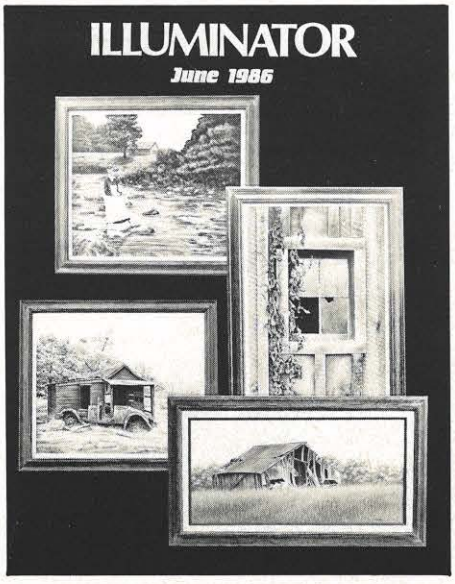
ILLUMINATOR

June 1986



Paintings by Virginia Farley and Kathy Caudill drew praise from customers during the month they were on display in the lobby at Appalachian Power's Beckley office. Virginia and Kathy are the wife and daughter, respectively, of Hubert Farley, Beckley engineering technologist.

Vol. 36, No. 9, June 1986

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The inside story

AEP Savings Plan

Date	Fixed Income Fund		Equity Fund		AEP Stock Fund	
	VPU	UCPD	VPU	UCPD	VPU	UCPD
1/31/86	$2.3389	.4275	$3.7117	.2694	$2.9059	.3441
2/28/86	$2.3620	.4233	$3.9736	.2516	$3.0887	.3237
3/31/86	$2.3874	.4188	$4.1952	.2383	$3.2630	.3064
4/30/86	$2.4117	.4146	$4.1455	.2412	$3.0279	.3302

VPU — value per unit

UCPD — units credited per dollar

HOW TO READ THE ABOVE CHART: The first column lists the days on which unit values are figured; the second shows the market price or value of each unit on that day; and the third indicates how many units you could have bought for $1 on that day. For example, if the market value or "value per unit" of the Equity Fund were 50¢ on the valuation date (last day of each month), then "units credited per dollar" would be 2,000. This also holds true for the AEP Stock Fund and the Fixed Income Fund.

A family of artists

The family of Hubert Farley, Beckley engineering technologist, will be featured in an upcoming four-generation art show. The exhibition, sponsored by Beckley Newspapers, Inc., will be held in January and February next year. The show will include works by Hubert's mother-in-law, Daisy Massie, his wife, Virginia; his daughter, Kathy Caudill; and his grandchildren, Erin and David Caudill.

Virginia says, "When I was growing up, my mother painted for pleasure, and she was really good, but she didn't devote much time to it. When I was in high school, mother bought some oil paints and an easel for me, and that's how I got started. I didn't know even how to mix the paints, but I had the desire."

Kathy notes, "My interest in art dates back to early childhood when, as an only child, I spent many entertaining hours in the imaginary world created with paper and a pencil. After I was married, I took a position in the art department of a local printing company and began doing freelance work at home and in the evenings. Finally I gave up my job and freelance work to follow my heart and turned to painting."

Virginia adds, "We had a friend who invited us to join the Beckley Art Club, and that's when we got the fever and really learned how to paint." Virginia is a realistic landscape painter and works mostly with acrylics but does some watercolor. Kathy works in both watercolor and acrylics, and her paintings are traditional realism.

How do they decide what to paint? Kathy says, "We get ideas all around us. I paint anything from old barns to portraits to wildlife to florals." Virginia adds, "When I see something particularly interesting, I immediately start mixing the colors in my head. I just have to put it on canvass. It gives me a great deal of satisfaction when I complete a painting."

Kathy notes, "Painting is a means of self-expression. It is something within you that just has to come out. I believe an artist must first be true to himself. Through perserverance and dedication, each of us in our own way must work toward excellence. I have been told many times to loosen up, that realism isn't popular. But I have to be true to myself. I do it anyway because I have to do what I feel."

Displaying some of their art are: seated, l. to r., Mildred Ellison, wife of Kyle Ellison, retired Beckley line and station superintendent, and Daisy Massie. Standing, l. to r., Virginia Farley and Kathy Caudill.

Virginia prefers to paint in the mornings and can do a painting in one or two weeks. Kathy, however, prefers to paint at night. "There are times when I'm painting at 3 or 4 o'clock in the morning. Sometimes, with all of the children's activities, that's the only time I can find peace and quiet. I am a much slower painter than mother. Because I do so much detail and realism, I average three to four weeks per painting."

Both Virginia and Kathy have won awards for the past three years in the Rhododendron State Outdoor Arts and Crafts Festival in Charleston. They also have won awards in the Appalachian Arts and Crafts Festival in Beckley; the Beckley Art Group Annual Shows; and the Chemical City Festival in South Charleston.

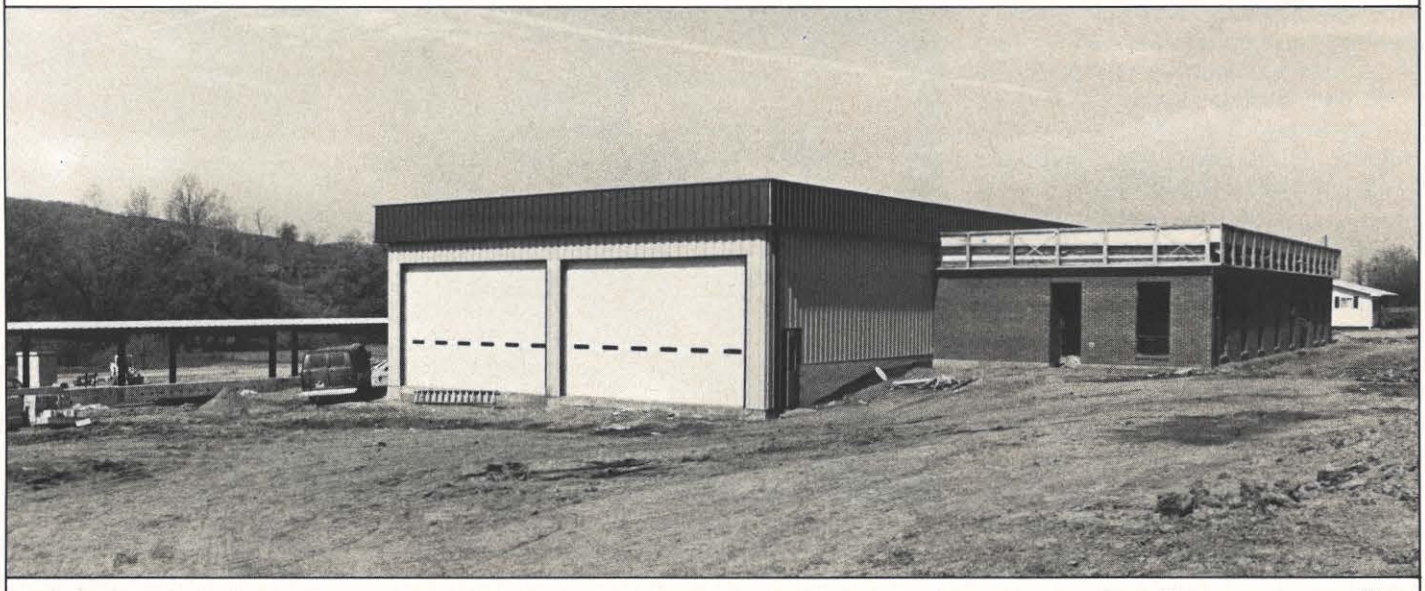
Kathy designed the official seal for Raleigh County, West Virginia, in 1980 and was commissioned for two murals for the Beckley Post Office in 1982. One of her paintings was selected by the Department of Natural Resources to appear on its 1985-86 wildlife calendar, and one also will appear on the 1986-87 calendar. She has won over fifty awards for her paintings, including nine best of show.

Virginia says, "When Security Pacific Finance built a new office, we were asked to put our art on loan for their opening. And we were very pleased to be asked to display some of our paintings in the lobby of Appalachian's office in Beckley a few weeks ago."

Kathy notes, "My children, ages 10 and 13, don't paint but they draw. They entered a competition open to children of Westinghouse employees, and David's picture was selected for the cover of PACE, the company magazine. Erin came in second place."

Kathy is currently teaching local art classes at the Paint Box Gallery, Beckley Art Center, and the Raleigh County Youth Museum. She has done some limited edition prints and plans to do more. "If I go to prints, it will provide a lot more volume to my work. I just can't grind out that many pieces of art." □

Ripley facility nearing completion



The new service facility near Ripley, West Virginia, is expected to be completed soon. Located on a four-acre tract on Route 33, the new structure will replace three leased facilities in the Ripley area. Shown here are the brick office wing, prefabricated metal garage and stores building, and a covered parking shed at the rear.

Appalachian Power Company has received the National Safety Council's Award of Merit for 1985. The award recognizes a change of 53% in the company's incidence rate over the prior three years. In a letter to Appalachian President John W. Vaughan, AEP Chairman W. S. White, Jr., congratulated APCo employees on this accomplishment. Appalachian received an award of merit from the National Safety Council in 1979 and awards of honor in 1981 and 1982.

APCO granted rate increase in Va.

The Virginia State Corporation Commission has granted Appalachian Power Company an increase in its base rates of $29.4 million annually. At the same time, the SCC reduced by $12.8 million the fuel increment in company rates. The net impact will be an increase of $16.6 million, or three percent, for the company's Virginia customers. The company had asked for an overall increase of $32.8 million with a $12 million fuel reduction, or net of $20.8 million.

The increase went into effect on May 1 and is subject to refund pending final order from the Commission. The request was part of the company's submission of operating results and fuel expense estimate, required annually by the SCC.

The Commission will begin hearings in the case September 4. □

INFORMATION

Benefit

Two ways you can cut medical expenses

The cost of living has slowed considerably in the past few years, but one element in that picture — the cost of medical care — has continued to rise. This mounting cost is of concern to both the company and its employees, who share the expense of medical insurance coverage.

Robert H. Strahan, assistant vice president - compensation and benefits of the AEP Service Corporation, offers two pieces of advice that could be helpful in avoiding unnecessary medical expense:

MedVantage

"First, an employee or covered dependent who is planning hospitalization should take full advantage of the System's new MedVantage program. It involves only a phone call, but it can save the employee $300 right off the top and possibly can save the individual and the company additional thousands of dollars.

"MedVantage will be six months old on July 1, and, like all new programs, it will take some getting used to, but it's an excellent concept with benefits to all parties involved," Strahan said.

MedVantage is a hospital-utilization-review program and an important part of the AEP comprehensive medical plan. If an employee or covered dependent is advised that hospitalization is recommended, he or she is asked to notify the MedVantage administrator, Peer Review Systems, Inc. — as soon as the planned hospital admission is known or, in the event of an emergency admission, within 48 hours. In some cases — certain non-urgent or postponable surgeries — a "second opinion" by a doctor is required. (Surgeries requiring a second opinion are listed in the Medical Insurance section of the employee's Protection Program handbook.)

