

was something of an "after you, Alphonse" dialogue between Vance and Stuart Symington (D-Mo.), a former Air Force secretary who is a leading advocate of defense preparedness:

Senator Symington: I have always felt, if we made a deal on nuclear weapons, some of these other countries would do their best to develop their chemical and biological warfare capability. . . . What is the amount you spend, have in the budget, for chemical and biological warfare. . . . ?

Mr. Vance: . . . For research, development, test, and evaluation concerned with chemical and biological warfare there is [deleted] in the 1968 budget . . . and there is [deleted] for procurement, and [deleted] for operations and maintenance, for a total of [deleted].

Senator Symington: . . . We might get caught short unless we develop in this field, especially after we have made a possible nuclear treaty. Is that a fair hypothesis, Mr. Secretary?

Mr. Vance: We think we must have a retaliatory capability and a defensive capability, and those are the ends to which we are devoting both our research and development and our procurement. It is clearly our policy not to initiate the use of lethal chemicals or lethal biologicals.

Senator Symington: But I understand it is a form of deterrence to also have it?

Mr. Vance: It is indeed.

Senator Symington: It would become important, especially if we made a meaningful nonproliferation treaty, would it not?

Mr. Vance: Until we can reach a satisfactory agreement for the elimination of all chemicals and biologicals, I think we must have a retaliatory capability as a deterrent.

Between the deletions and the limitation of discussion, this is not much to go on. Future Senate hearings could obviously go a long distance toward putting on the table more of the facts about U.S. programs and policies for chemical and biological weapons. It is worth noting, however, that—if the line of questioning pursued by Symington is any indication of the tenor of Congressional interest—such hearings could as easily result in the promotion of greater CBW effort as in recommendations for restraint.—ELINOR LANGER

Appointments

Harrison Brown, professor of geochemistry, California Institute of Technology, to joint professor of geochemistry and newly established professorship of science and government at the Institute. . . . **Harold B. Finger**, manager

of the Space Nuclear Propulsion Office, NASA, to associate administrator for organization and management, NASA headquarters. . . . **Francis B. Smith**, formerly assistant director of the Langley Research Center, Va., to head of the newly established Office of University Affairs, NASA. . . . **Christopher H. Demos**, clinical research director of E. R. Squibb & Sons, Inc., to medical director of the Squibb Institute for Medical Research. . . . **Clarke Williams**, deputy director of Brookhaven National Laboratory, to research administrator of the new Marine Resources Council on Long Island. . . . **O. Burr Ross**, director of the Oklahoma Agricultural Experiment Station and dean of Agriculture, to vice president for all research at the Oklahoma State University. . . .

Inez M. Hinsvark, dean of the College of Nursing, South Dakota State University, to dean of the University of Wisconsin School of Nursing. . . . **Robert L. Cochrane**, research associate in the department of physiology, University of Pittsburgh School of Medicine, to senior endocrinologist at Eli Lilly Company. . . . **Donald M. Pace**, professor of physiology and director of the Institute for Cellular Research, University of Nebraska, to professor of physiology-pharmacology and director of cellular research, School of Pharmacy, University of the Pacific, Stockton, Calif. . . . **Frans E. Wickman**, professor and curator of the department of mineralogy of the Swedish Museum of Natural History, to professor of geochemistry, Pennsylvania State University. . . . **Joseph D. Novak**, professor in the departments of education and biological sciences, Purdue University, to president of the National Association for Research in Science Teaching. . . . **Dale K. Mecham**, principal chemist in the Cereals Laboratory, USDA Western Utilization Research and Development Division, to president-elect of the American Association of Cereal Chemists. . . . **C. Taylor Whittier**, superintendent of Philadelphia's public schools, to executive director of the Central Atlantic Regional Educational Laboratories, Alexandria, Va. . . . **Roger D. Reid**, director of the biological sciences division and supervisor and coordinator of biological research in the Office of Naval Research, to professor of biology at the University of West Florida. . . . **Charles Feldman**, manager of the Physical Electronics Laboratory at Melpar, Inc., to the staff of the Applied Physics Labo-

ratory, Johns Hopkins University. . . . **Ernst O. Attinger**, research director, Philadelphia's Presbyterian Hospital, to director of biomedical engineering, University of Virginia.

Recent Deaths

Ormond E. Barstow, 87; director, Instrument Systems Research Laboratory, Dow Chemical Company; 21 April.

Elizabeth Brown Chase, 56; professor of zoology, University of Rhode Island; 30 March.

William D. Collins, 91; retired chief, Branch of Water Quality, U.S. Geological Survey and recipient of the Distinguished Service Award; 8 May.

Palmer H. Craig, 66; dean emeritus of the College of Science and Mathematics, Florida Atlantic University, Boca Raton; 7 April.

Edward F. Degering, 68; former head of the radiation chemistry laboratory, U.S. Army Natick Laboratories; 11 May.

Foster L. Gambrell, 66; professor of entomology, New York State Agricultural Experiment Station, Geneva; 27 April.

Paul Hahn, 59; assistant to the director of the National Center for Radiological Health, Public Health Service; 3 May.

J. Donald Henderson, 57; professor of physics, University of North Dakota, on leave to serve as program director, Research Training and Academic Year Study Program, National Science Foundation; 17 April.

J. Warren Horton, 77; technical director emeritus of the U.S. Navy Underwater Sound Laboratory, New Haven, Connecticut; 10 May.

Fritz F. Koczy, 52; professor and chairman of the Division of Physical Sciences, Institute of Marine Sciences, University of Miami; 17 April.

William E. Ladd, 87; professor emeritus of child surgery, Harvard University; 21 April.

Jerome J. Morgan, 86; professor emeritus of chemical engineering, Columbia University; 20 April.

Harry R. Muegel, 71; professor emeritus of botany, University of Cincinnati; 8 April.

C. C. Torrance, 65; professor of mathematics, Naval Postgraduate School; 2 May.

Heinz von Diringshofen, 67; pioneer in flight and space medicine; 5 May.

Nathan Woodruff, 54; scientific adviser to the State Department; 7 May.