Apollo: Calm to Come

As the Apollo program gets raked over the coals in the aftermath of the January 27 fire that killed three astronauts, policy makers are trying to see into the future to tell whether other programs are likely to be burned as a result. Despite its troubles, 1970 is still Apollo's target for a manned lunar landing. But with the increased emphasis on finding practical uses for satellites (see p. 412), many Federal agencies are hoping that Apollo's troubles will make more money available for earth-directed applications.

Might such funds result from a slowdown in manned flight programs in general and post-Apollo and Apollo Applications programs in particular? "Absolutely not," says Dr. Edward C. Welsh, head of the prestigious National Aeronautics and Space Council. In fact, he adds, just the opposite might take place; that is, a pulling-away of funds from satellite applications for Apollo.

The most likely occurrence, Dr. Welsh believes, is that neither will happen. Rather, the furor will subside and both areas will develop, neither one at the other's expense.

Dr. Welsh is a staunch supporter of the manned moon program. As recently as April 10, in the same week as the release of the Apollo accident investigating board's report (SN: 4/22), Dr. Welsh warned the Aerospace Medical Association that the U.S. must not abandon its efforts to be first on the moon. "We cannot afford such folly for even a minute," he said.

Apollo also has friends on Capitol Hill. "As far as the House committee is concerned," says Representative Edward J. Gurney, a Republican from the Cape Kennedy area of Florida and a member of the subcommittee investigating the Jan. 27 accident, "there won't be any stealing from Apollo to give to other programs."

But this does not mean that Apollo will not be radically changed. In fact, five astronauts told the House investigators last week that they will refuse to enter an Apollo spacecraft until its many shortcomings are corrected. To this end, said Astronaut Walter Schirra, who piloted Mercury 8 and Gemini 6 and was to have been the backup command pilot for the first Apollo flight, a mockup spacecraft is being fitted with noncombustible materials arranged to inhibit the spreading of a fire. "Pretty soon we'll start a fire deliberately in this mockup just to see how it might spread," Schirra said. "And I can guarantee you that if it does spread, we'll change the spacecraft again."

While the one Congressional subcommittee was chewing up the Apollo program, others last week were munching on NASA's proposed $5.06 billion budget, which includes $2.606 billion to complete the lunar landing and another $455 million for future expanded use of Apollo hardware. James E. Webb, head of the Space Agency, said that even if the budget is passed intact, it will be so spare that another major accident would force him either to revise the program or ask for more money.

Hemispheric Science

The technological gap which faces developing countries got special emphasis from the American chiefs of state during the meeting that ended in Punta del Este, Uruguay, last week.

The key ideas, in science as in other areas, were self-help and a pooling of effort.

The Presidents proposed formation of multi-national scientific and technological institutions which would benefit the whole continent. As in the Common Market concept, these regional centers would save duplication of effort and concentrate scarce resources.

Alliance For Progress

Latins jointly fight animal disease.

Instead of each country having its own small center for research in tropical agriculture, for example, an international center might be set up in Brazil for the use of all; metallurgical research could be carried out in Chile, again on an international basis.

The emphasis on developing technical knowledge in the Latin American countries is a frank recognition that economic development depends on self effort—that technology can't be imported, gift-wrapped and ready for use.

State Department spokesmen say experience with foreign aid shows that even the most successful technology developed here has to be adapted to local conditions before it will work.

Beyond that, they say, the development of a self-sustaining economy needs the development of a local technology to feed it, more-or-less independently of continual inputs from abroad. Not only adoption of existing technology, but furthering of new ideas and techniques are needed.

Because of the time it takes to build up a scientific establishment, countries that are just starting to industrialize have to start now to make sure their technology will be adequate when it is needed.

The conference's action paper states, "science and technology are genuine instruments of progress for Latin American and require an unprecedented momentum at this time."

Humphrey and Science

The week after next the 17-nation disarmament conference at Geneva reconvenes. Before it, Washington hopes, will be a draft of a treaty, agreeable to almost every nation, halting the proliferation of atomic weapons among countries that do not now have them.

But getting the advance agreements has been tough—and all are not in the bag. Vice President Humphrey, in his recent two-week swing through Europe, tried to allay the fears of our allies, and to some extent—as yet unknown—succeeded. He also, through science advisers accompanying him, laid the ground work for some increased scientific cooperation across the Atlantic.

On the treaty, the West German National Defense Council met last week in what may have been the key session in a world-wide diplomatic effort to make nonproliferation both acceptable and useful.

The Germans, despite a stream of assurances from the United States and Britain, fear that abjuring the bomb might cut them off from peaceful advances in nuclear technology.

The German meeting was to be followed by a 15-member North Atlantic Treaty Organization session in Paris, where the Europeans would decide whether to go along with the U.S. plan to procede quickly with talks with the Soviet Union.

Meanwhile, India protested the treaty because it did not, at that stage, include guarantees from both East and West protecting her from the infant atomic arsenal of Communist China. Also, she felt, the nuclear powers who sign ought to give a quid-pro-quo to those who agree not to build the bombs. India suggests a thinning of the Soviet and U.S. nuclear stockpiles.