When the telephone call is made to Peer Review Systems, the employee will be asked these questions:

- His or her name and social security number;
- Name of AEP System company;
- Name, address, sex and birthdate of patient;
- Name, address and telephone number of physician, and
- Name and location of hospital.

The employee will be given a confirmation number — proof that the call was made.

It's that simple," Strahan emphasized, "and it could save you money."

Outpatient surgery

The second consideration in keeping medical costs down, Strahan continued, is the possibility of outpatient surgery.

"When medical alternatives have been exhausted and surgery is necessary, the cost and problems might still be minimized through outpatient surgery," he explained.

"Today, many minor procedures can be performed at a local clinic or in a physician's office, a hospital's outpatient facility or an ambulatory surgical facility. The operation can be scheduled at the convenience of both the patient and the doctor, not when the hospital operating room is available. The employee can avoid confinement in a hospital and at the same time have quality medical care.

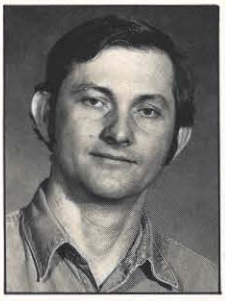
"Be an in-charge person," Strahan advised. Don't hesitate to discuss with your doctor the alternatives of outpatient surgery. □

CLIP AND TAPE IN YOUR PHONE BOOK

The toll-free numbers for that important MedVantage telephone call to Peer Review Systems are:

In Columbus.....451-3600
Elsewhere in Ohio.....1-800-233-7337
Elsewhere in U.S.....1-800-237-7337

17 employees publish in Operating Ideas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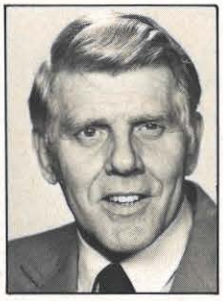
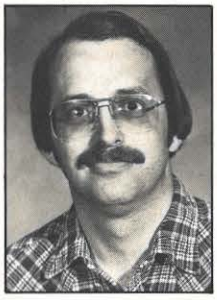

Herndon


Bumgarner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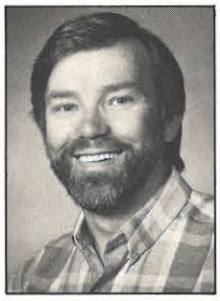
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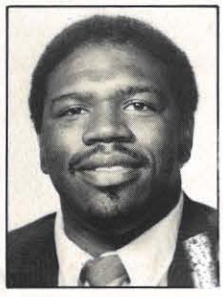
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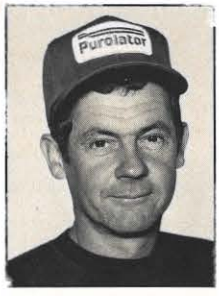
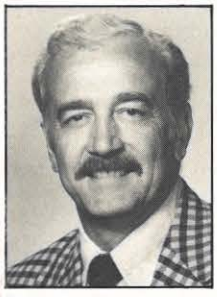


Lawrence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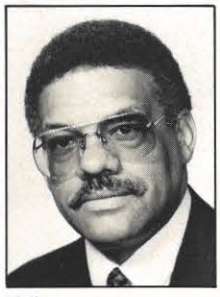

Toliver


Linkous

Articles by seventeen Appalachian Power employees were featured in the March/April issue of *Operating Ideas*.

J. R. Bowen, maintenance supervisor at John Amos Plant, described the fabrication of a portable rig to refinish the diffuser seat on main steam stop and control valves of a 1300 megawatt unit.

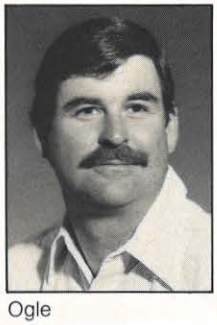
L. C. Bumgarner, maintenance supervisor at Philip Sporn Plant, wrote about the addition of flanges to the coal feeder inlet pipe, which makes removal for maintenance easier. Another alteration to the coal feeders is eliminating the adjustable gate when replacing the housing inlet and skirt assembly.

J. B. Aird, III, Roanoke station superintendent, described a procedure for isolating stuck circuit breakers which improves safety and reduces the amount of time required.

J. K. Westmoreland, Galax line crew supervisor nonexempt, and **J. L. Lawrence,** Galax line mechanic C, collaborated on an article about the permanent mounting of pole binders on pole trailers. This eliminates the need for lifting pole binders from the truck and carrying them to the trailer each time they are used.

D. E. Linkous, communication specialist, GO T&D Communications, Abingdon, wrote about the installation of an isolator test panel on telephone switchboards, which can isolate individual circuits to facilitate troubleshooting.


Lee


Ogle


Robinson


Westmoreland

Larry Houston and **Billy Ball,** communication specialists, GO T&D Communications, Bluefield, co-authored an article on the revision of carrier-telephone squelch circuits. The modification has completely eliminated the receive audio breakup problem previously experienced and the associated service calls due to intelligibility complaints.

Bob Herndon, production superintendent-maintenance, and **Yauncey Freeman,** performance engineer, both of John Amos Plant, wrote about the use of a high speed signal relay and latch memory circuit to monitor certain key trip relays on high pressure and reheat exciter start-up systems. If a trip device is activated during start-up, the Performance Department knows immediately where to look to correct the problem. The standing trip indicators save over $28,000 per year on Unit 3 at Amos.

Tom Toliver, material coordinator-maintenance at John Amos Plant, teamed with Pat Collins of the AEP Service Corporation to pen an article on replacement slagblower motors. Amos Plant has approximately 150 slagblower motors in service; and, when the failure rate became too high, plant personnel designed a more reliable motor. With the new design, motors on all three units are interchangeable by the use of a fabricated bushing. Based on an average of 17 motor failures annually, installation of the new motors will result in a savings of $14,000 per year in labor and material. With proper preventive maintenance, the motors should last more than ten years. This extended life means continued savings.

S. E. Greenlee, instrument maintenance supervisor, and **C. A. Powell,** operations superintendent, both of Mountaineer

(please turn to page 11)

Gavin scaffolding project largest in U.S.

An observer who had occasion last month to be inside the giant boiler serving the Gen. James M. Gavin Plant's 1.3-million-kilowatt Unit 1 may have understood how Jonah felt.

That latter-day Jonah was swallowed up by the largest full-furnace scaffolding project ever undertaken in the United States. The 218-foot-high boiler was filled from top to bottom with scaffolding so that workers could test the tubing at 13 different levels within the massive structure.

A similar project had been carried out earlier at the Tennessee Valley Authority's Cumberland Plant; however, its scaffolding did not extend all the way to the top, according to Ted Mieczkowski, the Plant Maintenance Division's contract administrator for the project. The Gavin scaffolding was designed by Waco International of Houston, Texas and built by Atlas Scaffolding of Charleston, West Virginia.

The inspection, involving both visual and ultrasonic testing to determine boiler tube wall thickness, was done during the unit's annual six-week maintenance outage in April-May. The Gavin Unit was chosen because it is the second oldest of the five 1.3-million-kw units in operation on the AEP System and because for many years it burned "aggressive" coal, Mieczkowski explained. The reasoning was that Gavin Unit 1 probably would show the most severe tubing corrosion and erosion because of its coal-burning characteristics, and, if it checked out, so would the System's similar units.

It did. "We gave it a clean bill of health," Mieczkowski said.

Significance of the job is evidenced by the fact that AEP's five 1.3-million-kw units (with another under construction) serve as its power supply nucleus, representing almost one-third of the System's total coal-fired generating capacity.

* * *

Prior to the erection of the scaffolding, workers and all of the materials had to enter the boiler through two small ash hopper access doors at its base. It took five days to erect the structure; one-and-a-half days to prepare the areas for testing; four days to do the actual testing, and then three days to take down the scaffolding.

Technicians from Inspection Services Inc. took three ultrasonic wall-thickness readings per tube at each of the 13 designated levels. In addition, readings were taken at various locations on the wing walls and superheaters, said Mike Williams, a Gavin maintenance engineer. Together, a total of 91,000 separate readings were taken.

All of the nearly 2,000 tubes in the boiler showed thicknesses better than the minimum standards, Williams said.

Information gained from the testing will be used to determine both short- and long-term maintenance requirements for all of the System's 1.3-million-kw unit boilers. It also will serve as a point of reference so that, when the same test is performed at Gavin several years from now, engineers will be able to see what, if any, deterioration has taken place.

"It was the first time everyone had a chance to take a full look — from top to bottom," Mieczkowski said. Previous inspections consisted only of spot checks where problems had occurred.

The unit went back on line May 23. □

How big is big?

The boiler serving the 1.3-million-kilowatt Unit 1 at Ohio Power Company's Gen. James M. Gavin Plant is equal in size to the largest in the world. It measures 218 feet high, 110 feet, 10 inches wide and 51 feet deep.

The Statue of Liberty, standing 151 feet high from base to tip of its torch, would fit very comfortably inside the Gavin boiler.

Amorphous transformers to be tested on AEP System

A new technology that promises significant energy savings is being tested in distribution transformers on the AEP System. These transformers use a recently developed amorphous-steel core that consumes only one-fourth the power of conventional silicon-steel core transformers.

A total of 400 such transformers has been purchased for testing by two AEP System operating companies.

The Zanesville plant of McGraw-Edison Company, one of several manufacturers developing the new transformers, will deliver 200 pole-type units (each rated at 10 kilovolt-amperes) to Ohio Power Company. The first 35 were delivered to the Zanesville Division on May 8; the remainder will be shipped before the end of the year. Ohio Power is the first utility in Ohio to use the new transformers.

General Electric Company will deliver 200 transformers (25 kva) to Indiana & Michigan Electric Company in August. This shipment will consist of 100 pole-mounted and 100 pad-mounted units.

During the evaluation period, which could last five years, the transformers will be inspected for their ability to maintain low core loss while meeting weather, climate, vibration and other operating requirements. Normal operating life for distribution transformers is approximately 35 years.

Power savings from this new technology could be substantial. AEP has approximately 880,000 distribution transformers in service, and each year purchases nearly 27,000 pole- and pad-mounted units to satisfy new and replacement requirements. If these 27,000 transformers were amorphous-core units, they would use approximately 3,000,000 watts less for operation, saving AEP more than $4 million in operating costs annually.

On a national scale, utilities in the U.S. have an estimated 25-million distribution transformers on line and install an estimated 1-million new and replacement units each year. If all 25-million were replaced at one time with amorphous-core transformers, the estimated core-loss reduction would be 15-billion kilowatthours per year.

