

appear that the Academy committee was not paying much attention to it, and since the AEC later announced that it will choose from the committee's list, it presumably isn't paying much attention either.

With geology and scientific productivity the basic values, other limiting factors inevitably followed in narrowing the choices for sites. Since scientific talent tends to cluster, the committee concluded that it would be advantageous to select a site near a center with existing strength in high-

energy-physics research and design. In the committee's view, this would make it easier to attract the people whose services are needed for designing and building the machine, but who themselves would not be able to benefit from it until it is in full operation, sometime in the early 1970's. Since 75 percent of the machine's users will be nonresident, the committee insisted upon relatively easy access to nationwide air connections. And for users in residence, as well as for the supporting staff, it specified the presence of a major uni-

versity nearby, where the residents might continue their studies and associate with scientists in other fields.

For those who might argue that this adds up to rather precious specifications for a relative handful of people who want the taxpayers to provide them with \$375 million, the committee answers that high-energy physics is a vitally important field of science, only a few people have competence in it, they are much in demand, and it would therefore be prudent, and, in the long run, most productive scientifically, to place the machine in what they will consider to be an attractive scientific setting.

Here we get down to some of the fundamental tensions between the basic research community and its governmental patron. Is science so valuable and so specialized in its requirements that society must support science on the terms of the practitioners of science? In general, science has pretty much had its own way, but as it becomes more costly and, at the same time, more closely associated with regional economic prosperity, there are increasing political pressures for science to compromise some of its demands.

It can be inferred that the Academy committee was not unmindful of these tensions and pressures. Since the Midwest has provided the most fervent regional agitation for a larger helping of federal research expenditures, it is not surprising that three of the six choices fall in that area. The choice of Brookhaven, in New York, was something of a surprise to *aficionados* of high-energy strife, since Brookhaven not only has what is now the most powerful machine but is undertaking a construction program to add to its energy; furthermore, Brookhaven has aspirations to build a 600- to 1000-Bev machine, which, according to one grand design of high-energy physicists, is supposed to come after the 200-Bev.

Nevertheless, Brookhaven figures in some of the many uncertainties to be resolved before ground is broken for the 200-Bev machine. Samuel Devons, chairman of the physics department at Columbia, has proposed a cost-cutting plan that would employ the present 33-Bev machine at Brookhaven as an injector for the 200-Bev. The plan failed to stir much enthusiasm in the AEC or in Associated Universities, Inc., the nine-university consortium that runs Brookhaven. But Devons' plan is a stripped-down, plain pipe-racks approach that attracts attention because it harmonizes with concern about the rapidly mounting costs of this field of

Education: Keppel To Leave HEW

Francis Keppel, Assistant Secretary of Health, Education, and Welfare (for education), will resign from the government in a few months, reportedly to join a new educational research organization being formed by Time-Life Inc. and the General Electric Company. As this was written, however, there still was no official confirmation of his resignation either from HEW or the White House.

Keppel, who was named Commissioner of Education in 1962 and an Assistant Secretary of HEW in September 1965 (*Science*, 31 December 1965), has been able to devote full time to his duties as assistant secretary since Harold Howe II took over the commissionership at the beginning of this year. As Assistant Secretary, Keppel is HEW Secretary John W. Gardner's principal adviser on education policy, and, as chairman of the Interagency Committee on Education, was expected to bring about better coordination of federal education programs.

It is as a key participant in developing new education programs and as a persuasive lobbyist for those programs on Capitol Hill that Keppel has made his principal contribution in Washington. For example, he played an important part in obtaining passage of last year's elementary and secondary education act—the first major general aid program ever approved—and of measures benefiting higher education.

Keppel is, by his own self-assessment, more of an idea man and advocate than he is an administrator. Accordingly, his former duties as commissioner would appear to have been more congenial than his current assignment, which is to see that the \$8.7 billion in education programs run by numerous federal agencies constitute a coherent federal effort in the field of education. Shortly after Keppel's impending resignation was reported last week, a HEW official was quoted anonymously as saying that he was not surprised at Keppel's decision. "He's been a man without a program," the official said.

The Gardner-Keppel-Howe triumvirate at HEW has been notable in that it has put at the controls of the national education effort three dedicated experimenters who are never satisfied with the status quo. Keppel, as dean of Harvard's School of Education, was a champion of educational reform long before becoming commissioner of education. Gardner came to HEW from his post as president of the Carnegie Corporation of New York, which has supported such important undertakings as James Conant's study of the American high school. Howe, also, has been identified with a number of innovative efforts, most recently as director of the Learning Institute of North Carolina, which has been concerned with such matters as the school dropout problem and racial integration of school faculties.

With Gardner and Howe remaining, Keppel's departure is unlikely to shake HEW's commitment to educational experimentation and change. However, it may well delay the task of improving the coordination of the overall federal education effort.—L. J. C.