

results of several of these programs were discussed by J. A. Knauss (University of Rhode Island). One finding was the verification of a prediction by H. Stommel (Woods Hole) that there should be a southward-flowing western boundary current in the deep water of the North Atlantic. Such a current, flowing at speeds between 9 and 18 centimeters per second below 2000 meters, was observed off the Blake Plateau.

Of even greater interest, however, have been the more recent measurements of J. W. Swallow (England) which suggest that the deep water of the entire western North Atlantic is in a state of turbulent unrest. The role of these large-scale eddies is still unclear, but it appears possible that many of our ideas about the general circulation will have to be reexamined. Turbulent motion, on a scale greater than was expected, but still considerably less than that in the western North Atlantic, has been observed also in the eastern North Atlantic.

During the IGY and since, information on equatorial undercurrents has increased. These eastward-flowing currents with speeds of 1 to 1½ meters per second are found just below the surface along the equator and are among the largest currents in the ocean. They are also the most perplexing. The Cromwell Current has been traced for at least 10,000 kilometers across the Pacific. The Atlantic Equatorial Undercurrent appears to be analogous to the Cromwell Current. Recent attempts to find a similar current in the Indian Ocean have shown that there is a profound difference in the current structure at the equator between the two monsoon seasons. Such observations give additional credence to the idea that these undercurrents are wind-driven. During the northeast monsoon a weak undercurrent appears to develop, but during the southwest monsoon the current structure appears to be very unsteady.

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Forthcoming Events

October

23-24. **Industrial Hygiene Foundation**, 28th annual, Pittsburgh, Pa. (R. T. P. de-Treville, 4400 Fifth Ave., Pittsburgh 13)

23-25. **Design of Experiments** (invitation only), Huntsville, Ala. (F. G. Dressel,

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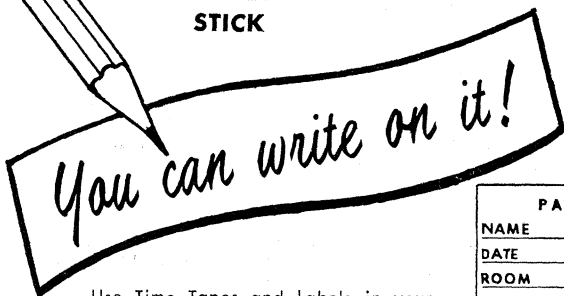
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23-25. **Optical Soc. of America**, 48th annual, Chicago, Ill. (OSA, 1155 16th St., NW, Washington 6)

23-1. **Association of American Medical Colleges**, Chicago, Ill. (R. H. Young, 303 E. Chicago, Chicago 11)

25. **Transport Mechanisms**, symp., St. Louis, Mo. (R. Rubright, Jewish Hospital of St. Louis, 216 S. Kings Highway, St. Louis 10)

25-27. **American Heart Assoc.**, 36th annual, Los Angeles, Calif. (American Heart Assoc., 44 E. 23 St., New York 10)

27-1. **American College of Surgeons**, 49th annual, San Francisco, Calif. (ACS, 40 E. Erie St., Chicago 11, Ill.)

28. **American Soc. of Safety Engineers**, Chicago, Ill. (A. C. Blackman, ASSE, 5 N. Wabash Ave., Chicago 2)

28-29. **Combustion Inst.**, western states section, Los Angeles, Calif. (A. S. Gordon, Code 5059, U.S. Naval Ordnance Test Station, China Lake, Calif.)

28-29. **Pediatric Surgery**, intern., Paris, France. (D. Pellerin, Hôpital des Enfants-Malades, 149, rue de Sèvres, Paris 15°)

28-30. **Antimicrobial Agents and Chemotherapy**, 3rd interscience conf., Washington, D.C. (E. E. Tretbar, American Soc. for Microbiology, 230 N. Michigan Ave., Chicago 1, Ill.)

28-30. **Electronics**, 19th natl. conf. and exhibition, Chicago, Ill. (NEC, 228 N. LaSalle St., Chicago 1)

28-30. **National Council for Geographic Education**, Columbus, Ohio. (L. Kennamer, Univ. of Texas, Austin)

28-31. **Technical Association of the Pulp and Paper Industry**, 18th engineering conf., New Orleans, La. (C. E. Green, B. L. Montague Co., Drawer 5428, Station B, Greenville, S.C.)

28-1. **American Inst. of Aeronautics and Astronautics**, 1st, Atlantic City, N.J. (Meetings Dept., AIAA, 500 Fifth Ave., New York 36)

28-2. **Stable Isotopes**, working conf., Leipzig, Germany. (Institut für Physikalische Stofftrennung, Deutsche Akademie der Wissenschaften, Permoserstr. 15, Leipzig 05)

29-31. **Aerospace Nuclear Propulsion and Power**, 2nd intern. symp., San Diego, Calif. (IEEE, Box A, Lenox Hill Station, New York 21)

29-1. **Plasma Phenomena and Measurement**, intern. symp., San Diego, Calif. (D. J. Niehaus, Bendix Corp., Research Laboratories Division, Southfield, Mich.)

30-1. **Gulf Coast Assoc. of Geological Soc.**, 13th, Shreveport, La. (T. E. Godfrey, 201 Oil and Gas Bldg., Shreveport)

30-1. **Parenteral Drug Assoc.**, annual conv., New York, N.Y. (PDA, Broad and Chestnut St., Philadelphia 7, Pa.)

31. **American Federation for Clinical Research**, midwestern section, Chicago, Ill. (D. R. Korst, St. Joseph Mercy Hospital, Ann Arbor, Mich.)

31-1. **Materials**, intern. conf., Pittsburgh, Pa. (E. R. Schatz, Dean of Research, Carnegie Inst. of Technology, Pittsburgh 13)