

modification activity as a weapon of war." Following negotiations in the Conference of the Committee on Disarmament (CCD), a Convention on the Prohibition of Military and Other Hostile Use of Environmental Modification Techniques (ENMOD) entered into force in 1978. At present there are 56 signatories to the Convention. There is no formal verification regime associated with ENMOD beyond the call for exchanges of scientific and technological information and a provision for formal complaint in the Consultative Committee of Experts. The second ENMOD review conference (14-18 September 1992) included a discussion of the release of oil into the Persian Gulf and the ignition of oil-fires by Iraqi forces in Kuwait during the War in the Gulf. Verification of these incidents came from a number of technical and human sources: aerial surveillance, satellite surveillance, "on-site inspection," HUMINT, etc.

Representatives of the participating States of the Conference on Security and Cooperation in Europe (CSCE) negotiated the Vienna Document 1992, a set of confidence- and security-building measures (CSBMs) which follow on from a series of previous documents such as that from the Stockholm Conference of 1986. The Vienna Document calls for an annual exchange of information on military forces, data on and deployment of major weapon and equipment systems, and military budgets. CSBMs include consultations, voluntary hosting of visits, demonstrations of equipment, notifications prior to certain military activities, observations of certain military activities, and exchanges of annual military calendars. Verification assumes the use of NTM and NIM and allows for on-the-ground and/or aerial inspections using maps and charts, photo and video cameras, binoculars, hand-held passive night vision devices, and dictaphones. In addition to inspections, evaluation visits are permitted to observe active military formations and units in their normal peacetime locations, as well as air-base visits.

A Canadian arms control initiative, the UN Arms Register was adopted by the UN General Assembly in 1991. Under this agreement,

signatories are called upon to provide data on their imports and exports of a variety of categories of conventional weapons. The Register is viewed as a CBM and the reporting is voluntary. Additional means to increase openness and transparency are being analyzed.

The Open Skies Treaty provides for short-notice surveillance flights by aircraft over an area from Vancouver east to Pavlovskoye (the former Vladivostok). Signed in March 1992 by 25 countries, the Treaty allows for adoption of its provisions by other signatories, including members of the Conference on Security and Cooperation in Europe (CSCE). The Treaty provides countries without sophisticated NTM with independent access to data on military activities. As a transparency measure, it contributes to regional stability by allowing countries the opportunity to monitor their neighbors, thus reducing concerns. Since aerial inspection has not as yet been made a part of the CFE treaty, Open Skies also can be viewed as an adjunct to the CFE verification regime; this relationship is discussed in the following section on "Open Skies and Aerial Surveillance."

Until the present time, verification regimes for multilateral treaties have stipulated CBMs and cooperative measures, while recognizing that some countries have sophisticated NTM. Thus far it is solely in the environmental area that the U.S. has agreed to open its archives of data compiled by reconnaissance means to scrutiny. Experts believe that information from intelligence platforms could aid scientists in their study of environmental changes. For example, reconnaissance aircraft take air measurements to track various types of military activity. These records might reveal levels of methane and carbon dioxide, as well as levels of chloro-fluorocarbons; such measurements would be useful in determining the amount of global warming and the damage being caused to the earth's protective ozone level. Similar tracking by Navy vessels might yield information about ocean pollution and global climate change.

