Coach Bud Wilkinson of the University of Oklahoma flashes his famous winning smile for Resourceful Oklahoma's October cover. Wilkinson appears to be well on the way to one of the best football years at OU. The sketch was done by Russell Pearson, artist for the planning board. Reprints may be obtained by writing to "Publicity Division, Oklahoma Planning and Resources Board, Room 533, State Capitol." The sketch is first in a series of covers to be done on personalities in the state.

Silver Dollars Mark Payroll

Clinking silver dollars still are numerous in Beggs, Oklahoma, following an all-silver payroll for employees of the Oklahoma Leather Goods Company.

The 42 employees of the company, whose annual payroll is about $50,000, were paid in silver to acquaint Beggs' residents with the importance of "new money," said Larry Clements, 28-year-old head of the leather goods firm.

The company makes hand-tooled leather purses, billfolds and other items, and distributes men's belts and some Indian jewelry.

Before Oklahoma Leather Goods moved to town, Beggs was primarily an agricultural community. The plan was established in March, 1953, and the monthly payroll has increased from $1,000 to an average of about $4,500, said Clements.

Five persons were employed when the plant opened. Now there are 17 full-time and 25 part-time workers. Monthly gross sales last year averaged about $2,500 while gross sales this year are estimated at about $120,000.

The Man Behind the Sooners

Bud Wilkinson is beginning his eighth year as head coach and athletic director at the University of Oklahoma and for once the big coach isn't crying the blues. The Sooners are a good squad this year and, although Bud's remarks still are edgy, they're not the usual black blurs of impending doom.

Blue-eyed Bud has an exceptional record at OU. He has led Big Red to two Sugar Bowl championships and one Orange Bowl title (overthrowing Maryland, the nation's number one team in 1953). The team holds the national record of modern times, 31 consecutive victories and they are the only team in the country to finish in the AP Poll's top ten the past six years in a row.

Honors Lavished

Oklahoma players have won the Heisman Memorial award, two Outland awards, one Lineman of the Year award and have landed 16 players on different first All-American teams. Bud himself has won two coach of the year titles. In 1949 he was voted the Outstanding Football Coaches Association award and in 1950 the Associated Press award.

During Bud's seven seasons at OU, Oklahoma teams have won the last six Big Seven Conference championships and tied for the league top in 1947, his first year. His Sooners teams have won 37 Big Seven games, tied 2 and lost none. And Oklahoma has scored in all 74 games in which Bud has been head coach.

Wilkinson appeared on an Oklahoma gridiron for the first time in 1946 when he became backfield coach under Jim Tatum. When Tatum resigned after that year to go to Maryland, Wilkinson stepped into the top spot.

He has coached football 16 years, the first nine as an assistant at Syracuse, Minnesota and Iowa Pre-Flight. During World War II he was a hangar deck officer on the aircraft carrier Enterprise and saw action in the battles of Iwo Jima, Tokyo, Kushi and Okinawa.

At the University of Minnesota, Bud played guard in 1934 and '35, and was a blocking back and signal-caller in '36. Minnesota took national championships Bud's sophomore and senior seasons. He also captained the Minnesota golf team and played goalie on the hockey team.

English Grad

Receiving a B.A. from Minnesota, Wilkinson later graduated from Syracuse with an M.A. in English. He went to prep school at the Shattuck Military Academy at Faribault, Minn.

The 6-foot 2-inch Sooners coach has lectured at coaching schools throughout the nation and has addressed highschool graduation classes and Sooner alumni groups all over Oklahoma and northwest Texas.

He is 38 years old, married and has two sons, Pat 13 and Jay 11.

The tall man pacing the sidelines of Owen's field, hands deep in overcoat pockets and red tie flying, is a familiar—and popular—sight to Sooner fans.

Stigler Holds Irrigation Talks

Interest in irrigation has moved eastward in Oklahoma as far as Haskell county where a two-day irrigation short course was held in September.

More than 90 persons attended a program at Stigler sponsored by the Cookson Hills and Kiamichi electric cooperatives. Visitors heard talks on potential irrigation development, availability of water supplies, water rights, irrigation research, and other problems facing irrigators in an area that until now has depended entirely upon rainfall.

