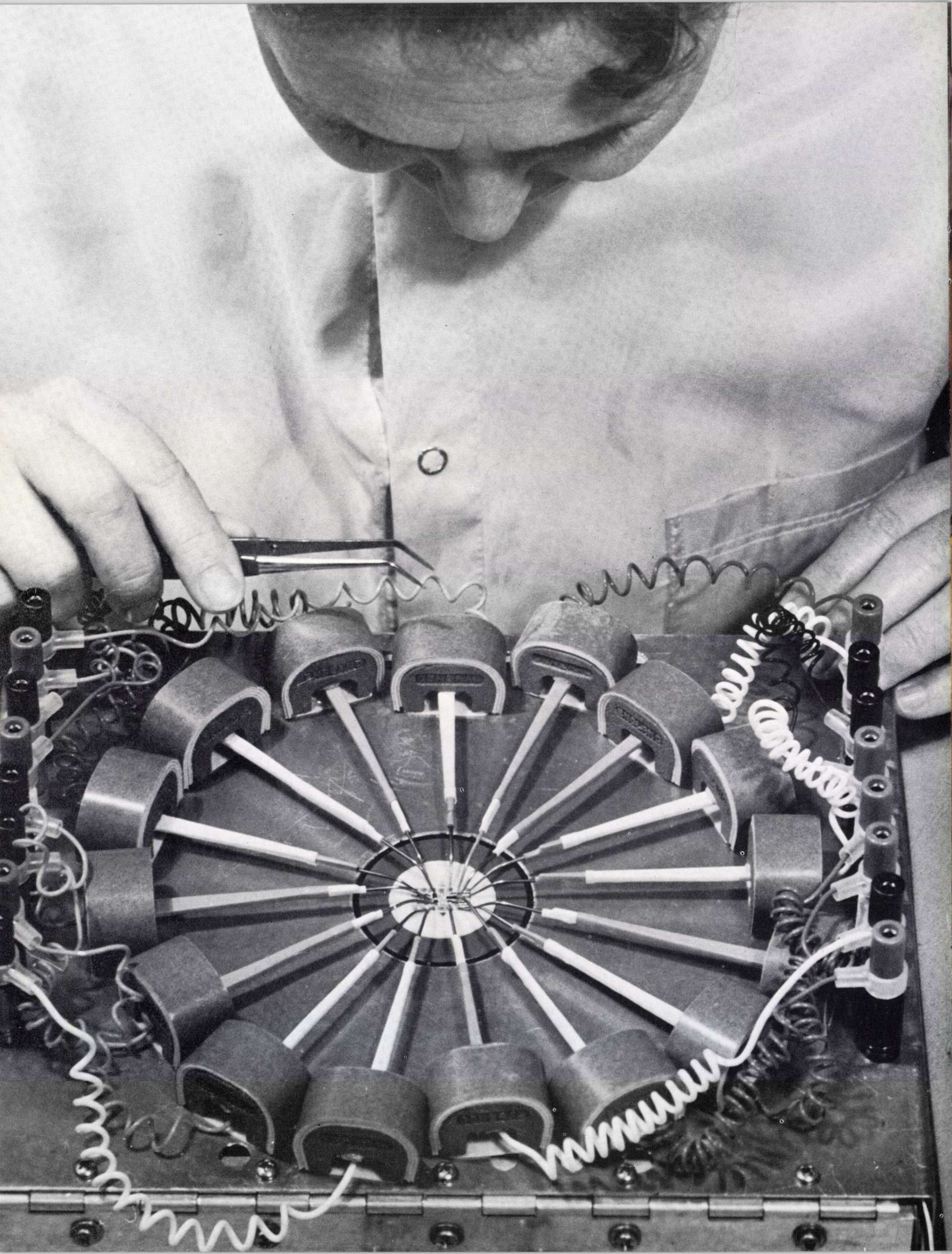
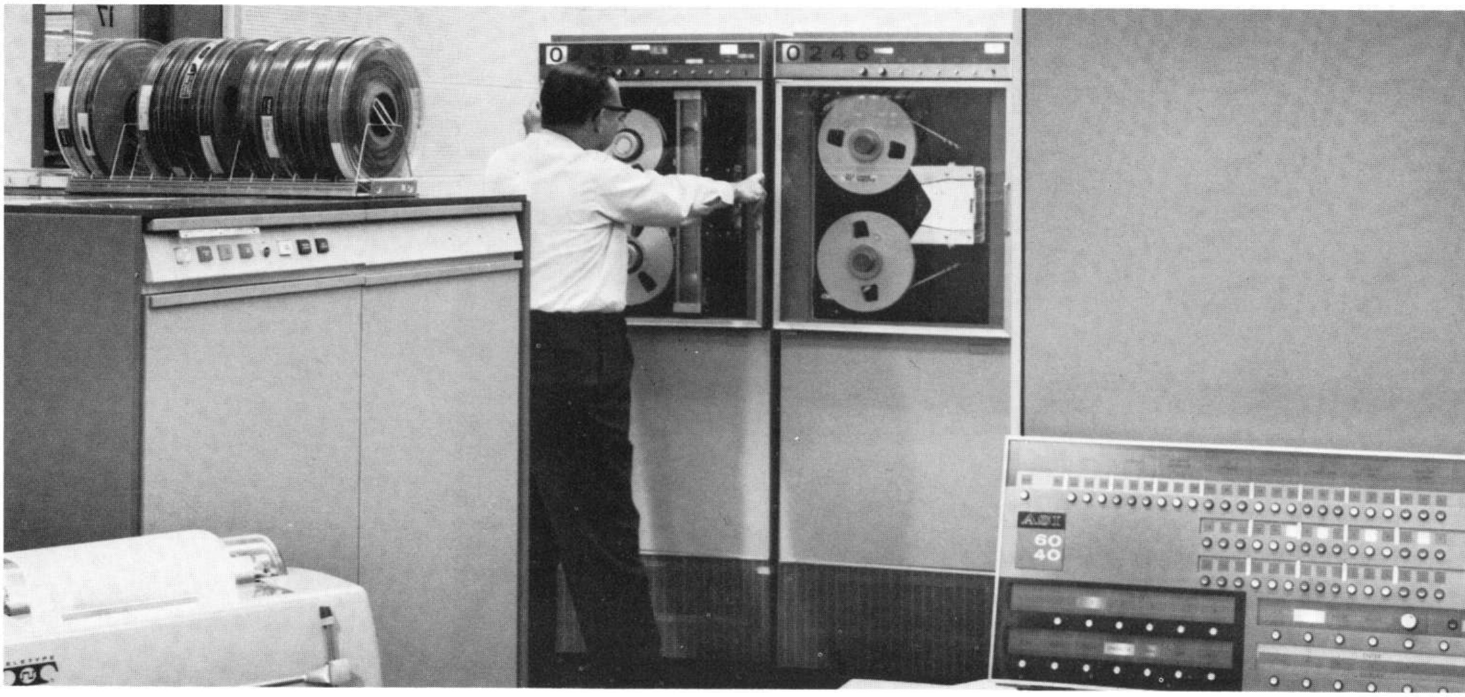




An EMR ADVANCE SERIES computer serves oil exploration at the Sun Oil Company, Beaumont, Texas. Modern oil exploration requires ever more sophisticated analysis. Geophysists are making increased use of data processing in the interpretation of the records obtained by seismic crews in the field.

