

2.1 Introduction (Continued)

The two antisatellite weapons (ASAT's) currently under development in the Soviet Union and the United States are also not verifiable in the Paxsat scenario because they are not in space for a sufficient length of time to enable an investigation to be undertaken. The Soviet Union has successfully tested and put into operation a ground launched weapon while the United States is currently testing an air launched ASAT weapon. Since these weapons seek out and engage targets within hours or even minutes of their launch, there is no question of their presence being verified by a Paxsat spacecraft based in space. Verification of these weapons would have to be done while the weapons were still on the ground. However, it is envisioned that the next, or second generation of ASAT's would employ alternative methods to destroy or disable the targets from the current impact method, and be based in stable orbits to carry out their mission. The Paxsat system would be attuned to the verification of these types of weapons in space.

The review of weapons in space conducted in this section of the report is presented in three parts. Section 2.2 addresses the targets in space and the space weapons likely to be deployed against them. Section 2.3 addresses targets on the earth and weapons likely to be deployed against them. Section 2.4 summarizes the preceding analyses to tabulate the threats relative to the earth and space assets, and defines the weapons systems most likely requiring verification by the Paxsat system.

2.2 Space-to-Space Weapon Situation

No known operational spacebased weapon system for space-to-space operation has yet been deployed in space. Thus, there is still a considerable amount of uncertainty as to how these systems would be configured for optimal performance. What is known about the situation in space however, is the location and distribution of potential targets in space.