

raises two questions in this context: could such intrusive on-site verification be negotiated and would NTMs be capable of detecting undeclared facilities?

The second general verification approach is to monitor the production of the missiles to be used in the MPS system. This approach has problems similar to those concerning monitoring canister launcher production. In addition, however, in the case of Soviet MPS, Meyer contends that use of an undeclared production facility would be easier since the USSR has a number of missiles and missiles producing plants already. Secondly, the USSR has a large stockpile of mothballed ICBMs which in the future will include SS-16s, SS-18s and SS-19s. Could these through a combination of pre-planned engineering of canister launchers and retrofitting of stockpiled ICBM bodies be made compatible with an MPS system?

The third approach to monitoring an MPS system is verification of aspects of its support and operations activities. For example, if the encapsulation of each missile in its canister launcher is done at a single facility, this plant could be monitored to see how many combined ICBM/launchers emerged. But, as is true for monitoring production, the requirements of high resolution and continuous observation rule out NTMs and dictate the need for on-site verification. The transport of the ICBM/launchers to the MPS site might also be monitored, especially if transport schedules and destinations were provided. If the MPS system is designed so that there is only one entry point to each set of protective structures or 'field', such a choke point could be monitored. In this regard, NTMs would appear inadequate, dictating the use of on-site black-box technology at the entry point and around the perimeter of the MPS field.

Problems with this general approach to verification include the possibility of undeclared ICBM/launcher assembly plants, the requirement that the opponent design his MPS system to facilitate verification, and ensuring that the protective shelters do not have some rudimentary launch capability, independent of the canister-launcher.

The final verification approach is the most direct method. It involves sampling ICBM deployment in the MPS system by removing the blast covers on a fraction of the protective structures to allow photoreconnaissance satellites to count the number of ICBMs. Opening the blast covers on all the protective structures would be unacceptable since, for a critical period following such an inspection, the inspecting country would have target data which would permit it to destroy its opponent's missiles in a preemptive strike without diverting warheads onto the decoy shelters. Therefore a sampling approach is necessary. There is, however, a fundamental conflict in such a sampling approach: to be successful it should have a high probability of detecting significant cheating but at the same time the information gained should not permit the opponent to break the MPS system's deception.