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Summary (Continued)

All spacecraft software is executed by a central computer located in the Command and Data Handling subsystem. This subsystem also provides a link between Paxsat and the ground through a Ku-band TT&C subsystem. A high rate data link (2 Mb/s) allows downlinking of the acquired sensor data. A tape recorded facility records up to 15 minutes of high rate data for those periods when ground station are not visible.

The most visibly conspicuous elements of the spacecraft are the two 15 m solar power gathering arrays of the power module. They, in conjunction with two 22 cell, 50 Ahr NiH<sub>2</sub> batteries, provide power to allow full sunlight operations and an equivalent daily surveillance of a single eclipse period for most of the mission life. Some reductions of operations during eclipse near the end-of-life of the spacecraft may be experienced in the highly elliptic Molniya orbit.

All of the spacecraft modules are well within the scope of technology of civilian organizations of non-superpower countries that have a space industry, with some modules readily available without further development. Paxsat is within the launch capabilities of the French Ariane IV launch vehicle. Thus Paxsat is judged to be a feasible spacecraft to fulfill the designated mission role.