Energy savings from the amorphous-steel core are made possible by the unique structure of amorphous steel. A conventional metal core has a crystalline structure; in contrast, the amorphous core has a non-crystalline makeup, the result of a new metal-making process developed by Allied Corporation.

The non-crystalline structure of the amorphous metal results from cooling the molten metal quickly during fabrication — actually at a rate approaching 1,000,000° C per second. This extremely rapid temperature change solidifies the molten steel so fast that its metal atoms do not have time to change from their random pattern of the molten state to the ordered (crystalline) structure found in conventional, cold-rolled metals. As a result, the amorphous metal has no grain boundaries, leaving it in a random, or amorphous (glassy), structure.

With no grain boundaries, the amorphous core allows easy, magnetic alignment during transformer operation, reducing core losses up to 75% of conventional transformer core losses.

Possible drawbacks to the new core material include: (a) the higher cost of the amorphous steel, (b) its delicate handling requirements and (c) the unanswered question of its ability to maintain low core loss over the typical life span of distribution transformers.

Amorphous steel for distribution transformers is made in a continuous ribbon four inches wide and 1,000th of an inch thick. Its cost is high ($1.50 per pound) compared with conventional electric steel (90 cents). Most experts agree, however, that, if amorphous-core transformers are accepted by utilities and purchased in quantity, the cost per pound will decrease to approach the cost of conventional steel.

Another cost consideration is the fact that the amorphous-steel transformer requires 20% more steel than the standard transformer.

Also, the very brittle, glasslike material presents manufacturing and handling problems.

Since the amorphous-steel technology is new in the distribution transformer field, whether or not the core losses will continue to be low for the life of the transformer is not yet known. However, testing to date indicates that amorphous steel will be able to maintain its specified core loss over such a period. □

AEP System's first amorphous-core transformer is delivered by McGraw-Edison to Ohio Power Company's Zanesville Division.

The efficiency of amorphous-core distribution transformers

The function of an electrical transformer is to change the voltage of a power line — to "transform" it from a delivery level to a usage level.

In this process, electric power is lost within the structure of the transformer's core material. For the most part, this power is consumed in setting up the core's magnetic field, vital to the voltage transformation. For the silicon-steel core transformer, a rule-of-thumb power loss is four watts per kva. For example, a conventional 10-kva pole transformer used in residential areas typically loses 40 watts of power (4x10). In comparison, an amorphous-core transformer of the same rating loses only one watt per kva, thus is 75% more efficient. This efficiency is gained because the amorphous —or random-structured — core has less barriers to the magnetic field than does the crystalline structure of the silicon-steel core.

V.I.P.'s keep 60's music alive

Twenty years ago, four students at the West Virginia Institute of Technology started a rock and roll band known as the V.I.P.'s. From 1966 to 1969, they performed at high school proms, fraternity parties, college functions, and in clubs. The band included Jeff Yago, keyboardist and pedal bass player; Mike Beal, guitarist; Joe Lastik, saxophonist; and Dave Martin, percussionist and vocalist.

Each went his separate way after graduation, with Jeff and Mike eventually settling in the Richmond, Virginia, area. Dave, now Central Machine Shop personnel supervisor, kept up with Jeff over the years but lost contact with Joe.

In 1983 the trio met at Mike's home in Richmond for a reunion and decided to dust off their instruments and make music again. Dave's drums had been in his basement since 1969, and Mike's guitar was in his attic. Jeff was the only one who continued playing.

"Our first musical reunion had a few rough spots," Dave admits, "but the people in Mike's neighborhood wanted us to play for a party a couple months later. This party prompted other requests, and now we get together three or four times a year for functions in the Richmond area. Our charge for playing is just enough to cover expenses."

Dave continues, "The public is always invited, the more the merrier. We played for a party at Mountaineer Plant last year, when I was working there. Our schedule in 1986 began with a May 10th performance in Richmond's West End. Later on we have to play near the Midlothian area and for a Halloween costume party in Richmond. We also have been asked to play for a couple class reunions. We usually play once a year in my hometown of Ripley, West Virginia; but, since I've moved to the Charleston area, we haven't organized anything definite this year.

"Each time we get together, we add two or three songs to our repertoire. And it seems like one of us is always buying another piece of equipment. At our first reunion, most of our equipment would fit in a Toyota station wagon. Now it requires two vans to haul everything. Jeff has a synthesizer, electric piano/organ, new bass pedals, and several large speaker cabinets. Mike and I have replaced our 1960's instruments with new ones and have added several accessories."

The V.I.P.'s twenty years later. From left, Jeff Yago, Dave Martin, and Mike Beal.

The band, still known as the V.I.P.'s, plays the music of the 60's, called garage band rock. Some of their favorites are "Twist and Shout", "Louie, Louie", "My Girl", "Light My Fire", and "96 Tears." Most of the people who attend their concerts are in the range of 30 to 45 years old. "When we get together, they seem to relive the past and act just like they did when those songs were popular," Dave says. The more current songs they play include ones by Huey Lewis, Bob Seger, Dire Straits, John C. Mellencamp and others.

The V.I.P.'s when they were students at West Virginia Institute of Technology. Center, Dave Martin, Back row, l. to r., Jeff Yago, Joe Lastik, and Mike Beal.

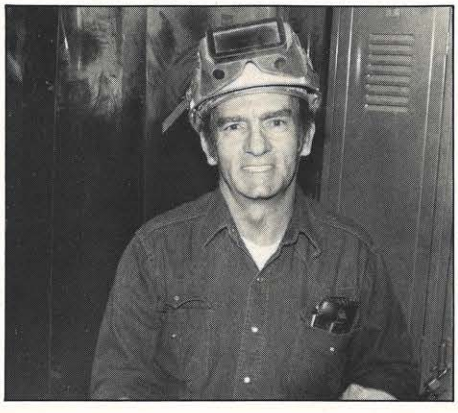
A typical performance weekend for Dave begins on Friday morning, when he leaves home at Hurricane, West Virginia, and starts the seven and a half hour drive to Richmond and a practice session that night. On Saturday they pack up equipment, haul it to the site of the party, and set up — a chore which takes about three hours. The band plays from 8 p.m. to midnight on Saturday evening, and on Sunday Dave packs up and begins his seven and a half hour drive back home.

Although the V.I.P.'s have no allusions about becoming rich or famous, they still enjoy playing and keeping the music of the 60's alive. Dave concludes, "I think our music makes people feel good, maybe even younger. I know it does me." □

Retirements

"Neither snow, nor rain, nor heat, nor gloom of night stays these couriers from the swift completion of their appointed rounds." These words, written by Greek Historian Herodotus in the 5th century (BC), are a fitting tribute to **Arthur Bonds,** express driver in GO General Services, Roanoke. He drove express route 4 for nearly 18 years before retiring on June 1, logging more than 1,300,000 miles without an accident. "I was the first driver they put on when the 'pony' was started," Arthur recalls, "and I have driven all the routes. I used to work at the old Walnut Avenue Steam Plant and the garage, but I enjoyed being an express driver the most." Arthur is retiring to his 58-acre farm at Goodview, VA, where he plans to raise chickens, hogs, and cattle. "I'll have plenty of things to keep me busy, but I want to do a little hunting, fishing, and visiting. I have a sister in Orlando, a brother in Philadelphia, and eight children scattered around the country." □

"Everybody says you should change your career halfway through, and that's what I did," says **Miriam Martindale,** Roanoke marketing and customer services representative, who elected early retirement on June 1. "I taught school for eleven years before I came to work for Appalachian. One of the most enjoyable aspects of my job here was my association with teachers and county agents." She continues, "The people I worked with were like family because we were together so much. I have made some really good friends. Some of my closest friends are my counterparts in the other divisions." Miriam adds, "My husband is still working so, until he retires, we will be somewhat limited in what we can do. We want to travel some and visit our three children more. As a retirement gift to myself, we're going to England in July. I plan to be more active in my church and want to work with senior citizens, particularly shut-in's. If I get to a point in my life where I want to work, I can find something to do. But I don't want an 8 to 5 job." □



"I put in my application at Kanawha River, took a physical, and went to work the same day," recalls **Johnny Johnson.** "The plant was still under construction, and I started as a guard. When the unit went operational several months later, I transferred to the Maintenance Department." When Johnny retired June 1 after 33 years' service, he was a maintenance mechanic A. "I have enjoyed my years with the company, and I've met a lot of good people. I'm sure I'll miss everybody, but I will be back since I don't live far from the plant." Since Johnny's wife Christine will be working a couple more years, he does not have a lot of plans for retirement. "I am a lay speaker in the Powellton United Methodist Church, and I expect to do more visitation and committee work." He has served in every category from Sunday School superintendent to chairman of the trustees. "I have hunting camps in Braxton and Pendleton counties, which I will be using more often," he adds. The Johnsons have two sons and four grandchildren. □

"I have always looked forward to taking early retirement at 62," says **Dottie Dellinger,** Kanawha River plant clerk C, "but for a while I didn't think I would have a job to retire from. I worked in the gas department at Owens Libby Owens for 23 years and was almost 50 when they closed their doors. Then I went to work for a coal company and got laid off again. In 1973 I was fortunate enough to get a temporary job in the storeroom at Cabin Creek Plant. When that plant closed, I transferred to Kanawha River. I really consider myself fortunate to have found such an enjoyable place to work. I will miss everyone after my retirement on June 1, but I'm going to enjoy being home. I live with my 88-year-old mother, and we hope to travel some. We're going to Indiana this month for my nephew's college graduation. I belong to the Chelyan United Methodist Church and am active in the Methodist Women. I also like to collect Hummel figurines, which I started when my brother was in service in Germany." □

"I enjoyed working with the public," says Huntington Customer Accounts Representative **Mary Lou Wilcox,** who spent 41 years doing just that. "There have been a lot of accounting changes from the time all payments were hand posted," she notes. "Perhaps the biggest one was when we started using computers." Mary Lou continues, "People always say when they retire from Appalachian that the people they worked with are really nice, and I have to agree. You do have a sense of comradery with your co-workers, and I know I will miss them." Mary Lou has not made a lot of plans for her leisure time after retirement on June 1. "I have been telling everyone I'm going to learn to cook. Of course, I've been married only 40 years! I hope to spend more time reading, which I love, especially mysteries and historical books. I'll probably grow some flowers, and Jim and I will travel some. We plan to visit my sister, who lives in Maine, and later on we're going to South Carolina and Florida. We're thinking about looking for a place to spend the winter months." □

"When two consecutive mine strikes played havoc with my insurance business, I came to work for Appalachian," relates **Keith Thomas,** Montgomery area supervisor. On June 1, he elected early retirement after 35 years' service. "I couldn't have been any happier no matter where I went," Keith says. "I think we have the best people in the Charleston area, and the people are what make you come back to work every day. I don't have any immediate plans for retirement. The only thing I know I'm going to do is break the schedule. I like to golf, fish, and hunt so that's why I enjoy living in the mountains. We have a place close to Summersville Lake, where we spend about all of our spare time. Right now I'm building another room on the house, getting ready for my granddaughter. She's six months old and the only grandchild I have, so she's special." Keith attends the Glasgow Methodist Church and has been a member of the Montgomery Rotary for 20 years. □

The country was at war when **Rosie Sandor** graduated from high school, so she headed for Washington and went to work in the Pentagon. "It was quite an experience because I had never been away from home," Rosie relates, "but I wouldn't trade those three years for anything. After I returned home, I worked in a furniture store before joining Appalachian." Rosie, Montgomery customer accounts representative A, had 35 years' service before electing early retirement on June 1. "I have enjoyed my career at Appalachian very much," she adds. "I met a lot of nice people and made a lot of good friends. But I will enjoy being home because my house is my castle. My main hobby is cooking and baking. I also enjoy walking and exercise and hope to walk at least 5 miles a day after I retire. I am active in the Immaculate Conception Catholic Church and want to become even more involved. I help a friend who is going blind with her books, and I'm sure she will depend on me even more when I'm not working. After my sister retires in December, we hope to travel." □

Operating Ideas

(continued from page 6)

Plant, co-authored an article describing the design of a portable battery-powered voltage and milliamp calibrator. This highly versatile and lightweight signal generator calibrates and tests almost all voltage or current input devices used at Mountaineer.