Electronics and Instrumentation

Schlumberger is a worldwide manufacturer of electronic instruments—instruments to sense, transmit and process signals, to display, record, analyze and control, in other words to perform all the tasks in modern measurement systems. There are five principal manufacturing companies in Schlumberger electronics—EMR, Weston, Solartron, SIS and Heath—with marketing organizations throughout the free world.

Electro-Mechanical Research

EMR is in advanced electronics and represents an important investment in technology for the long-range benefit of its customers and of other Schlumberger activities, whether in logging oil wells or making instruments. The major customers are government organizations interested in space and other scientific programs.

THE TELEMETRY DIVISION in Sarasota, Florida, produces a broad range of equipment for data acquisition, handling and communications—primarily for the aerospace and aircraft industry. Product sales remained firm, but systems sales declined with the ups and downs of government procurement. One of the major contracts for Project Gemini, and the Worldwide Tracking Network were completed; other programs were phased out or delayed by stretch-outs in U. S. space programs.

Increasing emphasis is now being placed on ground digital equipment, one of the fastest growing and largest market areas in mass data acquisition and processing. EMR in late 1966 won the contract to build a fully automated system to telemeter and process flight-test data for Lockheed's forthcoming C-5A military jet transport (which will carry 600 men and their weapons across an ocean). This system combines EMR-Sarasota telemetry

EMR's Telemetry Division, Sarasota, Fla. At the center of the circle is a microcircuit operational amplifier, part of EMR equipment to process and transmit information over great distances. This amplifier, little more than half an inch square, contains 11 micro-transistors and other components which are printed on and fused in place by heat. Sixteen test-leads check that all components meet specifications.

The tiny speck at the junction of the fine wires is a Thermistor—sensitive element in Weston-Rotek's AC to DC converter used for the precise measurement of alternating current. Alternating current cannot be measured directly with precision. It is necessary to convert the AC to an equivalent direct current which can be precisely measured. The Thermistor accomplishes this conversion by a change in resistance due to the heating effect of the alternating current. This resistance change, in turn, controls a direct current.

with the EMR ADVANCE 6040 computer to analyze the data and, among other tasks, make instantaneous margin-of-safety calculations for relay to the test pilot. EMR won the contract because of its ability to integrate telemetry and real-time (instantaneous) computer analysis.

The sales backlog at the beginning of 1967 was 36% higher than at the beginning of 1966. Indications are that this division should return to a profitable basis in 1967.

THE COMPUTER DIVISION in Minneapolis builds medium-size computers to solve scientific, engineering and industrial control problems. These computers are not designed for the business computer market. They serve a growing market of their own. EMR ADVANCE series 6000 computers are used in nuclear research laboratories, seismic or oil-seeking industry, defense and space organizations and industrial laboratories, and for digital computation in other Schlumberger companies. ADVANCE series 24-bit computers sell in a price range of from $150,000 to $500,000, depending on auxiliary equipment and soft-ware required.

During 1966 we shipped 15 computers. We plan to ship 30 in 1967; we had 18 on order as of January 1 for 1967 delivery. Three factors contributed to an overall loss in 1966: 1) high research and engineering costs; 2) the initial cost of expert, special-application "software" (the tapes and cards that tell the computer what to do); 3) about one half of computer production was leased and half was sold. Increased backlog and more efficient production indicate that losses will be reduced in 1967.

THE PHOTOELECTRIC DIVISION in Princeton, N. J., is the leader in designing and making high-quality photomultiplier tubes. The tubes detect minute amounts of light and convert it to usable elecric signals. They measure nuclear particles, for example, as these strike a scintillating surface (the tube was originally designed by our Ridgefield laboratory for this use in our oil well logging). They measure starlight reaching a space satellite. Lunar Orbiter II, the spacecraft that in November took spectacular closeups of the moon, used an EMR tube to help convert the moon's image to TV signals.

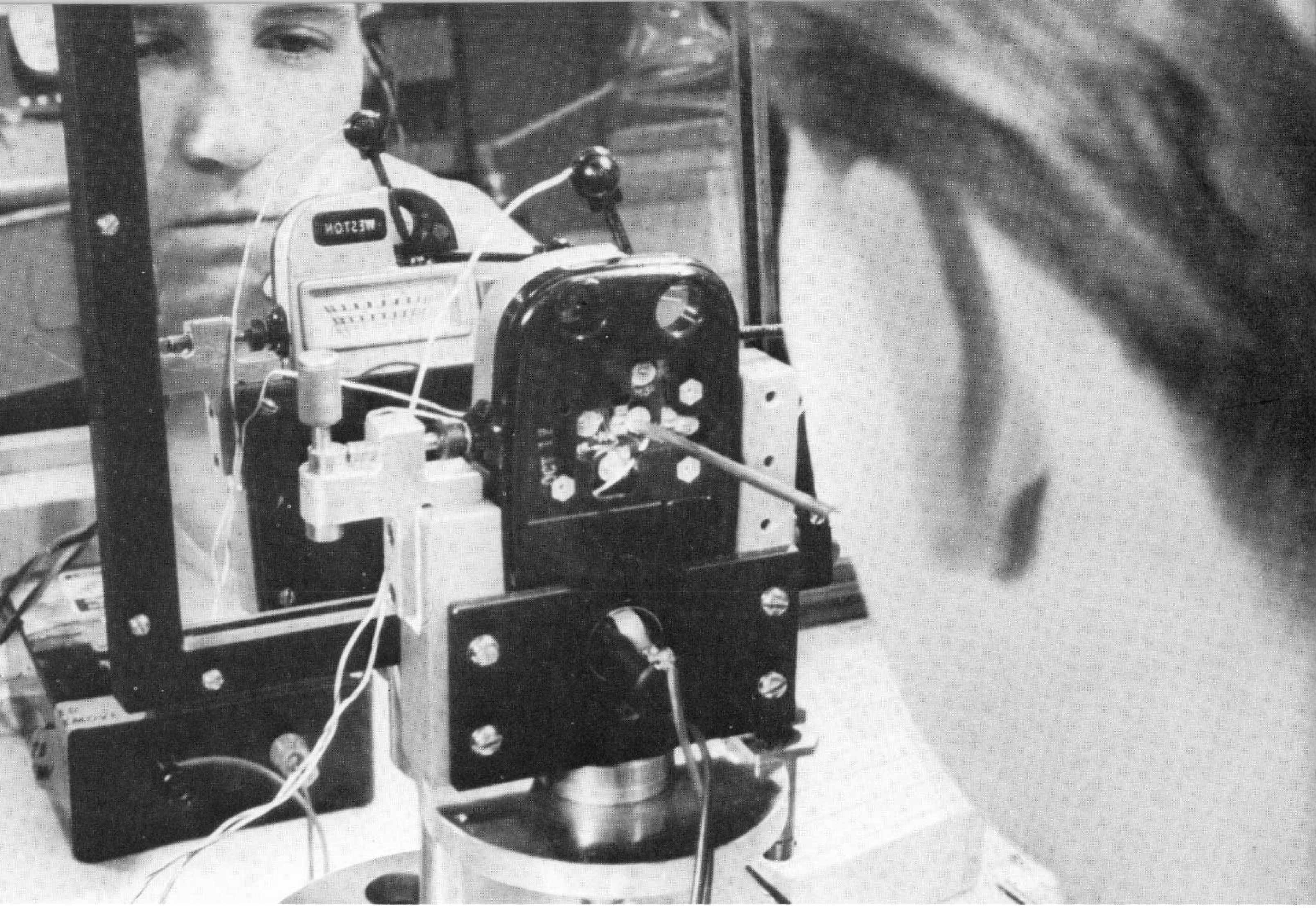
At the AEROSPACE SCIENCES DIVISION, College Park, Md., contract research and engineering services increased. NASA's Goddard Space Flight Center awarded EMR follow-on contracts to fabricate and test three more IMP (Inter-planetary Monitoring Platform) satellites.

