

Electronic reconnaissance satellites include the following:

- (1) "Ferret" - These collect data on Soviet radar. Since few have flown recently, it is likely that "Big Bird" or the KH-11 can collect similar data.
- (2) "Rhyolite" later renamed "Chalet" - These geosynchronous satellites collect telemetry from Soviet missile tests and military communications.
- (3) Ocean reconnaissance - These operate in sets of four proximate satellites. By detecting radar and communications signals from ships they can locate the ships.

Missile warning satellites include the Defence Support Program Satellites which detect missile launches by infra-red detection of rocket plumes. They also carry visible light detectors and radiation sensors for detecting nuclear explosions and monitoring missile test launches.

Nuclear explosion detection satellites include the following:

- (1) "Vela Hotel" - Two of these satellites still provide useful data from their detectors for monitoring nuclear explosions in the atmosphere and space.
- (2) Defence Support Program Satellites
- (3) Global Positioning System Satellites - These carry the Integrated Operational Nuclear Detection System which uses ultra-violet and x-ray sensors to give precise locations of nuclear explosions in the atmosphere and in space out to 11,000 km.

NTMs also include seismic sensors and the underwater acoustic surveillance system. Ground-based monitoring systems include electronic listening posts and special radars such as the phased array radar Cobra Dane. High-altitude reconnaissance planes (the SR-71, U-2 and TR-1) fly along coastlines and border areas peering into Soviet territory with side-looking radars, cameras and electronic receivers. Electronic intelligence ships include "Holystone" submarines which are nuclear attack submarines specially configured for signal and communications intelligence, as well as surface ships.

In addition, the paper mentions HUMINT which refers to information garnered from agents, defectors, emigrés, defence attachés, businessmen, and tourists as well as published literature.

The model comprehensive freeze proposed would involve seven components.

- (1) Indefinite freeze on deployment of ICBMs, SLBMs, IRBMs and GLCMs. This can be adequately verified. ICBMs require extensive support facilities that are visible to NTMs. SLBMs can be verified by monitoring the launch, fitting out and sea trials of each submarine. Mobile ICBMs, IRBMs and GLCMs can be verified by monitoring their transport, security and launch control systems. In peacetime these mobile systems are deployed in main operating bases. Strategic bombers are large, built at only a few plants and deployed at a few bases that are monitored. Prohibitions on major modifications to existing missiles could be verified by monitoring the test component of the freeze.