most zone. The purpose of the buffer zone controls was to keep weevils, which are known to be able to fly distances of up to 50 miles (at the least), from migrating into the core area. The pilot project was to cost $5.2 million, with the industry contributing about $1 million and the federal government nearly all the rest.

The test area selected was considered unusually challenging because the cotton fields were generally small and often surrounded by high trees, making it difficult to apply insecticides from aircraft. In addition, the fields were frequently tended by illiterate tenants or part-time farmers, with the equipment needed for proper in-season control of boll weevils often lacking. The project sponsors believed that if the boll weevil were eliminated from the core area, this would indeed demonstrate the feasibility of eradicating the weevil from the entire cotton belt.

The pilot project ended last 10 August, about 2 years after it had begun; shortly thereafter, the eradication committee concluded that the project had demonstrated the feasibility of eliminating the boll weevil. The fact is, however, that the results were ambiguous enough to allow either the optimist or the pessimist in the matter of boll weevil eradication to nourish his conviction.

The project team, using sampling techniques, could find an infestation of adult weevils in only one of the 236 fields in the core area during the final week of the test, although punctures made by female weevils in laying eggs were found on a few cotton squares in several fields (none contained fertile eggs). According to project scientists, the one isolated infestation and the evidence of oviposition punctures could have come from migration of weevils into the area. Also, they contend that, even if a few wild female boll weevils should survive or hatch out under such circumstances, they would mate with sterile males and thus fail to reproduce.

A special review committee of the Entomological Society of America, invited by the eradication committee to evaluate the project, was decidedly cautious in interpreting the test results, however. This six-member review body, headed by W. G. Eden of the University of Florida, was divided as to whether the technical feasibility of eradication had been demonstrated. But the panel was unanimously of the view that the time had not yet come for a massive eradication effort. ". . . [W]e have reservations until such time as currently available suppressive techniques have been improved and collectively tested in different geographical and ecological areas," it said.

The panel called particularly for improvements in the mass-rearing and sterilization of boll weevils (during the experiment the sterilization was only 98 or 99 percent effective), in the techniques of population surveillance, and in evaluating the relative effectiveness of the various suppressive methods. It expressed regret that the core area had not been larger and that the experiment had not run longer.

In the panel's view, the *technical* problems associated with an eradication effort are likely to be less difficult than the *operational* problems. A prime case in point was the project team's failure to discover and treat one 2-acre plot of cotton until near the end of the second growing season. It turned out that the farmer who owned this

A New Look at Federal Science

The National Academy of Sciences' (NAS) governing council has established a blue-ribbon committee to develop recommendations on how the relationship between science and techology and the federal government can be improved. Chairman of the committee is James R. Killian, Jr., who, during the Eisenhower Administration, was the first to hold the post of presidential science adviser.

Those involved in the effort emphasize that the committee is not attempting to reconstruct the White House science advisory machinery which was dismantled last year. The aim is a broader one of suggesting improved means by which scientific and technical information and advice can be provided to federal operating agencies and the Congress as well as to the White House.

An obvious attempt has been made to reassure the Administration that the committee's intentions are not hostile. Killian is among the ranking elders of the scientific community but has not figured personally in the tensions that have arisen between scientists and the present Administration and the previous one. The two vice-chairmen of the committee are Emanuel Piore, former IBM vice president for research, and Kenneth S. Pitzer, a distinguished chemist with experience as a university administrator, who is now a professor at Berkeley. Most members of the committee* named so far are prominent scientists or science administrators with past close connections with federal science, but only a few are mainly identified with the now defunct White House Office of Science and Technology and the President's Science Advisory Committee.

Killian made the following comment on the purposes of the committee:

> The committee has been appointed by the Council of the NAS to review and evaluate ways in which science and technology provide information and assistance to both the executive and legislative branches of the government. The committee will explore opportunities by which this essential service can be strengthened and improved in the future in view of the increasingly vital and humane role science and technology must play in serving the changing needs of our society. The committee will seek to assess present organizational arrangements, recognizing that new circumstances have already created new needs. In the course of its work, the committee will consult with leaders in both branches of government and in the scientific and technical community.

Killian is known to take the view that the committee should make a concentrated, short-term effort, and not, for example, commission papers on all aspects of the problem and engage in extended deliberations. The committee is expected to report in 4 to 6 months; the form of the report has not been decided upon.—J.W.

* Other members of the committee are Graham T. Allison, Harvard; Ivan L. Bennett, Jr., New York University; Harold Brown, Caltech; James B. Fisk, Bell Labs; Robert C. Gunness, Standard Oil of Indiana; Edwin H. Land, Polaroid Corp.; Franklin A. Long, Cornell; Donald B. Rice, Rand Corp.; James Tobin, Yale; Charles H. Townes, Berkeley.