The two-day session ended with a field tour of irrigated crops near the town of Keota and in the Arkansas River bottom.
Off to Chicago to sign $7 1/2 million worth of bonds to finance Oklahoma's huge recreational development program are John Badger, Altus, a member of the state planning board; Morton Harrison, director of the board; Mrs. Lynnie Clayton Spahn, assistant attorney general, and Mrs. Gladys Warren, state auditor. Another member of the group, not pictured here, was Scott Stine, assistant state treasurer. The bonds will mean new lodges at Lake Texoma, Sequoyah and Quartz Mountain State Parks as well as sizeable expansion at the other 11 parks.

Rugs Give New Old Look to Homes

Custommade Hummel Maid rugs are apparently an outgrowth of grandma's rag rugs but they have about as much resemblance to them as an F-86 does to the Kittyhawk.

The rugs now are produced by perhaps the only all-woman corporation in Oklahoma, organized expressly to keep the fine quality floor coverings in the state.

Lucile Y. Hummel, whose first rug made 29 years ago is still adding to the appearance of a room somewhere, couldn't make up her mind recently whether to sell her business to an enthusiastic New Yorker who wanted to take it out of Oklahoma. He also planned to braid the rugs by machine rather than by hand as Mrs. Hummel has always done.

The Oklahoma City woman went for advice to Myron Horton at Citizens State bank in Oklahoma City who suggested that she interest people here in the business and keep it at home. Mrs. Hummel discussed the possibilities with Lillian B. Canon at the bank.

Firm Organized

That started the ball rolling and within a short time the two had lined up a group of women to incorporate Hummel Maid, Inc., elected officers and directors and sold all the stock needed for an expansion fund. The firm is capitalized at $50,000.

Now some 20 women are braiding the rugs in their homes and adding to their income as well as increasing output of the rugs. Corporation members also instruct how to make the rugs, and sell necessary equipment.

The rugs are woven of thick Australian wool, half an inch thick and custommade to harmonize with the decorating colors in a room. A 9 x 12 oval rug weighs more than 80 pounds and costs $325.

Rugs Have Long Lives

The rugs are not expensive though, Mrs. Hummel points out, considering their long lives. They are made of braided strips of processed wool sewed together, standing on edge. And they come in all sizes, some of the big ones requiring four men to load and unload them.

Although up to now the business has been small in output, the rugs have gone to practically every state in the union and to Saudi Arabia—renowned for its fine rugs.

Incorporators are Mrs. Hummel, Alma Rayne Akers, Lillian Canon, Marie M. Homburg of Liberty National bank, Sara M. Jackson of Coates-Southwest Abstract Co., Frances Y. Smith, Bertha Howard of Investor's Syndicate, Mary Jane Carpenter, Maxine S. Stinchecum, Anne Goof, oil royalties dealer and Lillie G. Butler of the T. J. Bettis Investment Co.

Hummel Maid rugs were originated by Mrs. Lucile Y. Hummel.
A Family Affair

Four brothers from Minnesota went into business 35 years ago in a small building in downtown Oklahoma City. Their manufacturing equipment consisted of a hand-operated rolling machine that made weather strip, possibly the first machine of its kind in the country.

The brothers now have a modern plant covering 180,000 square feet (enough room for almost four football fields) in the industrial section north of Oklahoma City. And Macklanburg-Duncan Company and its products are known throughout the western hemisphere.

Few homes or buildings in the nation are without at least one product made by the Oklahoma City firm. M-D's seven major items are weather strip, calking compound, glazing compound, molding and trim, house numbers and letters, screen door grilles and sliding door hardware.

When the Macklanburgs first went into business, they had "little more than an idea, a business policy and faith in the future of manufacturing," says L. A. Macklanburg, president and founder. It was L. A. who organized and directed the firm, designed and developed most of the products and the machines with which to produce them.

Each of the brothers concentrated on one facet of the business. R. A. (Bob, Sr.) kept the machinery moving and speeded up production. A. F. set up the books and handled the finances. G. W., now deceased, started as a machine operator and later was in charge of the calking and glazing plant. Alma, a sister, acted as stenographer and billing clerk. She later handled the invoicing and pricing department.

With the Macklanburgs from the first was H. M. Duncan, first salesman and "the man who proved our products would sell," says L. A.

Behind the business was R. L. Macklanburg, father of the clan. His portrait hangs with that of the four sons and Duncan in the panelled conference room.

Although the builders of the business still keep a sharp eye on policy and production, they've turned over much of the actual management to their children. Bob, Jr., son of R. A., is general manager and vice-president. L. A.'s son-in-law, Bill Hulsey, is sales manager and vice-president.

Weekly staff meetings are held in the conference room where department heads, supervisors and foremen—about 30 in all—meet to plan future production and to solve any current problems.