The MAGNETICS DIVISION, Van Nuys, Calif., designs and makes high-performance magnetic filters for data-transmission equipment.

Weston Instruments

Weston makes meters as well as other electrical measuring instruments and industrial controls of many kinds. Its products range from photographers' light meters to instrument arrays on aircraft and manned spacecraft to a complete line of panel and portable meters and meter relays, potentiometers, industrial gauges, bimetal and electrical resistance thermometers, electro-mechanical and electro-hydraulic controls.

Weston's business is growing. Sales gains were broad in all divisions in 1966, with corresponding gains in profits. Modernization and efficiency programs were aggressively continued, with capital expenditures for buildings and equipment of $3.7 million, up from $1.9 million in 1965. Research and engineering outlay was increased from $1.7 to $2.6 million.



The new model Weston photographic exposure meter, Ranger 9—Weston's most familiar consumer product—is calibrated by a Weston-Newark technician. He views the scale image in a mirror, while making adjustments at the back of the meter.

At the NEWARK DIVISION, there were significant sales increases in Weston's basic line of electrical measuring instruments—panel meters, portable meters, military and commercial aviation instruments. A flat-scale panel meter was introduced; a light-projected pointer image replaces the conventional mechanical pointer to eliminate parallax error and provide quicker response. Also introduced was a solid-state relay with broad operating ranges. At year-end, new plant space of 57,000 square feet was completed to replace older facilities.

At WESTON-ARCHBALD, Archbald, Pa., sales of precision potentiometers responded to computer-makers' continued heavy demand. Sales of industrial gauges included one of the largest X-ray gauges ever made. It was shipped to Bethlehem Steel for eventual application in closed-loop computer control of rolling mill operations. Contract operating revenues for precision machining and electronic sub-assembly increased.

At WESTON-TRANSICOIL, Worcester, Pa., sales of electro-mechanical rotating components (the division's main product, including miniature servo motors, synchros and resolvers) increased substantially in response to stepped-up military spending.

At WESTON-POUGHKEEPSIE, Poughkeepsie, N. Y.—principally performing electronic assembly for industry and government—sales increased.

WESTON-BOONSHAFT & FUCHS, Hatboro, Pa., makes hydraulic shaking machines and other equipment for environmental testing, simulation and systems analysis, including dynamic analysis (analyzing moving, operating systems). Dynamic analysis activities were expanded. Transfer function analyzer sales improved.

Early in 1967, WESTON-ROTEK will occupy a new plant in Lexington, Mass., with 30,000 square feet of office, laboratory, and assembly space. Weston-Rotek makes high precision electronic standards, calibrating equipment and test instrumentation.

WESTON-GARWIN CARRUTH: To enter another growth market—general aviation instruments—Weston on Oct. 1 acquired Carruth Laboratories, Inc., Wichita, Kan. Carruth supplies control panel and flight instrumentation to business and private aircraft makers. Its strength complements the commercial and military instrumentation manufactured at Newark.

Solartron

Solartron is a manufacturer of modern electronic instrumentation for measurement, analysis and control, with headquarters at Farnborough, England. Sales increased substantially, and operations were profitable.

Among Solartron's products are:

