

opportunity. This 1973 mission as now planned will include a survivable lander with instrumentation consistent with the minimum scientific objectives recommended by the Space Science Board of the National Academy of Sciences in July of this year. However, the overall scope of the mission will be reduced and the schedule compressed from that which could have been done under the original budget request.

As a related matter, I should note that the operating plan provides for proceeding with the construction of two 210-foot antennas which will provide support for the Mars 1973 mission and other projects, including Pioneer missions, during the 1970's.

Bioscience.—The operating plan includes \$32.7 million for this program, a reduction of about \$15 million from the budget request. The 30-day biosatellites are retained in the program as planned; however, the reduction requires that we slip the 21-day missions by approximately 6 to 12 months to minimize expenditures in fiscal year 1969.

Space Applications.—The interim operating plan supports the space applications program at the full amount authorized, \$98.7 million. This amount is about \$14 million less than the budget request.

The program is somewhat recast from that which we presented in connection with the budget request, however, due to a decision to launch a replacement for the Nimbus B experimental weather satellite. You will recall that Nimbus B was destroyed on May 18 because of a malfunction in the Thorad launch vehicle. The launch of the replacement spacecraft, Nimbus B2, will be in the spring of 1969, according to present plans. Our decision to repeat the Nimbus B mission, using a number of backup experiments which are available, will avoid a delay of more than 21 months in obtaining the advanced meteorological data which the Nimbus experiments are designed to get.

The space applications program includes, in addition to the Nimbus program through Nimbus F, the Applications Technology Satellites through ATS-G; although funding for the downstream missions, ATS F and G and the advanced applications flight experiments is reduced. The Earth Resources Survey portion of Space Applications will be funded at the level of \$11.2 million. At this level we will continue to place emphasis on the Earth Resources Survey Aircraft Program, with extension to higher altitude observations and instrument development using the RB-57 aircraft made available to NASA by the air weather service. Our studies of the Earth Resources Technology Satellite (ERTS) are continuing to work toward defining the optimum spacecraft approach to the space testing and evaluation of instruments and sensors using automated satellites.

Also included are the Tiers-M and planned TOS improvements, the international applications project, the meteorological soundings program and data analysis for the geodetic satellites now aloft.

Launch Vehicle Procurement.—The amount of \$115.7 million was authorized in fiscal year 1969 for the procurement of launch vehicles in support of unmanned space mission requirements, a reduction of \$12.6 million from the budget request. The current fiscal year 1969 operating plan of \$100.2 million reflects further reductions commensurate with flight mission requirements supported by the reduced operating plan.