

## **I. ABM Components which might be deployed in Canada**

The bulk of US ballistic missile defence systems, as presently defined, would be deployed in space or in the territory of the United States. There are, however, components designed for the late-midcourse and terminal layers of defence which would need to be deployed nearer the areas to be defended. These components might include:

- 1) AOS — Airborne Optical System
- 2) TIR — Terminal Imaging Radar
- 3) HEDI — High-altitude, Endo-atmospheric Defence Interceptor.

For optimal tracking of Soviet Warheads, AOS might, at the very least, need to fly regularly over Canadian air space. In addition, forward basing at Canadian air fields might be required for a rapid response to any warning of Soviet nuclear attack.

(For a description of AOS and TIR see page 60 of this Appendix; for a description of HEDI see page 62.)

## **II. Components Which Might Require Basing in Canada**

- 1) Ground-based laser
- 2) X-ray laser (nuclear-driven), e.g., Excalibur
- 3) Exo-atmospheric, non-nuclear, hit-to-kill technology, e.g., Braduskill
- 4) ERIS — Exo-atmospheric Re-entry vehicle Interception System.

Ground-based lasers would need to be based as close to the Soviet Union as possible, in order to reduce the number and size of the space-based relay and mission mirrors, so Canada might be the logical site. The nuclear-pumped X-ray laser (Excalibur), deployed in the "pop-up" mode, would also have to be based as close to Soviet missile silos as possible, either on submarines or far to the north in Alaska, Northern Europe, or Canada.

Braduskill is a kinetic energy, hit-to-kill interceptor, which, instead of intercepting in a head-on collision, will fly along beside its targets so that it has time to discriminate between warheads and decoys. The warheads are then attacked by small rockets (sub-munitions) with explosive warheads. This interceptor would also benefit from forward basing in Canada.