NEWSLETTER NO. 35

"WRD RETIREES"

MAY 1982

An organization of retirees of the Water Resources Division, U.S. Geological Survey, who seek to keep in touch with each other and with their former agency.

National Officers: O. Milton Hackett, President; Joseph S. Cragwall, Jr., Vice President; Ruth L. Malone, Secretary; Sumner G. Heidel, Treasurer.
Regional Officers: Thad G. McLaughlin, Central; Norman H. Beamer, Northeast; Granville A. Billingsley, Southeast; Willis L. Burnham, West.
Administrative Coordinator: Robert M. Beall
Newsletter Editor: George E. Ferguson
Associate Editor: Margaret M. Walling
Address: "WRD Retirees." c/o USGS National Center, MS 420, Reston, VA 22092 Phone: 703 860-6867

WRD BUDGET OUTLOOK

With the fiscal restraints reported in the last issue (N.L. 34; p. 1) and the application of a few additional retrenchments under consideration, Division officials anticipate that WRD will remain "in the black" during the remainder of the 1982 fiscal year. One of the most recent fiscal shocks has been felt most directly at District level. The General Services Administration, essentially the "landlord" over space occupied by Federal agencies, has increased its rents drastically. Charges for district headquarters space in some cases have been increased by as much as 50 percent. Many district chiefs are consolidating their staffs and releasing as much space as possible in order to balance their budgets. Fortunately, the earlier indications of reductions in funds transferred to WRD Districts from other Federal agencies, have not continued. That type of cooperation has again stabilized and with apparent strength.

House Hearings on the 1983 (the fiscal year beginning next October 1) budget were held during the first few days of April. We understand that the cooperative program retained its traditional high priority in the 1983 budget justifications and that, outside the cooperative program, increased support of investigations directed toward the resolution of problems of ground-water contamination, toxic waste disposal, and acid rain are proposed. Substantial reduction in earlier "all Federal" projects on coal mine and oil-shale hydrology would be decreased appreciably - a sacrifice in deference to WRD budget ceilings.

Plans are relatively firm, as of mid-April, for a WRD delegation, headed by Chief Hydrologist <u>Phil Cohen</u>, to visit the Peoples Republic of China during May 27-June 24. The trip is in response to an invitation by equivalent Chinese officials, who visited the USA earlier, and would be directed toward strengthening USA-China relationships in hydrology. Surface Water Branch Chief <u>Marshall Moss</u>, who has handled the specific trip arrangements, will be member of the team. Others are: <u>Don Thomas</u>, SW Hqs. staff; <u>Dick Paulson</u>, instrumentation specialist, and <u>Bill Emmett</u>, a sediment transport

VOLUNTEERS NEEDED TO HELP CONDUCT TOURS AT THE NATIONAL CENTER

A more formalized program to conduct tours of the National Center is being considered. If adopted, the program would ask for volunteer (that means unpaid) tour guides from the ranks of the retired USGSers. The Survey needs to know how many people would be interested in helping out in the program and spending, if available, possibly a day or two each month at the National Center conducting tours for various groups. If interested, please contact Bob Johns, Public Affairs Office: phone: 860-7444. Training and orientation will be provided. Douglas Glysson, Asst. District Chief for Illinois, has been selected as the new sediment specialist at QW Branch Headquarters, National Center. He succeeds <u>Jim Culbertson</u> who became a representative of the Regional Hydrologist (West) with Headquarters at Vancouver, Wash., until his retirement in February.****John Kammerer has been designated to be the rapporteur on the subject of estimated water demands for different purposes at the Fourth World Water Congress in Argentina in September.****F. T. "Bill" Schaefer, Asst. Regional Hydrologist (NE) and Delaware River Master, was a recipient of an engineer-of-the-yearaward by the National Society of Professional Engineers at its awards banquet on Feb. 24 in Washington, D.C.****Daniel P. Bauer, who has been engaged in hydrologic studies for the Colorado District, has been appointed District Chief for Missouri.

The following have recently retired from WRD: Leo A. Bohner, in charge of hydrologic surveillance, Nevada District, on March 20.****Bonnie J. Bricker, in charge of report processing for the Ohio District, on Feb. 26.****James K. Culbertson, representative of West. Regional Hydrologist with Hqs. in Vancouver, Wash., and formerly sedimentation specialist, QW Branch, National Center, on Feb. 27.****Margaret O. Gurley, editorial assistant, Arkansas District, on Feb. 27.****Ralph C. Heath, Staff Officer, SE Region, with Hqs. at Raleigh, No. Car., and former District Chief for North Carolina and New York . on Mar. 8.****Katherine L. Jeffries, in charge of administrative services for NE Region, on Feb. 27.****Walter R. Meyer, engaged in the SW Alluvial Basins Project, Arizona District, on Mar. 30.****Wallace D. Robbins, member of the Austin Subdistrict staff, Texas District, on Jan. 22.****Mildred M. Schneider, in charge of administrative services, North Dakota District, on Feb. 26.****Elmer C. Schroeder, hydrologic systems specialist, Texas District, on Feb. 19.****Walter L. Steinhilber, Staff Officer, NE Region, with Hqs. at Madison, Wisc., on Mar. 26.****John W. Stephens, technical services specialist with Arkansas District, on Jan. 23.****Viola S. Taylor, hydrologic technician with Council Bluffs Hqs. of the Iowa District, on Mar. 31.****Arthur A. Vickers, hydrologist in charge of publications, New Jersey District, on Mar. 26.

