

a new budget for CERN's current program, Director General Gregory set forth figures that called for an operating budget of \$51.1 million in 1969; \$54.2 million in 1970, and \$56.8 million in 1971. Whereupon Brian H. Flowers, the British delegate, who is sympathetically regarded by his CERN colleagues as the kid whose parents won't let him come out to play, made a plea for spending less. There is a need for "short-term economy," he said, so as to avoid abrupt changes in growth curves. Sharply upward changes arouse the concern of government and of other fields of science. "We must keep the sympathy of the scientific community as a whole," he stated. "I am not asking for symbolic reductions. I ask that we recognize a new situation and that we meet it with a slower rate of growth to prepare for a new future."

Specifically, Flowers recommended that, instead of budgeting \$51.1 million for 1969, CERN settle for \$50.1 million, with \$52.7 million for the follow-

ing year and \$55.2 million to close the triennial budget.

West Germany, whose high-energy expenditures are said to be arousing some concern among scientists in other fields, stated its support for Flowers' proposal. France, which has conditioned its audience to expect anything, was flatly opposed.

At this point, Gregory took over. "Both cases," he announced, "have validity." Therefore, he proposed, let's split the difference between the originally proposed budget and the cuts recommended by Flowers. With the head-phones ringing with trilingual simultaneous translations of praise for statesmanship, so it was done.

As things now stand, CERN's 300-GeV machine lacks a formal go-ahead decision, since the participating nations must each ratify a new convention for the accelerator laboratory. Still to be selected is a site, since the CERN reservation on the outskirts of Geneva is too small to accommodate the new

machine. It is not likely, however, that the site selection process will generate battles of the sort that preceded the Weston selection. Machiavellian regional boosterism of that intensity is yet to be numbered among Europe's acquisitions from the New World. (Interestingly, Britain's study of whether to participate in the 300-GeV project included a report which held that the venture might easily cost the host country more than it brought in.) Then, a project director has to be appointed, and administrative relations with the present CERN laboratory must be worked out, since it has been decided that the two high-energy centers will be coequals under the governing Council. Finally, and most important, the rest of the money has to be raised. On all sides, however, there is ample confidence that CERN is on the way to getting its 300-GeV machine, and plans are going ahead on the assumption that construction will start in the latter part of 1970.—D. S. GREENBERG

## Federal Laboratories: Report Asks More Interagency Research

Mission-oriented federal laboratories have been reproved by a House of Representatives subcommittee for sins of omission. Criticism is directed, not at the scientific performance of the federal labs, but at the policies under which they operate and at their failure to do much interagency research or to deal effectively with great public problems such as environmental pollution and crime.

The criticism is contained in a report, "Utilization of Federal Laboratories," \* released Sunday by the House Science and Astronautics Committee's subcommittee on science, research, and development, which is headed by Representative Emilio Q. Daddario (D-Conn.). The report is based on 6 days of hearings held in March and April.

The report argues that the leveling off of the federal research budget since

1966 makes it more important than ever that the federal laboratories be used effectively. (Out of the roughly \$17 billion in federal R&D funds spent in fiscal 1969, an estimated \$3.5 billion went to federal labs.)

The committee reserves some of its sharpest comment for the "let's build another laboratory" syndrome which, it finds, afflicts federal planners very often when a new agency is created or an existing agency starts a new program.

The cure that the subcommittee favors is the expansion of "cross-agency research" in existing labs. And a major part of the report is devoted to a discussion of the policies which have given rise to the present situation, which in their view is unsatisfactory.

The committee finds that the laws, Executive orders, and other directives which bear on the matter do generally encourage the sharing of major equip-

ment and facilities. But, as is so often the case with government-wide coordination of a scientific activity, responsibility is dispersed—shared, in this case, among the Bureau of the Budget, Office of Science and Technology (OST), Federal Council for Science and Technology and its Committee on Federal Laboratories, and the agencies which operate the labs.

The report recommends that the Bureau of the Budget and the Office of Science and Technology collaborate in issuing a "current restatement of policy for interagency use of Government laboratories so as to bring together in one coherent statement the present collection of law, Executive orders and other directives."

Another, much bolder, recommendation is that the Bureau of the Budget and OST arrange "to clearly and vigorously promote the effective use of Federal laboratories and to monitor agency performance. The responsible official or office would: (1) investigate and furnish advisory opinions to agencies requesting funds for new laboratory facilities as to the feasibility of obtaining the desired research and development from existing Government laboratories; and (2) appraise agency decisions about interagency use of laboratories."

\* Copies of the report may be obtained from the House Science and Astronautics Committee.

Much of the expanded responsibility proposed by the subcommittee would fall to OST. The subcommittee rationale, in part, is that so many programs now cut across agency boundaries—examples are those dealing with air and water pollution problems—that the responsibility for coordination should be assumed by a science agency with the relative detachment of OST. But the force of this recommendation lies in the implied use of the Executive's budgetary powers to influence how and where research is to be performed.

