

### 2.3 Space-to-Earth Weapon Deployment (Continued)

- (c) A de-orbited nuclear device
- (d) A laser beam weapon in space
- (e) A particle beam weapon in space.

The first three candidates are technically feasible, conventional technology, and the remaining two require technical feasibilities to be established over the next one or two decades.

Verification of the first three candidates by Paxsat could require that Paxsat be maneuvered to within a few kilometers of the satellite carrying or believed to be carrying the weapon. Close-in remote sensing of nuclear decay products or chemical leakage would be a key measurement. Physical features as observed optically might be quite innocuous.

The remaining two candidates would be more easily verified because of the large dimensions and unique appendages on the satellite.

### 2.4 Summary of the Space Weapon Environment

The nature of the targets in space and on earth, and the qualitative dimensions of the threat to these targets from weapons on satellites have been examined in sections 2.2 and 2.3 of this section. In this final part, the results are combined in a single Paxsat system framework.

The highest priority targets in space are military satellites for targeting and tactical surveillance and, of course, other satellites carrying weapons.

Should targeting satellites be placed at very high altitudes, in the order of 100,000 km for example, a practical weapon system will also have to be placed at high altitude, certainly within 10,000 km of its intended target. Successful verification by Paxsat for such a weapon is probably not practical, although the very presence of the satellite may serve to cast suspicion on its mission. A jammer would be classed as a weapon in this context.