The News in PUBLIC ROADS

No. 11 December 1955

Bureau Employee on TV

MARY MCDONALD of the Physical Research Branch may now be considered a veteran of the Klieg lights. Probably many of our readers saw the program, "This is Your Life" on Wednesday night, November 16. Miss McDonald appeared on the program which was broadcast "live" from the studios of the National Broadcasting Company in Hollywood, Calif. She left Washington Tuesday morning, November 15, by air and was back at her home Thursday evening, the 17th. Her friend, Mrs. Julia Judge, the central figure in the program of that week, has devoted much of her life to charity having organized the group known as the Good Samaritan Society. Miss McDonald and Mrs. OLIVE SUTHERLAND, also of the Physical Research Branch, have had a part in supporting the work of the Society which, among other projects, sends clothing and toys to orphan children of Japan and has equipped an operating room in the hospital of the orphanage, Our Lady of the Angels at Sapporo, Hokkaido, Japan.

Incentive Awards

Cash awards for sustained superior performance were granted recently to the following employees:

FREDERICK B. FARRELL, Research Division of the Washington office, was awarded $250 for his contributions to the Congressional Report required by Section 13 of the Federal-aid Highway Act of 1954 concerning the needs of the several highway systems.

ARTHUR E. LAPPINEN, bridge engineer in the Division 7 office, was awarded $200 for superior performance in the design of highway structures.

DAVID R. LEVIN, transportation economist in the Research Division, received $250 for his contributions to the Congressional Report required under Section 11 of the Federal-aid Highway Act of 1954 concerning utility relocation costs in connection with highway work.

THEODORE A. SMITH, highway engineer in San Jose, Costa Rica, was awarded $300 for superior performance in the supervision of construction on the Inter-American Highway in Costa Rica.

Incentive Awards Committee

In accordance with Department of Commerce Administrative Order No. 202-27 dated October 1, 1955, the Commissioner has appointed the following individuals to serve as members of the Incentive Awards Committee for the Bureau of Public Roads: ROSS W. KRUSER, chairman; JAMES L. SHOTWELL, member; and ROY W. MESSER, member. ROBLEY WINFREY, as Personnel Officer, will serve as an ex officio member of the committee with voting privilege.

Nisqually Glacier Goes on Rampage

Nisqually Glacier bridge (Washington) presents a continuing challenge to engineers of Division 8. The most recent event occurred on October 25 when a 20-foot wall of water-driven conglomerate rolled down Nisqually River valley. In less than 2 minutes after the first impact the entire 86-foot concrete bridge span had been ground up and swept away. Searchers have not even been able to find the structure.

Behind this latest disaster is a story of repeated floods which have struck Nisqually Glacier bridge. This glacier, on the south slope of Mt. Rainier, terminates at a point 700 feet upstream from the bridge and is the source of Nisqually River. Although the gradient of the river is about 20 percent, the stream cannot carry away all the sand, gravel, and boulders brought down by the glacier. As a result, the elevation of the river bed rises each year.

The Nisqually Glacier forms a huge dam, commonly known as a terminal moraine, in front of it as it moves down a narrow rock-walled canyon. This mound of sand, gravel, and boulders permits a vast reservoir of water to form behind it, and during periods of very heavy rainfall and snowmelt this impounded lake will overflow, sweeping millions of tons of saturated conglomerate onto the valley floor.

The Mt. Rainier National Park community at Longmire, Wash., was being evacuated when Nisqually bridge went out 5 miles to the north. There were no casualties, but near the bridge site Park Service Ranger Dwight Hamilton had a narrow escape when he was forced to abandon his car and run to high ground. A bridge across the Paradise River, between Longmire and the community's power plant, was destroyed and water breached part of the road in the Longmire camp grounds. Damage was estimated at $150,000.

The first bridge in this area was washed out in 1932 and a new bridge was constructed by Public Roads in 1933. This bridge was somewhat damaged by floods in 1934 and 1939. Immediately following the most recent catastrophe, the Army's 539th Pontoon Bridge Company at Fort Lewis sent a survey team to the scene to plan for construction of a Bailey bridge. A long span—possibly 600 feet—is under consideration for the permanent bridge.

Christmas Gift Reminder!

Each Christmas we face the question—if I receive a Christmas gift from a person or firm with whom I have official relations, what should I do? The Agency Inspection Staff reminds us that it is our responsibility to graciously return it with a note of thanks for the sender's thoughtfulness, and the season's greetings. By doing this, you will eliminate any possible embarrassment and criticism which may develop either to you or the Department.

A Merry Christmas

and

A Happy New Year

Ethiopian Road-Building

The road building program being carried out under Public Roads' agreement with the Imperial Ethiopian Government is unique. By the terms of this agreement Public Roads maintains a Division staff in Ethiopia to direct the work of the Imperial Highway Authority. The Division staff of Public Roads hold dual positions. Our Division Engineer, CHESTER C. BURDICK, is designated by His Imperial Majesty, Haile Selassie I, Emperor of Ethiopia, as Director of Highways. He is authorized by Imperial proclamation to act in an executive capacity in all matters necessary to build a system of primary highways. This program has been in progress for 4 years, and is spectacularly successful.