If implemented aggressively, the subcommittee's recommendation would result in a centralization in the Executive of planning power for federal science which would probably lead to a rebellion in the congressional committees linked to the science-supporting departments. The Bureau of the Budget's power is considerable and is seldom openly challenged, probably because it is used subtly and selectively. More open use of the power would doubtless cause a sharp reaction.

OST has declined such proffered power in the past, and, as the report notes, OST director Donald F. Hornig, in the hearings, made it clear that he did not favor this committee proposal.

The chief obstacle to interagency use of government lab facilities, said Hornig, is the difficulty of determining "when it is appropriate to use facilities in other agencies when this is the best procedure as opposed to contracting it out or building a new facility. . . . The principal problem is that of the technical management in the agencies." Hornig, in short, thinks that better management and better managers is the answer, and that OST should help create more efficient mechanisms for increasing interagency use of the labs. But he does not want OST saddled with oversight tasks likely to convert it into an operating agency rather than a relatively small and footloose advisory office.

The committee, however, is unlikely to give up its wish to see the creation "of policies and the means of carrying them out which are strong enough to deal with the centrifugal forces of present Federal organization."

As coordinator of efforts to advance interagency research, the Federal Council for Science and Technology's Committee on Federal Laboratories would seem a logical candidate. But the committee has dealt mainly with problems of internal management rather than

with the issues of duplication of research, setting of research priorities, evaluation or rating of lab capabilities, or problems of interagency use. Bold initiatives should probably not be expected from the committee, whose members, like the members of their Federal Council parent, owe first loyalty to their agencies.

It is very doubtful that the interagency research problem will be solved by a policy coup or major administrative realignment. But it is possible that several subcommittee recommendations in the direction of increased flexibility for the federal laboratories could improve the situation if put into effect.

The report recommends that laboratory directors be given greater latitude.

The major suggestion is that a modest percentage of the budget come in the form of funds to be used, at the discretion of the director, for "forward-looking research," making possible "seed efforts," and for research that relates to "national problems." (The subcommittee spent a day of its hearings looking into the application of science and technology to law enforcement and crime control. The report asks that the Department of Justice be added to the membership of the Federal Council for Science and Technology so that it can "share experience in managing research programs." It also urges federal labs to expedite research and development relevant to crime control.)

## A POINT OF VIEW

*Excerpt from an article by Eric Solomon, professor of English at San Francisco State College, which was published in the 30 September issue of the Harvard Alumni Bulletin.*

Student activism, in all its phases, does indicate a strong force for change—change particularly in the roles of the faculty. To be curt and provocative, let me say that I believe firmly that within a decade in most public and many private institutions, students will share, to a greater or lesser extent, in all—repeat all—the decision-making procedures that affect their academic lives. Yes. Curriculum and personnel decisions. Courses and tenure. Coaches and presidents. To me, the overwhelming question is whether the university will move toward this new situation openly, carefully, working with the students through the immensely complicated problems involved, gaining lead-time with the atmosphere of mutual trust created; or whether the institution will fight the process, move *too* carefully, thus filling the road to the end of the decade with confrontations, suspensions, firings, police actions, resignations, and the other results of polarization—and, I would venture, ending with decisions arrived at without proper thought. In both cases, the result will be similar, but the nature of the institutions will be very different. Really, the answer depends on the faculty. . . .

There remain obvious built-in threats from radical shifts in the institutional power base. For many a faculty member, the split role of world-esteemed authority in his field and, at the same moment in time, co-equal on a curriculum committee with a twenty-year-old college junior, would touch on the ridiculous. Yet such split roles—scholar-teacher, high intellect-low salary—have long been a part of university life. More difficult, I assume, is the problem that the faculty is a self-selected group of adults who have accepted the nature of academic institutions as they are. Self-selected in that, for each faculty member, the undergraduate experience was not sufficiently frustrating to thrust him into professional paths leading away from the academy. Given this built-in tolerance for the *status quo* by such a refusal of the gambit of departure, many faculty members, no matter how good their wills, must finally be distressed by students who not only can't stomach the institution as it is but also refuse simply to go away. . . . There will be no dearth of identity crises. . . .

The report suggests that bureaucratic rigidities should be relaxed—for example, by exempting staff working on interagency problems from agency personnel ceilings. And the subcommittee urges that the “layering” of research management in many agencies be reduced so that lab directors would have a more direct line to top agency officials. Although nowhere implying that it favors a complete embargo on the creation of new labs, the subcommittee is committed to the proposition that “interagency work is a viable and attractive alternative to building new labs.”

