

ing arms embargoes to the area. NATO has deployed Airborne Early Warning and Control System (AWACS) aircraft containing advanced monitoring sensors and analysis equipment in order to undertake this assignment. Implementing bodies can request or provide direction to aerial surveillance platforms, as in the case of the Open Skies Consultative Commission.

### Synergies Associated with Global Agreements

In suggesting how synergies might be exploited among arms control verification, confidence-building measures and peace operations, this section will focus first on future global agreements and then look at potential regional arms control, non-proliferation and confidence-building agreements, and peace operations.

The NPT, with its associated IAEA safeguards, is designed to prevent the spread of nuclear weapons, to provide assurance that peaceful nuclear activities are not diverted to the making of nuclear weapons, and to promote the peaceful uses of nuclear energy. The treaty faces an uncertain future when it comes up for review and extension in March 1995. The achievement of two potential multilateral arms control agreements—the CTBT and the cut-off—could make a significant, positive impact on the outcome of the NPT review. There are clear synergistic relationships among the three agreements: each agreement reinforces the others.

Whether achieved or still under serious negotiation, the cut-off and the CTBT will reinforce efforts to extend the NPT. The compatible thrusts of all three agreements and the overlapping implementation of the three verification regimes offer unique opportunities for synergies which will both enhance their effectiveness and reduce the required resources. Efforts to extend the NPT will also be strengthened by the ratification of the START I agreement, significantly reducing strategic offensive arms as called for in Article VI of the NPT. Ratification of START I will also permit START II to enter into force, further reducing the strategic forces of the United States and Russia.

### *Verifying a Cut-off in the Production of Fissile Materials and a Comprehensive Test Ban*

Negotiations are likely to begin soon on a global ban on the production of plutonium and highly enriched uranium for weapons or explosives purposes, a fissile materials cut-off for short. In many respects, a cut-off would be more effective in constraining proliferation of nuclear weapons than a CTBT. The technical knowledge required to develop and produce a nuclear device or weapon is well known; efforts to deny such knowledge are unlikely to be successful. It is also no longer necessary to actually test a nuclear device/weapon to have confidence that it will function close to the design yield. The critical requirement for a prospective nuclear country is access to nuclear materials. Therefore, increased attention should be paid to a cut-off agreement, even though more publicity has been focused on a CTBT. A cut-off agreement should include a strong non-transfer provision to deny access to fissile materials by countries lacking indigenous capabilities.

A cut-off agreement will pose major verification challenges and technology needs. Particularly demanding challenges could include monitoring permitted production of highly enriched uranium and plutonium for non-weapons purposes to assure some material is not diverted for military purposes; detecting covert nuclear materials production involving military use of commercial reactor facilities; and detecting covert production of nuclear weapons materials at undeclared military reactors or facilities.

NTM—or possibly ITM—would play a large part in verifying a cut-off. But NTM would not be able to provide assurance that permitted production is being conducted only for approved end uses or detect production of fissile materials at undeclared facilities. For these monitoring tasks, co-operative monitoring by on-site inspection would be required, whether by an expanded and enhanced IAEA, by a new organization, or by a mix of institutions.

