



### SECTION 13 REPORT

Work has been started on the preparation of a report to Congress in accordance with Section 13 of the Federal-aid Highway Act of 1954. This will be based on a study of all phases of highway financing, including a study of costs for completing the several highway systems and of the progress and feasibility of toll roads. Development of information for this report is a responsibility of a Bureau Planning Committee appointed for the purpose, under the chairmanship of G. P. St. Clair, Chief of the Finance and Administrative Research Branch.

During the week of June 28, Division Office representatives were in the Washington Office to discuss the objectives of the study and to receive instructions for the assembly of information required in each of the States.

Present at this series of meetings were: Leo Grossman, C. H. French, J. J. Crowley (Div. 1); M. B. Kinnikin, G. C. Davis (Div. 2); R. N. Grunow, Harry E. Stark (Div. 3); C. C. Burdick, F. E. Junior (Div. 4); J. A. Swanson, W. W. Fryhofer (Div. 5); E. H. Swick, B. L. Andrews (Div. 6); J. A. Killalee, H. B. Powers (Div. 7); J. R. Sargent,

R. P. Rodgers (Div. 8); and A. R. Abelard, M. F. Maloney (Div. 9).

Our reporters for the Atlanta and Denver offices report similar meetings in their divisions.

Meetings were held in Atlanta on July 12-14 which were attended by district engineers, district programming and planning engineers, and programming and planning engineers from all the State highway departments in the division to discuss and initiate action for obtaining data to comply with Section 13. The meeting was conducted by B. P. McWhorter, division engineer; R. N. Grunow, division programming and planning engineer; and H. E. Stark, division urban engineer. The Seven southeastern States and Puerto Rico were represented.

State highway engineers and planning engineers for Colorado, New Mexico, Utah, and Wyoming met with the Bureau's district engineers at Denver on July 13 to discuss the provision of the new act. Division Engineer George M. Williams conducted the meeting. Division staff engineers A. R. Abelard and M. F. Maloney gave important information to the group which was gained during the conference in Washington.

### 40-Year Awards

The following employees of the Bureau completed 40 years of Government service in the calendar year 1953, and received Department of Commerce 40-year length-of-service awards: Messrs. Elbert C. Brown, Division 7, Levant R. Brown, Division 7; B. Paul Burtiss, Engineering Division; Lyman F. Copeland, Division

9; Frederick A. Davis, Division 3; George W. Davis, Research Division; Frank V. Gingell, Finance and Management Division; Irvin W. Hall, Division 2; Oliver C. Lockhart, Division 9; Ernest Lubeck, Division 9; A. E. McClure, Division 2; Jarl T. Pauls, Research Division; Samuel L.

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### Rescue Party

What was expected to be an uneventful routine reconnaissance trip down Padre Island along the Texas coast of the Gulf of Mexico turned out to be a rescue mission for three young travelers marooned in the sand.

Padre Island, 130 miles long and varying from 1 1/2 to 4 miles wide, extends along the southern end of the Texas coast from near Corpus Christi to near Brownsville. Except for park developments at each end, the island is uninhabited and consists mostly of salt marches and sand dunes with a beach fronting on the Gulf of Mexico for most of its length. The island has recently been connected to the mainland by causeways at each end, and local interests have been active in urging the construction of a highway along its entire length.

To obtain first-hand information on such a highway, a reconnaissance party composed of J. A. Elliott, division engineer, Bill Andrews, division design engineer, J. M. Page, district engineer, and engineers and officials from the Texas State Highway Department and Nueces County drove the length of the island on June 3. The party traveled in a station wagon and a 4-wheel-drive power wagon with winch, which was needed a number of times to pull the station wagon through the sand. The vehicle was equipped with extra gasoline, oil, water, spare parts, repair tools, and food for the noon-day meal.

About mid-way down the island the party came upon a station wagon, stalled in the sand, out of gasoline, with two young men occupants out of water and food, and wondering whether the third man of their group who had

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## New Assignments

Merritt L. Anderson was promoted to the staff position of administrative manager in the Division 9 Office at Denver, to fill the vacancy caused by the transfer of E. J. Martin to Washington. Mr. Anderson was formerly Chief of the Division 9 Auditing and Fiscal Section.

E. H. Cowan, staff engineer for the Alaska District Office, returned to duty in Division 9. He has been assigned as resident engineer in charge of forest and park work in Wyoming.

Frederick W. Cron, highway engineer, returned from an assignment with the Philippine Division in July, and is now district engineer for the Gatlinburg, Tenn. District Office of Division 15.

During the past year, Division 4 has welcomed 11 new employees: 3 engineers transferred from other divisions, 4 trainee graduates, 1 auditor, 1 clerk-stenographer, and 2 clerk-typists.

In addition to these employees, three trainees are expected during the next two months: Edward C. Moroney, Jr. and William S. Peterson, who will receive their Federal-aid training in Wisconsin, and Jack R. Hutchins who will be assigned to Illinois.