Greenlee also told how a digital meter and bicycle tire valve can be used to improve plant air compressor data for bearing vibration and pneumatic control signal pressures so that a higher accuracy equipment history can be kept.

D. T. Robinson, line crew supervisor exempt; **W. C. Ogle,** line mechanic A; **E. D. Lee,** line mechanic A; and **R. L. Kirby,** line mechanic C, all of Marion, described a way to eliminate resagging the primary conductor when a Cogenel insulator breakage and deterioration of insulators in service led to the decision to replace all Cogenel insulators. The new replacement method meant a savings of $103,415 to Abingdon Division, which had 4,300 Cogenel insulators scheduled for replacement in 1985. □

Design differences make U.S. nu

By Milton P. Alexich
Rear Admiral, U.S. Navy-Retired
Vice President-Nuclear Operations
and Del V. Shaller
Staff Engineer
AEP Service Corporation

The recent accident at the Chernobyl Nuclear Power Plant No. 4 in the Soviet Union has once again focused public concern on the issue of nuclear power safety. As employees of an electric utility operating the twin unit Donald C. Cook Nuclear Plant within its system, we may expect to have questions directed at us by our friends and neighbors. The purpose of this article is to help you judge the safety of nuclear power in the United States by answering the question, "Can a Chernobyl type accident happen here?" Let's look at the facts as we know them.

* * *

One of the better ways to address this question is to look at the differences between American reactors and Russian reactors. The best place to start in such a comparison is the different philosophies behind the nuclear power programs in each country. In the mid-1950s the Russians chose to build graphite-moderated reactors which would produce electricity and weapons grade plutonium at the same time. The United States chose to build reactors which produced a minimum of plutonium, to minimize the problems of storing wastes and to make it harder for foreign purchasers of American power reactors to use them to build weapons.

The American approach to power reactor construction is based on a defense-in-depth design. Several barriers are established between the fuel and the environment. A number of these barriers do not exist in the Soviet design. In addition to the cladding of the fuel pin, the U.S. design places the fuel assemblies in heavy, high pressure reactor vessels. The Soviet RBMK reactor places the fuel assemblies in relatively lightweight pressure tubes (there were more than 1600 of these tubes in the Chernobyl Unit 4 reactor). All U.S. power reactors, as well as most civilian power reactors outside the USSR, are housed in heavy-walled, steel-lined containment structures. The Soviet design, to the best of our knowledge, is a standard-type industrial building.

U.S. reactor designs include diverse and redundant emergency core-cooling systems and engineered safeguards within the containment, while the Soviet design includes limited emergency core-cooling systems with much less diversity. U.S. reactor containments are designed to collect all of the water and steam escaping from the reactor system during an accident and to provide the means for cooling and recirculating this water for reactor cooling. The Soviet design is based on protecting only against a much smaller break, and they have a limited water supply for post-accident cooling.

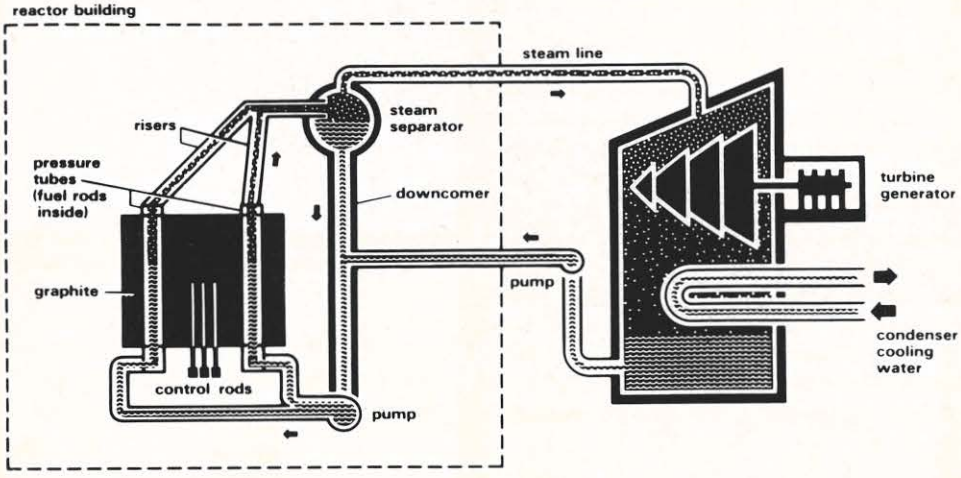
The required rigid seismic design of U.S. reactors makes them much more capable of withstanding the effect of a chemical explosion, as was apparently experienced at Chernobyl. Not all Soviet plants are seismically designed.

Diversity in power supplies to emergency equipment is another U.S. design feature; some emergency pumps are steam turbine driven or driven by diesel engines. The Soviet designs depend almost exclusively on electric motor-driven pumps (even though one of their main design criteria is to design for the loss of off-site electrical power).

Upon the loss of off-site power, all U.S. reactors fall back upon fast-start, quick loading diesels that reach full speed in less than 10 seconds and provide power

USSR RBMK-1000

(also referred to as: tube-type or channel-type or pressure-tube light water graphite-moderated reactor)



USSR RBMK-1000 REACTOR. In this Soviet reactor system, pellets of slightly enriched uranium dioxide are stacked and sealed into fuel rods made of zirconium alloy. These rods are assembled into bundles which are inserted into pressure tubes set in vertical holes or channels in the arrangement of graphite bricks which act as a moderator. A moderator slows down high energy neutrons to facilitate the fission chain reaction. Water rising through the pressure tubes picks up heat from the fission process and boils to become steam. This steam is then used to drive a turbine generator to produce electricity. The steam is then condensed back to water which returns to recycle through the reactor.

clear plants safer than Chernobyl

to emergency core-cooling equipment within 30 seconds. This capability is coupled with the availability of a large quantity of cooling water. The Soviet design gets the diesels started within two minutes and has a much smaller water inventory to facilitate core cooling.

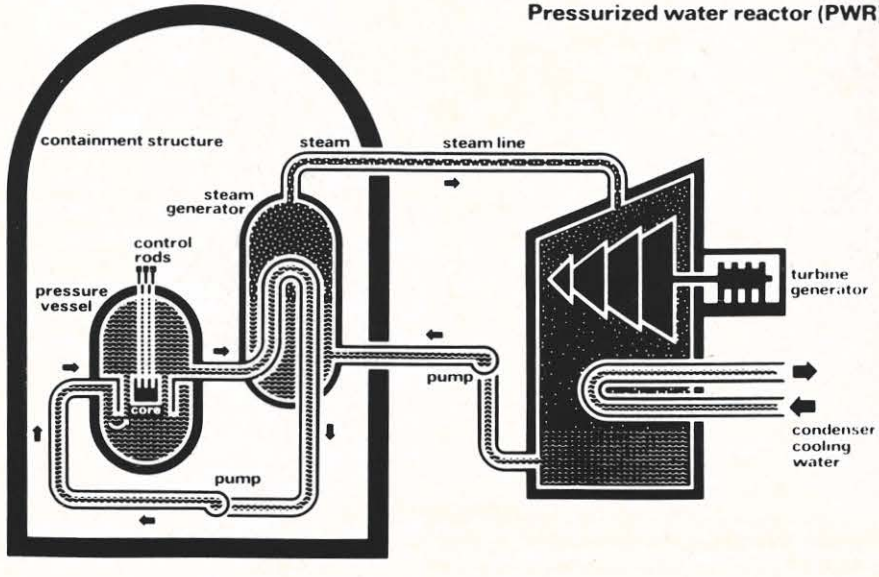
All U.S. reactors are designed with a negative moderator temperature coefficient which means, as the temperature of the moderator-coolant increases there is a decrease in the fission activity within the core. The Soviet graphite-moderated reactor has a slightly positive moderator temperature coefficient, thus, as temperature increases there is a tendency for fissioning to increase, making control more complex.

In the more comprehensive analysis of the Chernobyl incident to date, Mr. John J. Taylor of the Nuclear Power Division of the Electric Power Research Institute (EPRI), in testimony before the Nuclear Regulatory Commissioners, included the following remarks:

> "Fundamental design and operational differences exist that make side-by-side comparisons extremely difficult. These fundamental differences lead us to draw two immediate conclusions:
>
> First, the differences will make it difficult to draw easy applications to the U.S. situation. Many of the lessons from Chernobyl will not apply to U.S. plants. Some lessons will apply, and must be analyzed. Initial challenges or event initiators can be very similar between U.S. and Soviet plants. Also, I believe the consequences of the Chernobyl accident, in terms of accident source terms, radioactive transport, health effects, and cleanup efforts are all important areas that U.S. scientists must study and apply as appropriate to our own safety analysis efforts.
>
> Second, we must not fail to recognize the most obvious fact about U.S.-Soviet nuclear power program comparisons: Chernobyl was vastly different from our 1979 accident at Three Mile Island. Despite the fact that each experienced major core damage, the public health effects from the Three Mile Island accident and the Chernobyl accident are dramatically different. No deaths, injuries, or health risks resulted from the Three Mile Island accident. The exhaustive Pennsylvania Department of Health study completed last September found no evidence of increased cancer among area residents due to the 1979 accident at TMI. No damage to crops or livestock occurred, and no cleanup of land outside the plant boundaries was required. I firmly believe that our U.S. designs and operations account for that difference. The analysis of Chernobyl will no doubt reveal some opportunities for further improvements in the design and operation of U.S. reactors, but we must not lose sight of the fact that TMI-Chernobyl comparisons indicate that our program is fundamentally sound. This is a credit to your agency (NRC), our industry, and public scrutiny within our democratic process that have worked together to achieve high standards of safety."