The Imperial Highway Authority has reconstructed and placed under maintenance about 2,400 miles of all-weather roads. It has also constructed new roads as needed within this system. The Authority has more than 4,000 employees of over 30 nationalities.

At the present time the activities are limited to maintenance work. An expanded program now being considered will step-up the construction rate to 400 miles of new roads per year. These roads will extend into highly productive agricultural areas, including Kaffa Province, from which our word "coffee" is derived.

Coffee transport offers a good example of the benefits to be gained by road improvement. The cost of shipping coffee from Addis Ababa to New York by all-weather highway and sea is about $60 a ton. But it costs $80 a ton to haul coffee from Gore, in Kaffa Province, to Addis Ababa—a distance of about 250 miles. When the all-weather road from Gore to the capital is completed, trucking costs will be cut to less than $24 a ton.

The first highway tourist map of Ethiopia was prepared and submitted by the Bureau's offices to the Emperor, and has received wide approval. Mr. Burdick was also responsible for the preparation of the first tourist map of Turkey during his 4-year tour of duty in that country.

Our foreign assignments offer great opportunity for unusual experience in highway construction. Public Roads' program in Ethiopia differs from that in any other foreign country, as our employees are in direct charge of highway improvement work, and are responsible for the results achieved. Public Roads employees staff the following positions in the Imperial Highway Authority: director of highways, chief engineer, maintenance engineer, design and construction engineer, bridge engineer, materials engineer, programing and planning engineer, training engineer, and purchasing agent. Some of these positions are now vacant. In addition several construction superintendents, equipment specialists, and mechanics are on the staff.

Daniel Bags Buck

Dan O'Flaherty of the Highway Transport Research Branch bagged a deer Thanksgiving Day on his farm in the Shenandoah Valley of Virginia. It was an excellent specimen of the white tail family, weighed 174 pounds, and had 8-point antlers.

The deer was killed within 250 yards of the farmhouse and was shot at 103 yards with a 30-30 Winchester rifle. In alternate years since 1947 a buck has been killed in this field, and Dan has accounted for two of them. Some 20 deer were sighted on his place in 4 days, but they were either out of rifle range or were does. Only one shot was needed for this one.

What Are the Odds?

P. A. Carmichael, recently transferred from the California District Office to the Washington office, had the great misfortune of losing practically his entire household effects (and his prized golf clubs) when a moving van hauling the goods was demolished at a railroad grade crossing in Ohio. According to statistics, intercity-truck common carriers traveled 643,642,000 miles in 1953-54 with an accident rate of 0.73 per 100,000 vehicle-miles.

Library News

The Library has copies of the New Spanish-English, English-Spanish, Technical Glossary of Highway, Bridge, and Soils Engineering terms prepared under the direction of E. W. James, while he was Chief of the Inter-American Regional Office.

Mr. James and Library of Congress personnel spent more than 15 years preparing the manuscript which contains more than 35,000 terms. It was approved by a committee of Mexican Government bilingual engineers. The Fifth Pan American Highway Congress adopted a resolution commending the project and recommended publication.

Miss O. L. Evans, who has been Bureau librarian since 1921, takes pride in the quality of service the headquarters library gives research workers and those making serious studies of highway matters. If literature exists on any highway subject, the library staff seldom fails to find the reference to it. Most often it has the publication or can borrow it from another library.

Miss Evans feels that field employees would call on the library more often if they were familiar with the service available. References can be located, magazine articles reproduced, and our own books loaned to our field people doing important work. The service is not available to undergraduate students since we do not have facilities for handling a great volume of requests.

Test of Concrete Beam

An exhibition of the loading of a 42 1/2-foot prestressed concrete beam took place at Ames, Iowa, in September under the direction of Dr. C. L. Hulsbos, associate professor of civil engineering at Iowa State College. Dr. Hulsbos was assisted by D. A. VanHorn, former Public Roads junior engineer now on leave. Mr. VanHorn will use the results of the tests for his master's thesis. After all preliminary tests had been completed, the beam was loaded until failure occurred. Previous tests had indicated at least 8 inches of deflection, but failure did not occur until a deflection of 12.2 inches was attained. Many questions, such as when will it break? will the crack show? and others were answered while an audience of nearly one hundred watched.

The project was sponsored by the Iowa Highway Research Board. The beam, manufactured at Iowa Falls, was transported to Ames by truck. For the tests, a concrete slab 3 feet by 6 inches was constructed on top of the beam while it was in the testing machine.

New Assignments

GORDON R. BROOKS, junior engineer, reported to the Florida District Office during November for the Federal-aid phase of his training.

JAMES M. BUTLER and WILLIAM R. RICHBURG were assigned as engineering aids in Homestead, Fla. Their work will be in the Everglades National Park which is under the supervision of the Gatlinburg, Tenn., District of Division 15.

CHARLOTTE DE GARMO, a recent graduate of George Washington University, has returned to Public Roads and is assigned to the Library.

EARL E. DONALDSON, engineering aid in the Ohio District Office, completed a month's assignment in Michigan. He assisted in the test operations of the brake study made by the Highway Transport Research Branch near Erie, Mich.