Paul Doyle, who transferred from the District Office at Juneau, Alaska, on July 1, will assist the division auditors, Messrs. Warsh and Krickl, in making audits throughout Division 4.

Warren A. Frick, trainee graduate assigned to the Illinois District Office, returned to his home at Springfield, Ill., which he purchased when he was assigned to that district for his Federal-aid training.

Frank Grabski transferred to the Illinois District Office recently from Division 2. He has been with the Bureau since June 1943, having first been assigned to the Washington Office.

The Indiana District Office welcomes the assignment of three new engineers: Gordon B. English was formerly assigned to Division 2, Hagerstown, Md. He now resides at Carmel, Ind. Ernest W. Harris and Richard J. Purrington, who recently completed the Bureau's trainee program,

have established their residences at Indianapolis and Danville.

Warren D. Fish (Washington, D.C.) is now Chief of the Construction Branch of the Division of Engineering, and L. Sterling Hedgpeth is Acting Chief of the Specifications and Materials Section, Construction Branch. Mr. Hedgpeth recently returned from a 6-year tour of duty in Turkey, in the capacity of highway advisor.

Maurice W. Groves, John W. Ryan, and Russell M. Schermerhorn, highway engineers in the Division 1 Office, transferred to the New York District Office on May 23.

Mr. Ryan was assigned to Area 2 covering the western section of the State, and Mr. Schermerhorn to Area 2 for the northern and central sections. Mr. Groves was assigned to the Design Section of the District Office.

Lester A. Herr, bridge engineer for the Washington State District Office, transferred to the Hydraulic Branch of the Research Division (Washington, D. C.) on an assignment for one year, replacing William D. Potter who will attend Cornell University.

Hans A. Midstokke, a graduate of the Bureau's engineer trainee program, was assigned to the Michigan District Office. Mr. Midstokke joined the Bureau's trainee program in June of 1951 upon his graduation from the University of North Dakota.

Edward G. Oakley and David H. Hunter were assigned recently to the Tennessee District Office of Division 15 as bridge engineer and highway engineer, respectively.

Emery L. Shaw, junior engineer, assigned to the Oklahoma District since mid-June, moved to Austin, Tex., about August 1 where he will continue with the Federal-aid field operations phase of the trainee program.

Upon graduation from the University of Oklahoma in 1952, he entered the Bureau's training program and will be ready for assignment to a regular position next May.

Fay C. Smith, formerly with the Division 1 Office, was assigned to Vermont as the district's bridge engineer effective June 21. Mr. Smith became an employee of the Bureau in 1949. He served a tour of duty in the Philippine Division and returned to the States in August 1952 for as-

ignment with the Division 1 Office at Albany.

A newcomer this year to the Kentucky District Office is Edwin L. Stephenson, a native of the State of Oklahoma, but more recently connected with the Division Office at Fort Worth. Mr. Stephenson transferred to Kentucky by reason of curtailment of the staff in the Fort Worth Division Office.

A. C. Taylor, division engineer for the Philippines, interviewed some men on June 24 from the Alabama District of Division 15 for the purpose of getting construction personnel to join his force in the Philippines. P. R. Lee, construction superintendent, and Ernest Mooneyhan, heavy equipment operator, accepted the assignment.

David A. Van Horn of Des Moines, having just completed the Bureau's 3-year training course, requested and received authorization for leave without pay to accept a research assistantship at Iowa State College at Ames. He will begin work leading to a Masters Degree in structural engineering. Pending the beginning of the school term, he is assigned to the Bureau's District Office at Ames.

George M. Williams has been transferred to the Washington Office to serve as principal assistant deputy commissioner for Engineering. Karl S. Chamberlain has been designated to succeed Mr. Williams as division engineer for Division 9 and Morton M. Flint has been designated to succeed Mr. Chamberlain as district engineer for Montana. Mr. Flint transferred from the Division Office in San Francisco.

Mr. Williams has nearly 26 1/2 years of service with the Bureau; Mr. Chamberlain has 31 years plus nearly 2 years with the U. S. Marine Corps; and Mr. Flint's service adds to more than 25 years with the Bureau.

## Temporary Assignment

The Portland Division Office reports a record year of work on Federal highway projects handled directly by the Bureau on forest service development roads, Bureau of Land Management routes, and National Park highways. Construction is now under way on 83 such jobs covering over 500 miles and estimated to cost

more than \$22 million. Additional work on 93 jobs, extending 700 miles and estimated to cost about \$28 million, is practically assured.

