



# ESSA NEWS

U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION

## Three Scientists Appointed to New Boulder Posts



D.D. Crombie



E.K. Smith



J.A. Hull

Dr. Ernest K. Smith, Douglass D. Crombie, and Joseph A. Hull have been appointed acting associate directors of ERL's Institute for Telecommunication Sciences.

Joseph Hull comes to this new managerial post from NASA's Electronics Research Center in Cambridge, Mass., where he was chief of the Optics Technology Branch. At the Institute, he will be responsible for scientific direction of programs in telecommunication technology and systems, including systems analysis, electrospace sharing, information transmission, and millimeter wave and optical communication systems. A graduate of the University

of Kansas (B.S.) and the University of New Mexico (M.S.), Mr. Hull's professional experience includes instrumentation development at Los Alamos Scientific Laboratory, research and management assignments with the AVCO Corporation, and scientific management positions at NASA.

Dr. Ernest Smith, formerly director of university relations for the Research Laboratories, now will be responsible for research programs in electromagnetic wave propagation in the atmosphere, including millimeter-optical wave propagation, tropospheric radio wave propagation, radio meteorology, and millimeter wave laboratory studies of optical gases.

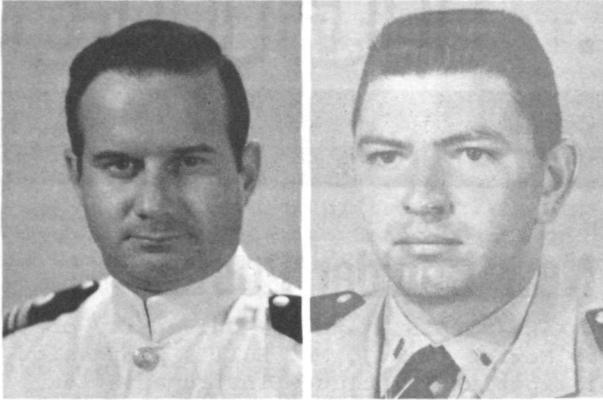
Douglass Crombie, who has been group head of ionospheric radio programs for the Institute, will assume responsibility for programs in electromagnetic wave propagation over the surface of the earth and through the ionosphere at frequencies below about 50 MHz, for wave propagation theory, antennas, and guided waves, and for remote radio monitoring of sea state.

## DISCOVERER Studies Origins of Mountain Ranges in the Sea

Oceanographers aboard the USC&GSS DISCOVERER are conducting a marine geophysical study around a group of islands off the west coast of Africa, to determine whether the same forces which influence the formation of the continents also contribute to the genesis of mountain ranges rising from the sea floor. The one-week study, centered on the Cape Verde Islands, is being carried out from Dakar as part of a longer oceanographic mission in the Atlantic between Cape Hatteras and Cap Blanc. Scientists have found that the Cape Verde Islands contain ancient sedi-

mentary rocks, 150 million years old, which may represent uplifted fragments of old sea floor or material of continental origin, possibly from West Africa. The expedition's chief scientist, Dr. Louis W. Butler of the Atlantic Oceanographic and Meteorological Laboratories, said that the Cape Verde Islands may be: (1) a seaward extension of mountain ranges in northwest Africa; (2) a segment of deep sea floor elevated and deformed solely by oceanic forces; or (3) a fragment of continental material which drifted westward from the African continent.

## J.W. Carpenter, C.N. Davis Become Executive Officers



Carpenter

Davis

Lt. Cdr. John W. Carpenter is the new Executive Officer of the U.S. Coast and Geodetic Survey Ship WHITING. The Norfolk-based ship is now conducting marine charting surveys in Delaware Bay. Carpenter joined the Coast Survey in 1964. Previous assignments included service on the PEIRCE, as chief of geodetic field parties G-17, 18, and 21, and as technical assistant to the chief of the Geodesy Division.

