

9.0

CONCLUSION (Continued)

survey all of military space. Two Paxsat spacecraft in distinct low-earth orbits, provides coverage of this orbit domain. A single Paxsat spacecraft enables observations for both the highly elliptic and the circular semi-synchronous orbits and another single spacecraft in the geosynchronous orbit permits verification in this orbital region.

The conceptual spacecraft design baselining the rendezvous mission scenario developed in the study was determined to be feasible within the scope of the technology of civilian organizations of a non-superpower countries that have a space industry. In fact, some of the modules proposed in the concept design were readily available without further development. The Paxsat spacecraft concept design was shown to be within the launch capabilities of the French Ariane IV launch vehicle and the American Space Shuttle. The spacecraft bus resources supplying sufficient power and mass carrying capabilities enabled operation of the spacecraft in all of the required orbital regions of space for a lifetime between five and ten years. Thus the developed Paxsat spacecraft was concluded to be a feasible spacecraft to fulfill its designated mission role.

In conclusion, the Paxsat Concept System was judged to be a feasible spacecraft based system to determine the presence of weapons in space and contribute to the effective verification of a treaty banning the deployment of weapons in space.