Michigan War Research Charged

Charging that the University of Michigan is perfecting weapons systems "used by the military to kill and incapacitate other human beings," a student member of a committee that approves all the university's classified research attacked Michigan's research contracts with the Department of Defense. Michael Knox, a graduate student in social work and a member of the Faculty Senate Committee on Classified Research, made the charges in a letter sent last week to the chairman of the faculty senate.

Specifically Knox claimed that University of Michigan researchers are:

► "Developing devices to protect bomb- and napalm-carrying aircraft so they can reach their target."

▶ "Perfecting systems which can locate human targets so they can be destroyed."

► "Improving military missile capabilities."

The Michigan faculty senate established the committee of which Knox is a member, after a 1968 controversy over classified research at the university. The committee examines unclassified summaries of all proposed classified research contracts and decides whether the work is appropriate for the university.

"I never suspected that the university was engaged in weapons research before I was appointed to the committee," Knox said in an interview with *Science*.

Knox went on to say that he hoped that, by making the information public, he would "raise the level of consciousness" of the campus community so that they could "decide for themselves whether this type of research is appropriate for the university."

Michigan receives about \$10.4 million per year from the Defense Department in research contracts, half of which have classified portions. Most of the research in question is performed under the direction of the University's Institute of Science and Technology at the Willow Run Laboratories, located about 4 miles outside of Ann Arbor. Some of the classified projects, however, are conducted on the main campus.

James T. Wilson, director of the Institute of Science and Technology, told *Science* that Knox's letter accurately describes some of the research at Willow Run. In Wilson's opinion, however, Knox over emphasizes the military applications. "He starts at the Viet Nam end and works back to the basic research," Wilson said.

"Obviously," Wilson continued, "the military wouldn't support the work if there weren't military applications." But he added that "the Willow Run Laboratories pioneered remote-sensing devices even before the military applications were foreseen. And "a little more than onethird of Willow Run's budget now comes from non-Defense Department sources."

According to Wilson, only about 10 percent of the staff at Willow Run are regular university faculty members. Most, he said, are older graduate students who might work on the classified aspects of military contracts, but who always publish their theses in nonclassified areas. Wilson emphasized that the Willow Run facility builds no prototypes of military hardware, only "breadboard models to collect data."

Many Michigan faculty members thought that the question of military contracts was settled with the establishment of the Committee on Classified Research. But Knox's allegations imply that the committee refused few, if any, proposals. Because of the letter, classified research has again become a major issue on the Ann Arbor campus. Student demonstrations have already taken place, and more are planned.

-ROBERT J. BAZELL

teaching with research and care on "cross-departmental lines." Shumway says the center "would have more to do with cardiology than surgery. It can't be a specialty hospital—there's too much overlap in areas such as infectious diseases." Such a center he sees as necessarily a part of the university medical center.

Understating it somewhat, Shumway admits, "Some people won't like this, but suppose a whole school goes this way. It might be very attractive to federal agencies."

Rather similar views are held by Henry S. Kaplan, the astute and toughminded chairman of the department of radiology. Kaplan was one of the engineers of the medical school's consolidation on the Stanford campus in 1959, and he has remained influential in the policy counsels of the medical school.

Kaplan, like Shumway, is attracted by the prospects of establishing a center or institute which would focus treatment and interdisciplinary research in a particular field. Kaplan envisions a cancer center and thinks that the push for a massive attack on cancer advocated in Congress and now proposed in the President's budget (Science, 12 February 1971) may provide the funds. The real question, says Kaplan, is "how to create an institute which is a fiscal and physical entity yet is still in the main stream of the educational process. I would not want to see a cancer center or cardiac center which is not part of the teaching process. We don't want watertight compartments."

Kaplan also bluntly concurs with the surgeons in saying, "A heavy degree of subsidization of those departments is going on needlessly. We wouldn't mind so long as people in those departments were working as hard as possible. It's time to blow the whistle," says Kaplan.

As critic, Kaplan's flanks are well covered. His department not only operates deeply in the black but has a strong reputation for clinical research. He himself is a successful researcher who pioneered development of the linear medical accelerator for radiation treatment of cancer and is, among other things, an authority on Hodgkin's disease and malignant lymphoma.

Kaplan's analysis of the ills of the medical schools is broader than a simple indictment of the handling of fees. In the period of rapid growth he feels that "too much reliance was placed on