Lt. Cdr. Carl N. Davis is now Executive Officer of the USC&GSS PEIRCE. The ship, which is conducting marine charting surveys off Massachusetts, is based at Norfolk, Va. Davis has been with the Coast Survey since 1963 and served previously with the SURVEYOR and with geodetic field parties. He recently completed graduate studies at Purdue University.

### Giraytys Chairs WMO Maritime Working Group

James Giraytys, chief, Requirements and Evaluation Branch of the Weather Bureau's Data Acquisition Division, was recently elected co-chairman of the Commission for Maritime Meteorology (CMM) Working Group on Observational Networks at Sea and Maritime Telecommunications. Mr. Giraytys will be responsible for determining what international ocean observing networks are required for operational meteorological forecasting and for special projects such as the Global Atmospheric Research Program (GARP) and the Integrated Global Ocean Station System (IGOSS).

## Weather Bureau Man Dies On Remote Arctic Ice Island

Bennie P. Lightsy, Weather Bureau Technician in Charge and manager of the scientific program on ice island T-3, died, apparently of a gunshot wound, on July 16. The Office of Naval Research operates the program on T-3, which is presently about 325 miles from the North Pole. During the summer months, it is virtually impossible to land any aircraft other than helicopters on the island because the ice runway melts. In this emergency, the Navy made arrangements for the Air Force to fly a helicopter to the island from Thule Air Force Base in Greenland. The nearest landing strip to T-3 is 300 miles away, and the helicopter was refueled in flight to enable it to reach the ice island on July 27, for removal of Mr. Lightsy's body.

A native of Louisville, Ky., Mr. Lightsy served in the Air Force as a weather observer. He entered the Weather Bureau in 1964, and worked at the Joint Arctic Weather Stations at Alert, Resolute, and Isachsen, Northwest Territories. He transferred to T-3 in May 1967, and served there as Technician in Charge until January 1968. He was cited by Dr. Max Brewer, Director, Naval Arctic Research Laboratory, for his contributions to the various scientific programs at the island during this period. Mr. Lightsy returned to T-3 in November 1968, and in May 1970 was appointed manager of the station for the summer. In this capacity, he was responsible for coordinating all activities performed by the 19-man staff on the island. Mr. Lightsy is survived by his wife, Thelma, and five children, who live in Louisville.

### Survey Underway Between Abilene and Topeka

A three-month geodetic survey along a 100-mile stretch of Interstate Highway 70 between Abilene and Topeka, Kansas, was started in July. The survey is being conducted by C&GS for the Kansas State Highway Commission, to establish over 150 geographic positions and elevations for use in highway planning. The 14-man field party, headed by Carl A. Annis, is based at Junction City, Kansas.

## NASA Awards Contract for Prototypes Of Operational Synchronous Satellites

The National Aeronautics and Space Administration has announced the award of a contract for the development of a Synchronous Meteorological Satellite (SMS) system to Philco-Ford Corp., Palo Alto, Calif. The NASA-funded SMS contract includes the design, construction, and launch of two prototype operational weather satellites into synchronous, near-equatorial orbits to establish the necessary technology for the operational synchronous weather satellite system. Both satellites are expected to be turned over to ESSA for operational use after successful checkouts in orbit. A third satellite may be included in the contract at the option and expense of ESSA. The first spacecraft is scheduled for launch in 1972.

An operational weather satellite in synchronous orbit provides continuous real-time weather surveillance from a fixed position above the earth. The SMS will also be able to provide data relay from remotely located instrumented stations.

## Blake Is Graduate Number 1000

Charles A. Blake, ESSA Employee-Management Cooperation Specialist, recently became the 1000th graduate of the Commerce Managerial Course, conducted by the Office of the Secretary for managers throughout the Department. The course is concerned with progressive management theory and practice.