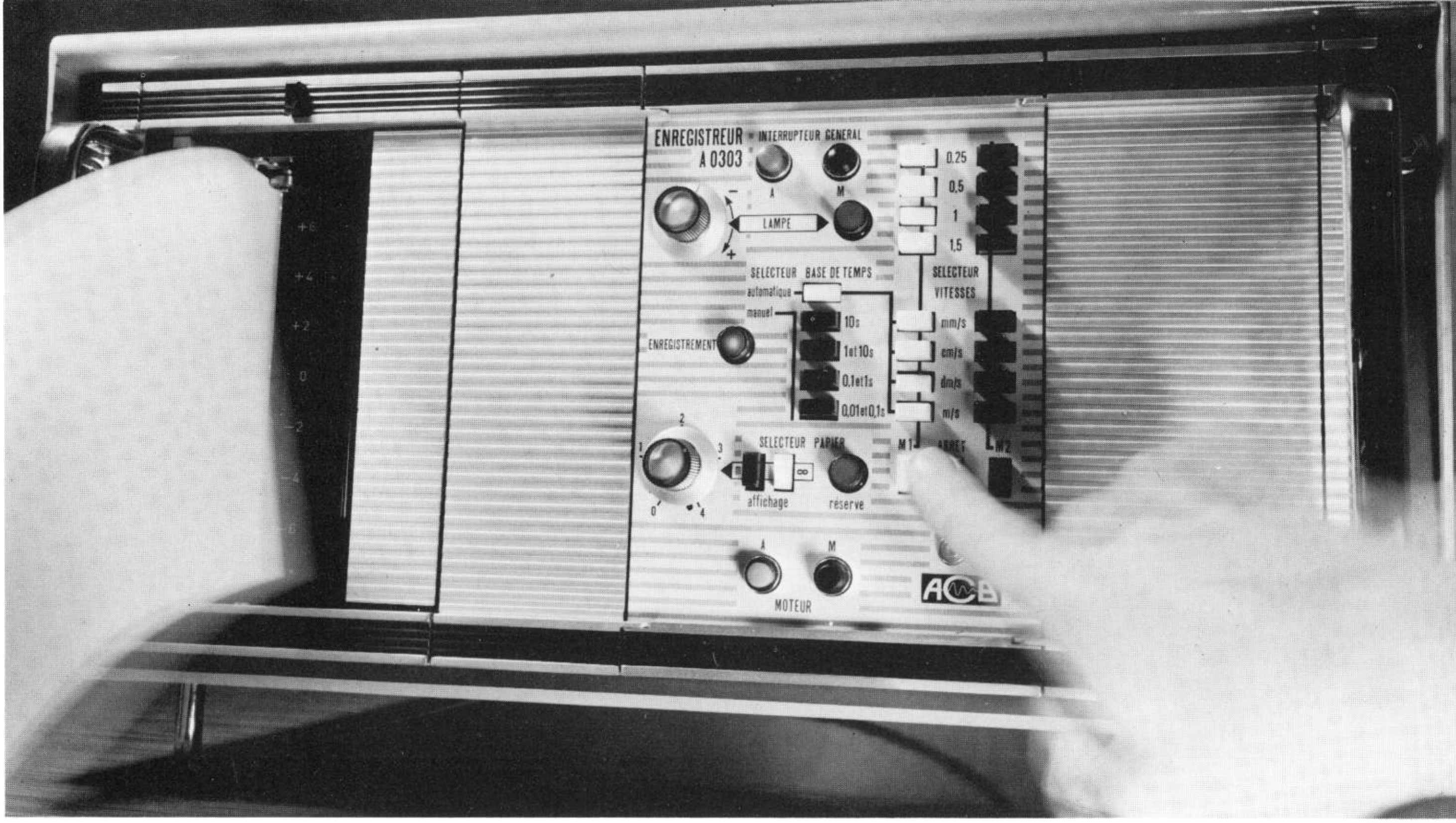
- Data loggers. They are used in a variety of research and industrial applications to measure, monitor and record many different channels of information in rapid sequence—as, for example, where the electrical signals from many polarimeters are automatically converted to digits and recorded for later analysis of solar energy; or where a Solartron 150-channel data logger is used in conjunction with a gas chromatograph to measure and record chemical reactions in a 1500°C furnace.
- Digital voltmeters. Sales increased substantially in 1966. A 1967 development program will add four new models to serve a broad market from relatively simple products to comprehensive state-of-the-art equipment.
- Oscilloscopes for laboratories, computer installations and industry. The British Post Office has standardized procurement on Solartron's CD 1400 for use with automatic telephone exchanges; the British Army has standardized on the same model for training.
- Dynamic analysis equipment. Introduced in 1966 for full sales efforts in 1967 were a new Digital Transfer Function Analyzer and a Precision Random Signal Generator. Both are unique state-of-the-art products with specialized applications in the area of dynamic systems analysis—as, for example, in the response testing of aircraft control surfaces and systems.
- Analog computers, where development was completed on the HS7 Series, a family of compatible "hybrid" computers with four basic units offering from 24 to 144 operational amplifiers.
- Radar, sonar and tactical simulators for aviation, marine and military training. Solartron simulators are used in Europe, Africa and Asia. Sales of Solartron Video Maps (for air traffic control) increased; all principal United Kingdom airports now use this system.

Société d'Instrumentation Schlumberger (SIS)

Several small French instrument companies which Schlumberger had acquired were merged into SIS. We completed this merger in 1966 by acquiring the remaining minority interest in Tolana (a manufacturer of magnetic tape recording equipment) and in Rochar Electronique.

Manufacturing costs are still unsatisfactory, and 1966 operations resulted in a significant loss. Research and engineering expenditures were increased, and concentrated on existing products to improve performance and quality. Substantial capital expenditures were made for new facilities and equipment.

This group is still not the integrated, efficient organi-



An SIS general purpose recorder, for use in industrial process control and in medical, university and commercial laboratories. It can handle as many as 20 different channels of data and gives immediate visual graphic read-out.

zation we want, but we are making progress. A single staff now provides centralized management control and supporting services for the major operating divisions:

THE APPLIED PHYSICS DIVISION makes laboratory and industrial transducers, photographic recorders and oscillographs. Sales continued to improve.

THE TOLANA DIVISION makes high quality magnetic tape equipment for data recording. Advanced designs for the major French-British Concord supersonic aircraft project will improve our position in this field.

THE ROCHAR DIVISION specializes in digital measurements, with a highly-advanced line of digital counters, chronometers and digital voltmeters. Most current development effort is directed at flow-metering—precision measurement of liquid flow—a large market area.

THE INDUSTRIAL CONTROL DIVISION makes a broad range of meters, meter relays, industrial recorders; temperature, pressure, gas analysis instruments; and other industrial control equipment. Production difficulties retarded 1966 sales.

THE ELECTRONICS AND COMPONENT DIVISION makes studio broadcasting and recording equipment, potentiometers, transformers and circuit components. Studio equipment sales were satisfactory, and a complete range of transistorized broadcasting equipment has been introduced.

Heath

The Heath Company, Benton Harbor, Mich., makes the well-known Heathkits: color TV sets, stereo hi-fi, amateur radio, citizens' band radio, marine equipment, electronic musical instruments, all in easy-to-build kits with simplified, non-technical instruction manuals.

Color TV kit business is a current growth area; 1966 sales were strong, limited only by component supply problems which eased somewhat in the last quarter. Introduced in 1966 was a 12-inch solid-state portable black-and-white TV kit with integrated circuits for simplified assembly; it is designed to meet the growing demand for a "second TV." Other major new home entertainment products were a de luxe solid-state stereo receiver, a professional-quality tape recorder kit and a line of guitar kits with electronic amplifiers and speaker systems.

A Solartron Video Map automatically displays for air traffic controllers the position of all aircraft in the air within a 400 nautical mile radius as well as certain geographic landmarks. Eighty-five of these radar-display instruments are now in use at airports and air defense centers in Great Britain and Europe.

Even a high school boy can assemble a Heath "295" color TV set. This is one of many Heath "make it yourself" products which enables anyone to assemble high quality and moderate cost equipment. Technical knowhow gained in building a Heathkit is helpful for later maintenance.