Some critics argue that new labs attract the ablest and most adventurous scientists and administrators and that many federal labs are perpetuated for the wrong reasons. The report indirectly acknowledges this by calling for the development of techniques by which the performance and productivity of federal laboratories can be appraised. While no generally accepted method of evaluating or rating labs exists, the subcommittee notes that most agencies do have methods of appraising the work of their R&D contractors and that “some carryover should exist for these appraisals.”

#### Variation in Labs

The level of discussion in the report is very general. Federal laboratories vary greatly in size, purpose, quality, and the political influence of the constituencies interested in them, and it is risky to lump them together. Also, there is, perhaps, too little discussion of the process by which decisions are made on whether research is to be performed in federal labs, in federal contract research labs like RAND and the Jet Propulsion Laboratory, or in private laboratories.

In the main, the committee follows the policy lines for contracting for R&D that were laid down in 1962 by the high-level committee headed by David E. Bell, then director of the Bureau of the Budget. The Bell Report defined the problems more clearly than they had ever been defined and urged that criteria for assigning research be developed, to insure that the research be performed efficiently and that national scientific resources, public and private, be strengthened. The new Daddario report indicates both that congressional awareness of these problems has sharpened and that the problems are still there.—JOHN WALSH

## APPOINTMENTS



E. J. Stahr



C. A. Newland

**Elvis J. Stahr**, former president of Indiana University and former Secretary of the Army during the Kennedy Administration, to president of the National Audubon Society. . . . **Chester A. Newland**, professor of public administration at the University of Southern California, to director of the Lyndon Baines Johnson Library. . . . **John S. Steinhart**, a staff member of the Carnegie Institution of Washington in the department of terrestrial magnetism, to the staff of the Office of Science and Technology in earth sciences; also at OST, **Bernard B. Berger**, on leave of absence from the University of Massachusetts where he was director of the Water Resources Research Center, will become a staff member concerned with water resources research. . . . **Andrew Shonfield**, director of studies at the Royal Institute of International Affairs in England, to chairman of the Social Science Research Council there. . . . **James H. Cavanaugh**, director of the Office of Comprehensive Health Planning, Health Services and Mental Health Administration, Department of Health, Education, and Welfare, to director of the newly established Office of Planning and Program Coordination at HEW. . . . **John W. DeWire**, professor of physics at Cornell University, to associate director of the university's laboratory of nuclear studies. . . . **Arthur T. Hertig**, chairman of the department of pathology and professor of pathological anatomy at Harvard University Medical School will keep his professorial position and become the chief of the pathobiology section at the New England Regional Primate Research Center. . . . **J. V. Slater**, associate professor of the School of Public Health at the University of California, Berkeley, to head of the department of biological sciences at Michigan Technological University. . . . **Rene H. Miller**, professor of flight transportation at Massachusetts Institute of Technology,

to head of the department of aeronautics and astronautics at M.I.T. . . . **James W. Fisher**, professor of pharmacology at the University of Tennessee Medical School, to chairman of the department of pharmacology at Tulane University School of Medicine. . . . **E. W. Titterton**, dean of the Research School of Physical Sciences in the Institute of Advanced Study of the Australian National University, to director of the school. . . . **Kenneth B. Castleton**, dean of the University of Utah College of Medicine, to vice president for medical affairs at the university. . . . **Ernest D. Klema**, professor of nuclear and science engineering, Northwestern University, to dean of the college of engineering, Tufts University.

## RECENT DEATHS

**Ernest T. Dewald**, 77; professor emeritus of art and archeology and former director of the Art Museum at Princeton University; 5 October.

**Richard F. Humphreys**, 57; president of The Cooper Union for the Advancement of Science and Art; 8 August.

**Gladys M. Mateyko**, professor of biology at New York University and an expert in cancer research; 11 October.

**Roy Overstreet**, 65; professor of soil chemistry at the University of California, Berkeley, and soil chemist for the Agricultural Experiment Station; 8 October.

**Mabel C. Paterson**, 41; associate professor of zoology, Eastern Illinois University; 27 August.

**Paul Pinchuck**, 32; assistant professor of biochemistry at the Jefferson Medical College of Philadelphia; 29 September.

**Theodore C. Schneirla**, 66; curator in animal behavior for the American Museum of Natural History; 20 August.

**Walter M. Scruggs**, 65; professor of zoology and former director of the division of life sciences, Eastern Illinois University; 22 September.

**Helen F. Smart**, 77; a former bacteriologist for the Department of Agriculture; 10 October.

*Erratum:* In the report “Allergic encephalomyelitis: passive transfer prevented by encephalitogen” by S. Levine *et al.* (13 Sept., p. 1155), by error, no value was indicated in Table 1 (p. 1156) for rats treated with 2.0 mg of basic protein 6 hours after passive transfer. Four rats were actually treated in this manner and all had zero EAE scores.

*Erratum.* In the Books Received column, 20 September, the price of *The Beetles of the United States*, published by the American Entomological Institute, was listed incorrectly; the price is \$25.