## Undersea Quake Shakes Bubble in Kansas

George Sowell, a member of a C&GS field party at Salina, Kans., was at work on June 24, attempting to get the instrument on his three-legged tripod level with the earth, when the bubble in his instrument began fluctuating wildly. "It seemed to go out of control," he related, "running from side to side and it was a couple of minutes before it settled down in its proper position."

An explanation was sought from the National Earthquake Information Center. James Lander, chief of the Center, said that seismic waves from an earthquake off Queen Charlotte Island, British Columbia--2000 miles away--caused the earth beneath Sowell to move. While the motion was too faint for him to feel, the bubble in his instrument, similar to that in a carpenter's level, "acted like a seismograph and picked it up."

## Tancreto Moves From New York To Head Weather Bureau Branch



Anthony E. Tancreto has been named Chief of the Weather Bureau's Public Weather Branch. This unit is responsible for developing Bureau-wide plans, policies, and standards governing the provision of weather services to the public and to certain user groups. Mr. Tancreto, a World War II Navy Aerological Officer, joined the Weather Bureau in 1946 and was assigned to Bermuda for a special project. From there he went to the New York Weather Bureau Office. In 1953, he became a "private" (non-government) meteorologist. Mr. Tancreto rejoined the Bureau in 1955 as a storm surge specialist at Boston. He served nearly 5 1/2 years as MIC of the Atlantic City Weather Bureau, before transferring to New York as the Eastern Region User Services Representative. He was then named MIC of the Weather Bureau Forecast Office in New York City. His most recent assignment was as Special Assistant to the Eastern Regional Director.

## College Observatory Chief Represents AGU

Jack Townshend, Chief of the Coast and Geodetic Survey's College, Alaska, Observatory represented the American Geophysical Union at the dedication of the University of Alaska's new Geophysical Institute. The dedication events, June 26 - July 5, were attended by scientists from the U. S., Soviet Union, Japan, and Canada.

## Climatic Center Employees Complete Supervisory Course



The Career Development Branch course, "Introduction to Supervision," was given at the National Climatic Center, Asheville, N.C., during the week of July 9-13. Instructor for the course was Robert W. Harris of the Branch's staff. Certificates were awarded to 24 participants. Front row, left to right: Charles B. Glenn, Louis Cundift, Wilson Tschiffely, Hugo

V. Lehrer, Rachel W. Babb, Dorothy I. Kiser, Robert W. Harris (Instructor), Nellie Jo Maney, Wanda Ross, Herman C. Steffan, William D. Bartlett. Back row, left to right: Delbert S. Leach, Don Halligan, Vincent E. Hagarty, Charles Browning, Chris Harrison, George Lankton, Roosevelt Vinson, Gayle C. Tompkins, Harry Torbitt, Dick Whiting, Ray Barr, Robert Quayle, Wade Glenn, T. R. Farmer.

### Clarence Jordan Wins Bronze Medal

Clarence R. Jordan, substation specialist at Weather Bureau headquarters, has been awarded a Commerce Bronze Medal. Mr. Jordan was cited for his long and effective service in helping maintain the more than 13,000 cooperative weather stations which take observations throughout the nation for climatological purposes. He has been with the Bureau since 1935.

### ESSA Men Honored

Max M. Chesy of ESSA's Visual Arts Branch has won the Excellence in Design Award in the annual house magazine graphics contest conducted by Industrial Art Method. Mr. Chesy received the award for his work as art director of ESSA magazine.

Fire-weather forecaster Virgil F. Hendricks of the Chicago WBFO was honored recently by the Northeastern Forest Fire Control Supervisors who awarded him a plaque for outstanding service to the fire control program in the northeastern area of the United States.

### Deaths

Hugh R. Chadwick, Chief Bos'n on the USC&GS Ship RESEARCHER, died July 1. In more than 28 years with the Coast Survey, Mr. Chadwick served aboard the MT MITCHELL, DAVIDSON, McARTHUR, HYDROGRAPHER, and LYDONIA.

