

- e) *Space-Based Kinetic Kill Vehicle*: this is a space-based, rocket-propelled interceptor system of the type proposed by the High Frontier organization. These interceptors, comparable in design to the ground-based ERIS, are scheduled to be demonstrated in the early 1990's and are applicable to both boost and mid-course phases.
- f) *Terminal System Demonstrations*: this demonstration will integrate the HEDI interceptor with the Terminal Imaging Radar and the Airborne Optical System described earlier. (See "Surveillance")

IV. Systems Analysis

- 1) **Battle Management/Command, Control and Communication (BM/C³)**: researchers involved in this project are seeking to develop the elements which will link the various weapons and sensors together into an integrated defence system including:
 - a) computer hardware which is reliable and "fault-tolerant";
 - b) software to integrate command the control of the entire defence system;
 - c) procedures for the correct release of weapons, avoiding false release or false withholding;
 - d) communications networks that will be robust and secure in the presence of jamming, attack and nuclear side effects.
- 2) **Systems Architecture**: in this project, analysts will define the combination of sensors, weapons, BM/C³ systems, and supporting technologies needed to meet mission requirements. Over the next two years (1986-1987), a number of System Architecture Studies will analyze Soviet threat models, including specific countermeasures to proposed US defence systems.

V. Support Programs

The development of SDI will require a number of supporting technologies.