The author reports three "inferred" instances of satellite monitoring which are relevant to verification of arms control agreements. Analyses of the ground tracks of an American Big Bird satellite and two Russian Cosmos satellites launched in June and July 1977 suggest photographic coverage of the Kalahari desert in connection with a possible South African nuclear test. It has been inferred that the same satellites monitored the rocket-launching range of the West German firm, OTRAG, in the Shaba province in Zaire. A Big Bird satellite and a Cosmos satellite may also have observed the crater formed by India's peaceful nuclear explosion conducted on 18 May 1974.