OBITUARIES

Herman Yagoda

Herman Yagoda, a cosmic-ray physicist, died on June 13 in an automobile accident in Bedford, Massachusetts. Mr. Yagoda was a staff member of the Air Force Cambridge Research Laboratories at Hanscom Field in Bedford. Last year the Laboratories awarded him the Guenter Loeser Memorial Award in recognition of his contributions to cosmic-ray research.

Mr. Yagoda was born 51 years ago in New York City. He was graduated cum laude in 1929 from Cooper Union and received his master's degree, in 1931, from New York University. He spent the next four years as a chemist with the Fales Chemical Company, and, in 1935, joined the staff of Columbia as a Baker research fellow, where he pursued doctoral studies. He became an assistant chemist with the US Customs Laboratory in New York in 1936 and remained there for five years. From 1942 to 1958 he worked at the National Institutes of Health, progressing from associate chemist to senior chemist. There he was engaged in research dealing with the biological aspects of cosmic radiation hazards to manned flight in regions above the earth's atmosphere.

In 1958 he joined the staff of the AFCRL as a physicist. His work at the Laboratories involved the use of rockets and satellites to detect cosmic rays from above the earth's atmosphere. An early satellite recovered after orbit carried one of Mr. Yagoda's cosmic-ray detectors, consisting of photographic emulsion plates. Though he was especially well known during his career for research involving tracks of ionizing particles in photographic emulsion, Mr. Yagoda also contributed to research in radioactivity and high-energy nuclear physics.

He was a fellow of the American Physical Society and the American Mineralogical Society and a member of the American Geophysical Union. He also served on the Bioastronautics Panel and the Space Science Board of the National Academy of Sciences.

Herman Yagoda

Robert W. Gelinas

Robert W. Gelinas, research physicist in the Electronics Department of the RAND Corporation in Santa Monica, Calif., died on July 25 at the age of 41.

Dr. Gelinas was born in Washington, D.C. He received a bachelor of engineering degree at Johns Hopkins University in 1943 and a PhD in physics in 1952. He spent the next four years at Johns Hopkins, first as a research associate in the University's Institute for Co-operative Research and later in the Johns Hopkins radiation laboratory.

In 1956 he joined the staff of the RAND Corporation, where his principal interests were infrared radiation and its military applications. He was well known for his analyses of difficult radiation and detection problems.

Dr. Gelinas was a member of the American Physical Society and the American Association of Physics Teachers.

