

also disenchanted with the system. They called it unrealistic, unnecessary, a threat to good relations with the university world, and a system "built on fiction." One government official said, "We would be unable to run Government research programs using the same requirements we place on universities."

Faced with such near universal unhappiness, the task force opted for change. As Goode told *Science*: "We concluded it was not really worth the trouble, that by and large professors are honest anyway, and that the government was getting more than its money's worth. If anything, the professor spends time on his research and slights other things because research is where he gets the stars for his crown."

The task force prepared five alternative solutions and found that representatives of the federal agencies and the academic community, with a few exceptions, generally favored the alternative that was finally adopted. The essence of this alternative is that the government will henceforth base its support on the value of a researcher's contribution to a project rather than on the time he spends on the project.

Under the new procedures, the amount of a faculty member's salary which the government will reimburse will be determined by the granting agency and the educational institution during the proposal and award process. The decision will be based on such factors as the "value of the investigator's expertise to the project, the extent of his planned participation in the project, and his ability to perform as planned in the light of his other commitments." To arrive at a fair figure, the granting

agencies will require information on the total academic year salary of the faculty members involved, the other research projects from which they are receiving salary support, and any other duties they may have, such as teaching and administration. The government salary support stipulated in the research award must not result in increasing an investigator's official salary from his institution.

The stipulated salary support will remain fixed during the life of a grant or contract "unless there is a significant change in performance." Factors which might cause a reduction in the amount include extended illness, a sabbatical leave unrelated to the research, or an increase in duties unrelated to the specific project. In these events, the educational institution is responsible for reducing the charges to the government.

Auditors will no longer review time or effort devoted to research projects, but will determine on a sample basis that an institution is not reimbursed for more than 100 percent of a faculty member's pay and that the portion of a faculty member's salary charged to the government is "reasonable" in view of his university workload and other commitments.

The new system of stipulating salaries applies only to faculty members (called "professorial staff" in the relevant budget bureau circular) and to certain other professionals who might be designated by the institutions and the agencies. Federal salary support for "non-professorial" professional staff, such as research associates and assistants, graduate students, or others performing professional work, will continue to require

after-the-fact documentation, but in a less time-consuming manner than before. Instead of the old time-or-effort reports, the documentation will be based on the institution's normal time and attendance and payroll distribution systems, provided that these systems are deemed adequate.

Superficially, at least, the new system seems to embody less strict accountability than the old. Responsible university officials must certify annually that expenditures for each research grant and contract were "for appropriate purposes and in accordance with the agreements"—but budget officials say such certification is "just a piece of paper—there's no way to go behind it." Nevertheless, as Goode told *Science*: "No accountability has been lost because there wasn't really any accountability before. The accountability lies in delivering research results, because if you don't deliver results you don't get any more funding from the review panels."

Implementation of the new system is up to the individual granting agencies. An agency could, if it wished, send out notices informing all grantees that their budgeted salary is their stipulated salary and that no further time-or-effort reports are required. Or it could phase the new system in gradually as grants and contracts come up for renewal of funding, a process which could take a year or two to complete, depending on an agency's refunding policies. In any event scientists who have been complaining of writer's cramp caused by the government paperwork explosion should soon get some respite.—PHILIP M. BOFFEY

Copyright Problems: Did Suit over Photocopying Kill Research Project?

The Committee to Investigate Copyright Problems (CICP), a small organization that has pioneered in research on the photoduplication of copyrighted materials, plans to go out of business after failing to win renewal of a government contract. The reasons for the project's demise are difficult to find in

a web of conflicting explanations. The Office of Education (OE) says the project was dropped because of budgetary stringencies. But directors of the organization believe they were denied funds because their conclusions supported a major lawsuit against the government. The lawsuit and the CICP are both

seeking to resolve problems caused by the proliferation of copying machines, a phenomenon which has undermined the royalty system on which many publishers and authors depend.

The CICP is a nonprofit, tax-exempt research organization based in Washington, D.C. Its chief claim to distinction is a report, submitted in March under a previous OE contract, which Abraham L. Kaminstein, register of copyrights at the Library of Congress, calls "the best we've seen on what's actually happening" with respect to reproduction of copyrighted materials. Kaminstein told *Science* that CICP is "probably the only organization that has

tried to stay independent, or at least neutral, between the opposing sides" in copyright controversies. He said most copyright organizations are little more than spokesmen for the authors and publishers of copyrighted material, on the one side, or the users of copyrighted material on the other, but CICIP "has tried to look at the situation and get at the facts."

CICIP's executive director is Gerald J. Sophar, formerly a business executive with two small companies. Its president and chairman is Howard Meyerhoff, former executive director of the Scientific Manpower Commission and former editor of *Science*. The organization incorporated in 1960, sought a grant from the National Science Foundation but was turned down, and went into eclipse from 1961 until 1966, when Sophar left a job in business to become full-time executive director.