In amateur radio, Heath's single-sideband equipment won growing acceptance. A 1965 sales decline in citizens' band radio equipment was reversed with a new solid-state transceiver. Marine equipment sales declined in 1966. Heath has begun a design program for low-cost VHF-FM marine radio to participate in this new and growing communication market.

Heath is also in the fast-growing educational market. It makes laboratory and test instruments and kits for industry, students and scientists. With a Heathkit, a science student can set up his own experiments and learn electronics while doing it. Educational market products showed large sales gains. Many of these economical products are also enjoying wide acceptance in industry. Intensive efforts are now under way to develop a digital electronics training system.

Direct mail sales increased and continued to account for the major part of Heath's business. Heathkit Electronic Center retail store sales also climbed, and new centers were opened in Philadelphia, Toronto and Quebec, bringing the total of retail stores to eleven. Export and domestic sales by Heath's Canadian, British and German subsidiaries increased moderately.

Heath achieved excellent 1966 results, with both sales and profits increasing.

Furniture Divisions

The two furniture divisions—Daystrom Furniture in South Boston, Va., and Virtue Bros. Manufacturing Co. in Compton, Calif.,—manufacture furniture for household and institutional use. Products include dinette tables and chairs, institutional tables and chairs and bedroom furniture.

Daystrom's sales increased 10 per cent in 1966 with a corresponding increase in profit. A 43,440 square feet addition to the plant was completed early in the summer.

Virtue's sales increased 13 per cent over the prior year. While the company operated at a loss during the first months of the year, results for the latter part of the year were greatly improved. It is anticipated that sales will continue to increase in 1967, with profitable operations for the year.

Management

To strengthen the Corporation's organization, the Board of Directors elected:

On September 15, 1966,
John E. Rhodes, Vice President-Finance. Mr. Rhodes was previously Controller of Schlumberger Limited.

David W. Chappuis, Controller. Mr. Chappuis was formerly Controller of Celanese Corporation.

On February 23, 1967, Dr. N. A. Schuster, Vice President-Research and Engineering. Dr. Schuster was formerly Vice President-Technique of Schlumberger Well Services. He will be responsible for the company's oilfield wireline research programs, long range technical planning and the coordination of the engineering programs of Clamart, France and Houston, Texas.

Management appointments at Schlumberger Limited

On April 1, 1966, Charles M. Kirkland, President of Heath Company, was promoted to Marketing Coordinator, Electronics and Instrumentation at Schlumberger Limited headquarters in New York.

On February 16, 1967, Marc Demoustier, recently President of Dowell Schlumberger, was appointed Assistant to the President of Schlumberger Limited. He will be responsible primarily for the liaison with Management of Dowell Schlumberger and Forex.

On March 6, 1967, Denis Tanguy was promoted to Coordinator-Research and Engineering, Electronics and Instrumentation, at Schlumberger Limited headquarters in New York. He was formerly Director of Engineering Development of Schlumberger Well Services.

Management appointments in subsidiaries

On April 1, 1966, David Nurse, previously Executive Vice President, was appointed President of Heath Company.

On February 16, 1967,
Roland Génin was elected President and General Manager of Dowell Schlumberger Corporation by its Board of Directors. He was formerly Executive Vice President of Société de Prospection Electrique Schlumberger and Schlumberger Overseas.

Pierre Majani was appointed President and General Manager of Schlumberger Overseas and Société de Prospection Electrique Schlumberger. He was formerly President of Schlumberger Surenco.

Louis E. Magne was appointed President and General Manager of Schlumberger Surenco. He was formerly Assistant to William J. Gillingham, Executive Vice President of Schlumberger Limited.

Financial Review

Net Income

Net income of $28.1 million in 1966 was the highest in the history of the company. This was equivalent to $3.71 per share compared to $3.52 in 1965, based upon shares outstanding at the close of each period (adjusted for the 3-for-2 stock split in March, 1966).

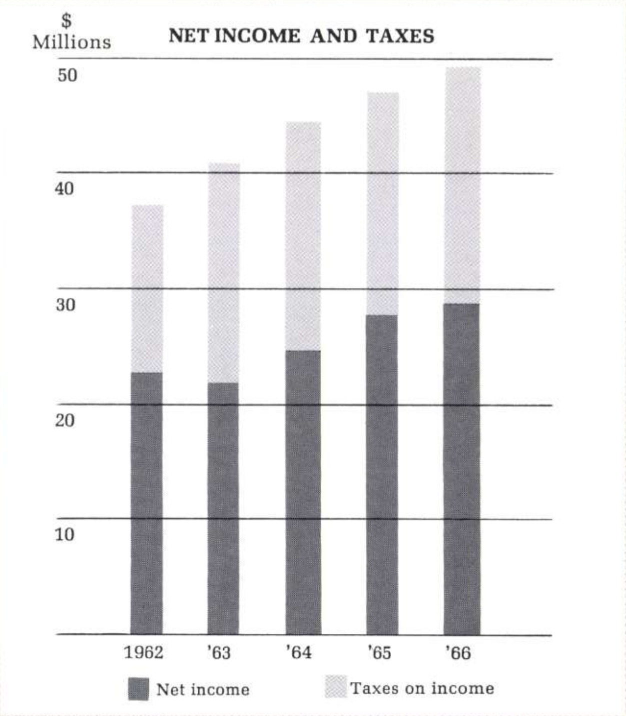
Amortization of intangibles, mainly goodwill, which does not affect cash flow or income taxes, was about $2 million per year in 1966 and 1965, reducing reported net income 27¢ per share in 1966 and 28¢ per share in the previous year.

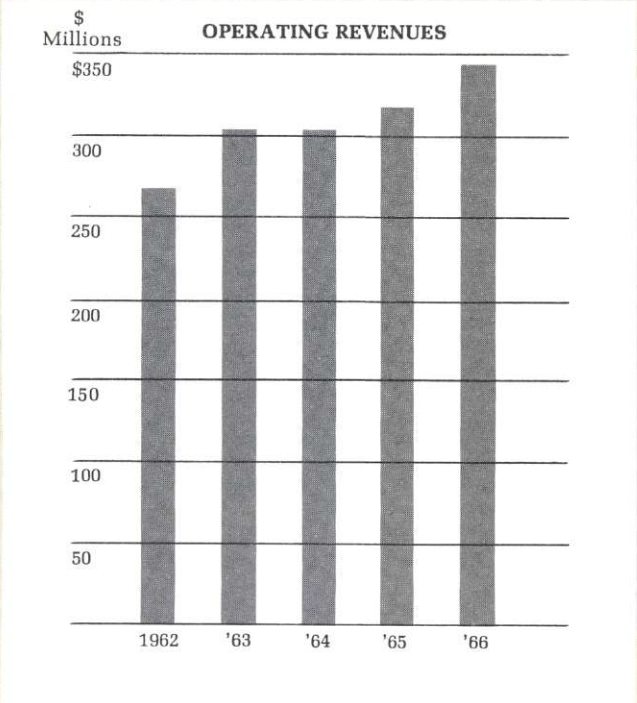
Cash flow—earnings plus depreciation and amortization—amounted to $56 million, equal to $7.31 per share, up from $6.75 per share in 1965. More efficient management of cash improved pre-tax earnings $0.7 million in 1966.

