

What are the relative advantages and disadvantages of aircraft versus satellites for different types of monitoring of verification regimes, both bilateral and multilateral? Are there considerations beyond cost that militate against the development of either national or multilateral satellite resources? Are air- or satellite-based remote monitoring approaches applicable in all global regions or is one approach better than the other in some regions?

Are there technologies for data and information processing, such as expert systems and "artificial intelligence," that will reduce the expected burdens of handling massive increases in monitoring data? Will this make multilateral monitoring organizations better able to function? Will the availability of artificial intelligence and expert systems promote interest in creating fully functioning multilateral or international verification organizations?

Will political and economically motivated decisions in certain countries or regions encourage the development of verification-related technologies (including satellites, sensor suites for aircraft and information-processing equipment) more or less regardless of the actual technical need for the equipment or the economic viability of the effort? Will this introduction of national or regional industrial strategies into arms control and verification complicate the arms control process?

Will maritime verification regimes require technologies and approaches not currently used for the verification of terrestrial arms control and confidence-building? Will these be available to most potential participating states, or will the situation parallel the current one, with only a few states possessing first-rate monitoring technologies? Will multilateral monitoring be the only practical answer to this limitation? Will regional maritime regimes have significantly different technological requirements than global regimes?

Will developments in military technology create new arms control and verification problems? Will these problems be profoundly different from contemporary difficulties (with, for instance, cruise missiles)? Can (and should) considerations of arms control and verification play an important role in shaping weapons system research, development and acquisition decisions? How large a priority should — and can — such a concern play in weapon acquisition decisions?

Will the development of sophisticated monitoring instruments by countries such as Japan, and the possible second-generation commercialization of monitoring resources, alter the anticipated trends in the verification of various types of arms control and confidence-building agreements? In what ways might these trends be altered? Will this commercialization process undercut multilateral and international developments or foster them?

#### The Verification of New BMD Limitations

Will adjustments in the existing ABM Treaty be necessary to accommodate new technological and political developments? (Are they necessary already?) Will these changes require new verification approaches and techniques? How will changes in the structure and operation of the strategic bilateral BMD arms control relationship interact with the possible development of BMD systems by other states or groups of states? Will regional arrangements for defence against tactical ballistic missiles interfere with the control of Soviet and U.S. strategic defence systems? Will new and demanding verification requirements emerge if strategic BMD systems are to be controlled while "tactical" ones are not? Should the introduction of potentially ambiguous exotic technologies into either strategic or sub-strategic BMD systems be controlled and, if so, will new verification approaches be necessary?