The firm moved from its downtown location in 1925 to North 23rd Street. There they expanded until the plant and buildings covered approximately a square block. Three years ago they moved to their present site.

The new plant is planned for efficiency and neatness "with the idea that neat and pleasant surroundings lead to better work and quality products," says Bob, Jr.

A sample room off the reception lobby shows all M-D's products in display cases and racks as they are shown in retail stores. The company's display department makes up the stock-display cases which are shipped for use to the hardware and lumber dealers throughout the country.

For example, numbers and letters, for use as a name and address sign for mailboxes, lawns, hallways, etc., are packaged in a mailbox. Everything that is needed to make up these signs is contained within the mailbox. Macklanburg makes every thing in the kit—mailbox, wooden name plants, numbers and letters. The complete kit goes to the dealer at no charge for the display itself. That way the dealer has an eye-catching case which both display the products and keeps the necessary stock of merchandise on hand.

Weather strip, one of the company's biggest items, is displayed on small doors and windows that actually open and close. The models are completely weather stripped so the dealer can dem-
The extrusion press processes two-foot long billets of aluminum into strips as long as 760 feet. From the strips are made screen door grilles, ornamental aluminum, moulding and trim, etc.

onstrate the actual installation and application of the various types of weather strip available.

In addition to the displays, M-D works closely with its dealers by furnishing them promotional literature, which the dealer uses in selling the products.

One of the company's newest products is M-D sliding door hardware for interior residential doors. The hardware consists of an extruded aluminum track and cadmium plated hangers with nylon wheels, available in all sizes and thicknesses of doors. Tests conducted at the Macklanburg plant indicate the hardware could be used some 75 years without apparent wear on the wheels or track. Introduced early this year, it already has become one of their larger volume items.

Among manufacturers in the building supply field, M-D is unique in its distribution set-up. Since the war they have not used wholesale distribution. "This way," explains Bill Hulsey, sales manager, "we can give better service and better prices."

Since the end of World War II, Macklanburg business has increased continuously. To keep up with the demand, the Macklanburgs had a machine specially made to step up production of aluminum items. Called an extrusion press, the giant machine processes two-foot long billets of aluminum 5 1/8 inches in diameter into shapes from which are made screen door grilles, ornamental aluminum, shelf brackets, thresholds, sliding door track or one of the 400 different shapes of moulding and trim made by the firm.

The aluminum billet is heated to 1000 degrees, then placed in position. The press can exert some 2,080,000 pounds of pressure to force the billet through a steel cavity die. As the billet passes through, it takes on whatever shape is in the cavity of the die and comes out the other end in long, curling strips or spaghetti-like ropes. The action is similar to toothpaste being spurted from a tube. The two-foot billets are extruded into shapes as long as 760 feet.

Besides the extrusion process, the firm also stamps, punches, rolls, sprays, mixes, rivets, welds, polishes and die casts in the operations necessary to making the diversified line of building specialties M-D manufactures.

A new 25,000 square foot addition to the plant is now being worked out. When completed it will handle an electrolytic process, called aluminizing, that will put a permanent finish or color on aluminum. Equipment is expected to be ready for production by the first of the year.

The weatherstrip business started by the four Macklanburg brothers has come a long way in the past 35 years. Today they employ some 500 people and, as their products are sold nationally, they not only sell Macklanburg-Duncan, but they sell Oklahoma.
Oklahomans were treated to a bigger and better Oklahoma State Fair September 25 through October 2 when the annual Oklahoma City extravaganza opened for eight action-packed days.

The 1954 fair was staged on the multimillion-dollar new state fair plant in northwest Oklahoma City. The modern, new facilities, designed for the utmost in comfort and convenience of fair goers, were rushed to completion for this year's show, C. G. "Pete" Baker, secretary-manager, said.

Highlighting fair attractions was an impressive 45th division Thunderbird review as Secretary of the Army Robert T. Stevens formally returned division colors to the national guard of Oklahoma from service in Korea. The review was staged on opening night.

Topping the full program of entertainment were six nightly appearances of the "Fair Follies of '54" plus a spectacular fireworks display. During the afternoon, fair visitors were treated to six thrill-packed auto racing sessions and the driving antics of Aut Swenson and Trillcade troupe.

As always, state fair sponsors were showing the top livestock, crops and Oklahoma-produced farm items exhibited by 4-H, FFA, amateur and commercial breeders from over the United States.