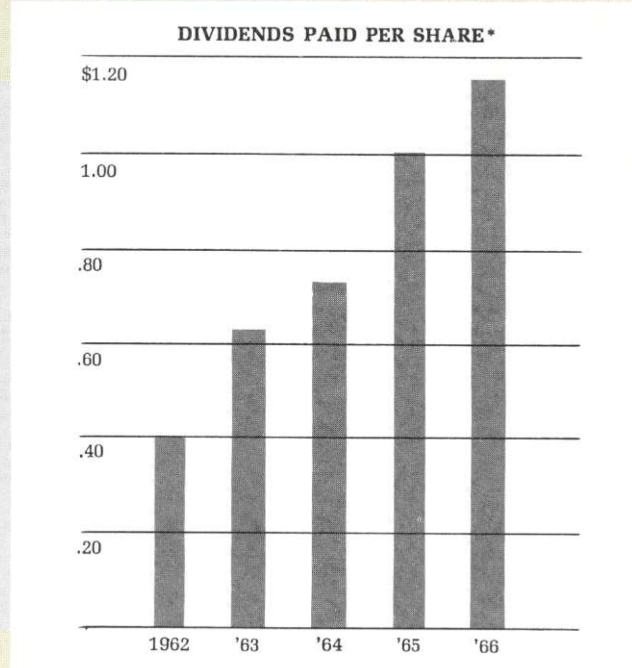
Electronic-instrumentation operating income improved significantly. Weston and Heath continued to show healthy improvement and Solartron was profitable for the first time. These gains, however, were partly offset by continued heavy expenditures for development of the computer business at Electro-Mechanical Research (EMR). At Société d'Instrumentation Schlumberger (SIS) our program for consolidation of activities progressed considerably but is not yet complete and operating results were not satisfactory. Order backlogs of electronic operations are substantially higher than a year ago, particularly at the EMR computer division.

Schlumberger's strong position in oil field services worldwide offset the adverse effect of decreases in well completions in the United States, Venezuela, Libya and Algeria through new services and increased volume in other areas.

Effective January 1, 1966, other income includes our share of undistributed net income of a 50% owned company. The favorable impact of $0.6 million was more than offset by a decrease in tax-free gains on sales of capital assets; a major portion of this was due to an extension of time in connection with the 1964 installment sale of a parcel of land in Orange County, California. Further comments relative to the investment in 50% owned companies and the revision of terms on the sale of land are included in the notes to the financial statements.







*Adjusted for three-for-two stock split in 1966

Operating Revenues

Revenues reached a new high in 1966; this is the first year that more than half of the revenue was generated from product sales, reflecting continued development of electronic companies.

Operating revenues for 1966 by general business categories were as follows:

Oil Field Services and Allied Products	$178 million
Electronic and Instrumentation	145
Furniture	20
	$343 million

Electronic sales of $145 million were $18 million (14%) higher than the previous year; each company showed significant gains with the exception of EMR. Total revenues of oil field and allied operations increased only 3%; the increase is mainly attributable to growth outside the United States. Furniture revenues were up over 10%.

Taxes on Income

Because Schlumberger operates throughout the world in many countries with varying tax rates, the change in the proportion of total net income attributable to each country causes some variation in the effective tax rate from year to year. The effective rate in 1966, however, was about the same as the previous year; improved electronic earnings which benefited from prior years' loss carry-forward, offset various other minor tax increases.

Suspension of the investment tax credit in the United States had little effect on 1966 results and the impact on 1967 will not be material.

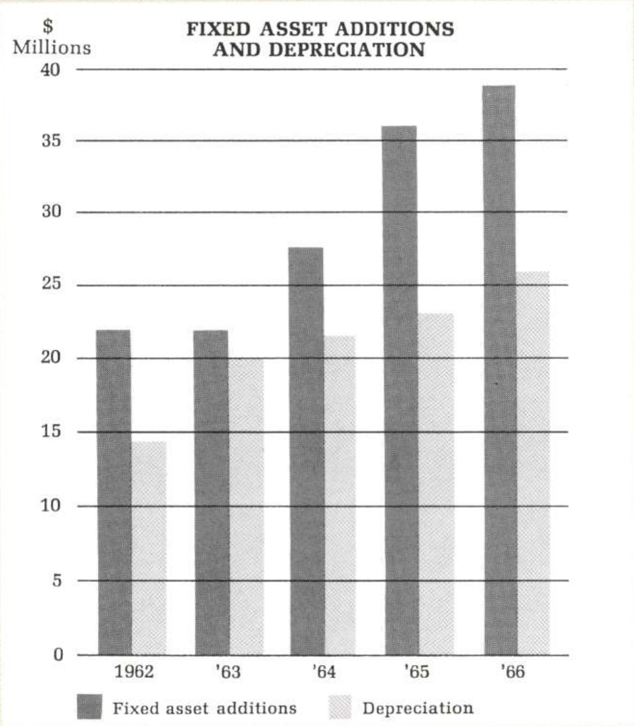
Dividends

The dividend was increased 12.5% to an annual rate of $1.20 per share on shares outstanding after the 3-for-2 stock split in March, 1966. This is the 4th consecutive year in which the dividend rate has been increased. A dividend of 30¢ per share was declared February 23, 1967, payable on April 14, 1967.

Common Stock

In March, 1966, the common stock of the company was split 3-for-2. At the annual general meeting of the stockholders on April 26, 1966, the stockholders approved an increase of authorized capital stock of the company from 10 million to 20 million shares of $1.00 par value.

During the year 114,950 treasury shares were purchased, 16,648 shares were issued in connection with the acquisition of Carruth Laboratories and 1,125 shares



were sold under employee stock option plans. At December 31, 1966, a total of 404,422 shares were held in the treasury. Additional purchases have been made in January and February, 1967 and purchases may continue, in the company's discretion, during the remainder of 1967.

Plant and Equipment

Total expenditures for plant and equipment were $38 million (before retirements of $3 million), slightly higher than in 1965. The 1966 expenditures include $22 million for field technical equipment for oilfield services. Expenditures for manufacturing facilities were $5 million for buildings and $11 million for machinery and equipment, principally for electronic and instrumentation operations.