NEWS OF RETIREES

Bill Allen, of Greenville, R.I., who hasn't "reported in" for awhile, brings us up to date on highlights of his last two years. In 1980 he visited the Geological Survey of Sweden and its ground-water section in Uppsala; flew over Stockholm and its archepelago in a seaplane; went hiking in New Hampshire and Maine. Year 1981 found him doing backyard gardening and delving into studies of church history and the revival movement in the Episcopal Church.****Dave and Marge Anderson have reported another happy, eventful year in 1981. February found them on a visit to Hawaii where they toured the islands of Oahu, Maui, and Kauai. (A minor earthquake provided them an additional thrill on Mauai!) In Honolulu, Dave enjoyed a visit to the USGS Office, and on their trip home they stopped for a few days in the San Francisco Bay Area. While there they were honored by an open house planned by Bob and Evelyn Smith that enabled them to renew acquaintance with numerous old Survey friends, including the Arvi Waananens, the Don Millikens, Joe and Flora Robles, and Rose Limerinos. In May, a first-time reunion of Dave's WWII gun battalion proved a huge success, and in June the Andersons celebrated their 40th wedding anniversary at a memorable party organized by their son and daughter.***Bob and Correan Cushman continue to enjoy a busy life of civic, church, and social activities in Middleburg, Vt. "We still enjoy the snow--and the rest of the year is beautiful. Our summer this past year was the first two weeks in July! Our travel, other than in New England, includes an annual trip in April to visit our daughter in Chapel Hill, N.C., and a biannual trip to visit another daughter in Berkley, Calif." Bob is still consulting in a modest way, locally. The town of Middleburg and a few local limestone quarries are his main clients.****From George H. Davis comes news of his appointment to the National Research Council's Committee on Onshore Mineral Development.****We have learned that Eldon and Jewel Dennis have returned home to San Angelo, Texas after a lengthy stay on Tortola, one of the Virgin Islands (British).

N.L. 35; p. 2

Keith and Vera Essex celebrated their 50th wedding anniversary in May 1981, with an anniversary gathering that included many of their oldest and best friends. Among the more than 100 guests honoring them at this benchmark occasion were long-time Survey friends, "Hutch" Eisenhuth, Ross Moor, "Augie" DePaulo, and Jess Ragsdale, (USGS, Cheyenne). Said Keith, looking back over their half-century of married life, "Our years (12) of retirement have no doubt been our richest ones. We spend so much happy time together," enjoying their family, their natural surroundings, their occasional work in the shop or photo lab. "Our open-door policy continues to bring our friends in anytime. Who could ask for more? We don't--only to let it continue"*****Ellis and Dorothy Gordon of Laramie, Wyo. (who have been "wintering" in Pharr, Tex. for several years) report a "pretty good" year in 1981. "Back home from Texas in April, we took our motorhome to Canada and Alaska in June and July. Then back to Laramie through the fall. We had planned to leave for Texas in early November, but I had to have my gall bladder removed November 10, and that held us up until December 2. But I recovered quickly and am feeling fine. Dorothy traded off driving on the way down. Did a fine job of pulling the Airstream behind the pickup!"****If their plans worked out, Howard and Norma Haworth spent 2 weeks in Thailand in January, with stopovers in Singapore on the way over and Hong Kong and Honolulu on their return.****Nice to hear from "Mac" and Lois MacKichan who were in Florida for a few months, enjoying the relative warmth of the St. Cloud area. They planned to return to their Nebraska home in the Spring.**** Readers of the Christian Science Monitor may have noted in the February 23 issue an interesting article entitled: "Mid-Florida's Environment: Is it sinking?" They may also have noticed that the "veteran hydrologist" interviewed was our Garald Parker.

Writing from their winter home in Largo, Fla., Ed and Holly Reed told of enjoying the balmy temperatures (70's and 80's) that have followed the unseasonable "citrus freeze" weather of January. As swimming enthusiasts, they have been enjoying the waters of the Gulf since mid-February. Ed reports that the Largo Chamber of Commerce blames their dismal tourist trade of early 1981 on the terrible weather up North, that discouraged would-be tourists from venturing out of their homes!****Nat Perlmutter writes that, having retired from full-time employment as a hydrologist with Geraghty and Miller, Inc., he is now a self-employed ground-water consultant operating out of his home. He also keeps busy "brushing up on folk guitar and banjo lessons, looking after some rental property in Tampa, and taking some courses at the local community college." He and his wife, Lillian were pleased to learn, recently, that their son, Richard, a 1981 School of Law graduate (University of Ore.), has passed the Oregon bar exam. Richard is presently working as a staff assistant (attorney) to the Senate Commerce Committee in Washington, D.C.****The Walter B. Scotts of Providence, Utah, had a very enjoyable year in 1981. In January they took a long trip to Okinawa, Hawaii, and Escondido, Calif., visiting children and grandchildren along the way. In April they visited children and grandchildren in Bismarck, N.D., and in December visited again in Escondido. For the past two summers Walt has been working as a Hydrographer-Commissioner for Utah and Wyoming, covering a 50-mile reach of the Bear River, regulating and keeping track of flow in 72 canals. Says Walt, "Keep the news of WRD coming. It doesn't make me wish I was still unretired, but what nostalgia!"

Earl Smith of Plaistow, N.H. writes that he is still busy with work on the Highway Safety and Conservation Commissions. "Winters are busy pruning Christmas trees and cutting firewood. Summer passes all too fast with one half-acre of garden and mowing lawns including 10 acres of Christmas trees. Any time left I play a little golf." In October Earl and Betty "boarded the 'Royal Viking Sea' for a trip down the Mexican coast, through the Panama Canal. Stopped at Cartagena, Columbia, Williamstead, N.A., and Ocho Rios, Jamaica, before docking in Ft. Lauderdale." A fabulous trip says Earl, but admitting "the food was too good and I gained too much weight. Am now working it off, cutting next year's firewood when the weather permits."***We learn from Len Snell that in 1981 he established a new scholarship fund at the Univ. of Minn., Institute of Technology to cover tuition for one person per year to attend the Institute to study civil engineering, hydrology, physics, geology or other earth sciences. This is the second scholorship fund established and supported by Len (and wife, Helen, now deceased). An earlier fund was set up at Mich. State Univ. for support of one student per year who has graduated from high school in Len's hometown of Crystal Falls, Mich. Both scholarships are set up to be perpetual. Len writes, "If any of you have a grandchild interested in going to school at Minnesota there is an opportunity for some assistance in the financing. As Helen and I had no children, these (scholarships) are a means of doing our part. Now, I, too, can say I am supporting two 'kids' in college." Bully for you Len'****Four New York State farms, each run by the same families for more than 300 years, were honored on Jan. 7 by the New York Agricultural Society (N.Y. Times, Jan. 3). The oldest, at the northeast tip of Suffolk County, L.I., is operated by descendants of William Wells, who moved there from Connecticut in the 1600's. A call to Joe Wells confirmed what we suspected: that William was a member of the same group of related Wells families who became early settlers of Long Island. Joe's forebears settled farther west, along the north coast--near Setauket, where he was born and raised.