The exposition was kicked off with a morning downtown parade with the first day designated as Band and 45th Division.
The $750,000 grandstand holds 10,000 persons. The general admission section is provided with redwood seats while the reserved section, with twice the number of seats as in the old grandstand, is equipped with chairs. A tunnel connects the modern concrete stage with underground dressing rooms.

The dairy cattle building is part of the livestock group which consists of seven long span buildings, the largest 170 by 300 feet. All house cattle, swine and sheep. A modern judging arena enables visitors to get a closeup and comfortable view of the actual workings in the show ring.

Day. On Monday, Oklahoma City school children had their day and Tuesday was designated 4-H and Future Farmers Day at the fair. A 4-H Club program and crowning of the state FFA Sweetheart opened the Tuesday night grandstand performance.

Oklahoma City Day was Wednesday and state school children, members of the press and teachers were honored on Friday.

The fair grounds were dotted with yellow school buses on Friday as thousands of students from over the state made their annual pilgrimage to the fall exposition. During the morning, State Fair trophies were awarded to the two daily and two weekly Oklahoma newspapers citing them for superior performance during the past year.

On Friday also, the fair paid tribute to 70 veteran teachers who were oldest in the point of service in their respective counties.

The Oklahoma Publishing Company's building is an exhibition building for the company's own services. From a 40-foot tower at the building, visitors may look down on the plaza which contains an outline map of Oklahoma with all counties and county seats designated. The OPUBCO building is just off the center plaza.

The agriculture building, 361 feet long, is the main building at the fairgrounds. It was built so it can be extended easily when expansion is needed. The building will house poultry, agriculture and dairy products. Colored plastic and glass appointments form an imposing front to the structure.
Then There Was Light

Three-quarters of a century ago, Thomas Edison invented the first practical incandescent bulb. Since then a large part of the world has been flooded with light.

Oklahomans had electricity before they had statehood. Oklahoma Gas & Electric company was incorporated in 1902. The company then served only Oklahoma City and Enid. OG&E has grown with Oklahoma and now has nearly 300,000 customers in more than 250 Oklahoma and Arkansas towns.

Another major company in the state is Public Service Company of Oklahoma with headquarters in Tulsa. The firm serves almost 218,000 customers in 241 towns.

What Is Electricity

What makes the light go on when you push a button? Or what cooks the potatoes when you can't see a fire? Electricity still is a mystery to most people. They know it works, but they don't know how. Electricians explain it this way:

Place a gas flame beneath a teakettle, point the spout into a fan which turns an electric magnet inside a coil of copper wires. This, basically, is how electricity is made. The electricity then goes into a transformer where the voltage is changed and transmitted over long distance lines.

The first thing necessary to making electricity is a primary fuel such as gas, oil or coal. Water also can be used to make electricity in hydroelectric plants.

Grand River Dam Authority, a state agency, makes electricity from water power at Grand River. And Southwestern Power Administration, federally owned, has hydroelectric plants at Fort Gibson Dam, Tenkiller Ferry and the Denison Dam on Red River.

These two organizations generate electricity and sell it wholesale, while OG&E and Public Service company make and sell their electricity to retailers. Each of the four organizations sell power to each other when the need arises.

OG&E

Most of OG&E's electricity is produced in seven major plants scattered throughout Oklahoma and Arkansas. Largest of these is the Mustang Generating Station, 10 miles west of Oklahoma City. Completed in 1950, the Mustang station is capable of producing 112,000 kilowatts. A new 100,000 kilowatt generator is scheduled to be added there in October.

OG&E is in the midst of an 11 million dollar construction project to be completed next April. The newest power plant project announced by the firm is a generating station at Muskogee which will house a 170,000 KW generator, largest ever brought into the state.

Since the end of the war, OG&E has added to its facilities so rapidly that, at the present time, it has more than two and one-half times as much electric generating capability as in 1942.

The rate increase that went into effect this summer, and which amounted to less than 10 percent in nearly all cases, was the first general rate increase in 36 years. However rates were reduced voluntarily several times during those 36 years.

Public Service Company

Public Service Company of Oklahoma incorporated in Oklahoma in 1913, and served five towns including Tulsa the first year. The company now has a system capable of producing 421,265 KW.

Its huge Southwestern Power Station at Tulsa, put “on the lines” in 1935, is the largest steam electric generating plant in Oklahoma and one of the largest between the Rocky mountains and the Mississippi river. The station's two units have a capability of 160,000 KW and a third unit of 100,000 KW will be added.

