instructional purposes would be subsidized by the commerical networks. The subsidy would come from savings in transmission costs realized by the networks through use of the satellite system, which would eliminate the need for much of the present costly land-line transmission service. The Ford proposal already has put the commercial interests on their mettle. Comsat, for example, has now suggested that all users of the domestic space circuits it hopes to establish be assessed to provide a subsidy for ETV.

The appeal to FCC by NSF and the arts and humanities foundation was not the first by a government agency on behalf of noncommercial broadcasting. The Department of Health, Education, and Welfare, in a statement signed by Secretary John W. Gardner and filed with FCC in August, indicated that it felt domestic communications satellite service should not be run as a monopoly enterprise.

"We believe," HEW said, "that the versatility and competitive nature of multiple authorizations will (a) provide the greatest versatility in meeting the broad range of public needs, (b) allow uniqueness of approach where necessary; (c) allow for reaching smaller professional or public groups where significant gains can be made; and (d) permit the broadest possible continuing experimentation necessary for quality and variety of programming. . . ." The department suggested a number of ways in which satellite transmission of broadcasts could be of important benefit in the education and health fields.

The National Science Foundation and NFAH, though taking no position on whether or not networks or other nongovernmental entities should have their own satellite systems, did more than simply echo, with a pallid "me too," HEW's views on the need for better service to noncommercial broadcasting. "It is well known that commercial television does not fully satisfy the cultural and educational needs of the nation," the foundations said. "Recent surveys indicate that in many areas increasingly large numbers of the educated public look at television rarely or not at all.

"The commercial networks schedule few educational and public information programs in relation to available broadcast time, and these few are almost never shown during the evening from seven to midnight. The frequent commercials are often tasteless and always distracting. Programs with scientific, historical, and cultural content are often bland or oversimplified. Complex subjects are either not covered at all or are given such cursory or superficial treatment as to deprive them of educational value or cultural merit."

The foundations said that, while educational television sometimes has suffered from dullness and awkwardness, it has faced almost insuperable financial and technical problems. Development of a national ETV network, or even of regional networks, has been prevented by high costs, they observed. "Meantime," they added, "national distribution of noncommercial programs by video tape is inefficient, cumbersome, and extremely time-consuming —a horse and buggy operation in the midst of an electronic era. . . . Some form of direct national service by interconnection or satellite is the only hope for a higher level of educational television service."

According to the foundations, "a domestic satellite system should permit the distribution of high-quality programs in the arts, humanities, and sciences at economical rates to remote areas of the nation where educational and cultural opportunities are often minimal. The addition of new channels for non-commercial programming will create wider program choices of high-quality material. Moreover, these additional channels would facilitate live programming of artistic events and public affairs programs, thereby enhancing their interest and cultural merit."

Television via satellite would expand and deepen educational opportunities at all levels, the foundations said, and would strengthen performance and public understanding of the arts. Rapid dissemination of discoveries and new research prospects would be facilitated, and new industrial and research techniques could be demonstrated, they noted. Moreover, programs transmitted by satellite would provide a hitherto unavailable medium for mass participation in the meetings of such organizations as AAAS and the American Council of Learned Societies, the foundations said.

Haworth told *Science* he had proposed to the National Science Board that NSF file such a statement with FCC, and that the Board had agreed. At NFAH, Barnaby C. Keeney, chairman of the Endowment for the Humanities, and Roger L. Stevens, chairman of the Endowment for the Arts, were thinking of a similar action. When Haworth suggested a joint statement to FCC, they were glad to go along. In their statement the foundations avoided taking a position on the Ford plan or any other proposal, in part because they felt it would be rash and improper to pass judgment on so highly technical a question and in part because the report of the Carnegie Commission on Educational Television is still awaited.

Established last year with the endorsement of President Johnson, the commission has been making a comprehensive study of ETV. Members of the commission include James R. Killian of M.I.T. (chairman), Lee A. Dubridge of Caltech, and James B. Conant, among others. The commission's report, expected soon, will cover questions of programming, financing, organization, and technology. It may strongly influence administration policy on ETV, and will almost certainly receive FCC's careful attention.

As to whether NSF's and the arts and humanities foundation's appeal on behalf of noncommercial broadcasting will be persuasive, one can only speculate. Pointing out the failure of the commercial networks to meet educational and cultural needs was scarcely a revelation. However, the foundations' comments, representing the considered views of two agencies entrusted with promoting advance in science, the humanities, and the arts, should have some political importance. If FCC diligently seeks to further the public interest, the foundations' statement, together with HEW's, will provide moral support as the commission comes up against commercial interests more interested in profits than in bringing about a golden age of educational and cultural broadcasting.—LUTHER J. CARTER

Announcements

The **Medical Mycological Society** of the Americas, established recently in Los Angeles, invites inquiries from prospective members. The society is trying to form a central organization for people in medical mycology, to coordinate exchanges of material and information, and to carry out cooperative studies among its members. The new society plans to hold its first annual meeting in New York on 29 April, the day before the opening of the American Microbiological Society's meeting.

People interested in the society should contact Donald L. Greer, chairman of the membership committee, Kansas City Field Station, Communicable Disease Center, 2002 West 39 Street, Kansas City, Kansas 66103.