Mrs. BETTY JEAN JACOB is a new employee in the Iowa District Office. Mrs. Jacob was previously employed by the Veterans Administration Hospital at Knoxville, Iowa.

ROBERT W. KEMLER returned to work for the Montana District Office in November. He had been employed by the Bureau from 1949 to 1953, and then accepted a position with the William S. Lozier Company in Rochester, N. Y.

ROBERT E. KIRBY returned to duty in the New Hampshire District Office after a month's assignment with Federal Civil Defense Administration in Hartford, Conn.

DOLORES D. MADDEN, clerk-typist, accepted an assignment in the New Jersey District Office in October.

FRANK E. HAWLEY, formerly with the Arkansas District Office, was assigned as assistant programing and planning engineer for Division 6.

ARTHUR R. MCDANIEL, junior engineer, was assigned recently to the New Hampshire District Office for Federal-aid training.

ARLENE M. MCNIFF was recently assigned to the Highway Transport Research Branch, Traffic Operations Section. Miss McNiff was formerly employed in the Mail and Files Section of the Office Services Branch.

WALT W. OSBORNE reported for duty in the Primary Highway Branch, Program Section, during November. He had previously been on an assignment in Turkey.

Mrs. ANNA M. ROARKE, clerk-typist, was assigned to the Administrative Section of the Division 1 Office in November.

JOHN W. SCHMIDT, Junior engineer, returned to duty at Denver from active military service in November and then transferred to the California District Office.

HARRY E. SHUTZ, formerly with the Geological Survey, and Douglas H. Layman were assigned during November to the Primary Highway Branch, Aerial Surveys Section.

CHARLES E. STACY, engineering aid in the Roanoke, Va., District, transferred to the Gatlinburg District of Division 15, and was assigned to the Everglades National Park.

D. H. TIPTON, engineering aid, transferred from the Arlington, Va., District to the Gatlinburg District of Division 15.

STEPHEN TYAHLA recently joined the engineering staff of the West Virginia District Office. Mr. Tyahla, a graduate of Indiana Technical College, spent 5 years with the Pennsylvania Department of Highways before joining Public Roads.

Mrs. MURRELLE H. WARNER, clerk-stenographer in the Utah District Office, returned to duty after 3 1/2 months' leave.

W. P. WALKER of the Highway Transport Research Branch is on a 6-week assignment with the U. S. Army Map Service.

Four engineers from other Divisions have been on temporary assignment with the New York District Office since September. They are THOMAS A. APPLE from Tallahassee, Fla.; JOSEPH F. EMONDS, Madison, Wis.; CUBERT R. PATTON, Jackson, Miss.; and WALTER H. LEE, Jefferson City, Mo.

The District Office expresses its appreciation for the additional help at a time when they had loaned three engineers to FCDA and still had the problem of processing plans aggregating $50 million.

Members of the headquarters staff who meet weekly to discuss Bureau policy matters. Reading from left to right: F. C. Turner, J. C. Allen, A. C. Clark, C. D. Curtiss, P. F. Royster (Department of Commerce), E. H. Holmes, and H. F. Kaltenbach.

Personals

VINCENT CILETTI, junior engineer assigned to the Physical Research Branch, was married to Jean Mitchell Wrenn on October 15. The ceremony took place in Richmond, Va.

JACK P. WOOLSTENHULME, engineer in the Utah District Office, was married to Mary Lou Harris at Flagstaff, Ariz., on October 20.

Proud parents of new offspring are as follows:

GENE R. CARPENTER, Florence, Ala., District Office of Division 15, a son, born in November.

SUMNER B. CHANSKY, Connecticut District Office, a son, Stephen Jay.

Mrs. GEORGE KARAFFA, New Jersey District Office, a daughter, Bonnie Stewart, born in October.

LEO M. PETERSON, JR., Division 9 Office, a daughter, Barbara Ann, born in September.

DONALD E. TRULL, Nebraska District Office, a daughter, Susan Carol, born in November.

L.D. WALKER, Virginia District Office, a daughter, Catherine Lee, born in November.

FRANCIS C. TURNER, Assistant to the Commissioner, announces the arrival of a granddaughter, Susan Lee Cook, born in November.

Bureau employees completing short tours of active duty with the armed services are as follows:

Maj. LEMOYNE F. JONES, Nebraska District Office, Fort Leonard Wood, Mo.; JOHN T. LITTLE, Georgia District Office, Atlanta Naval Air Station; and Lt. DOUGLAS E. SCHNEIBLE, Division 3 Office, U. S. Navy installation, Charleston, S. C.

JOHN S. ANDERSON, LESTER P. LAMM, JR., and PHILLIP E. OPP, JR., junior engineers with the Roanoke, Va., District of Division 15, were called to active military duty as 2nd lieutenants during October.

G.C. DAVIS, urban design engineer for Division 2, and Mrs. Davis recently made a trip to Chandler Air Force Base, Arizona, to witness the graduation ceremonies. Their son, Gemmill S. Davis, was commissioned a second lieutenant.

