plead their case. Also in growing numbers, states and regions are lobbying for federal research support. Colorado, for example, is seeking to become the site for the 800- to 1000-Bev accelerator now in the early stages of design at the Brookhaven National Laboratory. And multitudes of non-space researchers know just what they would do if they could get their hands on some of that moon money. But, despite these signs of financial agitation, the dominant impression is that the scientific community is not moving toward a dogfight over the division of federal support.

In part this can probably be attributed to the fragmentation of federal support among numerous federal agencies, and the consequent lack of any battlefield where, for example, the biologists might have it out with the chemists. It is, in fact, far easier for subdivisions of a discipline to struggle against each other for the favor of the agency that provides the bulk of support for the overall discipline. A case in point would be the physicists who lobby against each other for shares of the Atomic Energy Commission's physical research budget.

But it isn't only the lack of a suitable battleground that is helping to keep the peace among the disciplines. Whether because of timidity or statesmanship, the scientists who are concerned about these matters, and who are in a position to try to do something about them, seem to have very little stomach for waging the sort of Washington lobbying campaigns that other segments of American society indulge in when dissatisfied with their federal share. And, once the Academy reports are on record, it is going to be increasingly difficult to make a row—unless the row happens to be in line with the Academy's findings.

The reason for this is that, with remarkable rapidity, Kistiakowsky's Science and Public Policy Committee has become very well connected in Washington—particularly with Congress, which heretofore was off the beaten track for the leadership of the scientific community. The scientists originally came to Washington at the invitation of the Executive agencies, which treated them with courtesy and generally refrained from dragging them into any messy political business. When Congress beckoned, the reaction of many scientists was that Capitol Hill was too dominated by the philosophy of "what's in it for my district" for cool scientific advice to have any place there. However, it appears that, as Congress started to snipe at federal support for science, the leadership of the scientific community was forced to the conclusion that if it was painful to work closely with Congress, it might be even more painful not to work with it. One consequence of this shift in attitude was a recent decision of Kistiakowsky's committee to accept an invitation to provide scientific and engineering counsel for the House Science and Astronautics Committee headed by Representative Emilio Q. Daddario (D–Conn.).

Linked to Congress with this formal tie, the Kistiakowsky Committee stands as a unique scientific bridge between the two branches of government, and its views on federal support for science are very likely to be extremely influential. Interestingly, the first questions directed to the Academy by Daddario's Committee fall within the subject area of the studies soon to be forthcoming. They are: (i) What level of federal support is required to maintain a position of leadership for the United States through basic research in science and technology, and what are the economic, cultural, and military applications? (ii) What judgment can be reached on the balance of support now being given by the federal government to various fields of scientific endeavor and on adjustments that should be considered?

The questions, which have been turned over to an *ad hoc* committee headed by Kistiakowsky, are about as precise as the question of what part of a family budget should go for recreation. But there is a saying that you can't beat something with nothing, and once Kistiakowsky and his group have come up with their answers, it will be tactically difficult for anyone who disagrees to match them in prestige, data, or easy access to the political councils that will ultimately make the decisions.

—D. S. GREENBERG

Politics: Johnson and Goldwater Scientist Groups Show Differing Views on Civilian Technology

Outside of matters related to weapons development, the scientist and engineer groups that have taken sides in the presidential election have sounded very much alike when they have addressed themselves to science and technology.

There now appears to have developed one additional area of difference, and that involves the role of the federal government in what has come to be referred to as civilian technology—that is, research and development of nonmilitary and, usually, commercially oriented products. This difference showed itself last week when Scientists and Engineers for Goldwater–Miller issued a statement of principles which declared that "our government should confine its major research activities to projects which private industry cannot be reasonably expected to undertake."

By contrast, just a few days before, Senator Humphrey, the Democratic vice-presidential candidate, addressed a Washington, D.C., rally of Scientists and Engineers for Johnson–Humphrey and stated support for closer ties between government and industrial research. Humphrey was speaking for himself and the party, but Scientists and Engineers for Johnson–Humphrey had a hand in drafting his speech, and many of those in the leadership of the organization have long been associated with efforts to have the federal government stimulate industry to expand its research and development activities.

"We will not—let me assure you—be deterred by ill-informed denunciations of government planning or other bogies of reactionary minds," it was stated in Humphrey's prepared text.