Reporting on their January cruise, Dean and Ruth Bogart tell us that they cruised aboard the New Shoreham II "on a 12-day loop out of Nassau, Bahamas, to the mid-Out Islands of Eleuthera and the Exumas chain. Sailing only in daylight, the shallow-draft, low-key ship stopped at eight islands. The color and clarity of the water cannot be exaggerated." A high point of the cruise was a beaching of the ship "on Leaf Cay, to see the four-foot iguanas that are principal inhabitants of that human-deserted island." The Bogarts plan to take a similar cruise in April, to the northerly Out Islands.****Richmond Brown writes (in March) that: "I am busy with too many jobs, though I enjoy them all. Chairman of the Ground-Water Technology Division of National Water Well Association is taking a lot of time. We are initiating a series of conferences on Ground Water to be convened by interested persons and supported in part by NWWA. In addition, we are organizing an increasing number of state and local chapters. I'm also an officer with the local lakes association, on the board of Michigan Lakes and Streams Association, writing a chapter on artificial recharge with Don Signor for a handbook on ground water, working WAE with Scott Keys on a report, and putting together some preliminary data for another artificial recharge report. Meanwhile, we are trying to get the finishing touches on our house. We recently had a short visit with Warren Wood and Ken Vanlier while in the Washington area visiting our younger son and his wife. Our return was well timed, however, as we were in time to tap our sugar maples."****Clarence Burns advises that he was remarried last August and this carries our very best wishes to them both. They have now moved into their new home and plan on attending the World's Fair and, perhaps, a trip to Europe in the fall.****In mid-March we had word from Charles J. Cox of Tucson that he had just returned from a bass fishing trip to Alamo Lake, Ariz., where he had great luck "bass averaged about 2 1/2 pounds; one 10-pound channel catfish and several that were 2 to 3 pounds. Spent a week there and returned home--to find WRD Retirees in the mail box .**** During a personal trip to Troy, N.Y., Jack Davidian was invited by the N.Y. District Retirees' group to attend their luncheon/meeting at Valle's Restaurant in Albany, on April 5. Attendees were: Larry (District Chief) and Rita Martens, Irving and Arcola Leonard, Ken and Kay Darmer, Eric and Rowena Bresee, Helen and Rob Miller, Jim Ziarno, and Bernard Dunn. All are well and send regards to their friends in Reston. The group meets at intervals.****Although retired for 9 years, veteran stream gager Bill Dean is still "measuring flows now in California and Nevada power flumes and irrigation canals. Perhaps I have water in my blood."****Recent word from Al Fiedler tells us: "Have been in Florida since the middle of December. Left just ahead of the first snow. Winter here has been the best in years, but tourists and traffic are extremely heavy. Will be glad for mid-April when most snow birds leave."****Our thanks to Sally Hanson for responding to our inquiry (N.L. 34: p. 7) as to the current address of Melba (Mrs. Don M.) Corbett. But the sad news of Melba's death was received a few days later via Carl Alderson and Joe Wells. (See In Memoriam)****Although Caribbean cruises, trips to Bermuda and golf tournaments have not been successful in getting WRD retirees together, Dick Heath apparently knows what will do it. On March 13 a group of 38 District lab personnel and local retirees, with family members and guests, enjoyed their second fishfry picnic at the Ocala, Florida, boat basin. The fish were provided by Dick and fishing

pardner Gordon Skipper (N.L. 33; p. 4). Retiree family members attending included Ray and Bernice Cunningham, Stan and Nancy Gardner, Dick and Maxine Heath, Dick Hedges, "Billie" Leake, "Doc" and Alma Pride, Len Snell, Merle Wesley, Ken and Louise Young, and Margaret and George Youmans.****From Walter Langbein comes a note of interest concerning a living memorial established for Geoff Alexander (renowned statistical hydrologist, formerly with WRD): "Geoff Alexander's friends would be glad to know that his family has sponsored a graduate student in hydrology at Monash University at Melbourne in his memory. Geoff, a hydraulic engineer with the Victoria State Rivers Commission in Australia, served with WRD at Arlington Towers in 1956-57. Geoff died a few years ago."****Happy news from Jerry Meyer! His parents, Louis and Sophie Meyer, chalked up their 65th wedding anniversary in Norfolk, Virginia, on February 25. Their enthusiastic and active participation in three days of celebration -- including some right smart terpsichordery on the dance floor -- surprised no one. An additional news item: the February 1982 Journal of the American Water Works Association carried a review of an article by Jerry on "Ground-Water Contamination--No 'Quick Fix' in Sight." The article has been reprinted from the 1980 USGS Yearbook and single copies are free on request from Survey's Branch of Distribution, 604 S. Pickett St., Alexandria, Va. 22304.****From Marvin Peterson of Wheat Ridge, Colo., comes this happy account of their activities: "Charlotte and I enjoy retirement life very much and are happy spending more time together. I have a big garden--we can or freeze most of it for use later. We have a regular 'foursome' for golf and play often. I have several hobbies to work on. We do a lot of volunteer church work. Also, I have done quite a little contract work on flood problems and teaching hydraulics and hydrology. I manage to keep very busy and very happy."**** Claude Roberts spent the afternoon of March 9 visiting former colleagues at the National Center. Homebound to New Jersey, Claude had spent most of the winter in Florida and while there joined fellow members of the Geological Society of America on a tour of South America during the latter half of December. He visited Frank Watkins who heads WRD's Ft. Myers, Fla. office, Ralph Heath in Raleigh, and stayed a few days with daughter Phyllis and family in Rocky Mount, North Carolina.****Elmer Sandhaus of Rolla, Mo., writes that he has just received a hip replacement. "I believe it will fix me up."**** The Columbia University Seminar Series on Pollution and Water Resources (Vol. XIV, Part 1, 1981) is comprised of a sizeable number of articles by WRD authors, retired and active, including: Vic Stringfield and John Rapp (two articles on karst hydrology), M. V. Shulters and D. G. Clifton (Mount St. Helens ash fall), John Cummans (Mount St. Helens mudflows), Walt Durum (mineral waters; another on agricultural lands hydrology), and Frank Trainer (mineral springs).****A note from Becky Williams says "I enjoy the Newsletter and always check to see who has joined our ranks. As for me, I'm keeping busy with club and volunteer work, and some travel."****Leon and Betty Wiard tell us that they are enjoying life and good health in Kerrville, Texas and that when the temperature gets down to 12 degrees or even lower on an occasional January morning, they need only to reflect on their earlier winters in New York State.