To meet the need for additional resident engineers, the following men accepted temporary assignments in that Division: Washington Office: R. W. Bergeron, S. L. Boyette, A. A. Carter, H. M. Hancock, W. W. Hoffman, C. M. Moffatt, W. S. Peterson, R. A. Quist, R. T. Segawa, R. T. Walker, I. E. Winfrey, and R. G. S. Young; Division 1: R. D. Bee, R. C. Cowdery, and W. L. McCausland; Division 2: B. Cottrell, J. Leegan, H. W. Richart, and W. Townsley; Division 3: J. S. Corcoran and A. C. Haygard; Division 4: H. Krashen and R. C. Malmer; Division 5: C. E. Harness and E. F. Jones; Division 6: S. N. Whitthorne; Division 7: O. Anderson, R. Arwood, V. E. Carson, H. M. Christensen, D. W. Ferguson, and A. E. Grisson.

## Foreign Assignees

Rex S. Anderson, division engineer for Ethiopia, arrived in Washington during July for consultation.

Martin E. Bailey, equipment specialist, was appointed to the Liberian District and has arrived in Monrovia.

Mr. and Mrs. Virgil Cave, who have been stationed in Central America for a number of years, returned to the United States during June. They travelled by plane to Roanoke, Va., where Mrs. Cave underwent emergency surgery. It is reported that she is recuperating nicely. Mr. Cave is presently assigned to the Bureau's office in Nicaragua.

Ray C. McCall, equipment specialist, completed his assignment in Ethiopia, and has returned to the United States. Max K. Berry, George A. Hayberger, and Clyde B. Webb, equipment specialists, returned from Turkey during July and August.

## Former Employees

J. S. Bright of San Bernardino, Calif., who directed construction of the Alaska Highway and who retired in 1949 as Deputy Commissioner in charge of Construction and Maintenance is still a busy man. In response to an inquiry as to what he

is doing he wrote, "Most of my time is spent in looking after our properties, major item a citrus orchard. Due to air pollution from smog, production has fallen off seriously and it is expected the area will be converted to home sites. This change will require a change of our water system from a gravity to a pressure system. Lately I have acted on two advisory committees planning this change."

"Also I am on the board of directors of our citrus marketing association. In addition I have been working with a committee of the County Chamber of Commerce in the restoration of the vegetation on the San Bernardino Arrowhead landmark in the National forest, a natural mark seriously injured by a forest fire last year. The return of the vegetation will take some time unless aided by planting. We are trying to enlist the State Park Commission headed by Newton Drury (ex. U. S. Park Service Head). This arrowhead is of considerable note: in the class of the Holy Cross of Colorado and Old Stone Face of New Hampshire."

"I do some small church work. Saturday noons we can hear music at the Congregation Church on chimes supplied by Mrs. Howard Way in memory of Howard."

"Had a letter from C. C. Morris from Albermarle, N. C. reporting he is employed by Parsons', Brickerhoff, Hall and MacDonald, et al, on a highway needs study for that State."

"Best regards to my many friends."

B. W. Matteson, former division engineer of Division 9, who retired on February 28, 1953, is living in Denver. He has completely recovered from the unfortunate accident which befell him in October of 1952.

S. G. Newmann, former fiscal auditor for Division 9 retired July 31, 1953. He is residing in Denver and enjoying good health.

A. V. Williamson, former division engineer in Turkey and also district engineer for Colorado, is living in Denver. Following his retirement on November 30, 1953, he accepted an administrative position with the Colorado Department of Highways.

## Illnesses

Mrs. A. G. Bruce, wife of the former division engineer of Division

1 is recuperating from a serious illness incurred last winter.

Alpha L. Cook of the Virginia District Office entered Johns Hopkins Hospital, Baltimore, on July 12, to undergo surgery.

Mack Galbreath, Kentucky district engineer, Frankfort, is convalescing at his home on Hermitage Drive after a heart attack which occurred during the early part of May. In point of service, he is one of the oldest employees of the Bureau having gone with the organization in 1913.

Mr. Galbreath was confined to the hospital for a period of one month, but is now well on the road to recovery.

J. W. Henry, district construction and maintenance engineer for Kansas, underwent surgery on July 6. The District Office reports that he has recovered favorably.

Miss Emma S. Holcombe, clerk-stenographer for the Louisiana District Office, is back on the job after a two weeks' absence due to a serious throat operation.

George G. Holley, landscape architect, Roadside Section, Washington, D. C., suffered a heart illness on May 28. The latest report is that he has left the hospital and is improving steadily at home.

Mrs. Lucy D. Stoner, file clerk in the Division Office at Hagerstown, Md., is hospitalized at Mt. Wilson State Hospital, Mt. Wilson, Md. It is anticipated that her condition will require treatment for a year or more.

R. E. Tribou, district engineer in Massachusetts, has been absent from his office since May 4 as a result of a heart attack. A few weeks ago he suffered a minor setback but is now showing steady improvement. If his improvement continues, it is expected that Mr. Tribou will be able to resume his duties with the Bureau sometime in August.

