

## York at Berkeley, speaking on "The Scientist and Political Decision Making."

## March 22, 1963

BERKELEY, CALIFORNIA, March 22--Modern technology has brought an increasing number of a new breed of men to Washington to take their place among the decision-makers, and they are there to stay, Herbert York, Chancellor of the San Diego campus of the University, said here last night (Thursday, March 21).

York referred to the scientists, usually university professors, who have been called to serve as administrators and advisers in the executive branch of the national government.

He spoke on "The Scientist and Political Decision Making." His was one of the series of Arthur Compton Memorial Lectures, which honor one of America's great men of science.

Their increasing importance has placed a great moral burden on the scientists themselves, he warned. "There is a need for them to realize that they are dealing with something that has a certain mystery, so far as laymen are concerned. They are under a special obligation not to take advantage of the fact that they belong to 'a modern priesthood."

In describing "the interaction of science and politics," York, a physicist, speaks from experience. Before assuming the Chancellorship at San Diego, he spent just over three years (1957 to 1961) in Washington under the Eisenhower and Kennedy administrations, first as a member of the President's Science Advisory Committee, then as Chief Scientist of the Advanced Research Projects Agency and finally as Deputy Director of Defense Research and Engineering, the top scientific job in the Department where most of the Government's research money is spent-- Defense.

And the big decisions the administrator-scientist faces often eventually become budgetary, York said-- whether to go on with a program, expand it, or eliminate it, as has happened recently with the B-70 program. "Everything finally revolves at least in part around money," he said.

The advice of scientists is being sought at all levels of the government, York said. Working directly with the President is the National Security Council, of which one member, Glenn Seaborg, Chairman of the Atomic Energy Commission, is a Nobel-prize winning chemist; the President's Science Advisory Council; and the new Office of Science and Technology.

In the giant Department of Defense, which spends almost two-thirds of the Government's scientific budget, a civilian Presidential appointee, the Director of Defense of Research and Engineering, York's successor Harold Brown, on leave from the University of California, Berkeley, is a scientist.

In addition to serving in full-time executive positions in the government, scientists are also often called in for part-time advice, York said.

Many of the decisions required by government hinge on technical matters well beyond the grasp of laymen, York said.

"When our Constitution was framed, a man with an uncommon amount of common sense could understand any scientific problem that might arise. Scientific experts weren't required and the Constitution made no provision for them.

"This situation started to change in the 1890s, when science itself departed from common sense-- began to move out of the ken of the ordinary intelligent laymen. It became more critical in World War II, when the application of science, technology-- which is the interface between science and society became increasingly sophisticated.

"Before World War II, technology could be easily understood by any bright person. A clever high school kid could take a radio or an automobile apart and tell pretty much how it worked and what it did. Now you give a gang of real smart kids a thermonuclear weapon or a modern computer with its solid-state memory devices. They could take it apart as much as they wanted but they still couldn't understand how it works or what it will do.

"Scientists began coming into the Government a long time ago. The trend has been accelerated since World War II.

"It brings up some problems. Former President Eisenhower warned against allowing the nation to fall into the hands of a scientific-technical elite. As it is, the President or Congress must judge the scientist as an individual, decide whether he is a reliable citizen, and if so then take what he says as gospel. This is a serious problem. I have no solution."