S.E. FARIN, Illinois District engineer, while visiting his daughter in Wyoming last month availed himself of the opportunity to do some rock hunting. In all, he covered 4,800 miles and brought home 778 pounds of the famous Sweetwater and Fairburn agates, Eden Valley wood, and fossils. In case you're interested, the fossils include irides-cent baculites and scaphites which are a Mesozoic family of aptychidena ammonites and cretaceous scaphitoid cephalopods, respectively. Mr. Farin will keep about 10 percent of these rocks for his private collection; the remainder are available to friends and fellow rock club members for good will only.

In order to avoid the problem of whether to jettison a part of his find or leave his wife behind on the return trip, Mr. Farin had special springs installed in his car.

A local radio program over station WBAP in Fort Worth, named "Let's Go Fishing" has featured on several occasions the catches of CHARLIE WARE, administrative officer of Division 6, and his wife. Actually Mrs. Ware usually earns topbilling on the show, but there is not much talk about that at the office.

C.F. WYLLER, District Engineer in Alaska, became a member of the social lodge known as the "Pioneers of Alaska." According to the rules, a member must reside in the Territory for a minimum of 30 years.

Engineering personnel of the Minnesota District Office are all registered professional engineers. It is perhaps unusual in the Bureau to find 100 percent of assigned engineering personnel registered, particularly when the average age is 40.9 years. Yet the 10 engineers assigned to this District have an aggregate service with the Bureau of 124 years.

The Gatlinburg, Tenn., District of Division 15 is participating 100 percent (32 employees) in the Pay Roll Savings Bond Program. As new men are employed, the program is explained to them. As soon as they recover from the cost of moving their families from other localities, they become participants in the program.

Training Assignments

SHAFER D. CASE, Mississippi District Office, EDWARD C. MUSE, JR., Louisiana District Office, and ADRIAN C. TAYLOR, North Dakota District Office, were temporarily assigned to the Urban Highway Branch for training in the design of urban highway facilities. Their training was concluded December 17 with an inspection trip to urban centers between Washington and New York City.

GEORGE W. JOHNSON of Division 2 and EDWIN O. MONTGOMERY of the Illinois District were temporarily assigned to the Washington office during November for training in administrative matters.

Former Employees

Mr. and Mrs. A. C. BIRKLAND celebrated their Golden Wedding Anniversary on November 6. A reception was held in their home at 656 Benvenue Avenue, Los Altos, Calif., Mr. Birkland was employed by the Louisiana District Office from 1933 until his retirement in 1950, and served as an area engineer and programing and planning engineer.

H. L. HANDLEY, retired Division 5 employee, is now living in Albuquerque, N.M. Mr. and Mrs. Handley have purchased a home at 308 Montclaire Drive, N. E.

JOHN HEWES, son of the late Dr. L. I. Hewes and former employee of Division 8, is employed as engineer for the Southern Nevada Power Company in Las Vegas.

L. P. SCOTT, recently retired District Engineer for Michigan, has been retained as a part-time consultant by the Michigan Road Builders Association. Mr. Scott is currently reviewing the Highway Department's Standard Specifications which are undergoing their periodic revision. His report to the MRBA will be used to support their recommendations to the Highway Department concerning any proposed changes.

S. A. WALLACE, retired Public Roads employee, is living in Denver with his daughter and son-in-law at 2081 Eudora Street. Mr. Wallace was formerly locating engineer for old District 3. Many engineers in the highway field will be interested to know that "Steve" is still vitally interested in life and the happenings around him. Following his retirement, he prospected for oil as a side interest and reports are that he was quite successful in this venture. He is now interested in the uranium boom in Colorado.

Mr. Wallace will be remembered by many who received their highway field education under his supervision. This is best expressed by one of his "graduates" as follows:

Let's go! A shrill voice sounded through camp. The crew piled into the truck and off we headed for the "line." That started a typical day on location with Steve Wallace.

When you first met Steve, it was likely that you spent some time trying to figure whether he was "friend or foe," a "Wild Bull of the Pampas" or as "human as John Doe."

My first assignment with Steve was at Woodland Park, Colo. At the time of my arrival, he was just about to complete a location survey. I was hired as a levelman so Steve sent me out to run a "topog" party. On my first day out I was conscientiously trying to find a contour and was down on my haunches sketching when Steve slinked up behind me, let out a snort and said "You can't find them contours setting down." I was beginning to think he was the "Wild Bull."

As time went on, my opinion of Steve mellowed. As everyone knew who worked for him, there was considerable bluster and blow but down underneath was a heart of gold. Steve sweated and cussed side by side with every member of his crew and at times when you were pretty well "all in," he would make you fighting mad with a caustic remark.

During Steve's many years in the field, he left many "tracks" in the ruggedness of the Rocky Mountains. His work was not easy. There were many long miles of reconnaissance, then as many miles of pushing the line through timber and rough country. His was a job well done and when you drive over the famous Trail Ridge Road in Rocky Mountain National Park, the east approach road to Yellowstone National Park, or over high Fremont Pass in your automobile, visualize if you can, Steve Wallace on the "head end" of a surveyor's chain signaling for a point. If you listen closely, you might hear a shrill voice in the distance "Let's go!"

Retirements

Miss LEILA A. EVANS and Miss RAY F. MAJOR of the Accounts Section, Washington office, retired on December 1. Miss Evans ends a career of more than 37 years in the Government service, of which nearly 21 years were with Public Roads. Miss Major had over 33 years of Federal service to her credit, including 26 years with Public Roads.

