

Records, 1955-1956

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Smithsonian Institution Archives, Washington, D.C., osiaref@si.edu
Records
1955-1956
Accession 20-084
Science Service
0.5 cu. ft. (1 document box)
English

Collection Overview

Administrative Information

Prefered Citation

Smithsonian Institution Archives, Accession 20-084, Science Service, Records

Descriptive Entry

Beginning in the 1920s, Science Service staff wrote 15-minute radio scripts ("Science Service Talks" and "Science News of the Week") which were mailed every week to several dozen U.S. radio stations and then read on the air by local announcers or scientists.

By the early 1930s, Science Service was producing a weekly live-broadcast program for CBS, which eventually featured interviews of scientists. CBS and Science Service renamed these programs "Adventures in Science" beginning with the May 6, 1938, broadcast. Between May 6 and September 30, 1938, CBS controlled all writing and production and CBS staff member Paul Woodbridge hosted the program until it was cancelled September 30, 1938. "Adventures in Science" resumed as a weekly program on CBS on January 5, 1939, with a format of brief news bulletins followed by an interview conducted by Watson Davis. Programs were suspended during World War II and during football seasons in the 1940s and early 1950s. CBS cancelled "Adventures in Science" in December 1958.

This accession consists of audiotape recordings of "Adventures in Science" programs. Materials consist of 1/4" audiotapes.

Names and Subject Terms

This collection is indexed in the online catalog of the Smithsonian Institution under the following terms:

Subjects:

Radio programs Science -- History Science journalism Scientists -- Interviews

Types of Materials:

Audiotapes

Names:

Columbia Broadcasting System, Inc. Davis, Watson, 1896-1967

Preferred Titles:

Adventures in science (Radio program)

Container Listing

	Box 1
Box 1 of 2	Airdate - January 28, 1955 - Guest: Dr. William A. Baum, staff member, Mt. Wilson and Palomar Observatories. 1/4" audiotape, 15" IPS. Dr. Baum discusses working to study universe with the most powerful telescope in the world. Much of the research uses traveling light as a technique for measuring. Discussion of complex factors in astronomy such as the photoncounter, the age of galaxies and planets.
Box 1 of 2	Airdate - April 30, 1955 - Guest: Dr. William S. Middleton, Chief Medical Director, Veterans Administration. Subject: Mental illness; 1/4" audiotape, 15" IPS. Mental illness is the largest worldwide problem. It accounts for one half of hospital patients, and one out of sixteen people in the U.S. are afflicted. Mental illness is like other diseases and educating people will eradicate the shame, guilt and stigma attached to the disease. Psychotherapy and chemical therapy are two treatments for the illness. The basis of psychotherapy is Freud's work. Two new drugs that have a tranquilizing effect on mentally ill patients are chlorpromazine, and reserpine. Social workers, psychologists, and other health workers need to treat patients as well as rehabilitate them so they may reenter society as constructive citizens.
Box 1 of 2	Airdate - May 4, 1955 - Guests: State Finalists for the National Science Award. 1/4" audiotape, 15" IPS. Phoenix, Arizona, Bob built an electrical hygrometer which measures temperature and relative humidity. Knoxville, Tennessee, Sue Shipe studied the relation of pond animals to their habitat. Her study was focused on conservation and the balance of nature. Sioux City, Iowa, Jerry Anderson won his competition with an exhibition the use of rocket propulsion for space travel, including developing space stations. Oklahoma City, Oklahoma, Kenneth Dunn built an electronic stethoscope with an oscilloscope and cardiographic attachment. This machine amplifies the heartbeat and records it on a cardiogram. Charleston, West Virginia, Carol Irene Hawkin's winning research project was entitled "Coal Microscopy: A New Tool for New Research." It involved the microscopic study of coal, using photographic techniques and petrographic analysis. Maynot, North Dakota, Jerry Anderson built a remote-controlled robot capable of eight actions.
Box 1 of 2	Airdate - May 14, 1955 - Guests: William C. Foster, President of Manufacturing Chemists Association, and Cleveland Land, Assistant to the President. Subject: Advances in chemistry. 1/4" audiotape, 15" IPS. Chemical Progress Week is a public relations event designed to educate the public about the rise in the standard of living due to chemicals and the chemical industry. Chemicals are part of almost any kind of manufacturing e.g. iron, steel, drugs, biologicals and plastics. Mr. Foster emphasizes the importance of both fundamental and applied research. Results of fundamental research may not be instantaneous, but it is essential for progress. Attracting young people with fresh ideas into the industry is also essential. There are many professional and personal

