

which combine to form nerve gas upon firing.

From references in official testimony, it seems obvious that the Chemical Corps regards binaries—which are easier to store and transport from safety and environmental standpoints—as the wave of the future. In fact, the Army is considering building up a stockpile of binaries. Secretary of the Army Howard H. Calloway said in congressional testimony last month, after discussing the advantages of binary weapons: “Consideration is being given to the possibility of eventually replacing the national stockpile with this type of munition.” Or, as one outside source commented, the Army will spend, between now and 1985, \$1 billion on destroying existing stocks and perhaps more than \$100 million on binary production, and then “it will be right back where it started.”

There are those, both in Congress and in the technical community, who question the wisdom of having a national stockpile at all. Among them is Congressman Wayne Owens (D-Utah), whose district includes the Army base at Tooele, where CAMDS is under development. Owens has argued that there are serious questions as to whether a national chemical weapons stockpile benefits United States security interests and its overall strategic position. More vehemently, Kistiakowsky finds the prospect of a stockpile “extraordinarily stupid,” particularly a stockpile of binaries, which by comparison with conventional chemical weapons are fairly easy to come by. “Once the binary technology develops,” Kistiakowsky says, “. . . it is sure to proliferate in the direction of less developed countries, thus increasing the likelihood of war.”

—DEBORAH SHAPLEY

APPOINTMENTS

Merton D. Van Orden, vice commander, Naval Electronic Systems Command, U.S. Navy, to chief of naval research. . . . **Robert L. Payton**, former president, C. W. Post Center, Long Island University, to president, Hofstra University. . . . **David Mintzer**, associate dean, Technological Institute, Northwestern University, to vice president for research and dean of science at the university. . . . **Donald I. MacLean**, professor of chemistry, Boston

College, to vice president for academic affairs, Creighton University. . . . **Manik Talwani**, interim director, Lamont-Doherty Geological Observatory, Columbia University, appointed director of the observatory. . . . **Glenn G. Thomas**, associate professor of political science, Georgia State University, to dean, School of Arts and Sciences at the university. . . . **Miriam F. Bennett**, professor of biology, Sweet Briar College, to chairman, biology department, Colby College. . . . **Robert Stout**, director of research, Claremont Institute for Administrative Studies, to dean, School of Education, California State University, Fullerton. . . . **Lee F. Brown**, associate professor of history, St. Mary's University, to dean, Graduate School at the university. . . . **James J. Hudson**, professor of history, University of Arkansas, to dean, Graduate School at the university. . . . **Leo K. Bustad**, professor of radiation biology, University of California, Davis, to dean, College of Veterinary Medicine, Washington State University. . . . **C. Roger Smith, Jr.**, professor of veterinary medicine, Ohio State University, to dean, College of Veterinary Medicine at the university. . . . **William J. Byron**, associate professor of social ethics, Woodstock College, to dean, College of Arts and Sciences, Loyola University. . . . **Nathaniel J. Pallone**, associate dean, College of Education, University of Hartford, to dean, University College, Rutgers University. . . . **W. Chester Fitch**, chairman of engineering and technology, Western Michigan University, to dean, College of Applied Sciences at the university. . . . **Thomas Knipp**, assistant dean, College of Arts and Sciences, Kent State University, to dean, College of Arts and Sciences, St. Louis University. . . . **B. Spencer Meeks, Jr.**, professor of chemistry, Moorhead State College, to chairman, chemistry department at the college. . . . **Henry S. Schutta**, associate professor of neurology, University of Pennsylvania School of Medicine, to chairman, neurology department, State University of New York Downstate Medical Center. . . . **Eugene L. Rogers**, clinical assistant professor of physical medicine and rehabilitation, State University of New York Downstate Medical Center, to chairman, rehabilitation medicine department, University of Health Sciences/The Chicago Medical School. . . . **Frank E. Kloster**, visiting professor of medicine, University of Rotterdam, to head, cardiology division, University of Oregon Medical School.

RECENT DEATHS

Harwood S. Belding, 64; professor of environmental physiology, University of Pittsburgh; 6 August.

Hans A. Einstein, 69; professor emeritus of civil engineering, University of California, Berkeley; 26 July.

Angus M. Frantz, 78; former associate clinical professor of neurology, Columbia University; 16 July.

Brewster H. Gere, 62; chairman, mathematics department, Hamilton College; 13 July.

H. Claude Hardy, 86; professor emeritus of sociology, Hartwick College; 7 June.

Herbert H. Hyman, 53; assistant director, chemical division, Argonne National Laboratory; 20 July.

Thomas E. Jones, 85; president emeritus, Earlham College and Fisk University; 5 August.

Richard J. Kokes, 46; chairman, chemistry department, Johns Hopkins University; 27 July.

Claude J. Lapp, 81; retired director of special projects, National Academy of Sciences; 27 July.

George E. Large, 73; former chairman, civil engineering department, Ohio State University; 28 June.

Henry J. Masson, 81; retired assistant dean, College of Engineering, New York University; 3 August.

Thomas T. McClure, 58; plant physiologist, criteria and evaluation division, Office of Pesticides, Environmental Protection Agency; 21 July.

Edgar M. McKown, 77; dean emeritus, University of Evansville, 19 June.

Ernst Papanek, 73; former professor of educational psychology, Queens College, City University of New York; 5 August.

Leo J. Poelma, 80; former professor of veterinary medicine, University of Maryland; 15 August.

Wilbur M. Tidd, 69; professor of zoology, Ohio State University; 30 June.

Alfred Vogl, 78; professor of clinical medicine, New York University School of Medicine; 30 July.

Darrell E. Walker, 53; chairman, horticulture department, Pennsylvania State University; 7 July.

Alexander G. Wesman, 58; vice president, Psychological Corporation; 11 June.

Charles S. White, 62; associate dean, College of Education, University of Houston; 23 June.