LINWOOD W. FELTON of the Physical Research Branch retired in November after 43 years of service, most of which was in the Bituminous Laboratory. Mr. and Mrs. Felton will continue to live in Washington.

CLYDE E. LEARNED, Assistant Division Engineer for Division 9, will retire from Public Roads on December 31. Mr. Learned is a native of Massachusetts and a graduate of Worcester Polytechnic Institute. Prior to entering service with Public Roads he worked as engineer with the New York Barge Canal Commission and as construction engineer on concrete pavement and bituminous macadam for the New York Department of Public Works.

Mr. Learned reported to the Bureau's old District 3 for initial assignment as an expert on concrete pavement in 1918. He has worked continuously from the Denver headquarters since that time.

After helping to initiate the use of concrete pavements in the Rocky Mountain States, Mr. Learned entered direct construction operations. The latter field has been his life's work and his success is well documented by the forest and park highway systems in the Rocky Mountain area. His only departure from Division 9 was an intermediate assignment in 1942 as assistant to the District Engineer on the Alaska Highway. For outstanding service on this assignment, he was awarded the Department of Commerce Silver Medal for Meritorious Service in 1953.

Following retirement, Mr. Learned plans to continue residence in Denver. Besides his family, his chief outside interest is raising roses. He has earned professional reputation in this field and is prominent in the Denver Rose Society and related civic activities.

Mrs. GENEVIEVE O. SMITH, a Public Roads employee since 1934, retired in October after 34 years of Government service. Mrs. Smith was employed as fiscal accounting clerk in the Division 4 Office for the past 7 years. Immediately following her retirement, she will visit her sister in Needham, Mass.

Resignations

CHARLES G. HOBELMAN, bridge engineer in the Division 2 Office at Hagerstown, accepted an assignment with the Potomac River Naval Command at Newfoundland.

RICHARD J. PURINGTON, engineer in the Indiana District Office since July 1954, resigned in October to accept a position in private industry.

GEORGE E. KELLEY, Florence, Ala., District of Division 15, resigned his position with the Bureau during October.

Obituaries

ROY GRIFFIN, a former Public Roads employee of the Gatlinburg, Tenn., District of Division 15, died recently in Gatlinburg. He had been employed by the Tennessee Department of Highways and Public Works.

Dr. Robert S. Johnson, Jr., son of ROBERT S. JOHNSON, Assistant Division Engineer of Division 1, was stricken with polio on October 23, and died the following Thursday. He had specialized in psychiatry and was affiliated with the Massachusetts State Hospital.

Besides his parents, Dr. Johnson is survived by his wife, a small son, and his brother Ed who is now completing his junior engineer training with the Bureau in Washington.

The Bureau of Public Roads extends its sympathy to the bereaved families.

Illnesses and Injuries

SAMUEL J. CAPERTON, engineer in the Colorado District Office, underwent surgery in October. It was expected that Mr. Caperton would return to work about December 1.

Mrs. PEARL EVANS, Federal Projects Branch of the Washington office, had the misfortune to fall on a flight of stairs during November, and suffered a severe fracture of her right ankle.

JAMES L. GIBSON, retired fiscal accountant of the Division 9 Office, suffered a slight stroke about 3 weeks ago. After 2 weeks in the hospital, he was sent home and is recuperating satisfactorily.

Mrs. JUANITA JOHNSON, fiscal accounting clerk in the Texas District Office, recently entered an Austin hospital for treatment.

E. G. MIDDLETON, District Engineer for the Roanoke Office of Division 15, was hospitalized on October 18 and has returned to his home. He is making satisfactory progress toward recovery.

Mrs. LUCY D. STONER, former Division 2 employee, will probably be dismissed from the hospital in time to spend Christmas at her home in Washington, D. C. Mrs. Stoner has been confined to Mt. Wilson State hospital, Mt. Wilson, Md., since June 1954.

E.J. TERRILL, Construction Branch, is hospitalized at the Washington Sanitarium, Takoma Park, Md. He expects to return home for convalescence some time in December.

ANN WAGNER, secretary in the Georgia District Office, is recuperating at her home from a surgical operation.

JESSE E. WILLIAMS, former Colorado District Engineer, is recuperating satisfactorily from surgery performed in October. He and Mrs. Williams left Denver the middle of November with the expectation of returning to Bogota, Colombia, South America, soon thereafter.

Professional Activities

A Highway Drainage Conference for the South Carolina District will be held the week beginning Jan. 23, 1956.

The conference is to be under the direction of D.E. SCHNEIBLE, hydraulics engineer for Division 3. Officials of the South Carolina Highway Department, the City of Columbia, Richland County, U. S. Forest Service, and U.S. Geological Survey have indicated their intention to attend.

JAMES L. CHEATHAM, JR., past president and director of the New Mexico

section of the American Society of Civil Engineers, was appointed by the highway division of the national organization to the committee on cooperation with local sections.