Depreciation expense for the year was $25.4 million compared to $22.7 million in 1965. It is the company's practice to record depreciation for accounting purposes at accelerated rates applicable for tax purposes, principally under the double declining balance method. At the close of 1966 accumulated depreciation of $144 million was 56% of the original cost of fixed assets.

Acquisitions and Investments

In September, 1966, the company acquired the assets and business of Carruth Laboratories of Dallas, Texas and Wichita, Kansas, a manufacturer of general aviation instruments, in exchange for 16,648 shares of Schlumberger treasury stock valued at approximately $750,000. Total sales of Carruth in 1966 were approximately $4 million; Schlumberger revenues for the year include approximately $1 million.

In February, 1967, the company signed a letter of intent to purchase the assets and business of Plastic Applicators, Inc., a Houston based pipe coating and inspecting company, in exchange for approximately 64,000 shares of Schlumberger treasury stock. This company serves the petroleum, chemical and other industries in the United States; revenues in the 1966 fiscal year were in excess of $6 million.

Also in February, 1967, the Board of Directors approved the acquisition of an additional 15,000 shares of Forex stock in exchange for an equal number of Schlumberger shares. This will increase the company's interest in Forex to 60%. Approval of French exchange control authorities has been requested.

Consolidated Statement of Income

	Year Ended December 31	
	1966	1965
	(Stated in thousands)	
Operating Revenues	$343,136	$318,106
Operating Expenses		
Cost of sales and services	225,748	206,348
Research and engineering	17,240	16,058
Amortization of intangibles	2,020	2,145
General	52,416	48,873
	297,424	273,424
Operating Income	45,712	44,682
Other Income		
Interest—net	2,491	1,724
Miscellaneous	1,929	2,035
	4,420	3,759
Income before taxes on income	50,132	48,441
Provision for Taxes on Income	21,226	20,561
Income before minority interest	28,906	27,880
Minority interest in net income of subsidiaries	757	793
Net Income	$ 28,149	$ 27,087
Net Income per Share	$ 3.71	$ 3.52

Expenses include $25,394,000 and $22,692,000 depreciation of fixed assets.

See notes to financial statements

Consolidated Balance Sheet

ASSETS	*December 31* 1966	1965
	(Stated in thousands)	
Current Assets		
Cash	$ 11,473	$ 19,425
Time deposits	24,000	15,800
Marketable securities, at cost (approximately market)	40,720	52,897
Receivables, less allowances for doubtful accounts	74,337	67,316
Inventories, at cost or less	74,548	61,657
Other current assets	2,084	1,800
	227,162	218,895
Investments and Long-Term Receivables	15,034	15,557*
Fixed Assets		
Plant and equipment, at cost	258,055	235,401
Less accumulated depreciation	144,147	131,589
	113,908	103,812
Intangible Assets, less amortization	11,504	12,479
Other Assets	4,072	3,647
	$371,680	$354,390

LIABILITIES AND STOCKHOLDERS' EQUITY	1966	1965
Current Liabilities		
Accounts payable and accrued liabilities	$ 42,115	$ 43,474
Estimated liability for taxes on income	21,992	18,251
Short-term bank loans	10,319	8,826
Dividend payable	2,282	2,053
Portion of long-term debt due within one year	2,306	2,861
	79,014	75,465
Long-Term Debt	11,780	12,389
Other Liabilities	4,774	4,349
Deferred Credit to Income	1,280	1,600
Minority Interest in Subsidiaries	8,080	7,950
	104,928	101,753
Stockholders' Equity		
Common stock—(outstanding 7,595,958 and 7,693,135* shares)	49,850	49,814*
Income retained for use in the business	216,902	202,823*
	266,752	252,637
	$371,680	$354,390

*Restated

See notes to financial statements

Consolidated Statement of Stockholders' Equity for the Year Ended December 31, 1966

	Common stock	Income retained for use in the business	Total equity
		(Stated in thousands)	
Balances, December 31, 1965:			
As previously reported	$35,629	$215,281	$250,910
Adjustment for excess of cost over carrying value of reacquired shares	14,185	(14,185)	
Restatement of investment in 50% owned company from cost to equity		1,727	1,727
Adjusted balances, December 31, 1965	49,814	202,823	252,637
Changes in 1966:			
Cost of 114,950 shares reacquired	(748)	(4,903)	(5,651)
Proceeds from sale or exchange of 17,773 treasury shares	784		784
Net income		28,149	28,149
Dividends declared		(9,167)	(9,167)
Balances, December 31, 1966	$49,850	$216,902	$266,752

Consolidated Statement of Source and Application of Funds

	Year Ended December 31 1966	1965
	(Stated in thousands)	
Source		
Net income	$28,149	$27,087
Depreciation and amortization	27,414	24,837
All other, net	1,809	2,271
	57,372	54,195
Application		
Purchase of fixed assets, less retirements	35,123	33,097
Business acquisitions and investments	2,888	4,339
Treasury stock	4,867	3,107
Dividends declared	9,167	8,222
Reduction of long-term debt	609	252
	52,654	49,017
Net Increase in Working Capital	$ 4,718	$ 5,178

See notes to financial statements

Notes to Financial Statements

Principles of Consolidation

The consolidated financial statements include all majority-owned operating subsidiaries and present the consolidated results of operations and financial position after eliminating intercompany transactions and providing for minority interests. Fixed assets and investments recorded in other currencies have been translated into United States dollars at historical rates and all other items have been translated at current rates.

Long-Term Debt

Long-term debt includes $6.2 million of 5¼% debentures, due in 1980, which were assumed through acquisition in 1962, and $5.6 million of other debts payable by various subsidiaries to banks and insurance companies.

Taxes on Income

Amounts reflected in the balance sheet for taxes on income are considered to be adequate for all taxes applicable to earnings to date. In accordance with past practice, no provision has been made for income taxes which would be payable in the event that undistributed earnings of subsidiaries included in consolidated income retained in the business are remitted to the parent company as dividends. In view of the fact that dividends are generally paid out of current earnings, no such provision is considered necessary.

Stock Options

Options granted to key employees to purchase 234,187 shares of common stock at prices ranging from $27 to $53 per share were outstanding at December 31, 1966. The options granted beginning with 1964 are for five-year periods and are exercisable (at market value at date of grant) for one-fourth of the shares each year after the first year, cumulatively. Those granted prior to 1964 are for ten-year periods and for the most part are exercisable for one-fifth of the shares each year after the first year, cumulatively. At December 31, 1966, options to purchase 173,287 shares were exercisable.

