PART I: SATELLITE OPERATIONS

Chapter 2: Satellite Operations, Current and Planned

The following chapters focus on the work done by Dynacon concerning long-term space operations that could be perceived as space weapon research. In this chapter, projections of nonweapon space operations over the next 20 years will be compared with similar projections for weapon space operations. Then, in the following chapter, special attention will be given to cases where nonweapon operations could be confused, accidentally or deliberately, with weapon research or deployment.

Experience in previous rounds of arms-control agreements teaches that success hinges on careful definition of the objects to be regulated. Moreover, the discussion below is intended to be sufficiently broad to encompass not only those space systems that have already been developed, but also those that might be developed. On the other hand, the definition should be restrictive enough that desirable nonweapon space activities can avoid becoming entangled in the resulting agreements. The line of demarcation between ambiguous operations must be drawn with great care.

2.1 What Is a Space Weapon?

Before proceeding further, a definition of "space weapon" is in order. Though many definitions are possible, we shall, for the purposes of this paper, define a space weapon to be a satellite that has the following two key properties:

(a) it is capable of inflicting major harm on other satellites; and

(b) its owners intend it to inflict major harm on other satellites, if "sufficiently provoked."

This definition raises many additional questions, many of which are addressed in this paper. Most noteworthy is that Property (a) is essentially a technical one — complex, but susceptible[1] to engineering analysis — while Property (b) implies knowledge of the intentions of nations and their leaders — thus requiring judgements that are almost impenetrably complicated.