## Retirements

WILLIAM P. BUTLER retired from the Division Office at Hagerstown, Md., on January 31 after nearly 19 years of Government service. Mr. Butler joined the Bureau in October 1945 and served as District Engineer for Pennsylvania until July 1949, when he transferred



to the Division Office at Washington, D. C. He is a graduate of the U. S. Naval Academy and holds the rank of lieutenant commander on the honorary retired roll of the U. S. Naval Reserve. Prior to his retirement from the Bureau, Mr. Butler was handling foreign engineer training, right-of-way procedures, and forest and park work for Division 2.

FRANKLIN S. COCHRAN, automotive attendant, IRVIN P. MITCHELL, principal foreman, and JOE PROCTOR, senior mechanic, retired in June and July of this year after many years of service. These men have worked with the force account organization of Division 15 in Maryland, Tennessee, Alabama, and Mississippi.

L. F. COPELAND, division bridge engineer for Division 9 at Denver, retired effective August 1.

He spent 41 years with the Federal Government. Mr. Copeland entered the service in 1913 with the supervising architect's office of the U. S. Treasury Department. His transfer to the Bureau was effective on November 21, 1917. He served as district bridge engineer of old District 3 before division offices were established.

PAUL J. COX, a Division 15 engineering aid for the Bureau since November 1937, retired for disability reasons on June 30. His assignments were on the Blue Ridge Parkway and Great Smoky Mountain National Park projects. Mr. Cox served overseas during World War I, and before coming to the Bureau he served with the U.S. Corps of Engineers, New Orleans.

LUCY W. CURL, secretary to the program and planning engineer of the Georgia District Office, retired June 30. Mrs. Curl's service included 4 years with the Veterans Administration, 6 years with the Alcohol Tax Unit, and 14 years with the Bureau.

HAROLD S. GILLETTE, materials engineer, Division 6, Fort Worth, retired April 30, after 36 years of Federal service. For 31 years he was materials engineer for this division, contributing to the development of specifications, standards of inspection and testing, and methods of use of road-building materials.

Mr. Gillette served as captain in the Corps of Engineers, U. S. Army, during and subsequent to World War I. Prior to his service with the

Bureau, he was employed by the New York Central Railroad, and the New York Department of Public Works as resident engineer.

Mr. and Mrs. Gillette will continue to make their home in Fort Worth where he plans to complete another book on soils.

MRS. DOROTHY TUDOR HARRELL, Division 3, Atlanta, retired July 31 after 35 years of Government service. Mrs. Harrell entered the service of the War Department, Army Ordnance, Washington, D. C., in April 1918. Following the war, she transferred to the Bureau of Internal Revenue. In 1931, she entered the service of the Bureau, Mail and Files Section, in Washington. When Division 3 was organized in 1945, she transferred to Atlanta as supervisor of mail and files.

ROY A. KLEIN, division design engineer in the Division Office, Fort Worth, retired January 22, after 20 years of service with the Bureau. Before his transfer to Division 6, he was senior highway design engineer at Ogden, Utah, and assistant to the division engineer at Denver.

Mr. Klein held several assignments before coming to the Bureau. He worked for several railroad companies, for county highway departments in Oregon and Washington, for the Oregon State Highway Department, and practiced as a consulting engineer. During the period 1923-31, he was State Highway Engineer for Oregon. Mr. Klein was a member of the original AASHO committee which established the system of U. S. numbered routes.

Mr. and Mrs. Klein are now making their home in Portland, Ore.

NORMAN K. MILLER of our Division Office at Hagerstown, Md., retired on April 30 because of disability resulting from a stroke which he suffered in January. Mr. Miller, an auditor for the Bureau since October 1935, is residing at his home in Catasauqua, Pa.,

JOHN F. RIGHTMIRE, highway design engineer, Division 6, Fort Worth, retired January 22, after 20 years of employment with the Bureau.

Before coming to our organization, he served in various engineering capacities with the El Paso, Southwestern, and Santa Fe Railroads, the Arkansas, Louisiana, and Oklahoma State highway departments, and also as assistant administrator for the Civil Works Administration in Okla-

homa. In 1931 he became Acting State Highway Engineer for Oklahoma.

Following his retirement from the Bureau, Mr. Rightmire returned to work with the Oklahoma Department of Highways and presently is supervising a comprehensive traffic study being made at Tulsa.

GUY L. SMITH retired from the Bureau on April 1, after 37 years with the organization.

After graduating from Syracuse University in 1913, he spent 4 years with the New York Department of Public Works. He entered service with the Bureau in February 1917, and except for 2 years of duty as an Army officer during World War I, has served continuously on various assignments.

Mr. Smith has been in the Florida District Office since 1934. Before making his headquarters in Tallahassee, he had been stationed at Athens, Ga., Nashville, Tenn., and Montgomery, Ala. Since his retirement, he and his wife have made their home in Daytona Beach, Fla.

