Now about 200 students, including the peace activists, are working on environmental problems.

The students have recruited 50 professors from a broad variety of disciplines to conduct twice-weekly seminars on environmental problems, with the university administration furnishing seminar rooms and other logistic support. Townspeople are active also, and a broad political spectrum is represented. The main reason for concern is obvious: Air pollution from lumber and paper industries sometimes shrouds Missoula in choking smog for days at a time. The concern existed before the teach-in was announced and will continue after it, says Dr. Gordon.

The same kind of concern is evident in urban areas. Dr. Ian McHarg of the University of Pennsylvania says every institution of higher learning in Philadelphia, as well as other groups, is involved in plans for the teach-in and related activities. "We have more volunteers than we know what to do with," says Dr. McHarg.

Cooperating in the Philadelphia effort are local television channels—which bring "gentle pressure" against industries unwilling to divulge information on pollution—the Chamber of Commerce, urban groups and even black juvenile gangs. "This is the first such nondivisive issue we've had here," says Dr. McHarg.

But Dr. McHarg admits that many of the volunteers cannot make up in enthusiasm what they lack in skills and knowledge in a field that requires more of both than the usual political activities. And whether the environmental issue is truly a unifying one is still moot.

Splits along the old lines will occur when radicals begin to tie the environmental crisis "to the same old general malaise caused by a system which puts profits in control," says a leader of the War Tax Resistance. "This will turn off the middle-class people."

And he adds that anything supported by such establishment figures as Sen. Gaylord Nelson (D-Wis.) creator of the teach-in idea, not to mention President Nixon, may fail to gain radical adherents.

Hayes admits, also, that efforts toward liaison with radical groups have been limited. A spokesman for the Mobilization against the War in Vietnam had not heard of the teach-in until asked about it.

But the environment issue is too powerful a weapon to be abandoned just because it is popular, and environmentalists are making a clear appeal to peace activists to stay with them.

"The people who pollute," says Dr. Gordon, expressing a sound radical dictum, "are the same ones who profit from the war." □

Shift in scene

For several years atmospheric scientists have been discussing the outlines of a plan for conducting a large tropical experiment in the Pacific Ocean as part of the Global Atmospheric Research Program.

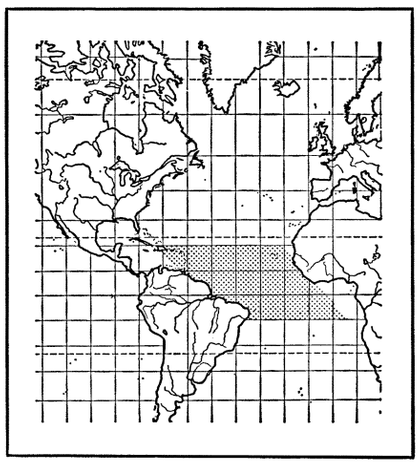
The international effort, now scheduled to begin no earlier than mid-1973, would attempt to achieve a better understanding of convection processes at work in clusters of tropical cumulus clouds, where large amounts of heat and moisture are transported up through the atmosphere. The experiment would also serve to check out some of the systems, methods and organizational machinery to be used during the first GARP global experiment some two years later.

A series of planning documents last year by the international GARP Joint Organizing Committee proposed a 6-million-square-kilometer area over the Marshall Islands in the Pacific for the most intensive observations in the tropical experiment. Last year's report of the U.S. GARP committee on United States participation (SN: 9/6, p. 185) went along with the Marshall Islands location. The region has a high frequency of tropical disturbances and is an area where cloud clusters undergo a wide range of development.

So it was quite a surprise when program officials gathered at a mid-March GARP planning conference in Brussels decided to switch oceans: the tropical experiment will be conducted in the Atlantic.

The basic problem was logistical. The United States and the Soviet Union were willing and able to participate in a tropical experiment wherever it was held. But many of the European countries, whose participation is essential, found themselves unable to take part in such a major field observation program halfway around the world. They enthusiastically supported an experiment in the Atlantic. Another objection was that there were no plans for a geostationary satellite to be in position over the Pacific at the time of the experiment—and an overhead space observing platform is essential for the effort.

The change in oceans will require some revisions in the nature of the experiment, but the effect of the change seems to be one that the scientists can live with. "All other things equal, I think the Marshall Islands would have been preferable," says Dr. Jule G. Charney of the Massachusetts Institute of Technology, chairman of the U.S. GARP committee. "But if we can understand the way things work in the Atlantic, we can understand them in the Pacific too."



Robert Trotter

Tropical experiment: To the Atlantic.

Continental effects are more pronounced in the Atlantic. The organization of tropical convection in cloud clusters occurs less frequently in the Atlantic. But clusters there are sometimes associated with easterly waves moving in from the African continent, and the study of these may prove fruitful. The exact area of the experiment will be selected later.

The tropical experiment will be carried out during a three-month period, between mid-1973 and the end of 1974. This is a slight slippage from earlier plans for 1972 or 1973. The exact period is to be designated by the fall of 1971. The experiment has to await the availability of a GOES geostationary satellite. The first is to be put into orbit over the United States in 1972. If all goes smoothly, a second one, for use over the Atlantic, may be launched by mid-1973.

There will be several polar-orbiting satellites, including one of the United States' Improved Tiros Operational Satellites, two of the Soviet Union's METEOR's, and possibly an experimental satellite of the United Kingdom's. France hopes to place a satellite over the tropical Atlantic in 1974.

As many as 24 fully instrumented research ships from eight countries may be available. "There was a tremendous amount of good will and agreement by the nations," says Dr. Joseph Smagorinsky, another American member of the Joint Organizing Committee. "The countries just couldn't wait to declare what they had to offer."

One remaining difficulty is in getting enough specially instrumented aircraft. "There just aren't many around," he says. □