The company's second power station in Tulsa, with a capability of 103,000 KW,
is equipped to use gas, fuel oil or coal so the station is not dependent on any one fuel. A third generating plant is located at Weleetka.

GRDA
Grand River Dam Authority at Pryor was created for the purpose of storing and controlling the water of Grand River and its tributaries and to develop and generate water power and electric energy.

The opportunity for producing cheap hydroelectric power on Grand River has been recognized for more than 50 years. However no real development was started until the legislature created GRDA in 1935.

Two years later construction of Pensacola or Grand River Dam began. The largest multiple arch dam in the world, Pensacola has a storage capacity of 1,680,000 acre feet and, when it was completed, an installed capacity of 60,000 KW. It now has an installed capacity of 90,000 KW.

When World War II started the federal government took over Pensacola for the war's duration. After the war, GRDA bought the Oklahoma Ordnance Works thereby more than doubling the authority's power capacity. With these properties, GRDA can sell about 430,000,000 KWH annually at a cost of $3,500,000.

The Markham Ferry project on Grand River, southeast of Pryor, will have an ultimate installed capacity of 72,000 KW, GRDA officials said.

During July, 1954, GRDA sold more than 47 million KWH, with a gross revenue of almost $31,000 and water for a gross revenue of more than $7,000.

SPA
Southwestern Power Administration, with headquarters in Tulsa, is a bureau of the Department of Interior. Like GRDA, Southwestern Power generates electricity and sells it wholesale.

SPA's power covers southeast Oklahoma, Arkansas, Louisiana and part of Kansas, Mississippi and Texas. The administration's transmission lines in Oklahoma connect its hydroelectric plant at Denison Dam on the Red River with Norfork Dam in north Arkansas. Transmission lines also run from Anadarko and from Walters and connect with the main line.

SPA has a program of active cooperation with rural electric cooperatives. Through their programs, power is delivered to isolated farms, small rural businesses and communities of 1,500 population or less.

In 1950, SPA entered into a contract with Public Service Company and OGE which provides for the exchange and sale of electric power from both the private companies and SPA. Under this contract, SPA serves through the facilities of the Oklahoma utilities six REA cooperatives, four government installations and 12 municipalities in the state, marketing a total of about 105,000,000 KWH per year to customers.

At present, SPA is participating in a comprehensive study for development of land and water resources of the Arkansas, White and Red River basins. The study is being done by the federal government and state officials in Oklahoma and the other states served by SPA. Members of this group are to prepare a plan for the development of the hydroelectric power potentials in the three basins.

Already completed studies show hydroelectric generating facilities could be built to produce an additional 750,000 KW and an average of 2,200,000,000 KWH of electric energy per year.
Miami Industry
Works Fast

When Miami Products, Inc., opened a new plant in Miami, they wasted no time getting into production and onto the market.

The plant opened April 1. By June, part of the firm's central heating units had been approved by the American Gas Association (a process that usually requires several months). Before July, the heating units were being sold to retailers.

Headed by L. K. Newell, the firm is newly organized. Newell, John Rutherford, vice president and works manager, and L. M. Melody, vice president and sales manager, have worked together in another company several years with the same titles they now hold.

City Wanted Plant

The three negotiated with the Miami chamber of commerce for a location in the city. They moved into buildings at the airport with 41,500 square feet of plant space. The city furnished and rehabilitated the building.

Miami Products, with a current employment of slightly over 100 persons, makes 13 furnaces, central heating units, all gas-fired. There are five models of horizontal units ranging from 60,000 to 140,000 B.T.U. (a five-room house requires about 80,000 B.T.U.). A second unit, the upright closet type, also comes in five models ranging from 60,000 to 150,000 B.T.U. And the third unit, counter flow, is made in three models from 80,000 to 120,000 B.T.U. The counter flow has duct work in the floor and air is returned from the ceiling. This is the type used in perimeter heating.

At present, the firm's models are sold by Sears-Roebuck, Rheem Manufacturing, U. S. Radiator and Royal-Jet.

The units can be used in conjunction with air-conditioners. That is, the same duct work can be used for both. Regulators and dampers make it possible to control temperature in individual rooms.

Newell said five years experience went into the building of the units. "We've incorporated all the latest features that make it one of the outstanding furnaces," he added.

These features include heavy gauge combustion chambers where the burners are located. All chambers have a 10-year warranty guarantee. Another feature is all seam-welded construction.

