

ical and social services offered by the Americans.

The medical impact of guerilla medicine is equally uncertain. Aidmen are trained in medical matters for 37 weeks. They are shipped off to isolated areas where they have only limited and sporadic contact with more fully trained medical authorities. They are armed with a battery of drugs and equipment for minor surgery. Exactly what happens in the field was impossible to learn from conflicting testimony at the trial. There was testimony that the aidmen were restrained and that they were reckless; that they were shoddy and that they were competent; that they did "a little bit of good," that they did "a lot of good," and that they did harm. There was testimony that they functioned without visible connection with higher authorities, and testimony that they were fairly well supervised; that they practised recognizable standards of medical ethics, and that they did not; that they helped to create administrative structures for public health in the provinces, and that they contributed to destruction of those structures. But there was no conflict about the central point: that medicine was being subordinated to political and military objectives, or about its practical implications—that aidmen could be ordered to offer treatment as a bribe for information or cooperation; that they could be ordered to abandon patients and move on.

This was the system in which Howard Levy refused to participate. He is opposed to the political use of medicine, as well as to the particular politics that it is being used to support in Vietnam. From a medical point of view, he is concerned about possible long-term hazards: "Medically, I think they do more harm than good," he commented to *Science*. "They go into a village, set up a station, hand out drugs indiscriminately. Penicillin will cure a lot of things but there are conditions it doesn't affect, and it has dangerous implications in the long run, both for individuals and for its effect on the development of drug-resistant strains. Physicians should be concerned with this changing medical ecology. The Special Forces have access to the whole pharmacopeia," he concluded. "They use drugs, such as Chloromycetin, that I hesitate to use myself."

Levy is not alone in his opposition to the program. Army physicians testified that it ran into considerable opposition when first established in the

1950's, partly because of opposition in the regular Army to the unconventional Special Forces in general, partly on the ethical and practical grounds raised by Levy. His position was supported, at the trial, by several other drafted physicians from the Fort Jackson hospital, support for which they consciously

risked the displeasure of the same officer who court-martialed Levy. In addition the Fort Jackson courtroom was for 1 day turned into a remarkable ethical-intellectual forum as the defense brought out well-known representatives of American medicine and public health to testify in the captain's

## Lloyd Berkner Dies at 62

Lloyd V. Berkner, 62, a leader in shaping U.S. science policy over the past two decades, died on 4 June in Washington, D.C.

Berkner was stricken with a heart attack while attending a meeting of the Council of the National Academy of Sciences, of which he was treasurer.

He served as adviser or organizer for a number of U.S. scientific programs, and was active in promoting U.S. participation in international endeavors.

In 1950 he suggested the International Geophysical Year and became the principal administrator of the U.S. part of the program during its operation in 1957 and 1958.

He was asked by Secretary of State Dean Acheson to set up the first military assistance program under NATO in 1949, and was largely responsible in 1950 for the assignment of scientific attachés to American embassies abroad.

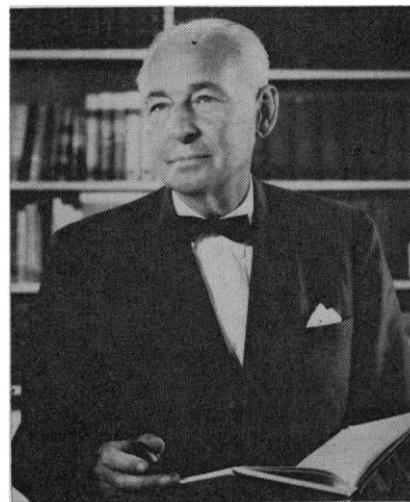
Berkner was a champion of open international exchange of scientific information and often criticized the government for its excessive secrecy in matters of science.

As chairman of the Academy's Space Science Board from 1958 to 1962, he was instrumental in developing U.S. space research programs.

Born in Milwaukee, Wisconsin, Berkner received a bachelor's degree in electrical engineering from the University of Minnesota, his only degree.

Following graduation, he went to Antarctica as a radio technician with Admiral Richard Byrd's expedition. He was also the radio man on the first air flight over the South Pole.

He came to Washington as an engineer for the National Bureau of Standards and later served as physicist in the Carnegie Institution's



research program in terrestrial magnetism.

From 1951 to 1960, Berkner was head of Associated Universities, Inc., formed by nine universities to operate the Brookhaven National Laboratory for the Atomic Energy Commission.

He became president of the Graduate Research Center of the Southwest in 1960, retiring in 1965 because of a heart attack, but continuing until recently as chairman of its board of trustees. The center (renamed Southwest Center for Advanced Studies, in January) was created to encourage the expansion of graduate education in the universities of the Southwest.

Berkner was president of the International Council of Scientific Unions from 1955 to 1958. His chief fields of scientific work were radio wave propagation, the structure of the upper atmosphere, and solar disturbances.

Berkner's home was in Fort Lauderdale, Florida. Funeral services were held at the Fort Myer (Virginia) Chapel; burial was in Arlington National Cemetery.—J.A.