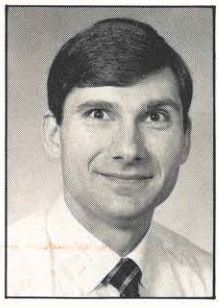
We were reminded at Three Mile Island that accidents will happen, however low their predicted probability of occurrence may seem. Even then, fundamentally sound engineering design and practices enabled us to avoid serious consequences to the health and safety of the public. Since TMI, U.S. utilities have made many improvements to even further reduce the probability of a reoccurrence. The vast benefits of nuclear energy may be enjoyed if we as an industry observe the highest standards of professionalism in the design, construction, maintenance, and operations of our vital nuclear power plants. □

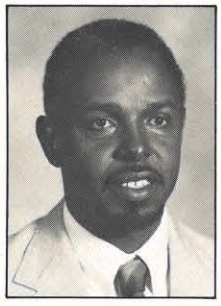
Pressurized water reactor (PWR)



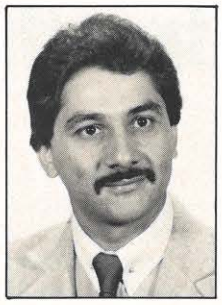
PRESSURIZED WATER REACTOR (PWR). The U.S. PWR shown here is a type of reactor fueled by slightly enriched uranium in the form of uranium oxide pellets held in zirconium alloy tubes in the core. Water is pumped through the core to transfer heat to the steam generator. This coolant water is kept under pressure in the core to prevent boiling and transfers heat to the water in the steam generator to make the steam.

Promotions


Konkus


Manns


Blankenship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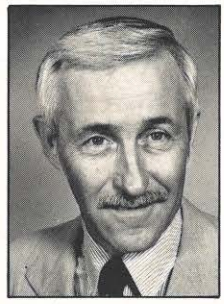
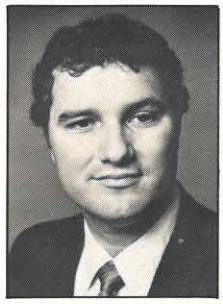

Lynch


McCraw

Scott Konkus, electrical engineer, was promoted to electrical engineer senior, GO T&D Engineering, Roanoke, on April 1. He holds a bachelor of science degree in electrical engineering from Virginia Military Institute.

Howard R. Manns, line mechanic A, was promoted to line crew supervisor nonexempt in the Fieldale area of Roanoke Division on April 12.

Carol D. Blankenship, electrical engineer, was promoted to electrical engineer senior, GO T&D Engineering, Roanoke, on April 1. She holds a bachelor of science degree in electrical engineering from Virginia Polytechnic Institute & State University.

Mo Ahangardezfooli, electrical engineer, was promoted to electrical engineer senior in Charleston on April 1. He holds a bachelor of science degree in electrical engineering from the West Virginia Institute of Technology.

Mark A. Lynch, power engineer, was promoted to power engineer senior in Huntington on May 1. He holds an associate in science degree in electrical engineering from the West Virginia Institute of Technology and earned a bachelor degree through International Correspondence Schools.

John A. McCraw, electrical engineer, was promoted to electrical engineer senior in Point Pleasant on June 1. He holds a bachelor of science degree in electrical engineering from the West Virginia Institute of Technology.

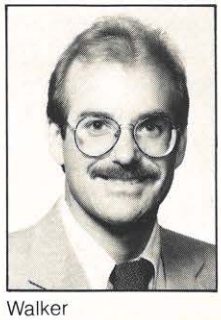
Marvin H. Monroe, line crew supervisor nonexempt, was promoted to line crew supervisor exempt in the Gate City area of Abingdon Division on May 1.

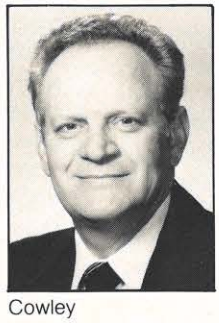

Monroe


McCutcheon


White


Bowers


Walker


Cowley


Carroll

Michael J. McCutcheon, performance engineer, was promoted to performance engineer senior at John E. Amos Plant on April 1. He holds a bachelor of science degree in mechanical engineering from West Virginia University.

Ronald L. White, head T&D clerk, was promoted to Charleston records supervisor on April 1. He attended the Charleston School of Commerce.

Jack L. Bowers, automotive mechanic A, was promoted to automotive supervisor nonexempt in Abingdon on May 3.

Donald E. Walker, performance engineer, was promoted to performance engineer senior at John E. Amos Plant on April 1. He holds a bachelor's degree in electrical design engineering technology from Pennsylvania State University.

Duaine G. Cowley, maintenance mechanic A, was promoted to maintenance supervisor at John E. Amos Plant on May 1.

Raymond T. Carroll, performance engineer, was promoted to performance engineer senior at John E. Amos Plant on April 1. He holds a bachelor of science degree in civil engineering from the West Virginia Institute of Technology.

Abingdon

Mark S. Smith from line mechanic D to line mechanic C, Lebanon.

Beckley

Shirley Summers from junior stenographer to personnel clerk C.

Robert Shiflett, Jr., from line mechanic D to line mechanic C.

Edward Zutaut from engineering technician to engineering technician senior, Oak Hill.

Bluefield

Teresa Branham from customer accounts representative C to customer accounts representative B.

Gary Bazzie from line mechanic B to line mechanic A, Princeton.

Daryl Swecker from line mechanic A to general servicer.

Jody Lusk from meter electrician C to meter electrician B, Welch.

Terry Akers from line mechanic C to line mechanic B.

Kenneth Britten from line mechanic B to line mechanic A, Welch.

Central Machine Shop

Carol Kosa from machinist 3rd class to power equipment mechanic 2nd class.

Centralized Plant Maintenance

Robert R. Burdette from maintenance mechanic B to maintenance mechanic A.

Charleston

Sandra L. Myers from marketing and customer services advisor to marketing and customer services representative.

Anthony D. Sword from line mechanic C to line mechanic B.

J. D. Ramsey from line mechanic C to line mechanic B.

Mark Patton from line mechanic C, St. Albans, to line mechanic B, Charleston.

Clinch River

Dennis P. Williams from utility coal attendant to coal equipment operator.

Gregory V. Mullins from coal handler to utility coal attendant.

Robert R. McComas from utility worker A to coal handler.

General Office

Linda Markham from tracer to drafter C, GO T&D R/e & R/w, Roanoke.

Charles A. Edwards, III, from hydro mechanic B to hydro mechanic A, GO Hydro, Roanoke.

Winsdor C. Adams from station operator C to station operator B, GO T&D Station, Charleston.

Ernest G. Perdue from transmission station mechanic B to transmission station mechanic A, GO T&D Station, Roanoke.

Tony G. Martin from transmission station mechanic B to transmission station mechanic A, GO T&D Station, Roanoke.

Sharon Beck from stenographer to secretary-stenographer B, GO T&D R/e & R/w, Roanoke.

Brenda K. Pearman from station clerk B to station clerk A, GO T&D Station, Roanoke.

Faye H. Amos from personnel assistant to personnel assistant senior, GO Personnel, Roanoke.

Jackie R. Scruggs from executive secretary, GO Executive, Roanoke, to personnel assistant, GO Personnel, Roanoke.

Betty C. Knouff from clerk, GO Rates & Contracts, Roanoke, to department assistant-marketing and customer services, Roanoke.

Glen Lyn

Oran K. Nance from maintenance mechanic D to maintenance mechanic C.

Gregory N. Lee from coal handler to coal sampler.

Jerry W. Worrell from equipment operator C to coal handler.

Kanawha River

Gordon Woody from maintenance mechanic C to maintenance mechanic B.

Lynchburg

Debi Watkins from junior stenographer to stenographer.

Walter Childress from line mechanic B to line mechanic A.

Don Morris from line mechanic C to line mechanic B.

Darrell Bradley from line mechanic A to general servicer.

Mountaineer

Joe Donahoe from control technician to control technician senior.

Pulaski

Robert Faulkner from line mechanic A to area servicer, Floyd.

Roanoke

Ronald J. Jefferson from line mechanic C to line mechanic B, Fieldale.

Michael R. Lawson from line mechanic C to line mechanic A, Fieldale.

Philip Sporn

Guyla Roush from secretary-stenographer A to secretary.

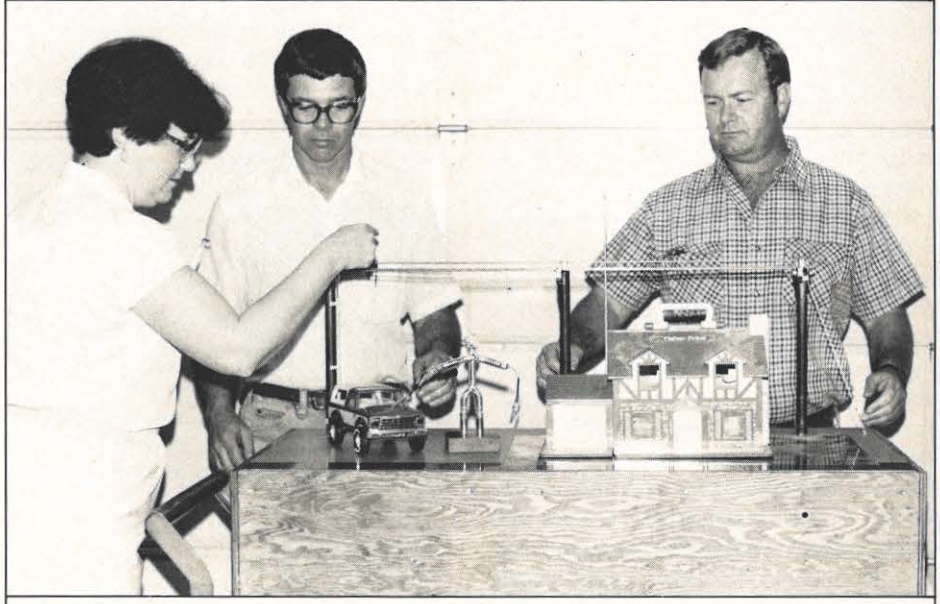
Charles Zuspan, Jr., from control technician to control technician senior.

Richard Payne from control technician junior to control technician.

Peter Brooker from control technician junior to control technician.

John Pauley from control technician junior to control technician. □

New safety display for Kingsport



An electrical display and program to educate the public in the safe use of electricity has been developed by Carolyn Gibson, marketing and customer services representative; Jerry Hagood, station mechanic A; and Gale Chase, line mechanic A, of Kingsport Power. The program begins with a discussion on the basics of electricity and is followed by a presentation of actual electrical hazards. These are demonstrated by using a scale model replica of a three-phase distribution line. The primary audience for the program is sixth through twelfth graders, but the program is available for presentation to other groups upon request. From left, Gibson, Hagood, and Chase.

