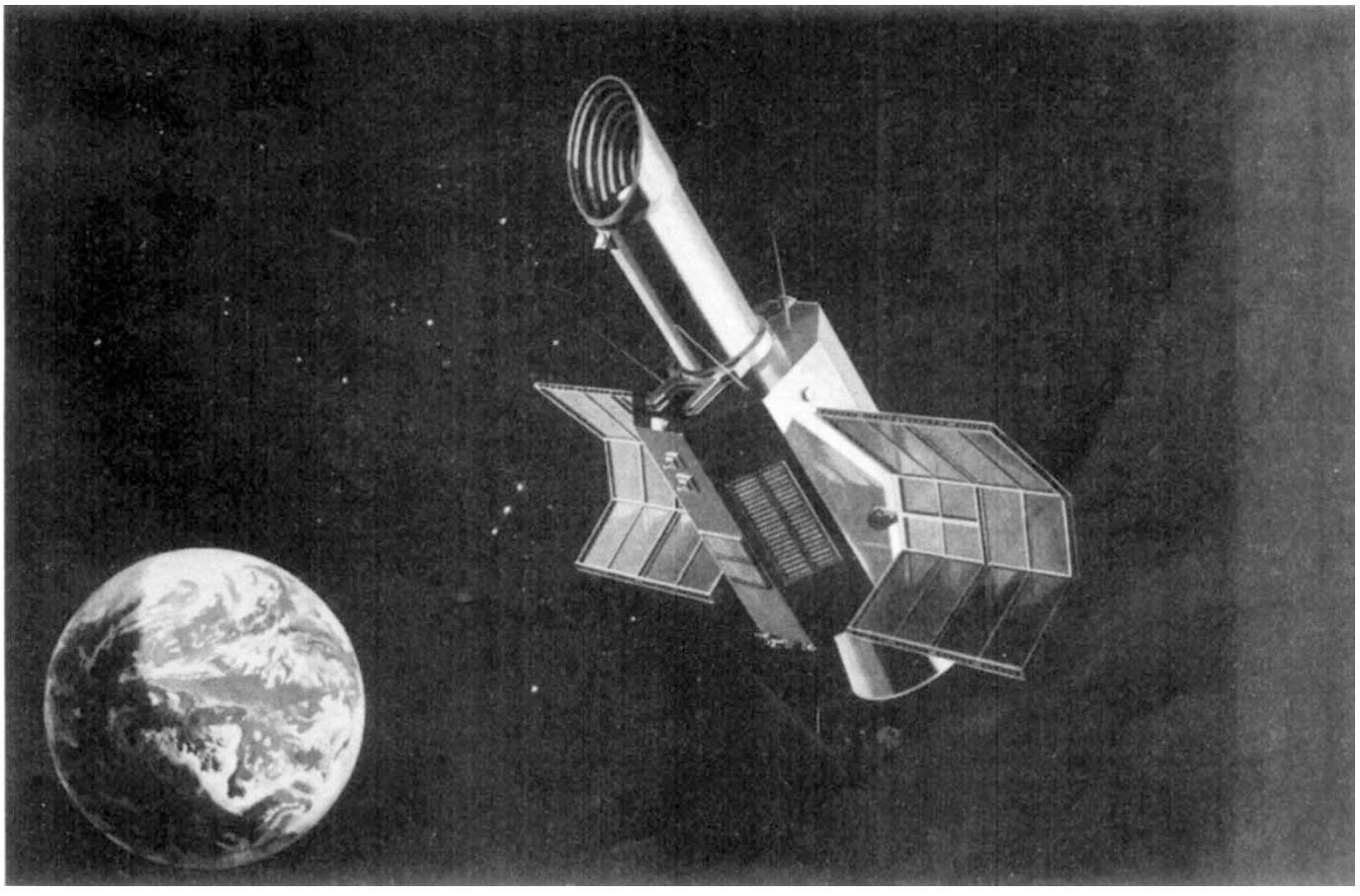
The International Ultraviolet Explorer (IUE)

The following eight papers deal with the International Ultraviolet Explorer (IUE), a joint project of the National Aeronautics and Space Administration (NASA), the European Space Agency (ESA) and the Science Research Council (SRC). The first paper describes the overall project and concept. The second deals with its performance in orbit as assessed during the commissioning phase following the successful launch of 26 January 1978. In addition to engineering switch-on, sub-system tests, optimisation and calibrations, that commissioning phase included astronomical observations of a set of high-priority targets as an insurance against premature failure of the system. What is 'high priority' is always a matter of judgement, and in this case that judgement was made by an international science commissioning team drawn mainly from the project staff of the three agencies but also including scientists from the general community. The results of those high-priority observations and their subsequent analysis are presented in the final six papers of this series. It should be stressed that these observations were made immediately after switch-on, that is before the system had been fully optimised or calibrated, and that the data were reduced in the very earliest phases of the image processing system. Nevertheless they clearly indicate the potential of IUE and provide a range of new and exciting data in many areas of astronomy.

In addition to the authors listed on the following papers, many people have made essential contributions to this project in all its stages, from conception and approval through hardware production and launch to the recent commissioning and operational phases. To all those people, in the government agencies, research institutes, universities and industry of many countries, the authors extend their thanks and gratitude. These papers were submitted on 9 August 1978.

R. Wilson



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