HOWARD F. SUTTER, highway engineer in the Division Office at Fort Worth, retired June 30. He has been a bridge and design engineer for the Bureau in Division 6 for the past 19 years. Prior to his appointment with the Bureau, his engineering experience included such assignments as bridge engineer for Nebraska, bridge and structural engineer for construction companies, railroad companies, oil refineries, grain elevators, consulting engineers, and for three years, private consulting work at Kansas City, Mo.

Mr. and Mrs. Sutter will continue to make their home in Fort Worth, where he will pursue his hobby of collecting and cataloging unusual rocks.

JAMES J. TONEY (Washington, D. C.) a Government employee for nearly 25 years, retired from the Bureau on June 30. Twenty-two years of this service were with the Bureau, where he was employed in the Supply Section.

Except for employment of less than two years with other Government agencies and a period of disability of approximately 3 1/2 years, his service with the Bureau has been since 1927.

He has been active in the American Legion, and expects to continue in this activity.

## Resignations

Eugene V. Aldrich, highway engineer for the Division 5 Office at Kansas City, resigned April 23 to accept the position of chief engineer for the Raymond Concrete Pile Co. of South America. Mr. Aldrich was formerly with the Bureau in the Division 7 Office before transferring to Division 5.

Logan L. Ratliff, district bridge engineer for the District of Columbia, Maryland, and Delaware for the past 3 years, resigned from the Bureau on July 7 to accept the position of supervisor of bridge design in the College Park office of Michael Baker, Jr., Inc., Consulting Engineers.

Mr. Ratliff's experience with the Bureau included 2 years in the Bridge Section of our Division 2 Office and 9 years in the Bridge Section of Division 15. Before coming to the Bureau he held a position with TVA.

Miss Helen Linn, veteran stenographer at Denver for the Division 9 Office resigned on July 2. She will retire officially from Government service on July 2, 1956. Miss Linn has served the Federal Government for over 25 years, of which 21 years have been with the Bureau.

She plans to make her home in Denver.

## Obituaries

NOEL S. ANDERSON, former district engineer for the Bureau in South Carolina, died in Milwaukee, Wis., April 19.

Mr. Anderson retired from the Bureau on December 31, 1953, having reached the compulsory retirement age. He joined the Bureau in 1931 and was appointed district engineer for District 14 in 1936. Under the reorganization of the Bureau in 1945, he was appointed district engineer for South Carolina, in which capacity he served until his retirement.

Mr. Anderson held responsible positions with the South Carolina State Highway Department immediately following World War I until his appointment to the Bureau in 1931. In addition to these assignments, Mr. Anderson also had extensive foreign service including work in South Africa, South America, and Canada. He was recognized as an authority on

soil-type bases and bituminous surfaces, and helped develop low-cost bituminous surface treatments used so widely today.

MRS. NELL R. CONNIFF, clerk-stenographer for the Construction Section of the Division 5 Office in Kansas City, died suddenly from a heart attack on July 11.

O. DALE HENRY of the Pennsylvania District Office passed away on June 22. He had devoted 33 years to highway and related construction work.

Mr. Henry was educated at Ottawa University, Kansas, and at Columbia University in Missouri. He was a veteran of World War I and spent the first 23 years of his professional life in Kansas. During World War II he was associated with the U.S. Corps of Engineers, and then joined the Bureau in 1946.

Mr. Henry was in charge of our work in the Philadelphia and Pittsburgh urban areas, where large and complex projects have either been completed or are under way. The Penn-Lincoln Parkway in Pittsburgh, and the Schuylkill Expressway in the Philadelphia area were among the projects on which he worked.

SEWARD E. HORNER, age 48, geologist for the Kansas State Highway Commission died suddenly July 8 at his home in Topeka. "Tiny" Horner is well remembered by veterans of the Alaska Highway, where he served as consulting geologist for the Bureau.

CHARLES T. FISHER died suddenly on July 26 at his residence in Albany. His widow survives. Mr. Fisher came with Division 1 in September 1935, in the New York District. He retired in October 1951, but was reemployed on temporary appointments until September 30, 1953.

*The Bureau of Public Roads mourns the passing of all of these employees, and extends its sympathy to their families.*

## State Engineers Injured

The Charleston Gazette reported that Claude A. Rothrock, chief engineer for the West Virginia State Roads Commission Planning Division, suffered multiple facial lacerations and possible fracture of the right ankle on July 19 when the automobile in which he was riding collided with another vehicle. The

accident happened near St. Albans, W. Va.

His assistant, Robert Titus, suffered a severe facial laceration and possible fracture of the right leg. Both men were reported to be in a satisfactory condition at the Thomas Memorial Hospital, South Charleston, W. Va.

## Military Training

Sgt. J. C. Sears, Division 15, Hot Springs, Ark., spent two weeks on military training with the Arkansas Air National Guard at Biloxi, Miss.