rewards in the chemical profession because of many exciting unexplored vistas in the science such as atomic power, energy, etc.

- Box 1 of 2 Airdate - May 28, 1955 - Guest: Dr. Gordon H. Strom, Aeronautical Engineer, New York University. Subject: Air pollution. 1/4" audiotape, 15" IPS. He is studying pollution produced by industrial manufacturing processes and how to control it. Dr. Strom conducts experiments in a wind tunnel to study the movement of pollutants in a micro form. Discussion of weather effects on air pollution, atomic blast fallout, etc. Comments on system of checks and balances in nuclear reactors.
- Box 1 of 2 Airdate: June 25, 1955 - Guest: Dr. Wallace R. Brode, Associate Director, National Bureau of Standards. Subject: National Bureau of Standards. 1/4" audiotape, 15" IPS. The Bureau employs approximately 28,000 people who conduct research in television, radio and the physical sciences. Two thirds of the work they do is for other federal agencies, including testing equipment that agencies are considering purchasing. One third of the work at the Bureau relates to maintaining existing standards of measurement and developing new standards and techniques. Discussion of using light emitted from the alchemical reaction from the melting of gold to measure. The Bureau also tests physical values necessary for other scientists' research and share much of their findings with other countries although they do not maintain international standards. Optimistic discussion of electronic computers.
- Box 1 of 2Airdate: July 2, 1955 Guest: Dr. Fillmore H. Sanford, Executive
Secretary, American Psychological Association. Subject: Psychology.
1/4" audiotape, 15" IPS. Dr. Sanford lists various types of psychologists.
They are different from psychiatrists in that they are more academic
and research oriented. They explore behavioral patterns in laboratories.
Vocational psychologists work in industry assisting organizations to
predict the efficiency levels of employees.
- Box 1 of 2 Airdate: July 9, 1955 - Guest: Francis W. Davis, Consultant Engineer from Waltham, Massachusetts, inventor of power steering. 1/4" audiotape, 15" IPS. Power steering is now widely used. Widespread use began in the 1930's and increased during World War II. The steering mechanism uses a "servo follow up principle." The driver of the vehicle tells the wheel how much effort he needs, the engine supplies the power. Mr. Davis received the patent for the machine in 1931. Now he has over 40 international and domestic patents. Inventors have many problems because patents only last for 17 years. Due to this 17-year limit Davis is researching improvements for the power steering device so that he can retain the patent. The prototype for the steering device is now at the Smithsonian Institution.

Box 1 of 2 Airdate: July 23, 1955 - Guest: Jerome Namias, Chief, Extended Forecast Division, U. S. Weather Bureau. 1/4" audiotape, 15" IPS. Mr. Namias discusses advances in forecasting techniques. Many businesses and industries have interest in weather forecasts. Discussion of collection of data from different points in the atmosphere. This data is sent to a central office, it is analyzed, and plotted. The Division attempts to predict the flow of pressure fronts which affect weather. Short discussion of climate changes.