The following items have just been received from <u>Thad McLaughlin</u>, our Director for the Central Region: Dick Sniegocki's mother is the author of a new book entitled "Indians, Indians, Indians and Me," published by August House, Inc., 1010 W. Third St., Little Rock, AR 72203. It is a delightful story of her 30 years as a teacher among the Navaho, Chippewa, Sioux, and Cherokee.****New employees of Tetra Tech, International in the Middle East include <u>Bill Doyel</u>, who was in Oman and Abu Dhabi last Fall and will be in Oman for the remainder of this year, and <u>Digger Jones</u>, who is headed for Oman.****Former Colorado District ground-water hydrologist, <u>Lloyd Hershey</u>, is working at the old frankincense port of Salala on the south coast of Oman. Lloyd and wife Betty had an audience recently with the Sultan's mother, who lives in Salala. After explaining the water program and partaking of refreshments, they were presented with small gift packages as they departed. When they opened the packages at home, they found "his" and "her" gold Rolex watches!***<u>Mel Johnson</u> was in Oman again last summer and fall measuring flood flows. Greater floods have hit the area since his return, so he may be heading back soon!****

A SPECIAL MESSAGE TO TRAILHIKERS From Don Farrell

After 25 years of dreaming about it, I finally found the time, after retirement of course, to hike the Appalachian Trail. Leaving Amicacola Falls State Park in Georgia on March 31, 1981, with a backpack weighing in at 63 lbs., I climbed Springer Mt., the southern terminus of the Trail. The combination of that first mountain and a heavy pack almost did me in and I stumbled into the lean-to at the top of the mountain at 7 p.m. I shared the lean-to that night with two young men, one of whom later died a violent death with his girlfriend, when they were murdered on the trail in Virginia.

On April 1, a wet, rainy morning, I started north on a trek that was to last almost six months. It didn't take long to know I was carrying too much weight, and I mailed home 13 lbs. at the first post office I came to.

The trail winds through 14 states, mostly staying on the ridges and mountains of the Appalachians. There is some road-walking, but mostly it amounts to following a white blaze through wooded areas. The highest mountains were in the Smokies, over 6,000 feet, with excellent views. I enjoyed Virginia the most, with its long ridges that made hiking a joy. It's also the state with the most trail miles. Pennsylvania gave me the most trouble. Lots of stones and sharp rocks which made the feet ache and swell; hot, humid weather, and 7 days of continuous rain. In New Jersey, I just happened to run into Harold Meisler, who brought me up to date on Survey personnel. In Connecticut, I stayed one night with Fred and Ann Ruggles who live in Canaan, which is near the trail. This was a welcome treat as I got a change of diet, homecooking, which I thoroughly enjoyed, plus a chance to take a long-needed shower and get my clothes laundered. Fred and Ann seem to be enjoying their retirement.

Mary came down to Pennsylvania to see me and met me again when I was in Massachusetts and southern Vermont. On these occasions I was able to spend the nights in motels, which was a change from trail life.

My youngest son, Matthew, met me in New Hampshire and hiked over 100 miles with me through the White Mts. He brought his fishing rod and caught 11 trout, a good supplement to our diet. I found the White Mts. and the southern section of Maine to be the toughest sections of the trail. Not only were they high, rugged mountains, but the rocks were an obstacle that made them the most difficult. The scenery was beautiful, so that helped make up for the extra hard work of climbing.

I finished on September 22, climbing Mt. Katahdin in Maine, the northern terminus of the trail, in a snow storm. The trip time totalled 173 days, of which 147 were spent hiking the trail. The other days were spent in towns along the way, and included 12 days in June when I returned home for my son Dave's wedding. The trail mileage was 2,140, but I actually walked a little more than that, averaging 14.6 miles per day. The trail is a good place to lose weight while still eating all the food you want. I weighed 167 lbs. at the start, and at the finish, 142 lbs.-a 25-lb. weight loss. My appetite was insatiable, food intake almost doubled, and yet I continuously lost weight.

I enjoyed the trail immensely, and after waiting 25 years for the venture, it was all that I had anticipated. Aside from the hard work, it was enjoyable to be out in the woods and meeting all the fine people who were hiking the trail as well as those I encountered living near the trail. There was also a close feeling of being a member of a very exclusive group, the thru-hikers of 1981.

"OLE TILLEY"

Manufactured in Hendon, England, in 1948, the Tilley FL-6 Floodlight Lantern was used to illuminate the nighttime work areas of the Geological Survey's hydrologists who were engaged in a joint water-data-collection program with the U.S. Soil Conservation Service in the Sandstone Creek basin of western Oklahoma from 1952 to 1962.

