

Peaceful Space Treaty

by Frank Sartwell

Although at loggerheads over Vietnam and still working to increase the effectiveness of their nuclear threats, the United States and Russia have found they could agree on the first international treaty on space.

But the decision to keep earth's wars on earth—to ban nuclear devices and "moon grabbing" from space—was relatively easy to make, since no one had planned to do those things anyway.

The pact, when ratified by the U.S. Senate and the Supreme Soviet, will forbid the placing of "weapons of mass destruction" in earth orbit, on the moon, or elsewhere in space. Since this would be enormously expensive—and ineffective—there was little chance of it happening. Earth-to-earth missiles are much more accurate and already are in place.

As laid before the United Nations for additional signatures, the treaty does have some technological effects, particularly in the banning of "harmful contamination" of the moon and other celestial bodies, as well as "adverse changes in the environment of the earth resulting from the introduction of extraterrestrial matter." This provision could make more stringent the sterilization techniques both nations profess to use in their moon and planetary shots. It could also cause some difficulties: although it cannot be proven, many engineers at the Jet Propulsion Laboratory in California blame hard sterilization of the early Rangers for their failure.

Under the pact, no nation could claim sovereignty over the moon or a planet; all would be required to help astronauts—"envoys of mankind"—in trouble; and each nation would be responsible for any damage its space activities did to another. Covered in this clause would be such incidents as the falling of U.S. rocket parts on Cuba and pieces of Sputnik on Wisconsin.

Co-operation would extend to warning other nations about dangerous conditions found in space, and consulting with others about experiments that might endanger their activities or citizens.

The two nations already are bound by treaty to exchange weather information gathered from space, and to jointly publish data on space medicine. But the current treaty most resembles that of 1960, which set up the first nuclear-and military-free zone: Antarctica. Provisions are similar, and long-memoried observers recall that when the Antarc-

tic treaty was signed, it was predicted that it might lead to such an agreement in space.

Like the Antarctic agreement, the treaty bars from the moon or planets "the establishment of military bases, installations and fortifications, the testing of any type of weapons and the conduct of military maneuvers."

But the treaty specifically provides that "the use of military personnel for scientific research or for any other peaceful purposes shall not be prohibited. The use of any equipment or facility necessary for peaceful exploration of the moon and other celestial bodies shall also not be prohibited." This provision acknowledges the fact that almost all astronauts and cosmonauts to fly so far are military men.

Negotiations between Russia and the U.S. broke down in September over a couple of points that have since been compromised. One was a provision the Russians wanted, to provide equal access to all tracking facilities by all powers. This would have turned over an equal share of time in the extensive American tracking net to the Russians. The compromise provides that all nations who sign the treaty will be treated equally, but on the basis of nation-to-nation agreements as is already the case.

On the other hand, American diplomats dropped their insistence that all space stations and vehicles be open to inspection "at all times." As now written, the treaty provides that visits be made "on a basis of reciprocity" with reasonable advance notice.

The treaty does not ban all military activity from space. It would not halt the flight of "spy in the sky" satellites, used by both nations to peek at each other, nor the "ferret" orbiters that listen to each other's radio messages. Nor does it prevent development of military applications of man in space, such as the Manned Orbiting Laboratory of the Air Force, now under development.

The treaty, which will be open to signature by any nation, goes into effect when signed by any five, including the U.S.S.R., the U.S., and the United Kingdom.

President Johnson, in announcing the agreement, said he will send the treaty to the Senate, which must ratify it, soon after the opening of Congress. Sen. Mike Mansfield, Democratic leader, predicts quick approval.

LBJ on SST: 4 Choices

Amid weighty stacks of reports, recommendations, advisory opinions and minority viewpoints, President Johnson is practically down to the wire in making his long-awaited decision on the 2,000-mile-an-hour Supersonic Transport plane—a decision that may be worth more than \$4 billion.

He has four choices, none of which will be popular with everybody, and some of which will be popular with nobody.

The most likely possibility is that he will pick one of the two corporations, Lockheed or Boeing, which have been competing heatedly for the airframe contract. Hundreds of millions of dollars have been spent by the competitors, but the government has promised a refund to the loser.

Running second is the chance that rising costs due to inflation and Vietnam could cause the President to postpone the project, either indefinitely or for a fixed period, possibly a year. A variation on this theme would be that "more research is needed," but it's getting pretty expensive to justify that claim without actually building something.

The most expensive possibility in the short run would be for each company to build a prototype. This is still a possibility, though almost everybody's advice has been against it. Federal Aviation Agency head William F. McKee, who turned in his agency's recommendation Dec. 1, has almost certainly selected one competitor or the other.

The most expensive possibility in the long run is that President Johnson might decide that there should be two SST's—one limited to overwater routes where its sonic booms would not be a problem, and a smaller, quieter one for continental use.

The market for the SST, whenever it arrives, will be huge. The longer it takes, however, the bigger a slice of the market will be stolen by the British-French Concorde, or even the Russian Tupolev 144.

Even if construction of an SST begins tomorrow, it will not be in commercial service for eight years. Confronted by a ballooning budget on one hand and prodded by a hopped-up aviation industry on the other, the President is not making a casual decision.