The units have right and left hand flue outlets for versatility in installation, and zero clearance which allows the furnace to be set on a combustible floor without danger of fire. Vertical units may be set flush against the wall.

Every piece of the furnace except motors and controls are made at the Miami plant which is equipped with the latest machinery. The plant is all conveyerized with some 500 feet of conveyors.

The furnaces are painted various colors, depending upon the retailer, and all finishes are baked enamel. Installation can be any place in the house, attic, utility room or under the floor.

The plant has all modern equipment including 500 feet of conveyors. Here, rows of chambers are waiting installation in the horizontal units.
Pottery Popular

Winart Pottery in Miami is another example of a young couple starting “from scratch without a dime” and making a success of their business. They sell in 32 states including all of Oklahoma, and part of Canada.

The modern design pottery is identified by the drip effect at the top of each piece. It’s called “drip glaze,” its creator explains, and looks as if the outer coat of glaze had been applied to the top of the receptacle and allowed to drip about one-third of the way down.

Winart is the product of Mr. and Mrs. Dave Arter and the name is a combination of Mrs. Arter’s maiden name, Winchell, and Arter.

Business “Just Grew”

Mrs. Arter was sales manager 12 years for Frankhoma Pottery, Sapulpa. Then, three years ago, the couple started their own line of pottery. They began in Sapulpa and moved to Miami last year. “We started from scratch without a dime,” says Mrs. Arter. “It’s just grown.”

They now have a factory and retail gift shop on Highway 66 just north of Miami. Five persons are regularly employed, although employment is up now because of Christmas trade.

The Arters do their own designing and develop all their own glazes. In addition, they do most of their own selling. They make two gift shows a year, Mrs. Arter says, and the rest of the selling is from mail order and unsolicited buyers.

Winart Pottery consists of all sizes of mugs, pitchers and accessory items. A line of dinnerware was started last spring and has been extremely popular, Mrs. Arter says. So popular that only the customers who originally received the line are able to reorder. “We just can’t make enough to supply everyone,” Mrs. Arter explains.

Coffee Mugs Popular

The most popular piece in Winart, what the couple calls its “bread and butter item,” is a set of six coffee mugs with sugar and creamer all set in a round wooden container with a horseshoe handle. “It was one of the first things we did,” Mrs. Arter says, “and it still sells better than any other one item.”

The couple has started several new pieces this summer including refrigerator dishes, juice jugs, little pitchers and a two-cup coffee server. They have discontinued a line of vases and miscellaneous bowls because “everyone makes that sort of thing.”

The Arters started from scratch without a dime but with an idea and plenty of ability. These qualities have paid off and the Arters are well on the road to success.
Video

Overlooking 60 miles in any direction, KWTV's soon-to-be-completed tower is the tallest manmade structure in the world. Its 1572 feet is exactly 100 feet higher than the antenna on the Empire State building.

Not to be outdone by a tower, the offices of KOMA (radio) and KWTV are being completely redecorated and several hundred square feet of floor space have been added. The television studio is the largest single studio in the state, said Edgar T. Bell, general manager of the station.

Some two million dollars have gone into the redecoration and new building, north of Oklahoma City. Official dedication ceremonies will be held October 16.

Elevator in Tower

The tower overlooks the modernistic station. It is equipped with an elevator to the 1340 foot level and visitors are invited to take in the view. The tower will give top television reception to many areas which have been completely without television and will clarify the picture for other areas.

Eleven platforms are located at intermediate levels. The tower is designed for 40 pounds wind pressure per square foot up to the 780 foot level and 60 pounds pressure above that. Total weight will be more than one million pounds.

KWTV (K for the code letter meaning west of the Mississippi and W for World's Tallest Video) came into being in November, 1953, when the Federal Communications Commission okayed Channel 9 for Oklahoma. The station is owned by the Oklahoma Television Corporation, Roy J. Turner, president.

Station Manager Edgar Bell keeps up with, and has a hand in, every facet of the radio and television production. He has a long record of radio and television experience and has helped put several stations on the air.

The station went on the air December 20th with temporary facilities rather than postpone operation until the big tower was completed.

Old Equipment Supplements

Now, almost one year later, the temporary material has been supplemented by thousands of dollars of new equipment and the new station will be sent off with a bang in official opening ceremonies.

The huge studio, as large as a basketball court, is equipped with three cameras and two booms, crane-like devices that move cameras into place.

A one-man elevator carries workmen to within shouting distance of the top of the tower.