Norman Sylar, who retired in 1964 after 32 years of service with the Coast and Geodetic Survey, died July 17 in Nice, Calif. Sylar conducted geodetic surveys throughout the U. S., including the Arctic and Guam, and in Chile for the Inter-American Geodetic Survey. In the late 1950's, he worked for two years with Rear Adm. Don A. Jones, Director of the Coast Survey, on a geodetic survey of Ethiopia.

### Kerner Heads Eastern Region Facilities Section

Allen Kerner has been appointed to head the Facilities Section of the Weather Bureau Eastern Region's Engineering Branch. Mr. Kerner is an engineer with 14 years of federal service, most recently in the Naval Facilities Engineering Command, Eastern Division.

## Dr. W. C. Jacobs, Environmental Data Service Director, Retires



Dr. Woodrow C. Jacobs, nationally known oceanographer and meteorologist,

is retiring from his post as director of the Environmental Data Service. He became director of EDS in January 1967, after heading the interagency National Oceanographic Data Center for six years. Dr. Jacobs began his career in meteorology in 1931 with the Weather Bureau, and in 1946 was chief of the Climatology Branch, later becoming assistant chief of the Climatology and Hydrologic Service Division. He served as associate editor of the Bulletin of the American Meteorological Society from 1948 to 1954, and of the AMS Journal from 1956 to 1961. He was associate editor of the Journal of Applied Meteorology of the AMS from 1962 to 1969. He was chairman of the Interagency Committee on Oceanography--Interagency Committee for Atmospheric Sciences working group on air-sea research in 1963 and 1964, and has served on many committees of the National Academy of Sciences and of the government.

## Grubb, Osmun, Nelson, and Thompson Depart Top ESSA Positions

R. C. Grubb, director of the Weather Bureau's Executive and Technical Services Staff since the formation of ESSA in 1965, is retiring after more than 40 years with the Weather Bureau and ESSA. In 1927, Mr. Grubb was assigned to the Weather Bureau office at Roswell, New Mexico, as a general and first assistant. He remained at Roswell until 1937 when he was reassigned to the Albuquerque, New Mexico, weather station. From 1941 to 1946, he was assistant regional director of the

Weather Bureau's Fort Worth, Tex., region. Mr. Grubb served as budget officer at Weather Bureau headquarters until he was appointed as assistant chief of the Weather Bureau for Administration in 1956.

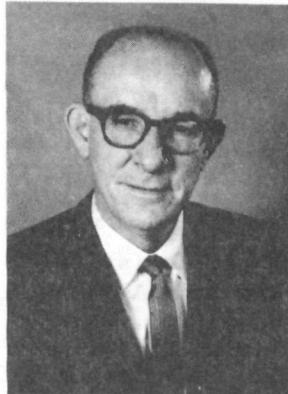
James W. Osmun, chief, User Affairs Group in ESSA's Office of Plans and Programs, is retiring after 40 years' service with the Weather Bureau and ESSA. Mr. Osmun began his Weather Bureau career at New York City in 1930 and progressed through various forecasting as-



J.H. Nelson



W. L. Thompson



R.C. Grubb



J.W. Osmun

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signments to become the Bureau's regional director at New York in 1956. He was appointed director of Aviation Weather Services in Washington, D.C., in 1959, and became deputy chief of the Bureau later that year. From 1964 until 1968, he was director of the Weather Bureau's Pacific Region.

Wilmer L. Thompson, director of the Weather Bureau's Southern Region, Fort Worth, Tex., since 1960, is retiring with almost 40 years' service with the Weather Bureau. Mr. Thompson joined the Bureau in 1930 at Groesbeck, Tex., as a junior observer. He subsequently held assignments at Tulsa, Okla., Dallas and Fort Worth, Tex.; New York, Miami, and in Washington, D.C., before joining the Southern Region.