Streamflow measurements made during periods of high runoff were an important part of the work. And that meant measuring during the night, as high runoffs normally resulted from intense thunderstorms of short duration that most often occurred during nighttime hours. The storms were often accompanied by gale-type winds and rains of cloudburst proportions. Previous to the availability of the Tilley FL-6 Floodlight Lantern, making nighttime streamflow measurements in such conditions was a dangerous, frightening, and an altogether harrowing ordeal!

Then came the Tilley FL-6 kerosene lantern--26" high, with a diameter of 14", and capable of illuminating the equivalent of several city blocks. It proved to be a very dependable source of light during even the most adverse conditions. It was found that the hazards and frustrations associated with pre-Tilley data collection were reduced miraculously, almost in direct proportion to the increase in illumination provided by the FL-6 Floodlight.

The lantern was nicknamed and affectionately referred to as "Ole Tilley" by the team of hydrologists who participated in the Sandstone Creek project, and was credited with playing a major role in the collection and accuracy of nighttime streamflow data. Retired in 1962, "Ole Tilley" was discovered alive and well in 1974 in the Oklahoma City WRD Office, and was sent to the National Center to take its place among the venerable in a collection of USGS memorabilia. (From information furnished to Wayne Hammond by George E. Hargrove, Admin. Division, Reston, and D. L. Bergman, WRD, Oklahoma City.)

REMEMBERING AND RAMBLING By R. Elton Cook

Was on my way to Nova Scotia to work with Foundation Co. of Canada (to help build a huge paper mill) when I got a telegram en route offering me Jr. Engr. job with USGS, choice of New Jersey or Arizona. Decided on Arizona (about July, 1928).

Checked measurements 2 months. Santa Cruz River had flow and Jim Klohr (with ancient penta-count meter) took me halfway thru a measurement, and then said, "It's all yours." (That being about the extent of my coaching in wading measurements.)

That fall I went with John Baumgartner on construction of gaging station on Bill Williams River near Planet, Arizona. An old cable was held by one clip at either end; locals laughed when told it was unsafe. Learned to hand drill in hard rock, churn drill for 2-inch cable U-bolts, melt sulphur, and hand-mix yards of concrete. Learned to sharpen and temper drill steel (valuable for next several years); District Engineer Dickinson was very safety conscious and each drilled hole had to be at least 2-feet deep.

The old Planet mine had just shut down. We boarded with Mrs. Wenceslaw (?) whose house was about a mile upstream. She fed us well. Made trips to Yucca and/or Kingman for supplies. Lots of quail and I had a shotgun. Ordered six traps from Sears; caught coyotes, foxes, raccoons, skunks, and a couple of bobcats (one of which mauled me somewhat; have a crooked finger).

Our transportation was a 1920 (I) Dodge Commercial, and John's old Star touring. We wound up that job and headed for Lees Ferry, arriving at Marble Canyon about Christmas (holidays were work days, "in those days"). The steel bridge across Colorado River was not yet complete. The ferry cable at Lees Ferry had just broken, drowning people and stock. So, we had to travel 7 miles upstream over the old Dugway (at that time in no condition to accommodate auto traffic). The shovelling we did on that road would have been devastating except that weather was cold, we were workhardened, and our hands were calloused.

Arriving on the left (south) bank, we noted that the Colorado River was iced about 40 feet out from banks and a massive ice flow 200-feet wide was grinding down the middle. Skipper (Owen) Clark was there, his boat tethered at the edge of shore ice. Crossing the river entailed pulling boat 200 yards upstream, plunging into the ice flow and emerging 400 yards downstream from start.

Lees Ferry had about 10 stone buildings. Wood stoves for heat in the big one; water hauled from a spring. Owen was a good cook, and a superb boatsman (ex. Navy man). The Ferry was loaded with history and "stories." To us it was hard work and frigid weather, though I was to return in later years under better conditions. Marble Canyon Bridge completed, deer hunting good in Kaibab Forest, roads improved. My closest call with drowning occurred at Lees Ferry when I foolishly pitted my strength against a huge eddy--had to call for an assist.

In my early years at Tucson I participated in equipment development, especially the Colorado Rivertype cable car. Much of the field testing was done at Lees Ferry. In the early thirties we built a new gaging station on Colorado River in Grand Canyon. My crew(s) were mostly college grads who couldn't find other employment. That job was interesting, frustrating, rewarding. All material (including items such as 15-ft channel irons, lumber, cement) came down 4900 feet on mule back. The tramway cable I got down by hiring 33 CCC laborers at \$3.00 each. A dozen feet of cable per man, steadily-moving centipede. (33 X \$3.00 = \$99.00, which didn't require a contract).

It was up to me to man a forge, sharpen and temper all drill steel. That granite was damned hard. We drilled about 180 feet of holes, all by hand. There was dynamite blasting 8 feet under water--using fuse! Concrete sand was at a premium in the area. Exploring for the source of a bit of sand I noticed on a trail, I uncovered a sidehill pocket of clean sharp sand. At last report it had supplied hundreds of cubic yards to jobs in the area. We sacked sand, used muleback-and-scow for transportation. In 1980 I heard indirectly that current careful levels check my levels transferring datum (?) from old gage to to new (small reward).

One day a key got lost in the deep beach sand on right bank. The wind howled that night. Early next morning the key was perched on a small but isolated cone of sand. You erosion experts will understand that.

We saw a 12-1b. white fish caught at gage site. A trot line across a cove gave us some nice catfish. One night my personal camera was stolen from the scow, but another night while playing poker at Bright Angel Lodge, I filled a royal flush by drawing the jack of spades (to A, K, Q, 10); it played against a pat full house. At today's values the pot would have been about \$200.

Job finished, I presented the D.E. with a good set of pictures, about which he remarked, "I hope to see that station some day; you either did a presentable piece of work--or you're a foxy photographer."

"THANKS, JIM, FOR A WONDERFUL AFTERNOON!"