A
Sets in the studio are attached to pulleys in the ceiling and, when not in use, are hooked up tight to the roof, a storing device that is new in the state.

Beside the studio is the control room with a gallery for sponsors and visitors to watch programs in production. The announcer's glassed-in booth is at one side.

On the second floor are electrical equipment, the art department which makes slides and sets, and the air-conditioning machinery (the entire station is air-conditioned).

The master control room, where engineers give the final say on sound and pictures, is equipped with a sound board specially designed by Chief Engineer Morris Thomas from RCA parts.

New transmitting equipment at the sta-

Video Chief Bill Curbow keeps an eye on proceedings in the studio.

Patrick Morin is a projectionist on KWTV's powerful new equipment.

tion has upped KWTV's power from 55,000 watts to 316,000 watts. The old transmitting equipment is used to drive or power the new machinery.

On the first floor of the station are the news room, film and music department, 20 offices, new cafeteria and lunchroom, and make-up rooms for the talent.

KWTV now produces almost 20 individual live shows (some go on five or six days a week) and the make-up rooms have rows of mirrors and necessary creams to apply and remove usually-heavy make-up. Washrooms are behind the make-up rooms.

Interior of the station is lime, salmon-pink and gray in the lobby and some of the offices. Modern furniture matches the architecture of the building.

Television sets are, of course, spotted throughout the station. The monitor in the studio, which shows the persons who are "on" how they look to the audience, is both helpful and distracting, Manager Bell said. Youngsters of live shows, catching a glimpse of themselves on the screen, frequently lapse into open-mouthed silence. The monitor is indispensable, however, when a station announcer is giving a commercial displayed by slides or film. The announcer can tell which lines go with which display, when to slow down and when to get ready for the closing.

The studio has been completed since this picture was taken. Sets for live shows are connected to pulleys in the ceiling and stored overhead.
Vast Lake Texoma, fourth largest man-made lake in the world, drew more than fishermen and picnickers last summer. The lake is the site of the University of Oklahoma’s biological station where students study and do research in plant sciences and zoology.

Fifty-two students and a staff of six faculty members attended the fifth annual meeting of the extension school the past summer. The station is on the north shore of the Red River arm of the lake at the mouth of Buncombe Creek, two miles east of Willis and eighteen miles south of Madill. Here biology and botany students collect data on fish, insects, plants—anything that seems to be alive.

State and Students Benefit
The school serves a double purpose. It increases the scientific record of just what exists in Oklahoma. And it aids the student by giving him the experience of finding and studying animals and plants in the field. The 8-weeks session is crowded with classes, lab experiments, field excursions, and off-campus fun, with emphasis on water sports.

The station’s location is ideal, since it is the only biological station in the nation permanently situated on a man-made lake. Large natural lakes do not usually have a regular in-take and out-take of water, explained Dr. Carl Riggs, director of the station. Man-made lakes, such as Texoma, have an almost continuous inflow of fresh water.

Access to both terrestrial and aquatic habitats is convenient from the station. Collections of species were begun in 1949 and are continuously being catalogued. The station herbarium now contains more than 400 species of flowering plants representing 239 genera and 80 families. Additional forms are added almost every field trip. Work also has been done on animal parasites, insects, vertebrate and invertebrate animals.

Of the vertebrates, 65 species of fishes, 14 of amphibians, 39 of reptiles, 152 of birds, and 29 mammals, including beaver and armadillo, had been seen or collected by spring of 1954 and comprise an excellent beginning for the vertebrate faunal list. Many of these are new records for the area and even for the state. The students can find something “new” as they work and make real contributions to knowledge of the fauna of Oklahoma, as the insect and invertebrate collections are yet uncatalogued.

Station Used by Others
The physical plant of the biological station consists of 18 buildings, suitable for use by other university departments, educational groups and organizations. Anthropology students, under the direction of Dr. Robert E. Bell, chairman of the department of anthropology, have found the area rich in features of anthropological interest. Eleven students doing field work last summer discovered a burial ground of six burials, estimated to be 2000 years old.

The station has a year round schedule of national and regional meetings. The National Science Teachers Association will use the facilities October 16, and a southwestern regional meeting of the American Association of University Professors will be held at the lake on October 30. Coming up in November is a session of biology classes conducted for Oklahoma and Texas college biology students.

The eighteen buildings of the biological station campus nestle between the waters of Buncombe Creek and Lake Texoma. The abundance of plant life in the area is apparent from the air.

