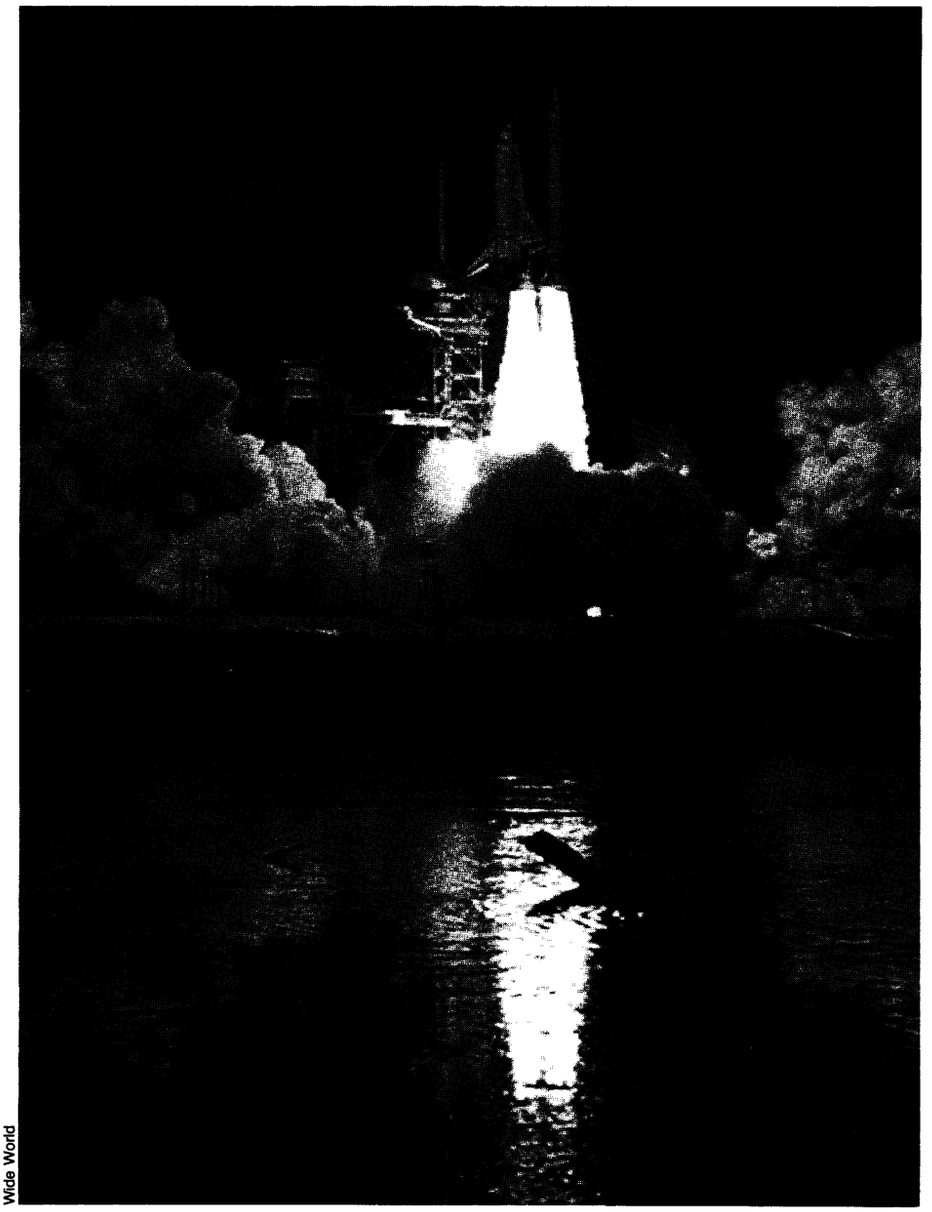

Wide World

Liftoff. "America returns to space as Discovery clears the tower," came the voice of launch commentator Hugh Harris, as the launch of the space shuttle Discovery on 29 September ended a 32-month hiatus in the American manned space program. The lift-off itself was 98 minutes late—ironically, because the winds aloft were peculiarly light for that time of year; ground controllers needed the extra time to make sure that the shuttle's on-board computers, which had been programmed for much stiffer winds, would not send the spacecraft off course. But when the launch finally came at 11:37 a.m. EDT, it was picture perfect. In the aftermath of the Challenger explosion of 28 January 1986, the National Aeronautics and Space Administration had made hundreds of major and minor design changes in the shuttle in an attempt to improve its margin of safety; the flight of Discovery seemed to show that the effort had not been in vain—and that it had not introduced some disastrous new problem by accident. The nation seemed to breathe a particular sigh of relief at the 2:04 minute mark, when the 46-meter solid-rocket booster jettisoned on schedule and fell away toward the Atlantic. It was a flawed booster rocket that triggered the Challenger explosion, killing all seven astronauts on board and shutting down the shuttle program for more than 2½ years.

Less dramatic, but still important to the program, was the successful delivery of Discovery's main cargo: a Tracking and Data Relay Satellite. Joining a similar satellite already circling Earth in the 35,900-kilometer geosynchronous orbit, this new spacecraft will allow ground controllers to keep in constant contact with missions in low Earth orbit—a category that includes not only the shuttle missions themselves, but scientific missions to come such as the Hubble Space Telescope.

■ M. MITCHELL WALDROP

U.S.S.R. to Set Up Fund for Basic Research

The Soviet Union is to set up a special fund to finance fundamental research projects which will be open to competition among individual scientists and laboratories and allocated through a system of peer review, according to Guri Marchuk, president of the Soviet Academy of Sciences.

The new fund is part of a broad attempt to put scientific research in the U.S.S.R. on a competitive basis by by-passing the traditional system under which research has been financed through block grants to the directors of institutes, and allocating the funds instead directly to laboratory directors.

It bears some similarities to an initiative introduced 2 years ago by the Hungarian Academy of Sciences (*Science*, 15 May 1987, p. 770). In the U.S.S.R., a competitive approach has already been applied in deciding which group should receive funding for research in high-temperature superconductors, an experiment which is being generalized across the research spectrum.

Marchuk is quoted by the Soviet news agency Tass as saying that the system of financing institutes was being replaced by one of financing projects. A move in this direction has long been seen as necessary for increasing the quality of Soviet research.

Where the proposed research project is directed toward the solution of a particular technological problem, applications must detail how the results will help to lead to the resolution of the problem. Applications will be assessed by a committee, which will make decisions by secret ballot.

In addition, Marchuk has announced that the special funds being set aside for funding basic research are intended for projects "where results are difficult to forecast." These funds will also be allocated on a competitive basis.

The news agency also reported Marchuk as saying that the modern research workers should show greater "initiative and enterprise," pointing out that at present, only the Siberian Branch of the Soviet Academy of Sciences has the right to market its discoveries and technical developments in foreign countries.

More work was needed, he said, to speed up the introduction of the results of research into large-scale production. In particular, said Marchuk, "there should be a 50% increase in support for building new facilities in this area, primarily pilot production projects."

■ DAVID DICKSON