James H. Nelson, chief of the Coast Survey's Geomagnetism Division, is retiring after 34 years with the federal government. As chief of the division for the past 18 years, he has supervised the compilation of charts of the earth's magnetic field for the United States. Mr. Nelson began his federal career in Washington, D.C., as a magnetic and seismological observer, and then served as chief of the geophysical observatories at Tucson, Ariz., and Sitka, Alaska. He was editor of "Earthquake Notes" in 1939-40, and a geomagnetism section secretary from 1958-64 of the American Geophysical Union, of which he was elected a Fellow in 1967. In 1968, he was the recipient of the Commerce Department's Gold Medal.

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## ESSA Employees Retire Throughout Headquarters and Field

A partial list of ESSA employees retiring on or before July 31, 1970, is reproduced below. The remainder will be covered in a coming issue.

Lorenz C. Armstrong, deputy director of the Weather Bureau's Executive and Technical Services Staff, is retiring after almost 40 years of federal service all of which has been with the Weather Bureau. Mr. Armstrong has held headquarters' positions for the past 20 years. During earlier days, he served at weather stations in Montana, Alaska, and California.

Robert W. Craig, general physical scientist in the ESSA Office of Plans and Programs, joined the Weather Bureau in 1930 at Des Moines, Iowa. He is retiring with almost 40 years with the Weather Bureau and ESSA.

John L. Baldwin, chief of the Environmental Data Service's Domestic Branch, is retiring after 42 years of service with the Weather Bureau. Mr. Baldwin, who joined the Bureau in 1928 as a junior observer, was editor of the agency's Weekly Weather and Crop Bulletin for 25 years. For this accomplishment, he was awarded the Department of Commerce's Bronze Medal in 1967.

Henry L. Jacobson, meteorologist in charge of the Weather Bureau's Albuquerque, New Mexico, service office, is retiring after nearly 43 years of service with the Weather Bureau. Mr. Jacobson joined the Bureau in 1927 at Chicago, where he remained until 1948. He has been MIC at Albuquerque since 1953.

Ethan A. Scott, meteorological technician at the Weather Bureau's Meteorological Office, Fort Worth, is retiring after almost 30 years' service. Mr. Scott's first assignment with the Bureau was at Corpus Christi, Tex., in 1940. He later served at San Antonio, Tex., and Key West, Fla., before his assignment to Fort Worth in 1969.

Emile A. Morrison, meteorological technician at Waycross, Ga., since 1969, is retiring after more than 30 years' service with the Weather Bureau. Mr. Morrison began his career in 1937 at Macon, Ga. He later served at stations in South Carolina, Pennsylvania, Missouri, Honolulu, Wake and Canton Islands in the Pacific, Oregon, Washington, California, Louisiana, Mississippi, and Florida.

Samuel J. Easley, meteorologist in charge of the Dallas, Tex., Weather Bureau Office since 1966, is retiring after 32 years of federal employment. Mr. Easley, a veteran of both the Army and Air Force, entered the Weather Bureau in 1940 at Abilene, Tex. His other posts were in New Orleans and Fort Worth.

Frank B. Mauk, electronic technician at WBO, Macon, Ga., is retiring. Mr. Mauk, a retired Air Force veteran, joined the Weather Bureau in 1959 at Key West, Fla.

John D. Watson, quality control officer at the National Hurricane Center, Miami, is retiring after more than 32 years with the Weather Bureau, 23 years of which was spent at Jacksonville, Fla. Mr. Watson joined the Bureau in 1938 at Savannah, Ga.

Gordon L. Bailey, stationed at the Weather Bureau Office, Daytona Beach, Fla., is retiring. Mr. Bailey, a Navy veteran, joined the Bureau in 1959.

Cecil R. Jobe, principal assistant of the Birmingham, Ala., Weather Bureau Forecast Office, is retiring after completing more than 32 years with the Weather Bureau. Mr. Jobe joined the Bureau in 1938. He has been principal assistant at Birmingham since 1951.

