



ESSA NEWS

Volume 4

Number 48

November 29, 1968

VIBRATION CHECKS COULD REVEAL BRIDGE DEFECTS



Wendell V. Mickey, chief of C&GS' Vibration and Engineering Projects Branch, has proposed that the stability of bridges be tested by regular checks on their vibrations.

The collapse last December of an Ohio River bridge at Point Pleasant, W. Va., with the loss of at least 46 lives, has generated increased interest in evaluating bridge safety. For more than 30 years, the Coast Survey has been testing the vibrations of bridges and other structures, such as buildings, water towers, dams, smoke stacks, and tall steel towers, in connection with its earthquake studies.

"You might say that every bridge has its own wave length, and we tune in on it," said Mickey. "Each bridge has a different pattern of vibration, as unique as an individual's fingerprints. Periodic checks could be employed to determine if the vibration characteristics of a bridge have changed. If they have, a close examination of the structure could reveal the reason for the change."

A vibration check of a bridge, Mickey explained, involves several stages. First, a determination is made of the design characteristics of the structure, such as the stress it could undergo under such conditions as wind, traffic, wave action and, in earthquake-prone areas, ability to withstand earthquakes. Second, vibration meters are placed in the center of the bridge to ascertain its overall characteristics. Third, each individual section of the bridge is checked, including the tops of the supporting towers.

With vibration meters costing about \$3,000, highway and bridge engineers could test both the vertical and horizontal motions of the structures. The vibration evaluation would be made under different conditions, including minimum and peak traffic and various weather conditions.



NELSON NAMED TO WORLD MAGNETIC BOARD

James H. Nelson, chief of the Coast and Geodetic Survey's Geomagnetism Division, has been appointed a member of the World Magnetic Survey Board of the International Association of Geomagnetism and Aeronomy. The board also includes members from Denmark, Japan, Spain, England, and the Soviet Union. It was established to plan and promote the objectives of the World Magnetic Survey, a post-International Geophysical Year project.

BOSTON FORECASTERS AID GLOBAL FLIGHT

The Boston Weather Bureau office provided enroute and terminal forecasts for the Round-the-World Flight commemorating the polar explorations of Admiral Richard E. Byrd. The flight, sponsored by the Admiral Byrd Polar Center in Boston, is the first commercial passenger flight to operate directly over both poles, with stops at Thule air base in Greenland, Anchorage, Tokyo, Manila, Darwin and Sidney, Australia, Auckland and Christchurch, New Zealand, McMurdo Sound in Antarctica, Rio Gallegos, Argentina, Rio de Janeiro and Manaus, Brazil, Surinam, South America, Dakar, Senegal, North Africa, Rome, and London. The flight, which began on Nov. 8 is expected to terminate at Boston about Dec. 3.

STATE CLIMATOLOGISTS CONVENE IN NEBRASKA

Dr. Gerald L. Barger, Director, Laboratory for Environmental Data Research; Harold Harshbarger, Director of the Office of Field Services; and Wayne Palmer, Project Scientist for Bioclimatology, represented EDS headquarters at the meeting of Central Region State Climatologists held in Lincoln, Nebr., Nov. 20-22. The meeting was primarily concerned with the services ESSA's State Climatologists provide the scientific community through their contacts and cooperative activities with the academic community.

CAPTAIN SHERIDAN DIES IN CALIF.



Captain Emmett H. Sheridan, who retired as the Coast Survey's West Coast Field Director a year ago, died at his home in Mountain View, Calif., on Nov. 24. Capt. Sheridan joined the Coast Survey in 1930. During his career, he served as commanding officer of three Coast Survey vessels, and held the posts of assistant to the chief of the Chart Division, liaison officer with the Federal Aviation Agency, assistant to the director for legislation, and assistant director for administration.

CAPTAIN BROWN RETIRES

Captain Edward B. Brown, Mid-Continent Field Director of the Coast Survey's Kansas City, Mo., office, retired Nov. 29 after 39 years of Federal service. During almost four decades of service, he saw duty in the Atlantic, Pacific and Indian Oceans and the Bering Sea aboard ten Coast Survey vessels, and as commanding officer of five. In addition, he has carried out field party assignments in nearly all sections of the United States; served as technical consultant with the Inter-American Geodetic Survey in Latin America; and as chief of the Los Angeles office.