Major Charles M. Lamont, Division 15, Arlington, Va., took two weeks' reserve training at Fort Meade, Md.

Lt. James Montgomery of the Highway Statistics Section (Washington, D. C.), trained at Ft. Meade, Md., the first two weeks in August with the 310th Logistical Command.

## Travel

J. C. Cobb, district engineer for West Virginia, and his family spent the month of July on vacation in Mexico. The Cobbs' visited with their son, a foreign correspondent in Mexico City.

Miss Charlotte Organ (Washington, D. C.) has resumed her duties as secretary for the Hydraulic Research Branch after an absence of nearly three months on an extensive tour in western Europe.

## Hobby

Ivan E. Gillson, administrative assistant in the Division 8 Office, had the article "A Different Live Food" published in the national fish magazine, Aquarium. Mr. Gillson has experimented on this subject as a hobby for a number of years.

## Committees

Three recent issuances of Administrative Memoranda have referred to permanent committees. Administrative Memorandum 1-11 covered the Technical Procedures Committee, Ad-



ministrative Memorandum 1-12, the Committee on Research Reports, and Administrative Memorandum 2-14, the Incentive Awards Committee.

The present committee memberships are as follows: Technical Procedures Committee: H. E. Cunningham (Legal), Chairman, M. B. Christensen (Engineering), E. H. Holmes (Research), R. W. Kruser (Finance and Management), A. L. Smith (Engineering), and A. R. Rankin (Legal), Secretary.

Committee on Research Reports: R. E. Royall (Research), Chairman, E. H. Holmes (Research), E. F. Kelley, (Research), R. W. Kruser (Finance and Management), D. W. Loutzenheiser (Engineering), H. A. Radzikowski (Engineering), G. P. St. Clair (Research), and Mrs. Ethel M. Kelly (Research), Secretary.

Incentive Awards Committee: R. W. Kruser (Finance and Management), Chairman, E. H. Holmes (Research), J. L. Shotwell (Engineering), and Mrs. Margaret M. Moskowitz (Office of the Commissioner), Secretary.

## Awards Committee

H. Q. Thomas, district engineer in New Hampshire, was appointed chairman of the Awards Committee of the New Hampshire Good Roads Association. This committee was recently established by the Association for the purpose of honoring annually the members who made outstanding contributions to the highway field during the year.

## In-Service Training

In-service training programs during fiscal year 1954 reached 1,506 employees, counting each individual for each separate training function he participated in and excluding the junior engineers in their 3-year program.

The field divisions conducted 118 schools and conferences attended by 375 division and 806 district office personnel. These field functions were attended also by 198 State highway department employees. Many of the 118 field conferences were 1- and 2-day functions conducted by engineers selected from the 96 who

participated in one or more of the six technical schools and conferences given at the Washington Office.

Robley Winfrey, Chief of Training and Education, is planning a series of training activities for the fiscal year 1955. The first school will be conducted at the University of Washington, Seattle, by William T. Pryor, September 7-20, for Washington State and Bureau engineers interested in aerial surveying. Other subjects on the tentative schedule include a highway capacity school at Denver, a Division 3 materials conference at Washington, D. C. an aerial surveying school at Washington, D. C., for representatives from field divisions, an administrative management conference at Washington, D. C. for field personnel, and a Division 9 materials conference at Denver.

Also being considered is a supervisors' training course for the Washington Office.

## Trainee Program

Fifteen junior engineers completed the Junior Engineer Training Course and received their diplomas from the Commissioner on June 18. This brought to 99 the number of men who have completed the course since the first group graduated in September 1949. Of this number, all but 6 are now with the Bureau. This is believed to be an unusual record for training programs of this kind.

## Management Improvement

Following the Iowa District Office custom of one talk or lecture a month, another engineer of wide construction experience addressed the engineers of the Bureau's District Office on July 12. A. M. Hensing, assistant construction engineer for the Iowa State Highway Commission, chose as his topic, "Construction Inspection of Major Structures." Many useful facts were presented, several of which led to a detailed discussion of pertinent design and specification matters that will be considered for revision or adjustment in the future.

R. W. Moore, Head of the Geophysical Exploration Unit of the Wash-

ington Office participated in the meeting by outlining some of the work relating to subgrade exploration for bridge sites.

A number of qualified men from the highway profession outside of the Bureau have addressed the group in the past. Not all the talks are by outsiders, however, as several of the group have prepared special papers for the occasion or reported on their attendance at some meeting of common interest.

## News From Jordan

In a letter concerning the NEWS in PUBLIC ROADS, E. M. Turner of our Amman, Jordan, office writes "Your reproduction of the Federal-aid Highway Act of 1954 was of particular interest and represents data on which we should keep currently informed. The human side of your issue will always be enjoyed by those of us so far from home. It was interesting to learn of the location of many of the boys with whom I have worked in various countries."