Jack Reed has been thinking back over the years when he was so fortunate as to have been on the staff of the late Jim Geurin when Jim was District Chemist for Arkansas. He recalls one particular incident illustrating that Jim was not at all times "the dignified staff officer" that those at National Headquarters knew: "It was one of those beautiful Ozark spring days at the Fayetteville QW lab. Jim, the District Chemist, had not shown up at his office that morning. But, at precisely 1:00 p.m., startled by the slamming of the battered old screen door of our WWII temporary, we all looked up and beheld Jim striding into the lab. In his best quarter-deck manner he announced loud and clear, 'Shut her down, men. Let's go fishing!' We did and we went. Only the secretary remained to inform any possible callers that the entire staff was unavoidably occupied with 'in situ' field investigations that afternoon. Thanks, Jim, for a wonderful afternoon--and rest in peace."

AN INCIDENT RECALLED By Kenneth N. Phillips

Some years ago I was travelling in the European part of Turkey on a U.S. Government water-development mission with my opposite Turkish number, Resit Bey and the translator, Huseyin Bey. I wondered if the area had any possibility of producing artesian water. Neither had ever heard of any and opined that there was none. So, we were all surprised when we stopped for gas, to see a good stream flowing from a horizontal discharge pipe of a well and dropping into a tank, from which the stream was diverted to irrigate a grove of poplar trees. I took advantage of the opportunity to measure the pipe diameter, and the horizontal and vertical components of the falling stream. While we waited for a meal in the attached lunchroom, I computed the flow--less than 1 cfs.

The Turks immediately asked me how many hectares that would irrigate. I demurred. The area would vary with the soil, the crop, the climate, the skill of the farmer. But they insisted--<u>approximately</u> how many hectares? I made a few assumptions and came up with 7 to 10 hectares. Immediately they went to discuss the matter with the proprieter. They came back, impressed, with this information: 8 hectares. I felt my status going up, and was encouraged to venture into a field where I may have less expertise--beekeeping.

On the lunchroom wall was a poster showing bees, with captions in Turkish. I said to them (and all this had to be repeated by Huseyin for Resit to understand), "That small one is the worker bee; the thick-set one in the middle is the drone; and the long slim one is the queen." They said I was right on the worker; but the long slim one had to be the male bee because the Turkish caption said it was the BEY. (That is a term used after the given names of men as a token of respect; and I was dining with Resit Bey and Huseyin Bey.) But I had kept bees, on a backyard scale, and knew I was right. Perhaps the caption was wrong. Again, they had a machine-gun style conference with the proprietor, and Huseyin Bey came back a little abashed. "You win, it is the queen." Then he added brightly, "and I learned something about Turkish!" "The word Bey does not mean 'man'--it means 'the boss in the house.' So, in the hive, the Queen is the Bey." At which time I learned something--about Turkish philosophy. Somehow I remember those little funny episodes after I have forgotten some unpleasant aspects of the job.

HOW I BECAME AN EMPLOYEE OF WATER RESOURCES DIVISION

By A. M. Moore (Ret'd 1969)

My reason for joining WRD was fortuitous and caused by HUNGER.

I graduated from the University of Wisconsin in 1935 as an electrical engineer. Only one man in our class had a job lined up--it was with his father's company. I went back to my home in Massachusetts and began pounding the pavements. I went several times to Liberty Mutual Insurance Co. as there was a possibility that a "Safety Engineer" position might open there. A Mr. Morris interviewed me. He said he would let me know of anything he heard about, and would I let him know of any job I found that I didn't want as he had a son he would like to get employed at anything. Almost immediately I found an opening with another insurance company--office boy at \$15.00 per week. Mr. Morris' son took the job and about a week later Mr. Morris called me about an opening he had heard of with the "Theological Survey." Of course, it turned out to be the Geological Survey. I went to the P.O. Building in Boston, where I was interviewed by H. B. Kinnison and Don Corbett. I got the job--\$35.00 per week on a CWA Program. (There was no Civil Service exam for Jr. Engineers until 1938; I took and passed the exam in 1938.)

From 1935 to 1938 we had the snowmelt floods of 1936 and the hurricane flood of 1938, during which time I worked 80 to 100 hours a week for six to ten weeks (for \$35.00/week plus \$3.50/day--or was it \$2.50/day? --expenses, but not to exceed the amount of <u>actual</u> expenses; no overtime pay at that time).

Other than having had one hydraulics course in college, I knew nothing about water except that it was good for you, you could swim or boat in it, and it went well with bourbon or rye. But I liked the work and remained in it until 1969.

In short, I went to work for WRD because I liked eating regularly. I stayed with WRD because I liked the challenging work and my associates.

UP FROM MEMORY'S DEPTHS PROFOUND --

Chuckling over a jingle suddenly recalled from the distant past, <u>Art Frazier</u> ('59) has been prompted to share it with us, just for fun. 'Tis a poem that <u>Helen Kiesel</u> ('48)--WRD's Chief Clerk for many years--taught him "way back when," and it goes like this:

Her could never Come back to we, But us could Surely go To she! Samuel S. Baxter, long-time cooperator and enthusiatic supporter of the Survey's waterresources programs, died on Feb. 7 at age 77 in Philadelphia where he became the city's first water commissioner in 1952. During World War II, as an officer with the Corps of Engineers, he was in charge of designing, building, and running the Town of Oak Ridge, Tenn., where the first atomic bomb was built. Retiring in 1971 he was active in the consulting field and had leadership roles in many professional and civic organizations, including a term as president of American Water Works Association. In 1953, when the State of Pennsylvania cut off cooperator funding to the Philadelphia District (QW), Sam made a special effort to increase the cooperator funding with the City of Philadelphia in order to assure continuity of the work in the Delaware Estuary. (By Norm Beamer)

Charles K. Bayne, a long-time employee of the Kansas Geological Survey and the father-inlaw of <u>Phil Emery</u>, was killed in an auto accident some months ago. Chuck started his career with the old USGS-KGS coop ground-water program and, in later years, was Assistant State Geologist. (From Stan Lohman through Thad McLaughlin.)

