8.2 System Elements (Continued)

alternative satellite system employment configurations on the basis of cost effectiveness requires knowledge of two elements:

- (a) Knowledge of the number of investigations a Paxsat spacecraft is likely to have to make during its lifetime.
- (b) Detailed estimates of satellite, launch vehicle and launch pad facility costs.

In this study, it is believed that the former question is answered by stating that full scale politically driven Paxsat investigations will be greater than one in a lifetime and that Paxsat is optimized for numerous encounters. However, further study into the frequency of past alleged treaty violations could bound this estimate. Regarding the second question, this study has not attempted to price the Paxsat system. The ability to price satellite systems and produce meaningful estimates requires knowledge of the spacecraft elements to a greater degree of accuracy than that generated in this concept study. Price tags are first introduced after a phase A study of any given concept.

The Mission Control Facility could be a dual purpose facility containing a single Mission Management Office (MMO) and three Mission Control Centers (MCC). The MMO would be responsible for all the administrative and managerial functions while the MCC would perform the routine system monitoring and control functions of the spacecraft during the dormant loitering operations, and command the satellites during investigative operations under direction from the MMO. A small technical wing of the MMO would provide technical support to management decisions, and plan the mission event sequences for the Paxsat spacecraft encounters with suspect satellites. From this central office, the MCC could be directed, although redundant mission planning facilities should also be available at the MCC locations.