

2.2 Space-to-Space Weapon Situation (Continued)

ASAT long before it achieves any significant ABM (Antiballistic Missile) capability". [3] Additionally, given the intrinsic vulnerability of spacebased systems, the domination of space by ASAT measures would be a prerequisite to the reliable ballistic missile defense of an entire nation. Thus, the more immediate concern for the placement of weapons in space are weapon systems designed to carry out antisatellite activities and it is in this direction that the report ensues.

Since the launch of Sputnik I by the Soviet Union on October 4, 1957, to the end of 1983 over 2,500 known successful space launches have occurred, hurtling over 14,400 objects, consisting of artificial satellites, rocket fairings, spent rocket casings, etc. into the domain of space. [4,5]. Many of these orbiting objects have been placed into low earth orbits where the drag exerted by the earth's rarified atmosphere has resulted in their fiery return such that approximately 5,000 objects remain in space today.

A database of all known satellite launches compiled from a variety of sources [3-17] for the period 1980 to 1983 inclusive, indicates the intensity of space activities by the world's nations in recent history. Appendix A documents this satellite listing. During this period, over 476 successful space launches for an average annual rate of 119, have placed a total of 585 artificial satellites into outer space. Table 2-1 illustrates this level of space activity. Of these artificial satellites, the USSR and the US are the predominant owners accounting for 80% and 13% respectively. Approximately 70% of all satellites launched during the period serve a military function with approximately 80% of all Soviet satellites serving military roles and approximately 50% of all American satellites performing military activities. Certain of these satellites while launched for military use, serve a double purpose as part of the arms control verification process between the Superpowers. Therefore, certain military uses of space are essential from the arms control aspects. Nevertheless, as increasing numbers of single-purpose military assets are placed into orbit, an increasing militarization of space will result. But, as mentioned