which agency should do it, and where the money would come from. The committee would include agencies with foreign interests, such as DOD, State, the Agency for International Development, the National Security Council, the Arms Control and Disarmament Agency, and the U.S. Information Agency, among others. Such a committee has been suggested previously by the Defense Science Board and a National Academy of Sciences committee. Pentagon officials hope the committee would be given "real power" to allocate research responsibilities, in contrast to the existing Foreign Area Research Coordination Group (FAR), a voluntary group of some 20 agencies which has no binding authority and serves mainly as an information exchange.

The Defense Department's new guidelines—and the proposed interagency committee—are the latest additions to an ever-growing list of "safeguards" that have been established in the wake of the controversy caused in 1965 by the Army-funded Project Camelot, a study of the potential for internal conflict in Chile and other nations. After Camelot, research approval mechanisms were tightened up in the Defense Department; all research projects with foreign policy implications were required to be reviewed for "sensi-

tivity" by the State Department; and FAR, in 1968, issued guidelines for the conduct of foreign area research. A report by the State Department's reviewing council indicates that the council, in its first 3 years of operation (1965 to 1968), reviewed 377 projects—half were cleared; 44 percent were cleared subject to classification of the results or other conditions; and 6 percent were denied clearance or were withdrawn by the sponsoring agency.

Implications of Pentagon Action

The probable impact of the Pentagon's latest retreat from foreign area research is a matter of disagreement. Some disgruntled Pentagon social scientists believe valuable work is being abandoned because "no one in a key position over here fundamentally believes social science is important—the minute you get trouble with Congress they back off." However, other Pentagon officials believe any work that is truly important to defense planning can still be carried out through the loophole in the guidelines which allows the Secretary of Defense to approve crucial projects.

The Pentagon's withdrawal may spur civilian agencies to boost their niggardly support of foreign area research, and it may further reduce the likelihood of international incidents involving military research abroad. But some Pentagon officials claim there may be an adverse effect on the Pentagon itself. Though much of the criticism of Pentagon social science stems from the current drive in Congress to curb the power of the military, these officials suggest the new guidelines may actually increase the "militarization" of the Pentagon by depriving Pentagon planners of the allegedly "restraining" influence of civilian social scientists.

Whatever the impact of the guidelines may be, it seems likely that these latest steps by the Pentagon will not be enough to satisfy the opponents. Senator Fulbright his criticized the Pentagon's policy planning studies and its support of research in the natural and social sciences by foreign institutions. Neither of these categories of projects seems to be directly affected by the new guidelines. Moreover, Fulbright has urged a much more drastic cut in Pentagon financing of social science. In fact, he has asked the Senate Armed Services Committee to reduce by at least half the Pentagon's proposed \$48.6 million budget for social and behavioral sciences. The Armed Services Committee is not apt to go along with this suggestion. But there will almost certainly be further controversy over Pentagon research in the days ahead.—PHILIP M. BOFFEY

University Contractors Cut Ties with CRESS, HumRRO, Army's Two Main Centers of Social, Behavioral Research

While Pentagon officials were recently assuring Congress that campus protests against military research were having little effect on that research, two universities based in the nation's capital quietly announced that they will divest themselves of their Army-sponsored research offices. American University said it will spin off its Center Research in Social Systems (CRESS), an organization which, under a different name, conducted the ill-fated Project Camelot that provoked an international controversy in 1965. And George Washington University said it will sever relations with its Human Resources Research Office (HumRRO), an organization that conducts work of various kinds in the behavioral sciences. Both research centers have their headquarters off campus.

The full implications of the divestiture are not clear, but the move seems potentially significant. CRESS and HumRRO are the Army's largest contractors in social and behavioral science research. In the past, much has been made of the usefulness of their university connections.

Both research centers grew out of the Army's use of social science research during World War II, and both were established in the 1950's at the request of the Army. The two universities, being neither rich nor eminent, and being naturally oriented toward government by virtue of geography, welcomed, at least originally, the offer of Army money to set up the research operations.

HumRRO, which was first funded at George Washington in 1951, grew out of the Army's wartime use of university psychologists to design training programs and pyschological tests for military personnel. The laboratory expanded rapidly in the mid-1950's when it undertook psychological studies of Chinese, North Korean, and American prisoners of war. It currently has an annual budget of about \$4 million and a staff of 273 researchers.

