Briefing:

Joint NASA-Military Space Vehicle Planned

The Air Force and the National Aeronautics and Space Administration (NASA) have agreed—on paper, at least—to cooperate in building an entirely new, unmanned space vehicle known as the "Advanced Launch System." Congress mandated the program last year, asking the two space agencies to set aside their rivalries and formulate a joint R&D program. The Air Force was given priority, but NASA was to play an important role in work on the propulsion system. The objective is to come up with something much more reliable and easier to run than the shuttle to carry payloads to orbit beginning in 1998 for one-tenth the present cost, or for about $400 a pound.

After negotiating internally for months, the Administration released the text of a joint agreement last week that sets out the bare bones of the program. Congress asked to receive a report describing the management approach before making funds available. The resulting 4-page "report" endorsed by the President does little more than confirm what is already known.

The project will be governed by a joint AF-NASA office, located at a still unfixed point within the two large bureaucracies. The program manager will come from the Air Force; the deputy, from NASA. The Air Force will be primarily in charge of designing the vehicle, controlling systems engineering and integration, developing the payload module, running the "logistics system," and paying the bills. NASA will be responsible for developing liquid engines and new technology.

In July, the Air Force let contracts worth $5 million to seven aerospace firms to define basic concepts. One novel element in the management plan is the requirement that the proposed designs undergo a critical review by the Pentagon's Defense Acquisition Board, which will "approve the mission need and acquisition approach." Only if they pass muster here will they go on to phase two, detailed design preparation, followed by full-scale development. The first cost estimate is due in April.

Meanwhile, NASA intends to go forward with its own, separate R&D program focused on an unmanned cargo ship called Shuttle-C. This vehicle, if it comes to fruition, would be intended for use beginning in the mid-1990s. The joint project agreement with the Air Force, according to a NASA official, will have "no effect" on Shuttle-C. ■ **E.M.**

New York Drops Out of SSC Sweepstakes

Protests by residents of Wayne County, New York, have caused Governor Mario Cuomo to take the state out of the running for the $5.3-billion Superconducting Super Collider (SSC). Cuomo took the action on 14 January after citizens and politicians in the area, which is near Rochester, voiced concerns about the upheaval that would accompany the construction and operation of the 52 mile accelerator ring.

New York was one of eight states with proposals that cleared the National Academy of Sciences' site selection review committee in December (*Science*, 8 January, p. 133). The states remaining on the list are Arizona, Colorado, Illinois, Michigan, North Carolina, Tennessee, and Texas. But Cuomo's decision to take New York out of the running may make it easier for DOE officials to add names to its official list of finalists. Department officials are said to have been distressed by the academy's decision to exclude Mississippi and California from the group of finalists.

Cuomo's action came in response to pressure from Senator Daniel Moynihan (D–NY), Representatives Frank Horton (R–NY), and Louise Slaughter (D–NY), and other state politicians. Local groups such as Citizens Against the Collider Here were opposing the SSC project because it would require leveling as many as 1000 homes and would wipe out some apple orchards and farms, an aide to Horton says.

Adding to these concerns, however, was a lack of accurate information about the project. "A lot of people really did not know what it was," says Sarah Hull, press secretary to Representative Slaughter. ■ **M.C.**

U.S., Soviet Academies Renew Exchange Pact

Relationships between the U.S. and Soviet academies of science appear to have returned to the cordiality that prevailed in the 1970s. Last week, officials of the two organizations signed a new 5-year agreement setting out a program of scientific exchanges and joint workshops and issued a statement taking note of "an improved environment for encouraging cooperation between scientists of the two countries."

The new agreement will not result in a major expansion of activities, however. It provides for exchange visits of up to six members of each academy per year for lectures or scientific research; visits of up to 20 other scientists from each country for periods ranging from 1 month to 1 year; up to 8 scientific workshops per year; and cooperative research programs that would mostly be financed by governmental research organizations. The agreement, in fact, is identical in almost every respect to the agreement it replaces, which was due to expire in April.

The old agreement, which was signed in 1986, ended a 5-year period when formal links between the two academies were allowed to lapse by the U.S. National Academy of Sciences (NAS), in part to protest the treatment of Soviet physicist Andrei Sakharov.

The statement released on the signing of the new agreement states that both sides have reviewed the previous pact "in a very favorable light." In one key respect, however, NAS officials describe the pact as only a mixed success. In an effort to ensure that top-flight Soviet scientists take part in the exchange programs, the agreement included a provision for each academy to invite scientists from the other country to participate. On some occasions, however, many of the NAS's invitees have not been allowed to participate. And, in what one NAS official describes as a "habitual problem," some of the Soviet scientists scheduled to take part in joint workshops in the United States have not made the plane.

NAS officials hope that these problems will diminish in the new era of *glasnost*. The new agreement requires a review after 2 years to assess progress improving "the environment for cooperation." ■ **C.N.**

More Americans to Japan

The Japanese government has sweetened its recent offers to entice American researchers to study in Japan.

Prime Minister Noboru Takeshita during his visit to Washington, D.C., last week, announced that Japan would contribute $4.4 million to establish new fellowships for American scientists. The program would be run in cooperation with the National Science Foundation.

During the past few months, several Japanese agencies said they would establish programs to subsidize more scientific exchanges with foreign researchers. The combined money for these fellowships would enable more than 100 Americans to study science and technology in Japan next year.

Takeshita's announcement means that there will be funds for an additional 80 to 90 American researchers to go to Japan. The money would become available next fall.

The proposed science and technology cooperative agreement between the two countries is still under negotiation, according to Administration officials. ■ **M.S.**