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COVER

The Gerard P. Kuiper Observatory consists of a gyroscopically stabilized 91-centimeter telescope which is mounted in a converted C-141 transport aircraft. The telescope is in the cavity just forward of the left wing. The observatory operates at an altitude in excess of 12.5 kilometers for a period of 8 hours or more. At this altitude the observatory is above more than 99 percent of the water vapor in the earth's atmosphere, so that observations can be carried out at infrared wavelengths between 30 and 300 micrometers which are not accessible from the ground. See page 723. [C. M. Gillespie, National Aeronautics and Space Administration, Ames Research Center, Moffett Field, California]