Friends We'll Miss

William H. Hoard, 73, retired Kingsport custodian, died May 5. A native of Hawkins County, Tennessee, he was employed in 1942 and retired August 1, 1974. Hoard is survived by three sons, two daughters, ten grandchildren, two great-grandchildren, and two sisters.

William Leon Mitchell, 70, retired Grundy lineman A, died May 9. A native of Abingdon, Virginia, he joined the company in 1948 as a groundman and retired March 1, 1981. Mitchell is survived by his wife Marilyn, Route 4, Box 113, Grundy, VA; two sons; two daughters; one foster daughter; and seven grandchildren.

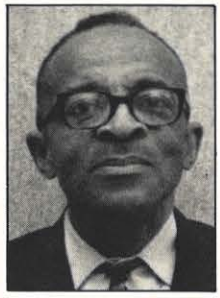
Donald Cecil Brown, 63, retired Philip Sporn Plant outage coordinator, died April 26. A native of Catlettsburg, Kentucky, he joined the company in 1947 as an assistant chemist B in Bluefield and elected early retirement on February 1, 1983. Brown is survived by his wife Rolande, 3-356 Royal Palm, Lady Lake, Florida; one son; two daughters; and nine grandchildren.

Edward F. Lacy, Jr., 76, retired Roanoke head T&D clerk, died May 7. A native of Lynchburg, Virginia, he began his career in 1927 as a clerk in Lynchburg and retired July 1, 1974. Lacy is survived by his wife Mary, 1601 Sigmon Road, Roanoke, VA; one son; two grandchildren; and three brothers.

John David Walters, 67, retired customer accounting administrator, GO Accounting, Roanoke, died May 7. A native of Davis, West Virginia, he was employed in 1941 as a clerk junior in Ashland and elected early retirement June 1, 1981. Walters is survived by two sons and two daughters.

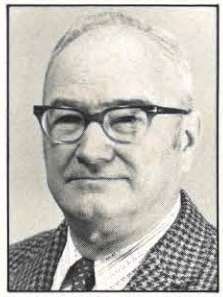
George Hallie Burns, 67, retired Huntington commercial engineer, died May 3. A native of Lincoln County, West Virginia, he began his career in 1945 as a residential representative junior and elected early retirement on February 1, 1983. Burns is survived by his wife Mildred, 6205 East Gate Road, Huntington, WV; one son; and two grandchildren.

Ervin E. "Buddy" Thompson, 64, retired Glen Lyn Plant unit supervisor, died May 10. A native of Elgood, West Virginia, he was employed in 1941 as a laborer and elected early retirement on February 1, 1985. Thompson is survived by his wife Betty, Peterstown, WV; two sons; one daughter; and six grandchildren.


Hoard


Mitchell


Brown


Lacy


Walters


Burns


Thompson

George Dan Covey, 86, retired Beckley customer services representative, died May 1. A native of Lester, West Virginia, he was employed in 1938 as chief janitor and retired June 1, 1964. Covey is survived by his wife Mary, 108 Vale Street, Beckley, WV; one daughter; thirteen grandchildren; ten great-grandchildren; one stepson; and two stepdaughters.

William C. Strain, 86, a 40-year veteran of the AEP System, died March 19. Throughout his career, he was employed in construction and operation at various AEP System power plants in Virginia, West Virginia, Ohio, and Indiana. He retired in 1962 as accounting supervisor for the construction of Unit 4 at Tanners Creek Plant. □

John E. Amos dies in Florida

John E. Amos, 80, a retired director of American Electric Power Company for whom the AEP System's largest power plant was named, died May 8 at his winter home in Vero Beach, Florida.

He served as an AEP director for 16 years, 1962-78.

Amos, a lifelong West Virginian, was one of the state's most illustrious citizens. He served in the West Virginia Legislature for 20 years: six terms in the House of Delegates, of which he was speaker for six years, 1943-48, and two terms in the State Senate, of which he was majority leader. He was the first president of the State Board of Regents when it was established in 1969. And he represented West Virginia on the Democratic National Committee, 1959-68.

He was born in Charleston, was graduated from the West Virginia University School of Law in 1929, and for many years was a partner in the Charleston law firm of Amos & Brotherton. He also was president of Bell Lines, Inc., a trucking company, and of West Virginia Terminals, Inc.; a partner in Conner & Amos, a nursery; and a director of Vulcan Materials Company, Consolidation Coal Company, Kanawha Valley Industrial Development Corporation and the American Trucking Association. He was a member of Sigma Nu and Phil Delta Phi fraternities. □

Who's News

Abingdon

Cathy, daughter of J.L. Cook, station mechanic A, is one of the seven Washington County students selected to attend the Governor's School for the Gifted. She also was county and regional winner of the Bland Memorial Scholarship music competition sponsored by the Lions Club of Virginia.

Pete Montague, division superintendent, has been elected a senior member of the Institute of Electrical and Electronic Engineers, Inc. Senior member is the highest professional grade accorded by IEEE.

Jim Hughes, marketing and customer services manager, has been elected to a five-year term on the board of trustees of Bluefield College.

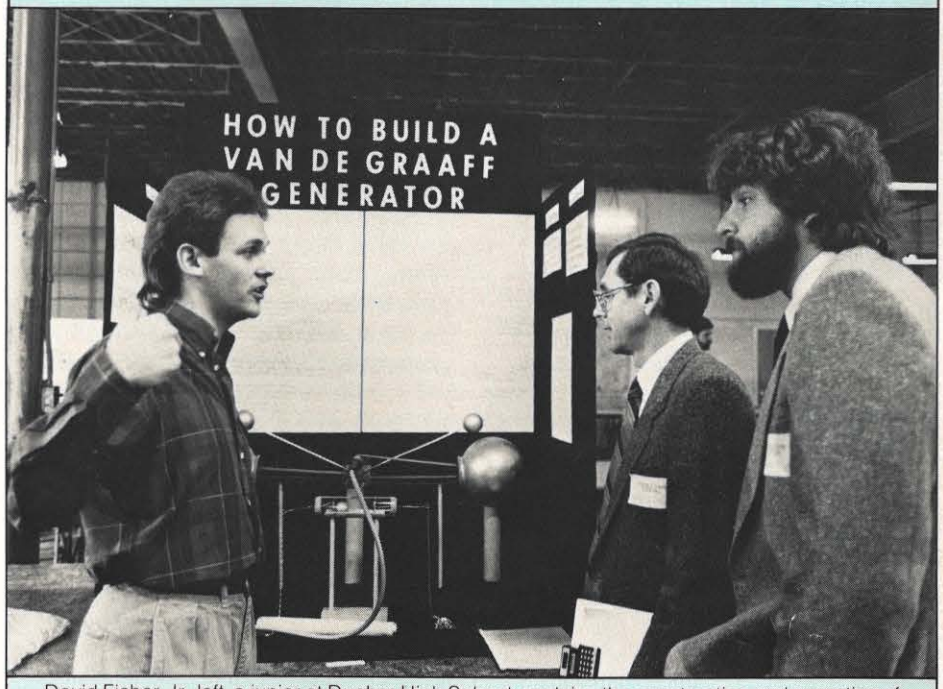
Amy, daughter of Gus Croft, customer accounts supervisor, won second place (school) in the cultural arts contest sponsored by the Virginia State PTA. She also received honorable mention in the junior division of the AHS Science Fair. ☐

Bluefield

Natalie, daughter of Alex Yazdani, electrical engineer senior, received the first place award in the music division of Clinch Valley District Cultural Arts Contest with an original piano composition entitled "The New York Song." The entry took first place in the Dudley Elementary School, where she is a first grader, and the Tazewell County Cultural Arts Contest.

Dick Ruff, retired power engineer senior, was honored by the Welch Lions Club with a life membership in the organization. He has been a member of the club since 1947. ☐

Fisher places first in science fairs



David Fisher, Jr., left, a junior at Dunbar High School, explains the construction and operation of his Van De Graaff generator to judges Rodger Woodrum, Charleston energy services supervisor for Appalachian Power, and Wes Bruce, director of Kanawha County Schools Department of Research, Evaluation and Planning. David built the apparatus from scratch, using common materials such as glass lamp bowls, rubber balls, and fiberglass tubing. His work and explanation rated him first place in school, county, and central regional science and engineering fairs. He also received the United States Navy Science Award from the Secretary of the Navy. David is the son of Robert L. Fisher, transmission station mechanic A, GO T&D Station, Charleston. Photo courtesy Evadna Bartlett, Charleston Daily Mail.

Beckley

Juli, daughter of Sandy Palen, marketing and customer services representative, had one of her paintings selected for a special yearlong exhibit in the nation's capitol. She is a senior at Woodrow Wilson High School.

Dale, son of Judy Smith, custodian, has been named assistant costumer for the outdoor dramas, Hatfields & McCoys and Honey in the Rock, at Grandview Amphitheater.

Rob Londeree was selected for the Beckley Area 15-and-under AAU basketball team. He is the son of Bob and Dianna Dyke, Oak Hill area servicer and customer accounts representative C, respectively.

Phil Wright, electrical engineer, has been elected president of the Oak Hill Jaycees.

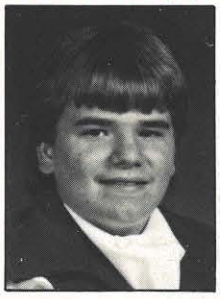
Keith Von Scio, department assistant-marketing and customer services, has been elected to the board of directors of the Beckley Jaycees.

Jimmy, son of Basil Bolen, line crew supervisor nonexempt, has been awarded a brown belt in karate by the Beckley YMCA.

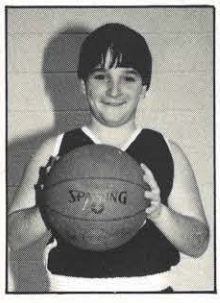
Jeff, son of Ray Vest, administrative assistant, and **Nick,** son of Elizabeth Nixon, customer accounts representative C, have been selected by the staff at Shady Spring High School to represent the school at Mountaineer Boys' State.

Seventeen Beckley Division employees and family members participated in the WALK-A-THON for the March of Dimes, raising over $700 for this worthwhile organization. ☐

Charleston



Troy, son of Beverly Meadows, St. Albans customer accounts representative C, was named third chair sousaphone player in the Kanawha all-county concert band. A ninth grader at Spring Hill Junior High, he also made the all-county band last year.



Chad, son of Pat Taylor, customer accounts supervisor, was named to the Sissonville Biddy all-star basketball team. He played guard on the Flinn Elementary fifth grade team in four tournaments. The team won three of the tournaments, and Chad was named to two all-tournament teams.

Missy, daughter of Pat Taylor, was named a cheerleader at Sissonville High School. ☐

General Office

Andrew K. Barham, engineering technician senior, GO T&D Meter, Charleston, has successfully completed the basic electronics portion of the CET exam to qualify as an associate certified electronics technician.