Aurel J. Knarr, meteorologist in charge of the Weather Bureau Service Office at Fort Worth, is retiring with more than 42 years' service with the Weather Bureau. He began his career in 1926 at Royal Center, Indiana. His other assignments were in Texas, Washington, Oklahoma, Ohio, Missouri, and Georgia.

Wendell Woodward, guidance forecaster at the Weather Bureau Forecast Office, Seattle, is retiring with 39 years of service. Mr. Woodward joined the Weather Bureau in 1931. His other weather assignments were in Portland, Oreg., and Salt Lake City, Utah.

George L. Rudolph, meteorological technician at the Salem, Oreg., Weather Bureau Office, is retiring with 31 years of service with the agency. He joined the Weather Bureau in 1939. During his career, he served at Seattle and North Head, Wash.; Astoria, Medford, and Salem, Oreg.; and at Koror in the Pacific Trust Territories.

Harold Rush, principal assistant of the Weather Bureau Office, Yakima, Wash.; is retiring after 31 years with the Weather Bureau. Mr. Rush's other assignments were at Pendleton, Oreg., and Omaha, Nebr.

Arthur V. Pierson, leading forecaster at the Weather Bureau Forecast Office, Honolulu, is retiring from the Weather Bureau after completing more than 30 years of government service. His career with the Bureau began at Sacramento, Calif. Mr. Pierson transferred to the Pacific Region in 1953.

Hubert Boyd, radar meteorologist in the Weather Bureau's Pacific Region headquarters, Honolulu, is retiring after completing almost 30 years of weather service. Mr. Boyd joined the Bureau in 1941 at Corpus Christi, Tex., and saw duty at weather stations in Brownsville, San Antonio, and Fort Worth, Tex.; and Little Rock, Ark. He is a former meteorologist in charge of the Kwajalein forecast office.

Douglas E. McCormick, clerk in ESSA's Finance Division, is retiring. Mr. McCormick joined the Coast Survey in 1958.

Horace Harby, warehouseman at the Coast Survey's Pacific Marine Center, is retiring with 20 years of federal service.

Joseph K. Alina, program management specialist at the Coast Survey's Honolulu Field Office, is retiring with 34 years of federal service.

Leo Sergius, leading fireweather forecaster at the Weather Bureau Forecast Office, Los Angeles, is retiring after 41 years of service. Mr. Sergius joined the Bureau in 1929. He has served at weather stations at Reno, Nev., and San Francisco, Calif.

Elvin S. McDonough, hydrologist at the Weather Bureau's River Forecast Center, Salt Lake City, is retiring with 33 years' service. Mr. McDonough joined the Bureau in 1937. His other assignments were in Iowa, Missouri, WB headquarters, and Pennsylvania.

Martin McGurrin, leading aviation forecaster at the Weather Bureau Forecast Office, San Francisco, is retiring with 37 years of service with the agency. Mr. McGurrin joined the Weather Bureau in 1930. He later served at Oregon, California, and Weather Bureau headquarters.

Ward Lampkin, meteorological technician at the Weather Bureau Office, Medford, Oreg., is leaving the Bureau after almost 30 years of service. Mr. Lampkin joined the agency in 1941. His other assignments were in Cheyenne, Wyo.; Prescott, Ariz.; Flagstaff, Ariz., Red Bluff, Calif.; and Elko, Nev.

John Aldrich, supervising aviation forecaster at the Weather Bureau Forecast Office, Los Angeles, is retiring with 43 years of service with the Weather Bureau. Mr. Aldrich joined the agency in 1927. He later served in weather stations at Des Moines and Davenport, Iowa; Kansas City, Mo.; and Los Angeles.

David J. Stowell, aviation forecaster at the Weather Bureau Forecast Office, San Francisco, is retiring with 32 years of federal service, all of which has been with the Weather Bureau. Mr. Stowell joined the agency in 1938. During his career, he was assigned to weather stations in Spokane, Wash.; Los Angeles; Fairbanks, Alaska, and in Washington, D.C.