INTER-AMERICAN ROCKET GROUP MEETS

The Experimental Inter-American Meteorological Rocket Network, with representatives from Argentina, Brazil, Canada, Peru, Spain, and the United States, held its fourth annual meeting at Wallops Island, Va., Oct. 21-23. Participating in the two-day meeting were: Dr. Sidney Teweles, chief of the Weather Bureau's Data Acquisition Division, Frederick G. Finger, chief of NMC's Upper Air Branch, A. J. Miller and R. S. Quiroz, Upper Air Branch research meteorologists.

NEW IDENTIFICATION ADDED TO ESSA SHIPS

New identifications will soon appear on ESSA vessels, in an effort to eliminate confusion with ships of other services. Under guidelines just issued, the designation "U.S. Coast and Geodetic Survey" will appear on the bow directly under the letter-number designation. In addition, the ESSA emblem will be painted on both port and starboard sides of the ship's stacks.



ANNETTE WEATHER STATION WINS GROUP AWARD

The staff of the Annette, Alaska, Weather Bureau Airport Station has won a group award in recognition of superior performance in temperature and probability forecasting for the period from March 1967 through February 1968. Sharing the award are Charles Hanas, MIC, Harold Lowman, William L. Simonds, James W. Schroeder, Ronald G. Baldwin, James M. Fair, Elmer Updegraff, and Dawaine A. Shoemaker.

SCHLOEMER BRIEFS OFFICER TRAINING CLASS

R. W. Schloemer, EDS Deputy Director for Climatology, addressed the 27th ESSA Officer Training Class at Norfolk on Nov. 18. Mr. Schloemer stressed the scientific value and importance of the environmental data these officers will soon be collecting, by describing uses of these data in research and practical application.

WOOLLUM PRESENTS PAPER IN BRUSSELS

C. A. Woollum, Weather Bureau Forecast Office, Washington, D.C., presented a paper titled "Washington Metropolitan Area Precipitation Patterns," at the World Meteorological Organization's Symposium on Urban Climates and Building Climatology held at Brussels last month.

SORRY, MR. FEEMSTER

Alphonzo Feemster, Coast Survey Reproduction and Distribution Division employee, pictured directly behind Rear Admiral Don A. Jones, Coast Survey Director, in the Nov. 22, 1968, issue of ESSA NEWS, was incorrectly identified as David McIntyre.

SERVICE AWARDS

Length-of service awards are due to the following WB Southern Region employees during November: 40 years - Tedrow R. Swaim, Houston. 30 years - Leo E. Young, Fort Worth, and Rex R. Rhoten, Jacksonville, Fla. 25 years - Carl C. Conrad, Fort Worth; Albert E. Eckhoff, Baton Rouge; Irwin A. Teske, Daytona Beach; Clifford E. Bond, Mobile, Ala.; and Leo E. Hopp, San Antonio. 20 years - Willard W. Patterson, Jr., Nashville, Tenn.; and Nan D. Van Pelt, San Angelo, Tex.

Items to be considered for ESSA NEWS must be received by Friday for publication the following Friday. Send material to: Office of Public Information, ESSA, Room 804, Bldg. 5, Rockville, Md. 20852. Phone (301) 496-8243.

National Oceanic and Atmospheric Administration

ERRATA NOTICE

One or more conditions of the original document may affect the quality of the image, such as:

Discolored pages

Faded or light ink

Binding intrudes into the text

This has been a co-operative project between the NOAA Central Library and the Climate Database Modernization Program, National Climate Data Center (NCDC). To view the original document, please contact the NOAA Central Library in Silver Spring, MD at (301) 713-2607 x124 or Library.Reference@noaa.gov

HOV Services
Imaging Contractor
12200 Kiln Court
Beltsville, MD 20704-1387
July 23, 2010