the work being done by the Public Health Service is well known and is to be commended.

Under the provisions of the House passed radiation control bill (H.R. 10790), the Public Health Service will take on additional responsibilities for research relating to the effects of radiation upon man. Since the Atomic Energy Commission and the Department of Defense have supported a substantial amount of this research in the past, it will be important to see how the existing competence of these agencies can be utilized in developing the Department's new program.

We are pleased to have you gentlemen here, and we will proceed with

Dr. MacArthur and Mr. Glass.

(The biographies of Dr. MacArthur and Mr. Glass follow:)

## DR. DONALD M. MACARTHUR

Dr. Donald M. MacArthur was born in Detroit, Michigan, in 1931. He received a B.Sc. (Honors) degree from St. Andrews University, Scotland, in 1954 and a Ph. D. in X-ray Crystallography from Edinburgh University, in 1957.

Afterwards Dr. MacArthur taught for a year at the University of Connecticut. In 1958 he joined Melpar, a subsidiary of Westinghouse Air Brake. When he left he was Manager of the Chemistry and Life Sciences Research Center. In this position he was responsible for the management and direction of a large number of defense and space programs representing a broad spectrum of disciplines from instrumentation engineering to biology. These programs represented applied research in the physical and life sciences, in addition to develop ment programs in space instrumentation, life support equipment, chemical and biological detection and warning equipment, and the development of large scale atmospheric diffusion experiments.

In February 1966 he accepted a position as Deputy Director (Chemistry and Materials), Defense Research and Engineering. In July 1966 he was designated Deputy Director (Research and Technology), Defense Research and Engineering in the Office of the Secretary of Defense.

As Deputy Director (Research and Technology) he is responsible for management of the DoD investment in research and technology relevant to military needs. The programs which he directs cover such diverse fields as rocket and missile propulsion, materials technology, medical and life sciences, social and behavioral sciences, environmental sciences, and chemical technology. He also oversees the 134 DoD RDT&E in-house activities which represent a fixed investment of \$17.5 billion with an annual cash flow of \$3.4 billion. Primary effort is devoted to policies, and innovating improved management systems to insure that they are organized most effectively to meet current and future military needs. Dr. MacArthur is a member of interagency committees and represents Dr. Foster on the Federal Council for Science and Technology. He was a member of the President's task force on the "Technology Gap."

## EDWARD M. GLASS

Edward M. Glass was born at Providence, Rhode Island in 1917. A graduate of Rhode Island State University, he did work towards a Masters Degree at Virginia Polytechnic Institute. The major portion of his professional career was spent in the Air Force Materials Laboratory at Wright Field, assuming the position of Technical Director in 1958. His professional field of interest began with research and development in fuels and lubricants, subsequently broadening to the entire field of aerospace materials. In 1962 he was appointed a Special Assistant for Laboratories to the Assistant Secretary of the Air Force (Research and Development). His current position is the Assistant Director (Laboratory Management), ODDR&E, and is concerned with the policy and means of improving the in-house laboratories of the Department of Defense.

He has been active in a number of professional activities including the American Society of Lubrication Engineers, the Society of Aerospace Materials and Process Engineers, the Society of Automotive Engineers and the Materials Advisory Board, National Academy of Sciences. He is also a member of the