## Foreign Visitor

R. L. Gursahani, divisional engineering consultant for the Ministry of Transport, New Delhi, India, spent several weeks in July in the Washington Office.

Mr. Gursahani spent two days in the Roadside Section familiarizing himself with roadside improvement projects which he will encounter during his trip to Kansas, California, Texas, and other States. He is in this country as a United Nations Fellow on Engineering.

## Highway Conferences

Division 4 quotes, as an item of general interest, the closing paragraph of an address presented at the Summer Highway Conference by Harold L. Plummer, Chairman of the State Highway Commission of Wisconsin. This meeting was held at Lake Delton, Wis. on June 16.

"I would also like to express our confidence in, as well as our gratitude to, the representatives of the Bureau of Public Roads, both to Mr. George Eldred who heads the District

Office in Madison, and his staff, and to Mr. R. H. Harrison, Division Engineer in Chicago, and his staff. It has been our experience that we have had the very close cooperation of these offices and I am sure that under the 1954 Act that fine relationship and cooperation will continue."

The Western Association of State Highway Officials will hold its 33rd annual meeting September 16-18, at Sun Valley, Idaho.

This group is comprised of highway people from the eleven Western States and Texas. E. V. Miller, State highway engineer in Idaho, is the current president. A meeting of Bureau division and district engineers from the same area will precede the State meeting and will be held in Twin Falls, Idaho, Sept. 14-15.

## Pan American Congress

The sixth Pan American Highway Congress, which met in Caracas, Venezuela, July 9-21, reported the most successful Congress to date.

The American delegation consisted of the following: chairman and delegate, Walter Williams, Under Secretary of Commerce; vice-chairman and delegate, Charles P. Nolan, Department of State; Congressional advisers, J. Harry McGregor and George H. Fallon, House of Representatives; members, Herbert Ashton, Department of Commerce, Sewell Marcus Gross, American Road Builders' Association, Edwin W. James, American Society of Civil Engineers, Henry H. Kelly, Department of State, Gale Moss, American Association of State Highway Officials, Francis C. Turner and Norman B. Wood, Bureau of Public Roads, Department of Commerce.

## Archeology

The Santa Fe newspaper, "The new Mexican," reported a program of cooperation between roadbuilders and archeologists. Before any road construction gets underway in New Mexico, the archeologists are notified to enable them to check the proposed site. Some of the pueblo remains uncovered by roadbuilders date from 1150 to 1200 A.D.

## Dedication Ceremony

The Boulder, Colorado Chamber of Commerce held dedication ceremonies July 20, on the completion of the new Boulder Canyon Highway. This modern improvement, constructed in a rugged area of the Colorado Rockies, has been built entirely with Federal funds at a cost of \$2 1/4 million. Grading costs on one particular section were \$350,000 per mile.

Clyde E. Learned, staff engineer for the Division Office, has been in general charge of the improvement. Mr. and Mrs. Learned attended the ceremonies, and he was singled out by the Boulder Chamber for outstanding achievement.

Many other Bureau engineers (included some retired) contributed to the improvement and were given recognition by the Chamber of Commerce.

The Colorado Department of Highways was represented by Chief Engineer Mark Watrous and his construction staff engineers.

## Old Concrete

A 600-foot length of pavement some 40 years old, still in excellent condition, has been removed on a New York Federal-aid project located at Sag Harbor in Suffolk County.

This concrete showed no signs of scale, and cracking was noted in only two places. Two large samples have been shipped to the Physical Research Branch in Washington for study.

## Economics of Highway Improvement

Plans were discussed early in June in Arkansas for a study of the effect of road improvement on the economy and living conditions in a rural area. This will be part of the program of engineering and economic investigations of the highway department's Federal-aid program, and a part of the Bureau's research project on economic and sociological aspects of highway development.

The work in Arkansas will be in cooperation with the University of Arkansas as well as the State Highway Department.

## Economic Costs of Accidents

A State-wide study of the economic costs of motor-vehicle accidents, announced by Governor Herter on May 25, is underway in Massachusetts. This is the first attempt to make an analysis of the economic costs of accidents on a comprehensive basis. The Massachusetts study is expected to point the way for similar studies in other States.

Sponsored by the Governor's Highway Safety Conference, the study is being conducted by the Department of Public Works, Highway Planning Survey, in cooperation with the Registry of Motor Vehicles and the Bureau of Public Roads. Robie Dunman, transportation economist, is the Bureau's project leader.

## Traffic Study

After lying dormant for almost two years, interest has recently been revived in a transportation study for the Chicago metropolitan area.

The program of studies includes: an area-wide study of highway and street use, of truck and rail freight terminals and their effects on street design, of passenger and other services rendered by railways, airways, and buses, and their terminal facilities as related to their effects on street and highway traffic, and a study of the various mass transportation systems serving the Chicago metropolitan area.