Frankie, wife of Tom Puckett, senior buyer, GO Purchasing, Roanoke, was named Piedmont Area Reading Council "teacher of the year" at the Virginia State Reading Association Conference. She is a reading teacher at Heritage High School, Lynchburg.

Glenn Reynolds, marketing and customer services director, was re-elected vice president-Valley of the Virginia State Chamber of Commerce.

The sons of Jim Surface, relay specialist senior, GO T&D Station, Bluefield, are active in a number of sports. **Chad,** a ninth grader at Graham High School, played football for the G-Men this past season, with a record of 7 wins, 3 losses. He also played point guard on a basketball team in the Bluefield, WV, Recreation Department. Chad is now participating in Graham's weight lifting and track programs. **Brent,** a fifth grader at Graham Intermediate, played left halfback and defensive safety for the undefeated Bluefield, VA, Lions football team last season. He played point guard in basketball in both the VA and WV leagues, and his team won the championship in VA and came in second place in WV. Brent was chosen to play point guard on the WV all-star team, which won the area regional tournament. He received the most valuable player award for outstanding performance during tournament competition. Brent also took first place in Pipestem State Park's one-mile pumpkin run.

Matthew John, son of Hank Sullivan, programs manager, GO Public Affairs, Roanoke, was selected as a member of the Roanoke Youth Symphony. He plays trombone with the Northside High School Marching Band and was selected its most valuable member. ☐

Roanoke

Mark Lawrence, administrative assistant, has been elected to a one-year term as director of the Roanoke Jaycees.

Timmy, son of Rudy Pilson, Fieldale line crew supervisor nonexempt, was a member of the Fieldale Elementary Tiny Mites basketball team which captured the Fieldale-Collinsville District regular season championship.

Rob Glenn, energy services supervisor, was elected to a one-year term as vice president of the Virginia Museum of Transportation. He served on the board of directors for a year and chaired the Museum's Long Range Planning Committee, which was responsible for selecting a new site for the Museum following the November 1985 flood.

Glynn, son of Bill Loope, station crew supervisor nonexempt, won first place in the impromptu speaking event during the Virginia Phi Beta Lambda annual leadership conference. He was one of five Ferrum College students competing against students from 25 other Virginia Colleges. He will receive an all-expense-paid trip to the national competition in Washington, D.C., next month.

Moriah, daughter of Lynn Short, Stuart area supervisor, was presented a $75 U.S. Savings Bond during award ceremonies conducted by the Fraternal Order of Eagles, Stuart Chapter 4007. Moriah won third place nationally out of 4500 students in an art contest. ☐

Kanawha River

Michael Siemiaczko, Jr., assistant plant manager, was named an honorary member of the Delta Theta Chapter of Pi Tau Sigma, a national honor mechanical engineer fraternity. He was presented a plaque by the fraternity's president at a dinner held at the West Virginia Institute of Technology. ☐

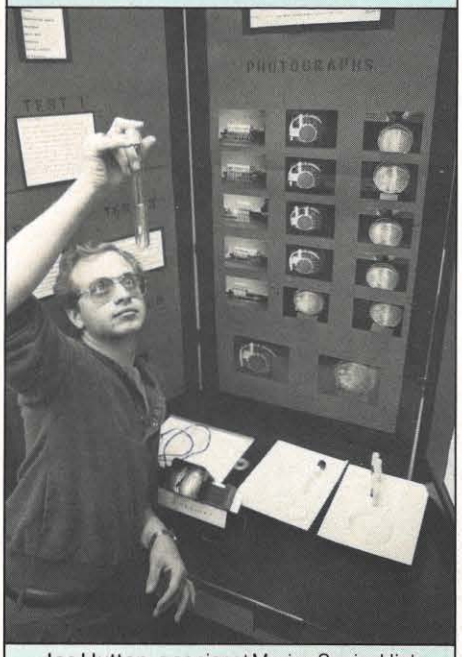
Pulaski

A.L. Graham, Jr., retired marketing and customer services manager, led the Town of Pulaski election in winning a council seat. He has previously served sixteen years on council, including eight as vice mayor.

Jim Lane, T&D clerk A, competed in the 80th Division Commander's Rifle Match at Fort Eustis, Virginia. He placed fourth in the expert classification individual competition, and his team came in second. Jim is a sergeant first class in the 80th Division of the Dublin Reserves.

R.E. Lester, Jr., son of Christiansburg Retiree Ray Lester, was elected to Christiansburg Town Council. He was the second largest vote-getter. Eddie, a certified public accountant with Dalton Pennell & Co. in Christiansburg, is chairman of the Montgomery County Economic Development Commission. ☐

Hutton wins science awards



Joe Hutton, a senior at Marion Senior High School, won four awards at the Southwest Regional Science Fair for a project he did on comparing the purity of rain, ground and surface waters. Joe tested how much bacteria was in each water source and found surface water to be the most contaminated. He determined from this project that animal and human wastes are the primary causes of water pollution. Joe received a first place award from the U.S. Marine Corps and from the American Society for Microbiology. He also received an award of merit from the Department of Health and Human Services and an honorable mention in the microbiology division. Joe is the son of Linda Hutton, Marion customer accounts representative C. Photo courtesy Michael Harrington, Smyth County News.

Kingsport

M.C. Simpson, executive assistant, has been appointed to the board of directors of Kingsport Centre, Inc. □

Huntington

John, husband of Debbie Hickel, Point Pleasant T&D clerk B, was elected junior governor of the Point Pleasant Loyal Order of Moose.

June Deal, lab technician, Huntington General Lab, was elected to a three-year term on the Marshall University Alumni board of directors.

Three employees were elected officers in the Huntington Jaycees for 1986-87. They are **Bob Waters,** electrical engineer, GO T&D Station, community development vice president; **Brent Evans,** chemical lab technician III, AEP General Lab, treasurer; and **John Bertram,** electrical engineer, director.

Charles Arnold, chemist, AEP General Lab, and **George McClure,** retired customer servicer, were members of the Society for Preservation and Encouragement of Barbershop Quartet Singing in America Small Chorus Division which came in second place in the Johnny Appleseed Division held in Columbus, Ohio. The Johnny Appleseed Division covers Ohio, western Pennsylvania, and western West Virginia. The first and second place choruses are eligible to participate in the larger division contest to be held this fall.

Greta Keefer, junior clerk, was named to the director's list of honor students for the winter quarter at Southeastern Business College. To qualify, a student must have a grade point average of 3.5 out of a possible 4.0 and have taken at least 8 credit hours. Greta is working toward an executive secretarial degree.

Mark Lynch, power engineer senior, has been elected vice president of the Guyandotte Association of the American Baptist Men for 1986-87. □

PSI chapter honors Linda Smith

Smith

Linda Smith, secretary in GO Executive, Charleston, was named "secretary of the year" by the Charleston Chapter, Professional Secretaries International.

Three judges representing the fields of education, business, and secretarial determine the winner via a point system, based on PSI activities, education, and business experience.

Linda attended Trevecca Nazarene College, West Virginia University, and West Virginia State College. During her 13 years with Appalachian, she has worked at John Amos Plant and Centralized Plant Maintenance.

A member of the Charleston Chapter, PSI, since 1976, Linda has been recording secretary, corresponding secretary, and a member of the bulletin and retirement committees. She was chairperson of the secretaries week committee in 1984-85. She has attended various PSI seminars in West Virginia and the Southeast Conference and was a delegate to the international convention in Louisville, KY. □

Carter wins Roanoke tourney

Winston Carter was awarded a trophy for winning first place in the championship flight of the Roanoke golf tournament.

Winston Carter, GO T&D Civil Engineering, squeaked by Tim Earhart, GO Hydro, to win the championship flight in the 1986 Roanoke Division/General Office golf tournament. Their scores were 69 and 70, respectively. Ninety-one golfers participated in the event, held May 10 at Countryside in Roanoke.

Winners and runners-up in other flights were: 1st flight-Ron Hogan, GO Accounting, 87; Dave Baumgardner, GO T&D Station, 88. 2nd flight-Ron Jefferson, Roanoke T&D Line, and Eddie Purves, Roanoke T&D Station, tied with 93's. 3rd flight-Frank Stiff, Roanoke T&D Station, and Bill Hagerman, Roanoke T&D Engineering, tied with 98's. 4th flight-Tommy Abshire, Roanoke retiree, and Stanley Hill, GO Accounting, tied with 103's. 5th flight-Kim Wright, Roanoke T&D Engineering, and Bruce Tolson, GO Accounting, tied with 111's.

Other award winners were: Brian Sheetz, Roanoke T&D Station, low handicap round, 60; Orville Napier, Roanoke T&D Line retiree, low round retired employee, 89; Noble Marshall, GO Accounting retiree, flashiest dresser; and Bud Jones, GO T&D Engineering, Rodney Dangerfield award. Tim Earhart, GO Hydro, and Randy Agnew, GO Operations, tied for the longest drive on #15. Bill Loope, Roanoke T&D Station, was closest to hole on #3, and Bill McClung, GO Public Affairs retiree, was closest to hole on #14. □

Golf tourney winners

The Riverview Country Club in Madison, West Virginia, was the site for Logan-Williamson Division's scramble golf tournament this spring. First place winners were, l. to r., Gary Watson, line and station superintendent; Mike Watson, Gary's son; Don Robins, personnel supervisor; and John Skidmore, administrative assistant.

Births

Abingdon

Lindsey Brooke, daughter of **David T. Jones,** power engineer, April 21.

Charleston

Jessica Lynn, daughter of **David W. Kessler,** engineering technician, April 13.

Ryan William, son of **Terry R. Tucker,** line mechanic C, April 18.

Clinch River

Justin M., son of **Jeffery S. Dotson,** equipment operator B, April 21.

General Office

Erin Leigh, daughter of **Kathy Simmons,** centralized cash operator, GO Accounting, Roanoke, April 26.

Kasey Cheyenne, daughter of **Gloria Greene,** centralized cash operator, GO Accounting, Roanoke, April 27.

Amy Elizabeth, daughter of **L.D. Adkins,** station operator B, GO Operations, Huntington, April 4.

Huntington

Jacob Michael, son of **Perry Plymale,** lab technician, AEP General Lab, April 12.

Kanawha River

Alexandria Michelle, daughter of **Gloria J. Rhem,** plant clerk A, April 18.

Kingsport

Margaret Curtis, daughter of **Stephen Harnsberger,** marketing and customer services representative senior, May 9.

Lynchburg

Rebecca Sue, daughter of **Alan Jones,** electrical engineer, May 3.

Mountaineer

Benjamin Robert, son of **Glenn Collins,** maintenance mechanic A, February 18.

Andrew Seth, son of **Roger Johnson,** maintenance mechanic B, March 4.

