long duration habitation in space and the use of a centrifuge to serve as a gravitational "control" in studying the effects of weightlessness. However, Smith says, NASA does not know "when, how big, or where" the centrifuge will be. There is no plan for a dedicated life sciences lab. And he is not optimistic about using the station in its man-tended mode. "The operational word in life sciences is 'life,'" Smith says, and life is not something that can be turned on and off or managed by robots. He speaks wistfully of the old Skylab module that died in the 1970s after a brief period of use. It offered an "effective" bioscience lab, Smith says, permitting extended visits to space long before the shuttle was launched.

Robert F. Sekerka, dean of the Mellon College of Science at Carnegie-Mellon University and chairman of a group of physical microgravity scientists who reviewed the station for the Space Studies Board, also holds a low opinion of NASA's plan. "You don't want to use a big hammer to kill a little rabbit," he says, yet that is what NASA is doing in building a station to carry out some microgravity experiments. A less expensive "free-flyer" capsule would be adequate—in some cases even better.

Anticipating this argument, perhaps, NASA officials suggested at the 21 March briefing that sensitive microgravity experiments could be run aboard the station before the crew moves in, during its "man-tended" period from 1997 to 1999. But Sekerka points out that if NASA is serious about this, it would have to build a new set of robotic devices to run the experiments remotely, and there are as yet no plans to buy such equipment. Sekerka likes the idea, though: "You would make lemonade out of a lemon if you could do that," he says.

What really troubles members of the Space Studies Board, however, is the staggering inefficiency of the project. "Suppose it has a useful lifetime of 30 years," Sekerka says. Assume that the initial cost is, as NASA claims, $30 billion, and that the lifetime operating costs are $100 billion—a reasonable extrapolation, according to Sekerka. "Then this turns out to be a million-dollar-an-hour proposition. As a taxpayer," Sekerka says, "I personally wonder whether it's worth it."

But the president and his staff have declared that the investment is worth it, for reasons other than any possible scientific rewards, and now the funding decision passes to Congress. Since NASA has obediently followed instructions for redesigning the station handed down by the appropriations committees last fall, the chances are that Congress will also approve.

■ ELIOT MARSHALL

For Rent. Suitable Creative Thinker

Immediate occupancy: Charming summer house in the village of Caputh on the shores of Lake Templin, near Berlin. Large garden. Forty square-meter living room. Great historical significance.

The state of Brandenburg is about to become the owner of Albert Einstein's beloved summer house—the only solid memento of the great physicist's life in Germany—and it is looking for a tenant.

The house cost Einstein and his wife, Elsa, their life savings of 60,000 marks (some 3 years' salary for a professor) when he had it built in 1929. "A disaster, but rather a nice one," was how Einstein described his "hut" at the time. For 3 years, it was to give him enormous pleasure. Although he could not swim, Einstein spent his time sailing on Lake Templin, a few minutes walk from the house. When pondering some knotty problem, he often failed to return to the house before dark. There was no telephone; instead Einstein relied on neighbors, who would take calls for the Nobel laureate and summon him by blowing on a trumpet.

Then, in January 1933, Adolf Hitler became chancellor of Germany. The Einsteins were away in the United States, where Albert was lecturing, and never saw the summer house again. Shortly afterward, the Nazi government confiscated his property and turned the house over to a youth organization of the National Socialist Party. Einstein's boat was advertised for sale in the local newspaper in 1934. After the war, the East German government offered Einstein no compensation for his losses.

The house seems to have been forgotten until the centennial of Einstein's birth in 1979. Then the East German Academy of Sciences, anxious to do the right thing, contacted Einstein's step-daughter Margot and received her approval for ownership of the house to be transferred to the academy. Their tenure, however, was not to last long. Thanks to German reunification, the East German Academy is about to be dissolved, putting Einstein's home in the hands of the state of Brandenburg.

One possibility for the house would be to turn it into a museum. Local villagers support the idea in the hope that it would bring in visitors and aid their depressed economy. But this is the one use that Einstein specifically forbade in his will—and the academy has already promised Einstein's heirs that they will obey his wishes.

Jürgen Dittberger, state secretary in the ministry of science of Brandenburg, says the state would like the University of Potsdam to take it over for a physics conference center. One snag: The University of Potsdam does not yet exist and plans for its creation will probably be on hold until Germany has sorted out its bills for the Gulf war.

Archiv für Kunst und Geschichte, Berlin

Archiv für Kunst und Geschichte, Berlin

Blowing in the wind. *Fifty years ago Albert Einstein pondered the problems of general relativity while sailing on Lake Templin, near Berlin. German physicists are now wondering what to do with his summer home there* (below).

The German Science Council, the Wissenschaftsrat, is now examining the problem. It is expected to recommend that land be bought near the house for a conference center and that the house itself be reserved for receptions and small seminars. The German-Jewish Foundation and the Hebrew University of Jerusalem have also expressed interest in taking over the property.

■ RICHARD SIETMANN

Richard Sietmann is a free-lance science writer in Berlin.