During 1966, options for 4,500 shares were granted, options for 1,125 shares were exercised at prices ranging from $32 to $41 per share and options for 6,900 shares terminated.

Common Stock

Under the accounting policy in effect prior to 1966, the company reduced the carrying value of its common stock by the entire cost of shares reacquired. As of January 1, 1966, this policy was changed so that the carrying value is reduced by only the pro-rata amount applicable to such shares; any excess over this amount is treated as a reduction of income retained for use in the business. This change had no effect on total stockholders' equity; the stated value of common stock was increased $14,185,000 with a corresponding decrease in income retained for use in the business.

At the annual general meeting of the stockholders on April 26, 1966, the stockholders approved an increase of authorized capital stock of the company from 10 million to 20 million shares of $1.00 par value. The 5,333,587 issued shares at December 31, 1965 were increased by a 3-for-2 split of the stock of record March 10, 1966 so that there were 8,000,380 issued shares at December 31, 1966. Of the shares issued, 404,422 and 307,245 shares (after the split) were held in treasury at December 31, 1966 and December 31, 1965, respectively.

Commitments and Contingencies

There were no commitments or contingencies other than in the ordinary course of business, except for several lawsuits which on the basis of presently available information are not expected to result in any significant liability.

Supplementary Information

Marketable securities comprise mainly United States dollar securities of the International Bank for Reconstruction and Development and of the governments of the United States and other countries.

Inventories are stated primarily at moving average or standard cost, less allowance for obsolescence. They comprise $23.0 million of operating materials and supplies for oilfield services and $51.5 million applicable to manufacture of electronic equipment and other products.

Investments include $8.5 million, representing a 50% interest in Dowell Schlumberger. Effective January 1, 1966, Schlumberger adopted the policy of stating this item at the amount of its equity in the underlying net assets and reporting as income its share of profit when earned. Accordingly, the amount at which the investment was stated on the balance sheet at December 31, 1965 was increased $1.7 million, representing Schlumberger's equity in undistributed earnings prior to that date; a corresponding credit was made to income retained for use in the business. The effect on net income for the year 1966 was not material. The other investments are stated at cost.

Intangible assets represent largely the excess of investments in consolidated subsidiaries over related tangible assets and in the main are being amortized over ten-year periods.

Deferred credit to income of $1,280,000 represents a portion of the gain on installment sale of land in 1964. In 1966, the terms of payment were renegotiated so that collection of the remaining unpaid balance and related credits to income are to be spread equally over the five-year period, 1966 through 1970.

The company and its subsidiaries have several pension and other deferred benefit plans covering substantially all of their employees, including certain employees in foreign countries. Total expense of such plans during 1966 amounted to $6.7 million. Pension plans are fully funded with respect to past as well as current services.

PRICE WATERHOUSE & CO.

60 BROAD STREET
NEW YORK 10004

February 23, 1967

To the Board of Directors of
Schlumberger Limited:

In our opinion, the accompanying consolidated balance sheet and the related consolidated statements of income and stockholders' equity and the consolidated statement of source and application of funds present fairly the financial position of Schlumberger Limited and its subsidiaries at December 31, 1966, the results of their operations and the supplementary information on funds for the year, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year. Our examination of these statements was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

Price Waterhouse & Co.

Five-Year Financial Summary

	1966	1965	1964	1963	1962
			(Stated in millions)		
for the year—					
Operating revenues	$343.1	$318.1	$302.4	$303.0	$266.5
Research and engineering	17.2	16.1	13.6	13.8	14.2
Operating income	45.7	44.7	43.1	40.8	35.7
Income before taxes	50.1	48.4	45.4	42.3	37.7
Taxes on income	21.2	20.6	20.3	19.8	15.8
Net income	28.1	27.1	24.6	21.8	22.2
Amortization of intangible assets	2.0	2.1	2.0	1.8	1.3
Depreciation of fixed assets	25.4	22.7	21.1	20.1	14.5
Plant and equipment additions	38.5	36.1	27.7	21.7	22.0
at December 31—					
Cash, time deposits, and marketable securities	76.2	88.1	87.2	89.8	69.9
Working capital	148.1	143.4	138.3	141.1	126.0
Current ratio	2.9	2.9	3.0	3.1	3.5
Plant and equipment—					
Land	6.1	5.5	4.9	5.0	5.4
Buildings and improvements	59.1	55.5	51.4	48.5	46.2
Oilfield technical equipment	133.5	120.1	101.0	91.3	57.9
Other equipment	59.4	54.3	51.5	46.3	43.1
Gross book value	258.1	235.4	208.8	191.1	152.6
Accumulated depreciation	144.2	131.6	120.4	107.7	77.9
Net book value of plant and equipment	113.9	103.8	88.4	83.4	74.7
Long-term debt	11.8	12.4	12.6	14.7	17.6
Stockholders' equity	266.8	252.6	234.3	225.8	211.3
Number of shares outstanding* (in thousands)	7,596	7,693	7,726	7,955	7,991
Net income per share*	$3.71	$3.52	$3.18	$2.73	$2.78
Dividends paid per share*	$1.17	$1.00	$0.73	$0.67	$0.40

*Adjusted for three-for-two stock split in March, 1966.

Schlumberger Limited

Directors

H. G. Doll

R. G. Cowan
Chairman, National Newark & Essex Bank

W. J. Gillingham

J. C. Hutcheson, III
Partner, Baker, Botts, Shepherd & Coates

P. A. Lepercq*°
President, Lepercq, de Neuflize & Co.

C. S. Lutkins°
Senior Partner, R. W. Pressprich & Co.

A. Maratier
President, Forex

J. de Menil*

C. C. Parlin
Partner, Shearman & Sterling

J. Riboud*°

Mrs. Schlumberger Primat

R. Seydoux

A. Vennema*

E. M. Voorhees°

*Member Executive Committee
°Member Finance Committee

Directors Emeritus

M. Schlumberger

P. Schlumberger

Officers

J. Riboud
President and Chief Executive Officer

H. G. Doll
Chairman of the Board

A. Vennema
Executive Vice President

W. J. Gillingham
Executive Vice President

J. de Menil
Chairman of the Executive Committee

P. A. Lepercq
Chairman of the Finance Committee

J. E. Rhodes
Vice President-Finance

E. F. Stratton
Vice President

N. A. Schuster
Vice President

E. N. West
Secretary and General Counsel

D. W. Chappuis
Controller

W. Niles
Treasurer

Stock Transfer Offices

First National City Bank, New York City
Bank of the Southwest, Houston, Texas

Registrars

Morgan Guaranty Trust Company of New York
First City National Bank, Houston, Texas

Schlumberger Limited
277 Park Avenue, New York, N. Y. 10017