



Group of Scientific Experts is a good example of this point. Its cooperative research into seismological techniques, despite the absence of a specific Comprehensive Test Ban Treaty (CTBT), has advanced considerably the global capability for monitoring an eventual CTBT.

General research into verification techniques also offers the promise that effective verification systems can be made less intrusive and, therefore, more acceptable to parties concerned about the potential intelligence-gathering capabilities of verification systems.

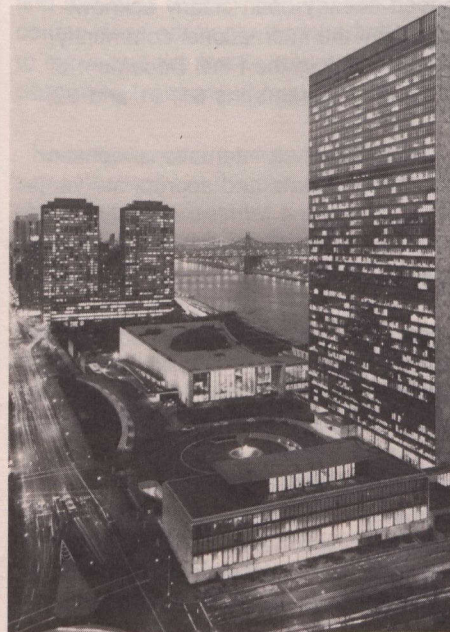
It has also been said that generic research into, and discussion of, verification is not productive. Such a view ignores the fact that the general principles of verification developed at UNSSOD I have applicability, in some degree, to all specific arms limitation issues. It also ignores the possibilities for developing general procedures and techniques which could then be applied in specific arms limitation contexts. For example, various procedures and techniques developed by the IAEA have potential application elsewhere, including a convention on chemical weapons. Attempts to research and relate principles to the procedures and techniques involved in verification can be highly productive both in generating new ideas and solutions to specific problems and in overcoming obstacles in specific negotiations.

A review of the Final Document of UNSSOD I reveals several principles relating to verification. These include 1) adequacy, 2) acceptability, 3) appropriateness, 4) universality, 5) verification methods and procedures in combination, 6) non-discrimination, 7) minimum interference, and 8) non-jeopardizing of economic and social development. It is the task of governments and their negotiators to formulate verification provisions in conformity with these principles.

In the future, although it is expected that much attention will continue to focus on the bilateral arms control process, it is likely that the multilateral dimension will become increasingly

significant. This reflects a number of realities: the need to deal with existing or potential weapons systems for which a large number of countries have a capability (e.g., chemical and biological weapons); the increasingly recognized interest in precluding or controlling weapons deployment in certain specified environments (e.g., the Antarctic, the seabed and outer space); and the growing recognition of the desirability in principle of universal commitments to agreed arms control measures. ('Universality of disarmament agreements helps create confidence among states': UNSSOD I Final Document, paragraph 40.)

In this context, the experience of the USA and USSR in implementing bilateral agreements is of limited value and relevance. Each party to those agreements is to a large extent self-reliant for verification purposes; each party relies on its own personnel and technological resources, which remain under its own direct jurisdiction and control in the collection and interpretation of data. Nevertheless, in addition to the technologies that have been developed, the consul-



*A view of the UN headquarters in New York at sunset. The buildings are the 39-storey Secretariat (right), the General Assembly (centre), the Council Chambers and Conference Rooms (at the river's edge) and the Dag Hammarskjöld Library (foreground).*

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tative procedures and collateral measures which the two parties have elaborated (e.g., in relation to the ABM and SALT agreements) could be of considerable instructive value in a multilateral context.

For the resolution of some of the more difficult problems in the verification of multilateral agreements, however, the experience with bilateral agreements offers only partial guidance. At issue are such matters as: equitable sharing of rights, responsibilities and costs; the delegation of executive and operational responsibilities in ways which make the principles of acceptability, universality and non-discrimination operationally meaningful; and the effective coordination of procedures and techniques so as to ensure that the entire verification process is adequate, appropriate and minimally intrusive. Meeting these challenges will require careful and imaginative institution-building and the creative elaboration of new international law.

At the conceptual level, a number of possible approaches can be envisaged. One possible approach, for example, might be for the parties to an agreement to delegate responsibility for data collection and interpretation to a selected group of countries possessing the relevant technological and other resources. In effect, much of the verification service would be obtained from those having the capability to perform it. Such an approach would need to involve a careful elaboration of agreed terms of access to information and agreed decision-making procedures for the purpose of taking action in the light of the interpreted data.

Other approaches posit the notion of an International Verification Organization (IVO), an organization created and maintained specifically for the purpose of monitoring the implementation of arms control and disarmament agreements. An IVO could have 'general' responsibilities, i.e., be responsible for conducting verification activities in relation to several different agreements. The 1978 proposal for an International Satellite