Science and the News

Money for Space: The Program's Managers Fear the Public Does Not Understand the Issue

The space budget next year will be about double what it is this year: about $3 to $3.5 billion compared to $1.7 billion during the current year. The figures are a bit higher than those talked about when the President proposed the accelerated program last spring, but they are not surprising, and Congress will almost certainly accept them without too much fuss. The Administration put a great deal of emphasis last year on the point that it would make no sense for Congress to provide the money for the first year of the accelerated program unless it were prepared to follow through with the even larger appropriations that would become necessary in succeeding years to keep to the accelerated time schedule. This did not put Congress under a legally binding commitment to continue support for the program, but as a practical matter the commitment was implied when Congress put up the first year's appropriation, and the Administration is likely to get the money it asks for. Nevertheless, there is a good deal of anxiety within the space agency and General Shriever's Air Force Research and Development Command, which has charge of most Defense Department space programs, that the public does not really understand where the money for space is going, and why it is, in the Administration's view at least, well worth spending.

At the American Rocket Society meeting in New York last month, Shriever, Wernher Von Braun, and Hugh Dryden, chief scientist at the Space Agency, all gave pretty much the same reply when they were asked to wind up a panel discussion of the space program by suggesting what they would wish for the space program above all in the coming year: all three men spoke of a hope that the public would come to understand what is involved in the space program, for without this, they suggested, continued support for the program would be threatened. What bothered them was that a great many people seemed to think of the entire space program as an elaborate stunt in which $20 billion would be spent to put one man on the moon. All the panelists were plainly concerned that the public does not understand the difference between what would be the overt sign of the project's success—that is, sending a man to the moon and bringing him back—and the thing that is really being bought for the $20 billion: the major advances in science and technology that will make the first trip possible. The interesting thing about this problem is that although the public misunderstanding seems to be widespread, it does not present any serious obstacle as yet to the Administration's getting the money it wants for the program.

Congressmen concerned with the space program regularly warn the Administration that they are getting a good deal of mail from voters who think the project is a stunt and not worth the money, but the lack of understanding has an almost secret status: there is no real public debate on the wisdom of the accelerated program, and no sign that any is developing. Last year the program swept through Congress with no difficulty at all, despite the concern expressed by a number of important Congressmen, who said they were having trouble explaining the program to their constituents.

What has happened is that there is an overwhelming coalition of political forces behind the space program, so overwhelming that the doubts that exist among the public are almost never articulated by a source commanding the attention of a large share of the public. The space program has come to be accepted by all the major political factions as an aspect of the Cold War. The Kennedy Administration is under attack for not pursuing the Cold War with sufficient vigor. The result is that even its strongest opponents, since they accept the assurances of the Defense Department that developments in space will have major military implications, have no desire to exploit the public's misunderstanding of what is being bought for the $20 billion that will eventually be spent on the moon program. The space officials are anxious to clear up the public's misunderstanding, and so to remove even the possibility of its being exploited, but although their anxiety is understandable, they really do not seem to have much to worry about.

In all this former President Eisenhower occupies a peculiar position. He is the one major political figure in the country who *is* outspokenly against the space program. Last week he told an audience at Case Institute of Technology that he could not understand why the Administration, at a time when the federal budget seemed to be getting out of hand, should choose to challenge the Russians to a race to the moon. The remark struck a sympathetic note for the audience, or at least part of the audience. It brought the only outburst of applause that came during his 30-minute talk.

A couple of weeks earlier, while campaigning for the Republican candidate for mayor of New York, Eisenhower had sought to ridicule both the space program and the Peace Corps by suggesting that as long as the Administration was so interested in experiments in space, it might try sending the Peace Corps to the moon. About the same time, the New York *Times* printed a long story summarizing the results of a series of interviews with the general and members of his staff. The *Times* reported that Eisenhower felt the sole reason for the moon program was that the Administration was looking for any excuse to spend more money.

But there has been no sign at all that Eisenhower, despite his prominence, has succeeded in arousing any significant popular opposition to the space program, despite fears of the space officials that there is a good deal of latent opposition around just waiting for a leader to bring it to life. This is

not really surprising, for at the moment Eisenhower is a captain with no lieutenants. Like an advertising man who wants to sell some toothpaste, a politician who wants to sell an idea has to keep repeating it over and over again, and see to it that the same idea is echoed over and over again by his followers. But there is no one to pick up Eisenhower's lead, either among other major political figures or in the mass-circulation press, for there is no significant faction in American politics that shares his view that the Administration has no better reason for supporting the space program than as an excuse to spend money.