Stuart G. Brown, a member of the special hydrologic studies unit of the Arizona District at Tucson, died on December 23. Born in 1922, he joined the Oregon District (GW) in 1954 and the Arizona District (GW) in 1959. Survivors include his wife Mary, two sons and a daughter. Mary may be reached at 7026 Elbow Bay Drive, Tucson, AZ 85710.

Melba (Mrs. Don M.) Corbett, whose late husband was a longtime District Chief (SW) for Indiana, died on March 26 in Salt Lake City. She was born in Sugar City, Idaho in 1905. Melba and Don left Indianapolis in March 1981, where they had lived since 1941, and moved to Salt Lake City. Don died in June (N.L. 32; p. 9). Melba is survived by four sisters.

Angelo Dalcerro, who had charge of the surface-water program conducted from the Yuma Headquarters of the Arizona District during the late 1950's and early 1960's, died on January 29 after a long respiratory illness. Born in 1917 and a graduate of Montana State University (BS-EE) in 1941, Angelo joined the Corps of Engineers in 1943 and transferred to the Tucson District in 1945. Although retired since 1980, he continued to work, part time, with the Yuma Subdistrict until his death. Mrs. Dalcerro (Anita) continues to reside in Yuma (address in directory).

George Donald Freeman, who joined the staff of the Water Utilization Branch in 1937 and was in the Albany District from 1938 to 1942, died on December 5. Don was born in Tucson, AZ in 1911 and was a graduate (CE-'32) of MIT. (Info. from Leon Wiard).

Thomas A. Hales, engaged in special hydrologic studies at Arizona District Headquarters in Tucson at the time of his retirement in July 1981, died of cancer on October 18 in Yuma. He was born in 1934 and joined the Survey at the Yuma Subdistrict in 1977. He transferred to Tucson in 1980. He is survived by his wife Phyllis and three daughters.

Albert L. Mattingly, age 60, died on March 24 at Albany Medical Center Hospital, Albany, New York. Al was born in 1921 in Washington, D.C., and moved to Albany while a child. Following the successful completion of a tour with the United States Marine Corps in 1946, Al returned to Albany to work and pursue his B.S. in Chemistry at Siena College. After graduation, Al worked briefly for the Department of Agriculture at Beltsville. It was from there that he was hired in the early 1950s by the District Chemist, Albany, to work in the Geological Survey's water chemistry laboratory. Al was associated with the lab his entire career and during the 4 years prior to his retirement in 1977, served as the Assistant Lab Chief, responsible for maintaining operations of the Central Laboratory-Albany. He will be remembered by his many friends for his ability to keep things moving, his concern for his fellow man, and his ever-present smile. He is survived by his wife of 37 years, Meredith, who resides at 204 Western Avenue, Albany, N.Y. 12203. (By Bernard Malo.)

N.L. 35; p. 9

We are sad to report the death of <u>Helen Sessums</u>, wife of Francis Sessums, Program Officer of WRD. Helen died in Falls Church, Va., following a long illness, on March 3. Three children survive their mother--Betty (VanNewkirk) of Scottsbluff, Nebr., Carol (Paden) of Owego, N.Y., and Bill Sessums of San Antonio, Texas. Services were held in Ruston, La. Francis resides at 2624 Sigmona St., Falls Church, Va. 22046.

Rudolph H. Westphal, a member of the Yuma Subdistrict staff of the Arizona District at the time of his retirement in 1980, died on July 7, 1981, in Yuma, after a long illness. A long-time resident and perhaps a native of Arizona, Rudy attended the Northern Arizona University at Flagstaff and later operated a gasoline service station at Gila Bend before joining the staff of WRD's Lower Colorado River Project in 1962. He is survived by two daughters and a son, all residing in Yuma.

ACKNOWLEDGEMENTS

Sumner Heidel, our Treasurer, reports that 58 persons have made special contributions subsequent to those listed in our most recent (February) newsletter. These total to \$360. Our thanks to the following who sent in "gifts," over and above their dues, as large as \$25: Marjorie Allen, Ivan Johnson, Barbara Gallagher, Al M.F. Johnson, Claude Roberts, Ethel Coffay, Ken MacKichan, Mrs. Charles Baker, Mrs. George Porterfield, Mrs. Melvin Williams, David Anderson, Charles Berkstresser, Chuck Collier, Bob Dingman, Al Fiedler, Prentis Frye, Gordon Giles, Milt Hackett, Dale Yost, Allen Agnew, Herman Brice, Hilton Cooper, George Davis, Keith Essex, Ed Reed, Julian Rostvedt, Earl Smith, Herb Stewart, Carlton Sumsion, Ed Tripp, Richmond Brown, James Eddy, Walt Scott, Robert V. Cushman, "Pat" DeMarte, Bill DeVito, Mary Grisak, Henry Halberg, Paul Johnston, Lee Peterson, Don Rima, Agnes Watson, Charles Cox, Mervin Peterson, John Powell, Leonard Snell, Wayne Webb, Edward Burke, Clarence Burns, Bernice Canzona, Bill Childredth, Angelo Dalcerro, Ellis Gordon, Don Hart, Pat Holland, J. L. Kunkler, Elmer Sandhaus and Ralph Smith.

The following met at the National Center on Feb. 11 and spent nearly 2 hours processing about 900 copies of the February newsletter (N.L. 34) for mailing and other forms of distribution: <u>Ray Abrams</u>, Joe Cragwall, <u>Bob Beall</u>, <u>Walt Durum</u>, <u>Warren</u> <u>Daniels</u>, <u>George Edelen</u>, <u>George Ferguson</u>, <u>Milt Hackett</u>, <u>Sumner Heidel</u>, <u>Jerry Meyer</u>, Ruth Malone, Harry Wilson and Finch White</u>.

News of Retirees - continued from page 5:

Word has been received of the deaths of John and Peg Powell's mothers in Wisconsin and North Dakota.****Ivan Johnson is busy preparing to host the AWRA Seminar in Denver in June.****The <u>Hugh Hudsons</u> spent the Easter break on a trip to Mexico going by air to Mazatlan, by bus to Los Mochis, by train along Copper Canyon to Chihuahua, and by air back to Denver.****Irene Paulsen traveled to Nebraska recently.****Woody and Billy Wilson vacationed at the "tables" in Reno in March.****Ty Dover is preparing for another season of Little League baseball--Spring is here!