It is expected that the Bureau will participate in this study together with the Illinois Division of Highways, Cook County, and the City of Chicago.

## Rubber in Roads

The Utah State Road Commission plans to construct an experimental section of bituminous pavement using regular and rubberized asphalt. All phases of the work will embody only conventional equipment and methods. The experimental roadway, consisting of four alternating sections, will be built in Salt Lake City.

The rubber to be used is a synthetic latex emulsion of which approximately 50 percent is rubber.



Ten percent of the emulsion will be used to replace 5 percent of the 85-100 penetration asphalt.

Physical features of this project are particularly desirable to evaluate the relative performance between the two binders for such features as wear and stability at intersections, stability on relatively steep grades and curves, cracking as carried through from a rigid base, and other features.

## Use of Radio

The use of radio by the States to facilitate highway maintenance and operation has continued to grow so rapidly that it has been necessary to seek additional channels to meet demands.

A plan to alleviate this situation was submitted to the Federal Communications Commission on April 16, by the AASHO committee on the Use of Radio in Highway Departments. This plan provides for 27 channels of 20-kilocycle band widths in the 46-47 megacycle group assigned to highway maintenance radio service, instead of the 14 frequencies of 40-kilocycle band widths that are presently available.

Equipment has been developed and field tested over the past 5 years that will operate with fidelity on the narrower band widths. The FCC is now favorably inclined toward 20-kilocycle band width operations, and approval of this plan would enable more highway departments to take advantage of the benefits of radio communications in their operations.

## Rescue Party—Con. from p. 1

set off afoot up the beach would find help. The group had become stranded the night before, and since the seeker of help was about 50 miles away from finding it, they were in a serious plight.

The reconnaissance party was able to get them and their car back to the south end of the island where a telephone call was made to the U. S. Naval Air Station at Corpus Christi. This resulted in the rescue of the third man by helicopter. No more serious effects than a bad case of sunburn and several postponed meals developed from this ordeal.

## Right-of-Way

Chicago's Congress Street Expressway, a Federal-aid project, utilizes about all of the variations imaginable to clear its way. Besides the usual demolition of buildings as high as 8 stories, cutting back and refacing others, it slices through the upper 9 stories of a Clinton Street structure leaving a refaced gap over 220 feet wide. Another concrete-brick 6-story building in the way is reported to be the largest ever moved a distance of one block and rotated 90 degrees. Arcading the sidewalks into 5 adjacent buildings to provide full roadway use is another instance of variety, but the climax is reached when the 8-lane expressway dives right through the first story of the block square 13-story U. S. Post Office building, now being remodeled to permit freeway use.

## Safety Measure Opposed

The Worcester Turnpike, extending between Boston and Worcester, was built with Federal aid approximately 20 years ago, and the engineers associated with the project felt that they had designed and constructed a facility which would serve the public with convenience and safety for all future traffic needs.

The latest features of highway design at that time were incorporated, such as good horizontal and vertical alignment, separation of grades at heavily travelled intersections, and two divided roadways with a raised median that varied from six feet to twenty feet in width with certain sections having a median 40 feet in width.

For the convenience of the abutting property-owners, openings were made in the median strip. For a project length of only 30 miles, there was an average of almost 7 crossovers per mile.

The present traffic volume of the route is 28,000 vehicles per day. With the existing crossovers it is not unlike operating a local and express train on a single track. Furthermore, there is not width enough in many of the medians to provide full protection for a waiting automobile, and the vehicle usually protrudes into the highway.

After study by State officials, it was decided to close 141 of the crossovers in the eight towns through which the route passed as a safety measure. Seven of the towns were agreeable to the State's decision. The eighth town, Shrewsbury, did not concur and applied to the local court for a temporary injunction to prohibit the closing of 31 of 38 crossovers. The pending court battle was averted when an agreement was reached between the State and town officials to close only 28 crossovers. At the crossovers which are to be left open, the center strip will be widened wherever possible to increase storage space for vehicles.

## Salvaging Plans

In widening and resurfacing work in New York State, many old plans have been utilized (one set 50 years old) in the interest of expediting work during the engineering shortage. Only minor adjustments of plans were necessary in most cases.

## Aerial Surveys

California has used aerial survey methods for the preparation of plans for the improvement of U.S. 101. The section surveyed is a 4-lane divided highway and traverses both rough and level terrain.

The earthwork quantities computed from the aerial survey data, amounting to approximately 800,000 cubic yards, were within 2,000 cubic yards of the final pay quantities computed from the usual field surveys.

Employing aerial photography for surveys has promising possibilities in saving many man-hours of work.

## Awards—Con. from p. 1

Taylor, Division 2; and Mrs. Irma L. Edwards, Division 9.

Employees in the Washington metropolitan area received their awards from the Secretary of Commerce at a special presentation. Awards to employees in the field divisions were transmitted with a letter of congratulations from Commissioner du Pont.