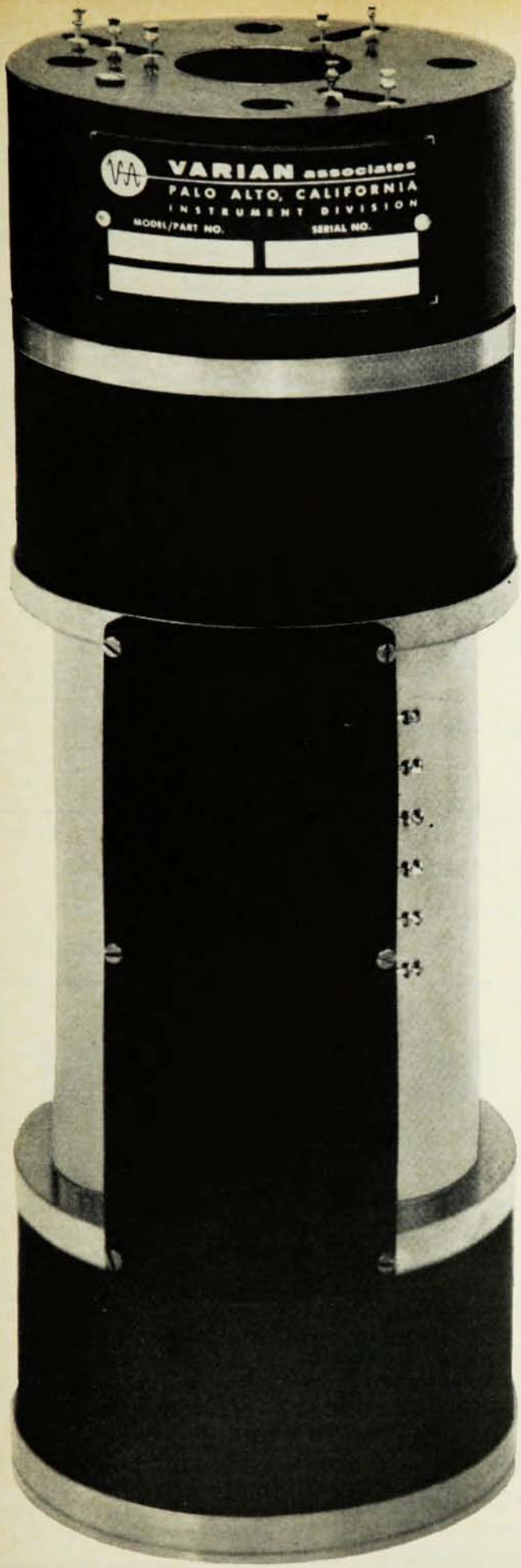
John W. Calkin

John W. Calkin, senior mathematician and chairman of the Applied Mathematics Department at Brookhaven National Laboratory, died in Westhampton, N.Y., on August 5 at the age of 54.

A native of New Rochelle, N.Y., he was graduated with honors in mathematics from Columbia University in 1933. He was awarded his MA in 1934 and his PhD in 1937 by Harvard University. While at Harvard, Dr. Calkin was a Shattuck Fellow and received the Bowdoin Prize.

In the fall of 1937, Dr. Calkin went to the Institute for Advanced Study in Princeton on a year's fellowship to work with Oswald Veblen and John von Neumann. He later served as an assistant professor at the University of New Hampshire and the Illinois Institute of Technology in Chicago. During this period, Dr. Calkin published a number of papers on operator theory and its application to partial differential equations. Some of this work has since become quite fundamental to further developments in the field.

During World War II, Dr. Calkin worked on a National Defense Research Committee Project in the field



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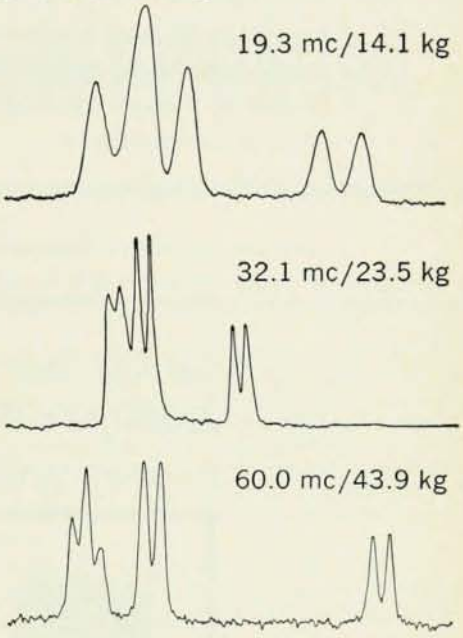

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of shock and detonation hydrodynamics at the Institute for Advanced Study and subsequently became a member of the Technical Section of the Naval Attache's Office in the American Embassy in London, working on military operations research. Toward the end of the war Dr. Calkin joined the staff of the Los Alamos Scientific Laboratory as a member of the Manhattan Project, remaining until 1946 when he accepted a Guggenheim fellowship at the California Institute of Technology. He later taught at the Rice Institute in Houston before returning to Los Alamos in 1949 as a member of the theoretical division. In 1958, he accepted a consulting appointment at New York University and at Brookhaven National Laboratory and, in 1961, was named head, and then chairman of the Applied Mathematics Department.

Dr. Calkin was a member of the American Physical Society and American Mathematical Society.

Henry J. Bolger, C.S.C.

Henry J. Bolger, C.S.C., associate professor of physics at the University of Notre Dame, died of a heart attack on May 4 at the age of 63. Father Bolger headed the Notre Dame Department of Physics from 1937 until September 1963. Under his guidance, undergraduate and graduate physics major programs were developed, and the full-time teaching staff grew to a total of 23.

Father Bolger was a native of Portland, Wisconsin. He graduated from Notre Dame in 1924 and received a master's degree from the Catholic University of America in 1929. Later, he did additional graduate work at the California Institute of Technology. From 1929 to 1932, he served as an instructor in the Physics Department at Notre Dame. In 1936, he was appointed associate professor in the Department. During World War II, he worked on the Manhattan District Project, returning to Notre Dame after the war, where he remained until his death. He was a fellow of the American Physical Society.