The Cruise Missile: Deterrence and Arms Control

Technical Description

The cruise missile is designed to fly at subsonic speed, 800 kilometres per hour, at low altitude, and has a range of 2,500 km (1,500 miles). A small jet engine provides thrust for the cruise missile and wings provide aerodynamic lift like an airplane.

The cruise missile's Terrain Contour Matching (TERCOM) guidance system consists of radar and barometric altimetres, an inertial guidance measurement unit, and a digital computer. During flight, TERCOM periodically compares surface characteristics with terrain profiles stored in the system's computer. The guidance system then aligns the missile on its course.

The Ground Launched Cruise Missile (GLCM) will be deployed with NATO's forces in Europe unless a satisfactory arms control agreement concerning Intermediate Range Nuclear Forces can be worked out with the Soviet Union. The Air Launched Cruise Missile (ALCM) will help modernize the U.S. Strategic Air Command bomber fleet, part of the United States deterrent force on which North American security depends. The two versions use the same guidance system.