The Asia Foundation is seeking donations of scientific and technical publications for distribution to schools in Asia. Books in good condition and dated 1955 or later will be accepted, and journals will be welcomed in runs of 5 years or more and dated from 1946. Shipments may be sent at any time to the foundation's **Books for Asian Students** Program, 451 Sixth Street, San Francisco, California 94103.

The Council for Basic Education has published a book containing some of the articles that have appeared in its *CBE Bulletin* since the council was founded. **A Decade of Comment on Education, 1956–1966** provides what its editor Mortimer Smith calls "a running commentary on what has been going on in education" during a decade of "vigorous debate, extraordinary activity, and some definite progress. . . ." The book includes articles on a variety of topics, from elementary education and reading to the new mathematics to personality testing to federal aid. It is 156 pages long and is available for $1.50 from CBE, 725 15th Street, NW, Washington, D.C. 20005.

The Environmental Science Services Administration has published the "Federal Plan for **Meteorological Services** and Supporting Research for Fiscal Year 1967." It was prepared by the office of the federal coordinator for meteorological services and supporting research, and is designed to give Congress and the executive branch an overall plan for government services and research and development programs in the field. Copies are available from the Clearinghouse for Federal Scientific and Technical Information, Springfield, Virginia 22151 (Publication No. PB-173072). Printed copies cost $2; microfiche, 50 cents.

Scientists in the News

Gerald D. LaVeck has been appointed director of the National Institute of Child Health and Human Development (NICHD), NIH, succeeding **Donald Harting**, who will be special assistant to James Shannon, NIH director. LaVeck has been director of the NICHD mental retardation program for 3 years and acting scientific director of the institute since August.

Alexander Kossiakoff, associate director of the Johns Hopkins University Applied Physics Laboratory, has been appointed deputy director of the laboratory. **Frank T. McClure**, chairman of the APL research center, has been named associate director of the laboratory.

Walter H. Hodge, head of the environmental and systematic biology section in the NSF biological and medical sciences division, has begun a 2-year assignment as head of the foundation's science liaison staff in Tokyo. He is succeeded in the Washington post by **Robert K. Godfrey**, former associate chairman of the department of biological sciences and curator of the herbarium at Florida State University.

Willson H. Hunter, assistant to the director of NASA's Lewis Research Center, Cleveland, has been named the agency's senior scientific representative in Australia. He succeeds **Ray W. Hooker**, who has been appointed special assistant for industrial affairs at NASA's Langley Research Center, Hampton, Virginia.

The 1966 Albert Lasker medical research awards were presented last month to **Sidney Farber** of Harvard University's medical school and **George E. Palade** of Rockefeller University. Palade received the prize for basic research for his use of the electron microscope in studying living cells; Farber was given the clinical research award for his use of chemicals in treating several forms of cancer. Each award carries a $10,000 cash prize.

Henry David has become executive secretary of the National Academy of Sciences–National Research Council division of behavioral sciences. David is a former president of the New School for Social Research and was head of the office of science resources planning at the National Science Foundation prior to taking the NAS post. He succeeds **Peter B. Hammond**, who resigned in August to devote full time to writing.

Norman F. Ramsey, Higgins professor of physics at Harvard, has been elected president of Universities Research Association, succeeding **J. C. Warner**. The organization was formed last year by 34 university presidents to offer its services to the government as manager of the proposed 200-bev proton accelerator.

Recent Deaths

Lannes E. Davis, 72; professor emeritus of soil chemistry at the University of California; 1 November.

William L. Ingmanson, 42; chairman of the engineering department and head of the mechanical processes group at the Institute of Paper Chemistry; 6 November.

Frederick Leonard, 49; head of the chemistry program, psychopharmacology research branch, National Institute of Mental Health, NIH; 19 October.

Max B. Lurie, 73; professor emeritus of experimental pathology at the University of Pennsylvania; 23 September.

Arthur Lindo Patterson, 64; head of the department of molecular structure at the Institute for Cancer Research, Philadelphia, and professor of biophysics at the University of Pennsylvania; 6 November.

Friedrich Ringleb, 66; chief scientist at the U.S. Naval Air Engineering Center at League Island, Philadelphia, Pa.; 20 November.

Charles Robert Steward, 72; professor emeritus of chemistry at Baylor University; 15 October.

Murray Strassman, 39; associate member of the research laboratories at Albert Einstein Medical Center, Philadelphia, Pa.; 9 October.

Carl Ten Broeck, 81; member emeritus of the Rockefeller University; 4 November.

Robert von Nardroff, 71; professor emeritus of physics at Columbia University; 24 October.

Harry D. Tiemann, 91; retired senior physicist at the USDA Forest Products Laboratory, Madison, Wisconsin; 18 November.

Erratum: Part I of the symposium of the American Society of Naturalists, "Polarity of Organization in Genetic Material," begins on the morning of Tuesday, 27 December (*not* 26 December as appeared in *Science*, 2 Dec., p. 1225).

Erratum: Section P's symposium, "The Application of Operations Research to Governmental Problems;" the luncheon and vice presidential address; and the symposium "Operations Research in Branches of the Government," will all be held Tuesday, 27 December (*not* 28 December as erroneously stated in *Science*, 2 Dec., p. 1235).

Erratum: In Table 1 of the report, "Anticholinergic blockade of centrally induced thirst" by R. A. Levitt and A. E. Fisher (28 Oct., p. 520),

SN	SN (contralateral)	0.8

should be inserted after the 11th line.