HumRRO's early work on the performance of soldiers in combat and on brainwashing in Korea has expanded into a major research effort on motivation, morale, and the performance of soldiers under stress. This kind of research is called "human factors engineering" and involves study of the problems individuals have in adjusting to certain conditions. One project, for example, called "Desert Rock," studies the reactions of troops participating in maneuvers involving nuclear weapons. Researchers at HumRRO's Alexandria headquarters and at HumRRO offices on five Army bases have developed

POINT OF VIEW

Research and the Coal Miners

The effects of "black lung" (pneumoconiosis) and other serious occupational hazards of miners have recently been getting increased public emphasis. One example was the session on dust control and health at the American Mining Congress in Pittsburgh, in early May, at which Charles C. Johnson, Jr., administrator of the Consumer Protection and Environmental Health Service, was a speaker. Describing federal programs to combat coal miners' pneumoconiosis, Johnson made the following argument for research and the wider application of available technology.

The technology of coal mining, already complex and sophisticated, will become even more so in the years ahead. Government, industry, and labor must perform research to assure that safety and health features are designed into the coal mining equipment of the future—not merely built on as afterthoughts. As the industry goes into deeper and doubtless gassier seams for our fuel supplies, the safety and health of our miners will pose constantly greater challenges for technology. Environmental problems such as water pollution also will become more serious, unless improved coal mining methods to minimize such problems are developed.

But we cannot wait until tomorrow to meet the urgent needs of today. With the technology now available, I am told that safety in our coal mines can be markedly improved. We know that there are specific segments of our coal mining industry that have injury and fatality rates much lower than the industry average. There is no defensible reason why the overall disease, injury and fatality rates should not be reduced dramatically.

training programs to teach soldiers how to fire every kind of weapon from an M-1 rifle to a Nike Zeus missile. HumRRO also writes training manuals for Army civic-action troops and for Special Forces personnel working overseas; it has prepared quick language courses for soldiers in Vietnam, and guides for troops stationed in such countries as Korea, to facilitate "getting along with natives."

American University's CRESS is the lineal descendant of a laboratory that was set up in 1956. At that time the Army, because of its expanding role overseas, decided it needed an office for social science research analogous to HumRRO in the behavioral sciences. The laboratory, which was initially called the Special Operations Research Office (SORO), was created partly through a spin-off of HumRRO's psychological warfare activities and partly as an outgrowth of an existing Army contract with American University for research in anthropology. It currently has a budget of about \$2 million and a staff of about 130 professionals.

SORO pursued its activities in relative obscurity through the late 1950's and early 1960's. But the organization

gained unwelcome notoriety in 1965 when one of its research efforts, a study of political change and instability in developing countries, known as Project Camelot, provoked an international incident. Critics in Chile protested against the "intrusion" of the American military into Chilean affairs. The Army was forced to discontinue the project, and SORO's name was changed to CRESS in hopes of avoiding any permanent stigma from the incident. But the shadow of Camelot continues to stain the organization's image in the minds of some American University faculty and of many social scientists around the country.

After Camelot, apart from the change of name and a change of directors, there seem to have been few basic changes in the CRESS mode of operation. Project Camelot had involved a widely publicized recruitment effort to attract top university social scientists and send them on overseas research missions. After Camelot, the research office went about its work for the Army more quietly, recruiting professors through former SORO alumni and through its university subcontractors. The level of funding has remained

the same, however, hovering around \$2 million since the early 1960's. And research on the political, social, and economic factors involved in social change and internal stability has continued, although the extent of foreign travel has undoubtedly been reduced from the levels envisioned before the Camelot affair broke. Studies are currently being made of Panama, Korea, Vietnam, and various other countries of Southeast Asia and Africa. Preston Abbott, director of CRESS, states that "most" of the research for these studies is being conducted in this country and does not involve work abroad. Many CRESS university subcontractors do work overseas, but CRESS officials say this is with foundation funds, not with CRESS money. CRESS does maintain a two-man research office in Seoul, Korea.

CRESS frequently subcontracts research to other universities. One such study, entitled "The Changing Roles of the Military in Developing Nations," is primarily directed by Morris Janowitz, of the University of Chicago, and involves researchers from Princeton, the University of Florida at Gainesville, and Chicago.

CRESS's biggest single contract is for running CINFAC (Cultural Information Analysis Center), the Army's computerized retrieval system for counterinsurgency and foreign area research, which answers queries from the Department of Defense and its contractors. Also, CRESS shares its offcampus offices with another Armyfunded project, which involves preparation, for the Army, of handbooks on foreign countries. The handbooks, which are prepared largely from library sources, include information on such topics as geography, political parties, and opposition groups.

The decisions to spin off CRESS and HumRRO were largely the result of recent student protests against military research, but questions about the two centers had been raised several years ago. At American University, the Camelot fiasco produced a certain amount of introspection. And at George Washington, a critical 1967 accreditation report by the Middle States Association of Colleges and Secondary Schools recommended that, if HumRRO could not be completely integrated with university teaching and research programs, it should become an independent corporation. "The present anomalous situation," the report said, "is not satisfactory, particularly for the University, which has little control over the activities of the program."

