

*ANNEX F***GLOSSARY**

Accessibility interval: The period required to obtain a repeat image of a point on the earth's surface. By using sensor offsets, it can be a much shorter period than the repeat interval or revisit time.

Active sensors: Devices that transmit and receive energy in some portion of the electromagnetic spectrum. The basic principle of operation involves transmitted energy illuminating objects in its path and the sensor subsequently detecting the echoes or reflections from that object (conventionally called a target) for the purposes of surveillance, detection, tracking or identification.

Apogee: The point in any non-circular orbit where the orbiting body is farthest from the earth.

Ballistic Missile: A pilot-less projectile propelled into space by one or more rocket boosters. Thrust is terminated at an early stage after which re-entry vehicles follow trajectories that are governed mainly by gravity and aerodynamic drag, with relatively minor mid-course and terminal phase corrections.

Ballistic Missile Early Warning System, BMEWS: A small chain of very large radars for the detection of ballistic missiles approaching North America from the general direction of the Soviet Union. Sites are located in Thule Greenland, Clear Alaska, and Fylingdales Moor in England.

Cruise Missile: An air-breathing, guided missile that uses aerodynamic lift to offset gravity and propulsion to counteract drag. It can be launched from aircraft (air launched cruise missile or ALCM), from a submarine or surface ship (sea launched cruise missile or SLCM) or from the ground (ground launched cruise missile or GLCM).

Detection: The ability to decide whether an object or activity of interest is present at a given location. In order for a sensor to detect the presence of a specific object, it normally requires a spatial resolution in the order of one half the physical dimension of the object.

Electromagnetic spectrum: The electro-magnetic spectrum represents the family of transverse waves made up of oscillating electric and magnetic fields which travel through a vacuum at the speed of light. The spectrum extends from the very low frequency long wavelength radio waves to the very high frequency, short wavelength gamma rays. While visible light, infrared, ultraviolet, laser, X-ray, etc., are all parts of the electromagnetic spectrum, acoustic energy (which is based on hydrodynamic pressure) is not. The relationship between wavelength and frequency is an inverse one - the longer the wavelength, the lower the frequency.