C. A. CARPENTER, J. T. PAULS, HAROLD ALLEN, and F. R. OLMSTEAD of the Physical Research Branch, J. A. SWANson, District Engineer, Massachusetts, J. M. DEBARDELEBEN, Division 1, and PHILIP MABEL, Massachusetts District, participated in the annual conference of the New Jersey, New York, and New England States Testing Engineers Association during the week of November 14 at Boston. The conference was well attended by representatives of the State highway departments, material and equipment producers, and contracting firms of the Northeastern area. Many interesting and helpful discussions were held on current materials problems and on the use of new materials and processes.

EARL F. KELLEY, Chief of the Physical Research Branch, attended the Second Annual Bituminous Conference held on November 2 at the University of Minnesota. Mr. Kelley was one of the principal conference speakers and presented a paper on "Current and Needed Research in Asphaltic Road Material."

District Engineer A. L. OVERBEE attended the conference from the Minnesota Office, and IRA E. TAYLOR from the Division 5 Office. Egil Wefald, former Bureau employee, was a member of the planning committee for the conference. Mr. Wefald is now engineer for the city of Richfield, Minn.

District Engineer W. E. REED presented a paper at the Third Annual Conference of the Iowa Chapter of American Public Works Officials held at the Municipal Auditorium in Cedar Rapids, Iowa. The subject selected by Mr. Reed was entitled, "The Federal Urban Road Program."

Mrs. HARRIET D. SMITH, fiscal accounting clerk in the New York District Office, has completed 2 years as president of the Albany City Council of Parent Teacher Associations. She is currently advisor to the Council and serves on the board of the Albany Cooperative Council for Public Education. Mrs. Smith recently was presented a life membership in the National Congress of Parents and Teachers in recognition of her contributions in the Albany District.

ADRIAN C. TAYLOR, design engineer in the North Dakota District Office, and GORDON SHARPE, Highway Transport Research Branch, attended the American Society of Planning Officials' meeting at Montreal, Quebec. Mr. Taylor is a member of the Board of Directors of that society. Mr. Sharpe presented a paper at the meeting.

ROY F. WARNER, hydraulics engineer for Division 5, was appointed the Department's representative on the programing subcommittee of the Missouri Basin Inter-Agency Committee. This committee coordinates water resources development efforts of State and Federal agencies in the Missouri River Basin.

The subcommittee is responsible for developing programs for meetings, disseminating information regarding water resources developments, and steering the activities of the main committee. Due to the wide variety of projects and the number of organizations involved, emphasis is being placed upon coordination for the greatest public good.

Educational Tour

On November 7 engineering personnel of the Tennessee District Office were taken on a tour of Third Division State offices by highway department officials. Located at Nashville, these offices included the Equipment Division, the laboratory facilities of the Division of Materials and Tests, The Civil Defense-Maintenance Department, radio communications facilities, the central departmental garage, the sign painting shop, and the Division of Roadside Parks.

Among many interesting features, the visitors were particularly impressed by the completeness of the radio communications network, the up-to-date records on every piece of motive and power equipment, and the several special items in the testing laboratory. The latter included a spectra-scope used for testing the color of paints, a sonic testing machine used to determine the strength of concrete block specimens, and a box for the control of temperature and humidity in concrete specimens which had been treated with membrane curing.

Housing for Engineering Personnel

The New Mexico District Office has obtained eight surplus dwelling units from the Atomic Energy Commission at Los Alamos for use at forest construction and maintenance camps. The houses are of the "wingfoot" type, and were hauled from Los Alamos to locations in New Mexico and Colorado. The installation of electrical wiring, heating, and plumbing facilities was accomplished by Bureau employees. These houses provide desirable field quarters for engineering personnel.

Personnel Advisory Committees

As a result of its recent inspection of our Washington office, the Civil Service Commission suggested that the Bureau of Public Roads establish some form of direct employee participation in the formulation of personnel policies and programs. To provide for this participation two employee committees to act in an advisory capacity to the Personnel Officer will be established.

The Commissioner has designated the following employees to act as a temporary committee for the purpose of selecting membership for the two Personnel Advisory Committees for Public Roads: HARRY CUNNINGHAM, chairman, NATHAN GORDON, Mrs. VERNA FAY ALM, and Mrs. ELLEN FLETCHER.

The two Personnel Advisory Committees will have six members each. One committee will be composed of professional employees, and the other committee will be composed of clerical, fiscal, or administrative employees.

The appointment of these two committees will meet the suggestion made by the Civil Service Commission and further, such committees will be of direct benefit to our overall personnel program.

Message to Public Roads Supervisors

The Civil Service Commission, through Departmental Circular 824, has again made known the policy that supervisors who initiate management improvement—whether by clarification of organization structure, simplification of work methods, elimination of work programs, or introduction of labor-saving devices which result in the reduction in number of personnel supervised—shall not be demoted or downgraded solely on the basis of such reduction. Furthermore, the Commission states that such a supervisor should be placed in another position offering a greater challenge and opportunity for contribution and consequently a higher grade and rate of pay.

Public Roads is pleased with this policy as stated by the Civil Service Commission as it is in conformity with the past practice of the Bureau.

It is a matter of record that in the past two years Public Roads has successfully handled a greatly enlarged program without increasing administrative costs. This accomplishment, in a large measure, is due to the efforts of our supervisors whose confidence that better management will result in recognition and advancement has made that achievement possible. Our thanks go to our supervisors for a job well done.