The ancient bones of six persons found in July at the Buncombe Creek site revealed something of the indigenous culture of the Lake Texoma area. This adult male was buried in a flexed position lying on his right side. This particular burial is especially interesting because the man held in his left hand two bone awls for piercing small holes, as in leather or wood.
This extension campus developed after Dr. Carl D. Riggs, assistant professor of zoology, spent most of the summer of 1950 with 13 students studying Texoma fish from the vantage point of two lake barges. The next year Norman Brillheart, a Madill oilman, donated land to the university for the project.

From another source came the gift of an unfinished hotel, which the legislature substantially completed. Today it houses most of the activities. It has student dorms for both men and women, a dining hall, kitchen, recreation room, study space, a photographic dark-room, two laboratories, an aquarium with outdoor and indoor tanks, and a library.

Recent additions to the station include another laboratory, a faculty dorm, trailer units for married students, and a harbor and boat house. Living facilities are available for a maximum of 200 persons, including faculty.

When the research is finished for the day, students turn their attention to lighter activities. Outdoor recreation such as fishing, boating, swimming, horseshoes, softball, hiking, and picnicking is readily available. The dining room is used for movies, dancing and indoor games. A lounge and sun decks are provided.

Three or more assistantships are available to graduate students each summer at the station. These pay the nonresident fee, and a monthly salary. Several scholarships of $150 each, provided by the OU Foundation, are available to both undergraduates and graduates each summer. Both the assistantships and scholarships are awarded on the basis of need, academic record and recommendations.

A full schedule of conventional indoor lab work makes lectures held out-of-doors doubly welcome. But the most welcome relief from the grind comes from the lake. Below, a group of erstwhile hard working biology students treat themselves to an afternoon swim.

A vertebrate natural history class takes to the field to get some first hand information on animals with segmented spinal columns.
Chickasaw Princess Wins Fourth

Judy Andrews may be "pushing 50" but she created a small sensation in September at the National Association of Internal Revenue employees convention at Jacksonville, Fla. Judy represented the Oklahoma chapter of NAIRE Unit 45 in the beauty contest and came in fourth from a field of girls ranging in age from 21 to 30 years.

When Mrs. Andrews, a widow, learned she would be entered in the contest, she set to work on an idea that would catch the attention of judges and spectators in Jacksonville, "Since I'm pushing 50," Judy laughed, "I had to think of something."

She bought several yards of palomino-colored leather and her stepfather, R. L. Hines of Duncan, made the leather into a skin-tight bathing suit. On the front and back of the fringed suit, Judy sewed the Oklahoma emblem as breast cloths.

In addition to the suit, Judy carried a wampum bag made from the same leather, Indian boned jewelry, beaded moccasins, beaded head band and arm bands, small bells on the calves of her legs and goat skin muffs at her ankles.

Before the contest, Judy, part Chickasaw, was made an Indian princess by Chickasaw Governor Floyd Maytubby. She was commissioned with her Indian christening name, Panola. Governor Johnston Murray and Supreme Court Justice Earl Welch signed the commission.

Spavinaw Country
Rich In Lore, Legend

The rugged but beautiful hill country surrounding the two Spavinaw lakes in northeastern Oklahoma is abundant in history, legend and wildlife.

Lost in the forest area are some 1,500 deer protected in the 12,000-acre Spavinaw Hills Deer Restoration area operated by the Oklahoma game and fish department.

Deer boldly traverse roads cut through the area and bound unhurriedly away through the dense undergrowth. Area officials said their numbers are increasing rapidly. In addition to natural food, the animals have access to corn, lespedeza and other domestic feeds planted by the game and fish department.

Caves Numerous

The area offers much in the way of folklore for the visitor who enjoys hiking. Caves are numerous in the area. One of the largest of these, Black Hollow, is said to have been the hideout of the Dalton gang.

Legend has it that the gang erected an iron door on the entrance to keep marauders out of their stock of ammunition and loot. However local Indians who had been using the cave to store their corn liquor, broke the lock and started reusing the cave. The Daltons, the story goes, surprised and massacred several of them and even today Indians in the area will not enter the cave for fear of their ancestors' ghosts.

Another feature of the area is the ghost town. The buildings still stand, sagging and lonely, and the old saloon still displays a backbar, empty bottles and part of a player piano.

Princess Panola of the Chickasaw Indian tribe sits before the Oklahoma flag. For the beauty contest in which she won fourth place, the princess, otherwise known as Judy Andrews, wore a fringed leather bathing suit.