What public discussion there has been on the space program has not been on the overall question of whether too much emphasis is being put on the whole business, but on matters of detail, such as the technical question of how to get to the moon most efficiently and the administrative question of how to deal with the sometimes conflicting jurisdictional claims of the civilian Space Agency and the Air Force.

On getting to the moon, Von Braun's longstanding advocacy of the rendezvous technique has been gaining ground. Rendezvous involves launching the final moon rocket and the passenger capsule in two or more segments, having them join together while in orbit, and from orbit launch themselves toward the moon. The alternative is to use one very large rocket to send the vehicle directly to the moon. A decision has been made to push about equally in both directions for the time being. Until now the major emphasis has been on the direct approach and the necessary development of a big rocket to carry it out.

On the jurisdictional question, the Air Force has been pushing hard for a greater role in the space effort. So far it has been getting no noticeable support from the Department of Defense, but a good deal of support from Lyndon Johnson, whose duties as vice president include the chairmanship of the Space Council. The details of the coming federal budget will give an idea of what success, if any, the Air Force has had in pressing its view that no useful line can be drawn between the military and civilian space programs, and therefore that nothing should be considered automatically unsuitable for development by the Air Force. The civilian Space Agency, of course, takes a different view of the situation.—H.M.

Overhead Costs: Intangibles Make It Difficult To Compute Cost of University Research

Officials of the University of Chicago reacted angrily last week to a report that the university may turn a profit under a new federal contract for operation of Argonne National Laboratory.

The possibility was stated in a New York *Times* report which revealed that the Atomic Energy Commission had agreed to give the university a "management allowance," in lieu of the overhead allowance provided for in the expiring contract. Under the old contract, the university received about $500,000 annually for the indirect, or overhead, costs incurred in operating the $50-million-a-year laboratory. The university has repeatedly complained, as have almost all institutions doing research for the government, that this overhead allowance is niggardly and fails to reflect a considerable portion of the "hidden" costs of research.

In negotiations for the new contract, the University of Chicago sought an overhead allowance of $1.6 million. This figure, according to university officials, was based on the general expansion of university activities since the contract was last under review, and on the university's contention that the AEC had been fairly miserly last time in its interpretation of indirect costs related to Argonne National Laboratory.

The AEC's accountants, however, saw justification for an increase of only $100,000 in the current allowance. The university then proposed that point-by-point accounting be abandoned, and that the university be given a lump allowance of $1.2 million. This proposal was accepted by the AEC, reportedly by a 3 to 2 vote of the commissioners. The attendant news report stated that the AEC "has adopted a policy opening the door for universities to make a profit on their management of the commission's national laboratories." To this, university officials reply that even the increased sum is inadequate and that the suggestion of profit is preposterous. They also point out that the University of Chicago is by no means the pioneer in receiving a management allowance from the AEC. In past years, this provision has been written into AEC contracts with the University of California, which operates Los Alamos Scientific Laboratory and the Lawrence Radiation Laboratory, and Associated Universities, Inc., which operates Brookhaven National Laboratory.

The differing points of view on overhead costs illuminate the fact that this computation is probably as much an affair of the heart as it is of the accountant's tape. Underlying the issue, in this and similar cases, are conflicting concepts of the nature of university research. Government budget officers, interested in making their funds go as far as possible, tend to view university research as something that, financially, at least, can be isolated from the overall university environment. University budget officials, seeking to make their funds go as far as possible, take a broader view of just how much indirect support the university environment affords specific research efforts.

The uncertainties of what constitutes justifiable overhead costs are matched by the uncertainties of what criteria should be applied in computing them. In theory, the basic document is an equally damned and praised Bureau of the Budget publication which recommends, but does not require, the application of certain standards. Standing aloof from the bureau's recommendations are the Department of Health, Education, and Welfare and the National Science Foundation. Health, Education, and Welfare limits its overhead costs on grants and contracts to 15 percent, a figure which is widely considered to be inadequate, but which strikes the fancy of Representative Fogarty, chairman of the appropriations subcommittee that passes on HEW funds. The National Science Foundation pays 20 percent, but there are indications that NSF is coming to the conclusion that this figure is too low, and it may provide for an increase in the near future.

Just what other departments and agencies pay is not easily arrived at. One government official who is familiar with the practices of a number of federal agencies contends that, for a given piece of research, a university could find itself receiving over 70 percent in overhead costs from the Department of Defense, 20 percent from NSF, and 15 percent from HEW.

The Bureau of the Budget guidelines are looked upon by many university officials as completely to their liking, and their fervent wish is that budget officers would take the guidelines to heart. In the 22 pages of specifications for computing costs, sufficient latitude is present to justify a happy agreement