Archeological Salvage

A program was initiated in 1954 by the New Mexico Highway Department, the Museum of New Mexico, the National Park Service, and the New Mexico District Office for the preservation of historical sites located within highway rights-of-way. Such historical salvage is authorized by a Federal law approved in 1906, and the New Mexico Laws of 1931.

The highway department advises the State archeologists in advance of all projects proposed for construction and maintenance. Excavation work is handled by field sheet or work order between the highway department and the contractor. On Federal Lands and Forest projects, the contractor has supplied necessary labor and tools and the State archeologist has directed the work. Salvage is completed well in advance of contract work. In no case have such costs exceeded $1,000 on any project.

The Indian ruins and artifacts excavated on our National Forest and Federal Lands projects during the past two construction seasons were of great importance to scientists. Some cultural objects were found dating back to 200 A.D. Several universities have arranged to provide students and trained personnel to assist in next summer's operations.

The New Mexico District Office can furnish a limited supply of Dr. Fred Wendorf's "Highway Salvage Archeology—Volume I," to interested Bureau personnel.

Louisiana Maneuvers

Louisiana was chosen as the site for the largest military maneuvers held in this country since the end of World War II. The maneuvers involved approximately 110,000 ground troops and 38,000 air troops. Known as Operation Sage Brush, it began in November and continued into December.

The area designated for the maneuver included about one-third of the State's area and generally covered the north and western sections of the State. Twenty-four of the State's 64 parishes were involved and some 4,000 miles of State highways and 11,000 miles of parish roads.

For the maneuver, the Army selected a network of roads to carry all of their heavy loads. Along these roads are about 400 bridges that were inadequate to carry the heavier loads. The army agreed to reimburse the Louisiana Department of Highways for strengthening all of the deficient bridges to meet the requirements for the Army Class 60 loading. Most of the inadequate bridges were timber structures. The Department of Highways set up a provisional district office at Camp Polk to handle this work.

In order to act on claims of damage to highways that might result from the maneuver, it was necessary for the Bureau of Public Roads to make a survey of all roads within the area. The State system was covered by a team consisting of two State engineers and one Bureau engineer from the Louisiana District Office. T. J. Weishaupt and R. M. Lemke handled this work for the Bureau by alternating each week.

The 11,000 miles of parish roads presented a bigger problem. Because the workload was too heavy for the Louisiana District Office, help was recruited from other Districts within the Division. The survey of parish roads was started with 5 teams: each consisting of one Bureau engineer, one State highway engineer, one Army officer, and a representative of the parish involved. The number of teams was later increased to eight. The following Public Roads engineers were assigned to this work: Charles W. Ruckman, Norman R. Barker, and Richard B. Gillette III, Texas District; R. Edward Stewart, Oklahoma District; and William P. Granthan and Hubert O. Thompson, Arkansas District. There was one casualty—Norman Barker picked up food poisoning and was replaced with John S. Logan, Jr., of the Oklahoma District.

The maneuver was based on a successful aggressor invasion from the Gulf of Mexico on the Louisiana coast. The aggressor was to drive the friendly forces into north Louisiana where the friendly force was to counterattack. The maneuver was climaxed by a crossing of the Red River.

Aerodynamic Research

A low-velocity wind tunnel is being constructed at the Public Roads Research Center at Langley, Va. With the recent award of a contract for the fan, fan motor, and electronic speed control equipment, its completion will soon be a reality. The tunnel will be used for continuing research on the aerodynamic behavior of suspension bridges. It was designed and built by personnel of the Physical Research Branch and will have an overall length of nearly 50 feet and a height of about 14 feet. A novel feature of the design is a tilting outlet which makes it possible to subject the model to an upward or a downward stream of air.

The first phase of this study, now completed, was carried out at the University of Washington in cooperation with the University and the Washington Toll Bridge Authority. It was undertaken as a result of the destruction of the Tacoma Narrows bridge by wind action in 1940 and was planned and carried out under the auspices of the Advisory Board of the Investigation of Suspension Bridges. E.F. Kelley, Chief of Physical Research, has been chairman of the Advisory Board since its organization.

The original studies, conducted in a temporary wind tunnel at the University of Washington, produced a great deal of valuable information. Much of this information was utilized in the design of the new Tacoma Narrows bridge and modifications of the Golden Gate Bridge, and it is hoped that the design changes will prevent the recurrence of disastrous suspension bridge failures. Some of the data, however, require conformation in another wind tunnel of different design. The confirmatory studies as well as additional researches will be carried out in the tunnel now being constructed.

George S. Vincent, bridge engineer of the Physical Research Branch will be in charge of this work at Langley. He has been transferred to Washington from Seattle where he was Bureau representative on the studies at the University of Washington.

Expressways Opening

The New York District Office was pleased to have Commissioner Curtiss participate in recent opening ceremonies of the new expressways in New York City. On November 5, the Major Deegan Expressway, Cross Bronx Expressway, and the Queens Mid-town Connection to the Horace Harding Expressway were formally opened by Governor Averell Harriman, Mayor Wagner, Commissioner Moses, and other city officials. Division 1 representatives were Division Engineer, C. E. Swain; District engineer, K. B. Foster; and area engineer, J. P. McAllaster.