Weddings


Bruce-Reynolds


Sarver-Albert


Cox-Smith


Conner-Chisom


Markham-Sullivan


McDaniel-Foley


Miller-Davis


Carpenter-Bigler


Gwinn-Bishop

Sonja Lorraine Reynolds to **Richard Monty Bruce,** April 25. Monty is the son of Patricia A. Greenway, stenographer, GO Personnel, Roanoke.

Jacquelyn Gail Albert to Jimmy W. Sarver, February 22. Jacquelyn is the daughter of Charlotte Wagner, Glen Lyn Plant chemist assistant.

Doris Damron Smith, centralized cash assistant, GO Accounting, Roanoke, to David Stuart Cox, May 10.

Jill Frances Chisom, stenographer, GO Rates & Contracts, Roanoke, to John Christopher Conner, May 10.

Traci Le-Ann Sullivan to **Bryan S. Markham,** Charleston meter reader, March 21.

Kathy M. Foley, communications engineer, GO T&D Communications, Roanoke, to Gary D. McDaniel, April 5.

Christina Davis to **Robert M. Miller,** St. Albans meter reader, February 14.

Naomi Bigler, Kanawha River Plant custodian, to Valesco Carpenter, April 5.

Dianna Bishop, Oak Hill customer accounting supervisor nonexempt, to **J.C. Gwinn,** Oak Hill line mechanic A, May 2.

Leslie Joan Journell to **James R. Tyree, Jr.,** Roanoke department assistant-marketing and customer services, April 19.

Sandra Kay Ware, Roanoke telephone operator, to Waymon D. Carter, April 13.

Tricia Baldner to **Bruce Bacon,** December 8. Bruce is the son of Carl S. Bacon, Kingsport marketing and customer services director.

Catherine Jensen to **James C.C. Hughes, II,** December 20. Jimmy is the son of James Hughes, Abingdon marketing and customer services manager. □

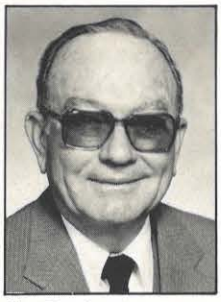
Sixtieth anniversary

Thomas and Eva Poole celebrated their sixtieth wedding anniversary with a dinner given by their children at the Surfside Holiday Inn, Daytona Beach, Florida, on May 10. Thomas is a retired area serviceman in Charleston Division. The Pooles have two sons, three daughters, thirteen grandchildren, and two great-grandchildren.

Service Anniversaries

Herbert Davis
transformer specialist
GO-Huntington
40 years

Delt Crosier
line crew supv. E
Charleston
40 years



Jim Dunham
energy serv. prog. adm.
GO-Roanoke
35 years

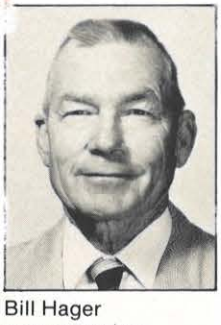
Clarence Bunting
regional dispatcher
GO-Huntington
35 years

Troy Hatfield
station crew supervisor
Huntington
35 years

Walter Wade
maint. mechanic A
Glen Lyn
35 years

G.T. Linger
maint. mechanic B
Kanawha River
35 years

Jim Turner
civil engineer sr.
GO-Roanoke
30 years



Bill Hager
area supervisor
Christiansburg
30 years

Kenneth Winter
shift operating engineer
John Amos
30 years

Fredrick Nibert
eng. technician sr.
Point Pleasant
30 years

Betty Lou Carter
editor of publications
GO-Roanoke
30 years

Joel Pugh
supervising drafter A
Pulaski
30 years

Bobby Daniel
el. plt. supv. clk.
GO-Roanoke
25 years

George Via
area servicer
Christiansburg
20 years

Clarence Breese
T&D clerk A
Bluefield
20 years

Terry Banks
line crew supv. E
Charleston
20 years

Charlie Anderson
customer acct. clk. A
Kingsport
20 years

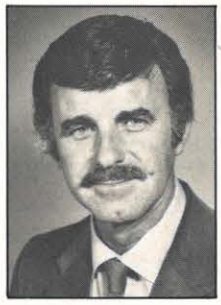
Lvonne Ferguson
cust. accts. rep. A
Welch
20 years

Beauford Miller
property maintainer A
Pulaski
20 years

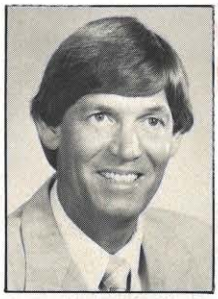
Harry Jennings
records supervisor
Pulaski
20 years

David Dodson
comm. specialist
GO-Bluefield
20 years

Roy Pendleton, Jr.
assist. shift op. engineer
Glen Lyn
20 years

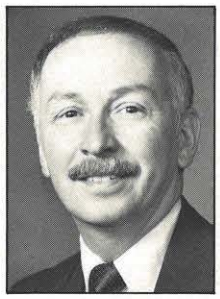


David Rood
driver-ground worker
Huntington
20 years



Jackie Rice
area servicer
Christiansburg
20 years

Ronald Hill
area servicer
Huntington
20 years



Bobby Ratcliffe
meter electrician A
Bluefield
20 years

Abingdon

10 years: **W.C. Ogle, Jr.**, line mechanic A, Marion.

John Amos

15 years: **Russell Browning**, maintenance mechanic A. **Monty Stover**, maintenance mechanic A. **Dave Vannatter**, maintenance supervisor. **Gary Painter**, production superintendent-maintenance. **Jackie Shaffer**, stores attendant senior. **Jeffry Hodges**, control technician senior. **Lester Steward**, coal equipment operator. 10 years: **John McLaughlin, Jr.**, maintenance mechanic B. **Glenn Matheny**, maintenance mechanic B. **Douglas Tyree**, equipment operator B. **Joseph Leffew**, coal equipment operator. **John Ragalyi**, coal equipment operator. **Kelly Chapman**, coal equipment operator.

Beckley

15 years: **Mike Bates**, meter reader, Rainelle. 5 years: **Lindsay Lattanzi**, engineering technician. **Dave Shrader**, line mechanic B.

Bluefield

20 years: **Doug Worley**, meter reader, Grundy. 10 years: **Ed Whittaker**, station mechanic A.

Central Machine Shop

10 years: **Allen Nesselrotte**, power equipment mechanic 1st class. **Deloris Williams**, junior clerk. 5 years: **Charlie Shannon**, power equipment mechanic 2nd class. **Jerry Wilson**, power equipment mechanic 2nd class. **Gary Grigsby**, welder 2nd class. **Cheryl Harris**, plant clerk C.

Charleston

10 years: **John Witt**, head custodian. **J.B. Hudnall**, line mechanic B, Montgomery. 5 years: **Alan Bays**, right of way agent.

General Office

30 years: **Carl Shepard**, transmission mechanic A, GO T&D Transmission, Bluefield. 15 years: **Eralene Poindexter**, senior telephone operator, GO General Services, Roanoke. **Herman Johnson**, head custodian, GO General Services, Roanoke. 10 years: **Albert Smith**, transmission mechanic B, GO T&D Transmission, Huntington. **Steven Bell**, transmission mechanic A, GO T&D Transmission, Huntington. 5 years: **Arthur Spangler**, transmission station mechanic B, GO T&D Station, Roanoke. **Linda Smithers**, load research data processor D, GO Rates & Contracts, Roanoke. **James Maynard**, operations engineer senior, GO Operations, Roanoke. **Richard Haley, Jr.**, hydro mechanic D, GO Hydro, Smith Mountain. **Judy Graybill**, meter clerk C, GO T&D Meter, Roanoke. **Dane Giles**, laboratory supervisor, GO T&D Station, Roanoke.

Glen Lyn

10 years: **Russell Lowe**, maintenance mechanic B.

Huntington

15 years: **Audrey Whitt**, line crew supervisor nonexempt. 5 years: **Roberta Hale**, meter reader.

Kingsport

15 years: **Dee Slagle**, general servicer. 10 years: **Carolyn Gibson**, marketing and customer services representative. 5 years: **Mike Webb**, meter reader. **Hazel Addington**, senior telephone operator.

Kanawha River

15 years: **E.E. Webb**, maintenance supervisor. **G.A. Smith**, unit supervisor.

Mountaineer

15 years: **Buddy Blank**, performance supervising engineer. **Allen Downie**, ash supervisor. 10 years: **Woody Hudson**, maintenance mechanic B. **Larry Norvell**, control technician senior.

Huntington safety breakfast

In recognition of having completed one year's work without a disabling injury as of February 15, Huntington Division employees were treated to breakfast. Their next goal is achieving one million safe workhours in October of this year.

People all over the world visit Smith Mountain

More than 1,143,000 people from all over the world have toured the visitors center at Smith Mountain Dam since it officially opened in June 1967. Each person was welcomed by either Henry Dooley or Jack Towler, who are virtual storehouses of information about the Smith Mountain Hydroelectric Project. Both worked at the site during the dam's construction and have been attendants at the center since it opened.

The center is open daily from 10 a.m. to 6 p.m. except Thanksgiving, Christmas, New Year's Day, and Washington's Birthday. According to Jack, there are very few days when no one visits. "Fewer people come on Monday, Tuesday, and Wednesday, but Thursday, Friday, Saturday and Sunday are always pretty good days. Some people come back four or fives times a year. These are people who live nearby and, any time they have company, they bring their guests here."

The center is packed with information in colorful exhibits and displays, some animated. The three major displays are a terrain map of the area in the vicinity of the reservoirs; a working model describing the pumped storage operation, complete with blinking lights and simulated water flow between the two dams; and an animated map of the American Electric Power System.

The terrain map is a 20-foot long reproduction of the area, portraying roads, bridges, mountains and streams. Faithful in detail, even the navigational beacon atop Smith Mountain blinks regularly.

Henry Dooley, left, and Jack Towler have worked at the visitors center since it opened in 1967. □

The working model, which is a favorite with visitors, is accompanied by a tape recorded explanation of the operation. The animated map of the AEP System also has a sound track. On the walls are illuminated pictures of lake activities as well as a drawing explaining how electricity is generated in coal-fired power plants.

From the center, visitors walk by ramp to an esplanade and overlook for a spectacular view of the dam and gorge. This spot has been the site of at least two weddings, with another one planned. One couple held a reception in the picnic area.

The picnic area is at the foot of the dam, on the Leesville Lake side. It features three picnic pavillions, seats and tables, gravel walkways, drinking fountains, charcoal burners, trash receptacles, and restrooms.

The Smith Mountain Dam, visitors center, and picnic area are located about seven miles north of Primary Route 40. Turnoff points on Route 40 are County Roads 777, 626 and 752 about midway between Rocky Mount and Gretna, Virginia. □

ILLUMINATOR

Appalachian Power Company
Post Office Box 2021
Roanoke, Virginia 24022
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ADDRESS CORRECTION REQUESTED

Bulk Rate
U.S. POSTAGE
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