John E. Hovde, supervisory meteorologist at the Weather Bureau Forecast Office, Chicago, is retiring with 39 years of service with the Weather Bureau. Mr. Hovde began his weather career in 1931. He formerly served at St. Paul, Minn.

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Sarah Gilchrist, bindery worker in the Coast Survey's Office of Aeronautical Charting and Cartography, is retiring with almost 30 years' service with the agency. All of Mrs. Gilchrist's federal service was spent in the Washington, D.C., area.

John H. Ralston, employee management cooperation specialist in the ESSA Personnel Division, is retiring after 25 years of federal service. Before joining ESSA in 1967, Mr. Ralston held positions in Japan, Germany, France, and Puerto Rico with the U.S. Army.

John C. Donohoe, program support assistant in ESSA's Office of International Affairs since the formation of the agency in 1964, is retiring with more than 33 years' service. Mr. Donohoe joined the Coast Survey in 1937.

Marian A. Blackhart, accounting technician in ESSA's Finance Division, is retiring with more than 27 years of federal service. All of Miss Blackhart's service has been with the Coast Survey and ESSA.

Alma B. Reese, who began her career with the Coast Survey in 1939, is retiring with more than 30 years' service. Miss Reese's present position is as an accounting technician in ESSA's Finance Division.

James J. Shuck, engineering technician in the Weather Bureau's Test and Evaluation Branch, Engineering Division, entered the Weather Bureau in 1960 as an instrument maker.

Grace O. Bethea, secretary in the Coast Survey's Instrument Procedure Chart Branch, began her government career in 1945 with the General Accounting Office. She joined the Coast Survey in 1953. Mrs. Bethea has 25 years of federal service.

Edward S. Sproles, supervisory personnel management specialist in the ESSA Personnel Division, is retiring after almost 40 years with the Weather Bureau and ESSA. Mr. Sproles began his career in 1932 as an airways observer. He has had 23 years of experience in personnel work.

Fred Bean, cartographic technician at the Coast Survey's Atlantic Marine Cen-

ter, is retiring with almost 32 years of government service. Mr. Bean joined the Coast Survey in 1958.

Eileen Brackett, secretary in the Office of the Director, ERL, is retiring with 20 years' service. Mrs. Brackett joined the National Bureau of Standards in 1956.

Jack Patterson, film assembler in the Office of Research Support Services, is retiring with 13 years of service. Mr. Patterson joined the National Bureau of Standards in 1957.

Frank Freethey, physicist in the Institute for Telecommunication Sciences, is retiring with 30 years' service. Mr. Freethey joined the National Bureau of Standards in 1956.

Lillian C. Langdon, meteorological technician in EDS' Laboratory for Environmental Data Research, joined the Weather Bureau in 1942. She is retiring with 20 years of service.

Aerial Langston, administrative clerk in ESSA's Administrative Operations Division, began her federal career in 1942 with the War Production Board. She entered service with the Coast Survey in 1953. Mrs. Langston is retiring with almost 30 years of service.

Helen R. Merriam, supervisory librarian in ESSA's Scientific Information and Documentation Division, is retiring after 35 years' federal service. Miss Merriam began her federal career in 1935, transferring to the Weather Bureau in 1957.

Miss Merriam received the Department of Commerce Bronze Medal this year for her competent performance of duties.

Louis E. Leipold, chief of the Editorial Branch, ESSA Scientific Information and Documentation Division, leaves the federal service after almost 27 years. Mr. Leipold's first civilian position was with the War Department in 1946. He later served with the Army Map Service and the Defense Intelligence Agency. In 1964, Mr. Leipold accepted a position with the Coast Survey as a technical publications editor. The Department of Commerce Bronze Medal was recently awarded to him for his distinguished editorship.

# **National Oceanic and Atmospheric Administration**

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