The Cross Bronx Expressway will cost about $112 million, an average of $22 million per mile.

What is the longest petition that was ever sent to Congress?

One prepared by Senator George F. Hoar, of Massachusetts, in 1893. This petition was signed by 150,000 citizens of the country and advocated the establishment of a Department of Roads in the executive branch of the government. The names were printed on a linen strip, eight and a half inches wide and rolled on two reels. Each reel was three feet in circumference.

—San Francisco Examiner

The Office of Road Inquiry was established in 1893.

The Search for Road Materials

There have been numerous alleged miracle road-building materials in the past that have been little used after a trial period. Prior to the Civil War many plank roads were built in eastern States. In 1898 steel channels were used as tracks for horse-drawn vehicles. Since then burnt clay, sulphite liquor, molasses, cotton fabric and certain resins have been announced as useful materials, only to be discarded soon after.

It should not be assumed that all these materials were worthless. For example, burnt clay gave good results in a region where aggregates for road surfacing were not available, but the expense of obtaining cord wood for burning the clay was too great. The idea may be revived should a low-cost method of applying intense heat to windrows of clay on the roadway be available.

The Bureau is now cooperating with 12 chemical manufacturing companies in the search for a material that will make ordinary soil suitable as a road surface or base. Modern science may succeed where random trial methods have failed.

PUBLIC ROADS: World Traveler

PUBLIC ROADS magazine is not only one of the oldest continuously published periodicals of the United States Government; it is also probably one of the most widely traveled. A recent review of mailing lists shows that each bimonthly edition of more than 5,000 copies carries the message of the Bureau of Public Roads research work throughout the United States and to 80 countries around the world.

The Bureau of Public Roads distributes 817 copies of PUBLIC ROADS magazine to its own personnel, and 1,464 copies are sent to the State highway departments in furtherance of the cooperative Federal-State highway program. In addition, 446 copies go to other Federal and State agencies and to county and local rural and urban government highway departments, 161 copies are sent to university libraries and instructors in highway engineering, and 138 to engineering and trade associations and publications. The Bureau's free distribution overseas reaches 50 foreign countries with 286 copies, mostly to national government highway agencies.

In addition to the Bureau's distribution, the Government Printing Office, in its program of supplying representative libraries with Government publications, distributes PUBLIC ROADS to 373 depository libraries across the Nation; and the United States Information Agency uses 87 copies in its information centers in 41 foreign countries.

That PUBLIC ROADS magazine is considered worthwhile reading is indicated by the paid subscription list, numbering 1,018 in the United States and 523 in 60 foreign countries. In somewhat less than 2 years (December 1953 to October 1955), subscriptions in the United States have increased 29 percent and foreign paid subscriptions have practically doubled in number.

Geographically, the total (free and paid) PUBLIC ROADS distribution is remarkably widespread. It goes to every State, ranging in number from 15 copies for Vermont and 19 for Delaware to 315 for New York and 428 for California. Twenty-three States receive up to 50 copies each; 13 States are in the 51 to 100 copy range; over 100 copies go to each of 12 States and the District of Columbia. Four U. S. Territories are on the mailing lists.

The 896 copies going to 80 different countries account for 17 percent of the total PUBLIC ROADS distribution of 5,313.

The paid circulation of 1,541 copies amounts to 29 percent of the total distribution, which seems surprisingly good for a government periodical in the technical research field.

Combined Charities Campaign

Under the Department of Commerce single campaign in the Washington metropolitan area for welfare and charitable organizations, Public Roads was assigned a quota of $13,345.60. The solicitation of pledges has been completed except for several employees who are on field trips. So far 860 employees have subscribed $13,919 or 104.3 percent of the Bureau's quota. For the Department as a whole, 105.49 percent of the quota has been subscribed.

The West Virginia District Office was recently honored with an award for their contribution to the Red Feather Campaign. The award, in the form of a certificate, was accompanied by a letter which officially recognized the West Virginia District as "having given outstanding help in the Community Chest campaign."

Reorganization

All foreign highway activities, except those directed by the Inter-American Highway Office, have been placed under the supervision of a Foreign Projects Office. This responsibility within the Commissioner's office will continue under F. C. Turner.

A. C. Taylor was designated as Chief, Foreign Projects Office, and is responsible to Mr. Turner for general direction of the program, including the training of all foreign nationals brought to this country for that purpose.

A separate office to handle the Inter-American Highway and its related work has been established for a number of years, and will henceforth be referred to as the Inter-American Highway Office. It will likewise operate within the Office of the Commissioner under the general supervision of F. C. Turner. N. B. Wood is in direct charge—under Mr. Turner's direction—as Chief, Inter-American Highway Office.

Challenge

The Texas District Office wants to fire a 4-man pistol match (.22 caliber) with other Bureau offices. Of necessity, the results of the contest must be reported by mail. Write to R. B. Gillette III, 607 Highway Building, Austin, Tex. *Editor's note:* We are pleased to print this notice. If you are going to engage in gunplay with Texans, by all means do so by mail. This is an unusual opportunity that appears to involve no great risk. We will report the results if anyone is bold enough to accept the challenge.

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