"Industrial clinics," he said, "taking advantage of the resources in engineering, business economics, and other academic specialties possessed by our fine universities, can be established on campuses around the nation. These clinics can serve the plurality of industrial needs in different regions of the United States."

The candidate's proposal is, of course, derived from the now-defunct Civilian Industrial Technology program which the Department of Commerce unsuccessfully tried to sell to Congress during the Kennedy administration. And, considering that industry, which is the source of the bulk of scientist-engineer support for Goldwater, was instrumental in defeating the program, it is not surprising that the Democratic and Republican scientist-engineer groups should split on this particular issue.

In other respects, however, they seem to remain in agreement. The Goldwater group's statement of principles opened with the assertion that "our continuing and great national need is for basic research in science and engi-

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neering, a major factor in progress and prosperity." It did go on to add a bit of caution by quoting President Eisenhower's Farewell Address warning that " 'the prospect of domination of the nation's scholars by Federal employment, project allocations and the power of money is ever present, and is gravely to be regarded.' " And it also quoted Eisenhower's assertion that " 'in holding scientific research and discovery in respect, as we should, we must also be alert to the equal and opposite danger that public policy could itself become the captive of a scientific-technological elite.' "

It is not in style for Democrats to quote Republican Presidents approvingly, but it is not unlikely that Scientists and Engineers for Johnson–Humphrey are in agreement with the substance of Eisenhower's views.

In releasing its statement of principles, Scientists and Engineers for Goldwater also expanded the list of members which was carried in this space on 9 October. The additional members are:

Roger Adams, professor emeritus and former head of the chemistry department, University of Illinois;

R. L. Anthony, professor of physics, Notre Dame University;

John C. Bailar, head of the department of inorganic chemistry, University of Illinois.

Carl Barnes, former vice president for research, 3-M Company;

Robert R. Bennett, program director, Space Technology Laboratory;

F. N. M. Brown, professor of aeronautical engineering, Notre Dame University;

William Burrows, professor of microbiology, University of Chicago;

Carl J. Christensen, professor of chemistry, University of Utah;

George L. Clark, professor emeritus, department of chemistry, University of Illinois;

Gilmore D. Clarke, consulting engineer, Gilmore D. Clarke–Michael Rapuano;

Walter A. Compton, vice president, Miles Laboratories;

A. Scott Crossfield, aeronautical engineer, North American Aviation;

Ray P. Dinsmore, former vice president, Goodyear Tire Company;

Roy Dorcus, former dean, school of life sciences, University of California, Los Angeles;

Louis Dunn, consultant to Aerospace Industries;

Max Dunn, vice president, International Chemical & Nuclear;

Lawrence H. Flett, consultant, Western Reserve;

W. M. Flowers, president, Sinclair Research, Inc.;

H. Close Hesseltine, professor, obstetrics and gynecology, University of Chicago Medical School;

James C. Hodge, president and director, the Warner-Swasey Company;

E. C. Hughes, vice president for research, Standard Oil Company of Ohio;

Carl Keyser, professor of mechanical engineering, University of Massachusetts;

Sidney D. Kirkpatrick, consulting editor, McGraw-Hill Book Company;

Guenther W. Lehmann, design engineer, Lockheed, Missile and Space Division;

Dewey M. McCain, head, department of civil engineering, Mississippi State University;

Admiral Ben Moreell, former president, Jones-Laughlin Steel;

Daniel E. Noble, executive vice president, Motorola, Technical Products Division;

John K. Northrop, founder, Northrop Aviation;

Jan Oostermeyer, chemical consultant and president, Applied Solar Energy Association;

George L. Parkhurst, vice president, Standard Oil Company of California;

Abbott L. Penniman, Jr., consulting engineer;

Roland I. Pritikin, ophthalmologist;

Louis Ruthenburg, former chairman of the board, Servel, Inc.;

G. Frederick Smith, professor emeritus, department of chemistry, University of Illinois;

Cornelia T. Snell, research chemist and author;

Foster Dee Snell, chairman of the board, Foster Dee Snell, Inc.;

Lincoln Thompson, president, Raymond Engineering Laboratories, Inc.;

J. Carlton Ward, Jr., former president, Fairchild Aircraft;

General T. A. Weyher, dean, school of engineering, University of Miami, Coral Gables, Florida;

J. C. Witt, former director of research, Portland Cement Company;

Lt. Gen. Laurence C. Craigie, vice president, American Machine & Foundry;

John H. Nair, consultant, Chemetron Corporation.—D.S.G.