Box 1 of 2	Airdate: January 7, 1956 - Guest: Richard T. Whitcomb, aeronautical research scientist, Langley Aeronautical Lab, National Advisory Committee on Aeronautics. Subject: Aeronautics. 1/4" audiotape. By making design adjustments on planes people can fly faster with the same amount of power. The "Mae West Waist" improved speed by 24%. These applications are especially important to the military. Normally they test airplanes in wind tunnels to measure the drag on the planes, and to investigate and document the movement of air flow around the plane. Many areas of research needed: tensile strength, drag at speeds beyond the speed of sound and cooling devices for planes.
Box 1 of 2	Airdate: January 14, 1956 - Guest: Dr. Francis O'Neill, Director, Central Iceland State Mental Hospital, Long Island, New York. Subject: Treatment of mentally ill patients with drugs. 1/4" audiotape. Recently there have been advances in treating extremely disturbed patients with Thorazine (tranquilizers). This has helped patients return home from hospital. These drugs have special qualities that calm patients without putting them to sleep and although they are not curative, they represent a great step forward in treatment of mental illness.
Box 1 of 2	Airdate: February 4, 1956 - Guests: Dr. Russell Cecil, professor emeritus at Cornell University, and Dr. Herzog, an organic chemist from Schering Labs, Bloomfield, New Jersey. Subject: New drugs for the treatment of arthritis. 1/4" audiotape, 15" IPS. Discuss new drugs for helping arthritis, cortisone and metacortin, a steroid therapy. Schering manufactures cortisone. Herzog discusses research at Schering.
Box 2 of 2	Airdate: April 29, 1955 - Guest: Walter A. Grant, Vice President, engineering staff, Carrier Corporation. Subject: Air Conditioning. 1/4" audiotape. Discusses the importance of air conditioners including a short history of air conditioning. The first use of air conditioning was an industrial application; in 1902 the first printing plant was air conditioned. Textile factories were also air conditioned during this period. In 1921 people began air conditioning theaters.
Box 2 of 2	Airdate: May 21, 1955 - Guest: Aron Wiener. Subject - Irrigation in Israel. 1/4" audiotape, 15" IPS
Box 2 of 2	Airdate: July 16, 1955 - Guest: Dr. George Gerard, Assistant Director, Research Division, College of Engineering, New York University. Subject: Designing a plane that breaks the thermal barrier. 1/4" audiotape. Technical discussion of the newest aerotechnology to break the thermal barrier, which is beyond the sound barrier. Flying at Mach I causes a friction problem due to 'drag' on the plane. Extremely high temperatures at Mach II (the point at which a plane breaks the thermal barrier) is the problem that Dr. Gerard is trying to overcome with engineering design applications.

Box 2 of 2	Airdate: September 3, 1955 - Guest: Sir George Allen, Secretary, British Association for the Advancement of Science. Subject: British Association for the Advancement of Science. 1/4" audiotape. (2 copies) This association founded in 1831, provides scientists from different fields opportunities to meet and exchange important information. Membership is open and there are quite a few members from industry and labor. The upcoming meeting of the association will focus on the atom, cosmic rays, applications of nuclear energy on industry, automation, employment problems and education as well as the effects of an atomic war. Areas of discussion will also cover some political aspects of nuclear war and scientists' responsibility to society.
Box 2 of 2	Airdate: January 21, 1956 - Guest: Dr. T. Campbell Thompson, surgeon and chief of the Hospital for Special Surgery in New York. 1/4" audiotape. This hospital is the oldest orthopedic hospital in the nation. It began as a brace shop, employing doctors who fitted Civil War victims with prostheses. The first surgeons were trained as barbers. Surgery has always advanced during wartime. First amputee clinic began at HSS after World War II. Now major causes of amputation are traffic accidents and problems that elderly people develop.
Box 2 of 2	Airdate: February 11, 1956 - Guest: Dr. Irvine Page, President, American Heart Association and Director of Research at the Cleveland Clinic. Subject: American Heart Association. 1/4" audiotape, 15" IPS. The association membership is half doctors and half laymen. American Heart Association's mandate is to educate the public about heart ailments. They are developing a program designed to get heart attack victims back to their jobs.