These initial criticisms produced no real change in the relationships between the universities and their Armysponsored laboratories. However, student unrest, caused primarily by opposition to the war in Vietnam, ultimately forced the administrations to take another look. Sit-ins at both schools in the spring of 1968 led the administrations to set up committees on sponsored research, with members drawn from the faculty, the student body, and the administration.

The committee held extensive hearings at American University, and last month it sent recommended research guidelines to the president. The guidelines, though not yet official, require the university to decline to do sponsored research that is classified (with certain exceptions) or that is not under the direct supervision of a full-time faculty member. This would effectively eliminate any future operations of the kind CRESS is now engaged in, since about 25 percent of the work at CRESS is classified. CRESS is largely autonomous in day-to-day operations; no American University faculty members are involved in any supervisory role.

At George Washington, the committee on sponsored research has not yet made public its guidelines, but the group is said to have proposed rules similar to the proposals already announced at American University. Both sets of guidelines, in fact, are modeled on guidelines drawn up at the University of Pennsylvania in 1967 after that university decided to stop doing chemical and biological warfare research for the Army.

Idea Whose Time Arrived

There has been some opposition to the guidelines on both campuses, but it is at a minimum. As Lee Fritschler, professor of government and head of American University's research committee, observed, "The notion that research closely associated with military missions should not be done on campus is an idea whose time is come." Fritschler also noted that the pressures for change came at an important crossroads in American University's history: "President Hurst Anderson, who had made the original contract with the Army for SORO and stood firm during the Camelot storm, was leaving. The new President, George H. Williams, was more flexible on the issue."

Full-scale faculty and student debate over the guidelines was preempted by the announcements that both universities would break ties with their Army research units. George Washington made its announcement on 9 April, the day before the campus chapter of Students for a Democratic Society was scheduled to release a booklet criticizing HumRRO. American University followed suit 2 weeks later.

The practical effect of the spin-offs is not completely clear. Both research centers plan to continue their contract work for the Army as independent nonprofit research organizations. Hum-RRO has already filed incorporation papers in the District of Columbia and is in the process of setting up a board of directors. The board, as yet unannounced, will include, among others, Meredith Crawford, director of Hum-RRO; William McClelland, associate director of HumRRO; and Stephen Ailes, former Secretary of the Army. No faculty members and administrators at George Washington are expected to be appointed to the board, according to Saul Lavisky, HumRRO's director of information, "because that might embarrass the university after their announcement of the break."

Looking at Options

CRESS, according to its director, Abbott, is considering becoming a non-profit group, or merging with another such group. Discussions are under way with a number of organizations, including the American Institutes for Research, a Pittsburgh group that already does a big chunk of the Army's counterinsurgency research.

Researchers at both CRESS and HumRRO express confidence that the productivity of their organizations will not be adversely affected by leaving the university. The labs' dependence on the university community largely individual, not institutional. Personal ties will remain. For example, Harold Bright, the vice president for research at George Washington, is a former top executive of HumRRO. Both laboratories used university faculty as consultants, a practice which is likely to continue. (At neither university do the new research guidelines restrict faculty members from serving as consultants, doing classified research off campus, or having "access" to classified data on campus.) CRESS will lose the dozen student researchers it hired each year.

There will also be changes in

status. Researchers will not be part of a university, with the accompanying prestige. Particularly at CRESS, where they were regarded as faculty members, researchers will lose campus privileges such as use of the library and access to the faculty club. Both CRESS and HumRRO officials will lose the privileges of taking graduate courses free of charge. (At CRESS, half of the researchers were working toward graduate degrees.)

Financial Loss

If the break makes recruitment of researchers more difficult, as seems possible, this will be its most significant practical result. Some Army officials admit that many researchers would rather work in a university environment than for the government. The divestiture will also inflict a financial loss on both universities. American University had been receiving overhead costs of roughly \$400,000 a year to operate CRESS, and George Washington was receiving a fixed fee of about \$240,000 a year to run Hum-RRO.

Officials at A.U. and researchers at CRESS say privately that the Defense Department was "upset" about the decision to break ties. One official said, "The Army accepts the decision with resignation. It is the combination of student protests and the opposition of men like Senator William Fulbright to these projects that did it." But the Army publicly presents a stiff upper lip. K. C. Emerson, the Army's acting deputy assistant for research and development, says the Army readily agreed that as long as it had an agreement with CRESS and HumRRO on the use of their services, they had the Army's approval on the breakaway from the university. "As long as they remain non-profit research groups, and their research output remains of high quality, there is no difference," he says.

At the moment it is not clear whether the universities' action amounts to a serious loss to the Army or whether one DOD official was right in saying "this is probably no more than a public relations defeat." But the spin-off of two major labs combined with other recent campus actions in ejecting military research from the universities certainly suggests a trend.

-Judith Coburn

Miss Coburn is a Washington freelance writer now engaged in work on a book on the social sciences.