Paul Benedict, long-time member and former chairman of the Sedimentation Subcommittee of what is now OWDC's Technical Committee on Hydrology, met with the Committee last fall for a field trip to the famous "Tombstone Area" and a meeting in Tucson, Ariz. The Committee supervises the research work on sedimentation at the St. Anthony Falls Hydraulic Lab, U. of Minn.****Jerry Meyer will participate May 2-7 in UNESCO/UNEP sessions in Prague, Czechoslovakia concerning worldwide problems of ground-water pollution. A monograph for the guidance of less-developed countries is in preparation. In addition, a report on Long Island's water problems, authored by C.H. <u>Phil Cohen</u> and several colleagues, will be published as a case history under the program. Jerry and Libby will spend a few days sailing the Rhine out of Wiesbaden, Germany, en route home.

FOURTH SUPPLEMENT TO MEMBERSHIP DIRECTORY (8th EDITION)

NEW MEMBERS

Abrams, Raymond O. ('81) (Liz) (former Affiliate), 3300 Graham Road. Falls Church. VA 22042 Berkstresser, Charles F., Jr. ('73) (Beverly), 566 Southgate Rd., Sacramento, CA 95815 Campbell, Roy E. ('81) (Marjorie), 529 Rushmore Lane, Madison, WI 53711 Collier, Charles R. ('82) (Patricia), 10205 LaurelcrestLane, SW, Tacoma, WA 98498 Cooley, Maurice E. "Spade" ('81) (Nancy), 1010 Bade Rd., Happy Jack Route, Cheyenne, WY 82001 Crippen, John R. ('81) (Eleanor), 307 Waverly St., Apt. 1, Menlo Park, CA 94025 DeMarte, P. James "Pat" ('76) (Mary), 409 Bristol Drive, Harrisburg, PA 17109 Evans, Horace H. "Bud" ('81) (Evie), 1100 White Hall Drive, Harrisburg, PA 17110 Hanneman, John H. ('82) (Ann), 12620 Garden Ave., Grand Terrace, CA 92324 Heath, Ralph C. ({82) (Martha) (former &ffiliate), 4821 Kilkenny Place, Raleigh, NC 27612 Jeffries, Mrs. Katherine L. ('82), 284 Gundry Drive, Falls Church, VA 22046 Kunkler, J. L. ('80), 116 Cmo. de las Crucitas, Santa Fe, NM 87501 MacCary, Lawrence ('81) (Rosalie), W 1104 Mansfield Ave., Spokane, WA 99205 Rima, Donald R. ('81) (Dottie), 705 West Meade Drive, Nashville, TN 37205 Watson, Mrs. Agnes M. ('81), 4000 S. 56th No. 376B, Lincoln, NE 68506 Weigle, James M. ('81) (Norma "Bea"), 2933 Walnut Ave., Owings Mills, MD 21117

REVISIONS TO DIRECTORY OF MEMBERS

Anderson, David B. ('73) (Margaret), Route 2, Box 280, Deerwood, MN 56444 Bentall, Ray ('73) (Dorothy), 4410 N. 14th, Lincoln, NE 68521 Burns, Clarence V. ('72) (Janice), 1639 Brooklyn, Topeka, KS 66641 Holt, C. L. R., Jr. "Lee")'80) (Cathy), 1348 Muirfield Dr., Stone Mountain, GA 30088 Hulsing, Harry ('80) (Klava), 20439 Bullblock Road, Bend, OR 97702 McMurtrey, Gale ('80) (Ardath), P. O. Box 335, Victor, MT 59875 Perlmutter, Nathaniel M. ('72) (Gertrude), 13008 Whisper Bay Pl., Tampa, FL 33624 Ruggles, Frederick H., Jr. ('80) (Anne), Box 761, Canaan, CT 06018 Trainer, Frank W. ('81) (Martha), P. O. Box 1735, Corrales, NM 87048 Williams, Mrs. Melvin R. (Isabel) (W), 9229 Arlington Blvd., Apt. 527, Fairfax, VA 22031

NEW AFFILIATES

Dingman, Robert J. (Ginna), 2654 Quincy Adams, Herndon, VA 22071 Feltz, Herman, 2208 Castle Rock #12C, Reston, VA 22091 Novak, Charles E. (Mary), 4211 Pennsboro Place, Chantilly, VA 22021

Recently published USGS Professional Paper 1250 on "The 1980 Eruptions of Mt. St. Helens, Washington" must rank as one of the largest and most presentable publications ever issued by the Survey. An 844-page handbook edited by P. W. Lipman and D. R. Mullineaux, it documents the early results of studies of volcanic events in 1980 and was written to be understandable to non-scientists as well as scientists. The volume is dedicated to David Johnston, the 30-year old Survey volcanologist who was swept away by the catastrophic eruption of Mt. St. Helens on May 18, 1980. The price, at \$35, may also be a "first." The U.N. has advised us, late in February, of three positions to be filled for service in Bangladesh that many WRD retirees are well qualified for. One is that of a chief technical advisor, who would modernize and strengthen the hydrologic data-collection facilities on the river systems of that Nation. The other two positions are subordinate. One, a specialist in data processing, would establish an electronic-data collection and processing system. The other, an instrument repair and maintanence expert, would organize a system of equipment inventory, storage and repair. Language requirement: English. Duration: 12 months for first two positions and 3 months for the last mentioned. Those interested should contact Alice Hecht, Programme Management Officer, Department of Technical Cooperation for Development, United Nations, N.Y. 10017.

"WRD RETIREES" c/o USGS NATIONAL CENTER STOP 420 RESTON, VA 22092

RETURN POSTAGE GUARANTEED

BULK RATE U.S. POSTAGE PAID Reston, VA 22092 Permit No. 186