In February 1967 CICIP applied for (and subsequently received) a \$20,311 contract with the Office of Education to compile data on the photoduplication practices of library administrators and on the legal aspects of reproducing copyrighted material. Sophar was principal investigator, and was assisted by Laurence B. Heilprin, professor of information science at the University of Maryland, who is vice president of CICIP.

Looking back, Sophar believes CICIP's research reached certain conclusions which may have annoyed the government. For one thing, CICIP estimated that in 1967 at least one billion pages of professional and scholarly copyrighted material were reproduced on a single-copy basis by libraries in this country. For another, it warned that "there are no court decisions at the circuit, appellate or Supreme Court levels to date which condone most of the copying practices of academic, industrial, governmental or general libraries."

Initially, Sophar says, the Office of Education seemed impressed with CICIP's work and invited a second research proposal, so on 18 March, Sophar requested \$181,300 for a project to compile data on the copying practices of a wide variety of organizations, and to determine the feasibility of a prototype system that would permit wide dissemination of copyrighted works while providing reasonable compensation to copyright owners. On 25 April, according to Sophar, he was assured that the request had been approved by

everyone up through the level of the associate commissioner of education and that the request was then in the contracts office awaiting processing.

Late in April, however, Sophar says he was told by a government copyright attorney that his proposal was in "deep trouble" with high officials of the Department of Health, Education, and Welfare (HEW), the parent agency for OE, who had gotten into the act because of a recent departmental ruling that all copyright matters had to be forwarded to top HEW officials for review. Sophar claims the attorney or another official—he can't remember which—told him HEW was questioning why the department should support research on copyright infringement when the department was itself the target of a copyright infringement suit.

How Suit Affects HEW

The suit in question had been filed in the U.S. Court of Claims in early March by the Williams & Wilkins Co., a small Baltimore, Maryland, publishing and printing company with 1967 sales of \$12.8 million. The suit charged HEW's libraries with copyright infringement through their photoduplication services. Alan Latman, attorney for the publishing firm, believes the suit will provide the first court test of whether photocopying by libraries is or is not permissible under the "fair use" doctrines that have governed U.S. copyright law.

Williams and Wilkins publishes about 40 biomedical periodicals, most of which operate on a narrow margin of profit and have circulations in the low thousands. According to a statement released by William M. Passano, company president, "uncontrolled photocopying is largely responsible" for the death of two of the company's journals, so Williams and Wilkins has been pushing for a system under which it could be paid "a royalty on each copy made to offset the loss in the sale of subscriptions, reprints and back volumes which photocopying brings about."

Passano said company officials tried to work out a royalty agreement with the National Library of Medicine and the Library of the National Institutes of Health but "were bluntly told that they would continue present practice until instructed otherwise by the courts," so the company filed suit demanding that the U.S. government pay damages for copyright infringement in the reproduction of eight specific articles.

Officials of CICIP have no doubt that the suit inadvertently brought about the death of their project. Says Meyerhoff, the organization's president: "We were told everything was approved and then we ran head on into the legal department's objections. They couldn't see why OE should pay for research that might be used against them." Says Sophar: "I believe HEW doesn't like the way our research is coming out."

Charles B. Brown, an HEW attorney, scoffs at the idea that CICIP's research could prove useful to the suit. Brown acknowledges that he expressed "certain reservations" to OE officials about CICIP's first research report, but declines to say what these reservations were.

Lee G. Burchinal, director of information technology and dissemination in OE's bureau of research, says the decision to drop the project was made by OE and was not imposed from above by HEW headquarters. He acknowledges that the Williams & Wilkins suit was "an impinging factor" in discussions concerning the desirability of funding CICIP's research and that the suit was "obviously in the minds of people at HEW," but he asserts that the project was chiefly a victim of budget restrictions imposed throughout the department. He also says officials at both HEW and OE raised questions about Sophar's objectivity, contending that he wrote beyond his data and seemed to have "taken sides" on controversial and still unresolved legal questions.

Whatever the reasons for dropping the research, CICIP's failure to win another contract apparently means the end of the organization. "We have no funds left, and all hope is gone," says Sophar. In the past, CICIP has relied heavily on contributions from industry. Its \$59,000 bankroll, now virtually exhausted, consisted of \$20,311 from OE, about \$35,000 from corporate contributions (chiefly Xerox and IBM), about \$3000 in membership dues from roughly 60 corporations and public bodies, and about \$1000 from sales of its report. The organization is reluctant to seek further support from industry lest it become a creature of its benefactors. "We need government support to keep clean," says Sophar.

At last report, such support was not forthcoming, and CICIP was painfully aware that reliance on government support can bring as many problems as it solves.—PHILIP M. BOFFEY