Soviets in U.N. decry weather warfare

In a surprise move, the Soviet Union has introduced a resolution before the United Nations that will force the United States to take an official stand on an issue it has long avoided. Soviet Ambassador Jacob A. Malik put forth a resolution and draft treaty before the U.N. General Assembly's main political committee last week that would ban geophysical or environmental warfare, including military weather modification.

Many of the actions included in the resolution sound like science fiction, but Malik says they are now scientifically possible: manipulations of the electrical processes in the atmosphere; creation of cyclones, anticyclones and cloud front systems; cloud seeding; modification of the chemical or physical behavior of the oceans; the production of earthquakes or tidal waves; the burning or defoliation of vegetation; the creation of electric and sound fields within the oceans, and the creation of windows in the earth's ozone layer that would allow lethal ultraviolet light to pour down on enemy territory.

Spokesmen for the U.S. delegation to the United Nations and the U.S. Arms Control and Disarmament Agency say the United States has no formal position on military weather modification, but probably will present a response before the U.N. committee in the next few weeks. Former President Nixon and Soviet Communist party leader Brezhnev discussed the subject briefly at their summit meeting in late June, and agreed to discuss means to limit weather warfare at a joint meeting later this year. But an Arms Control agency spokesman told SCIENCE NEWS this meeting has not been set up and that the Soviet resolution was somewhat of a surprise. The U.S. position is being prepared.

Attempts to modify the weather for military purposes have already been made. Spokesmen for the Department of Defense admitted in hearings this spring before Sen. Claiborne Pell's (D-R.I.) Subcommittee on Oceans and International Environment the use of cloud seeding and forest defoliation in Southeast Asia from 1967 to 1972 (SN: 5/25/74, p. 335). Pell, a long-time opponent of weather warfare, sponsored a Senate resolution in July 1973 that directed the Department of State to seek an international treaty. No U.S.-sponsored resolution has been forthcoming, however, and Pell's office blames opposition by the Pentagon. Pell is pleased the subject now is coming up for discussion, an aide says, but is disappointed that the United States did not take the initiative. □

U.S., Soviets, science: Joint projects

The U.S.-U.S.S.R. Joint Commission on Scientific and Technical Cooperation held its third meeting last week in Washington and announced new projects involving exchange of scientists and technical information. At a press conference, National Science Foundation Director H. Guyford Stever joined the head of the Soviet delegation, V. A. Kirillin, in expressing satisfaction with the cooperative venture, which is now over two years old and has involved the exchange of about 500 scientists from each country.

The new projects will include work on chemical catalysis, the application of computers to management, exchanges in solid state and astrophysics, electrometallurgy, microbiology, science policy and scientific and technical information.

Noting the progress made in developing computer models for economic and management systems, the commission urges joint work on the application of such models to the management of large cities and to decision-making by high-level executives. No exchange of sophisticated hardware will be involved.

Work is already under way on catalysis in both countries, and the new agreement is designed to facilitate exchange of the personnel involved. The American Chemical Society will be responsible for administering the program in the United States.

Joint working groups have already been established in microbiology and forestry, and these efforts will now be combined in an attack on such practical problems as the control of pests in agricultural crops and work with forest insects and diseases. Both junior and senior scientists are expected to be involved in exchanges on these subjects.

Joint projects on solid state physics will involve work on lasers, a particularly sensitive area (SN: 1/5/74, p. 8). Many of the scientists involved already know each other from recent international symposia on the subject, and the nucleus of a working group has already been created.

Travel restrictions are still a touchy subject. In both countries, certain areas are "off limits" to visiting scientists. But when a clear need for access to one of these areas exists, participants have apparently been able to work out informal agreements whereby an American scientist can visit a specific "forbidden" Russian area in exchange for the visit of a Soviet scientist to some comparable American installation. Says Stever: "We are finding ways around constraints that have been placed on us in the past." Both leaders express the hope that as cooperation expands, lowering of restrictions will follow as a matter of course.

Scientific cooperation thus seems to have developed a symbiotic relation to political detente: Progress in one area often leads to progress in another. From all indications, the result for scientists involved has been a steady progression from the "getting to know you" stage of cooperation to establishment of solid working relationships. □

Hearing loss and paranoid behavior

Hearing loss among the elderly is common, but what few realize is that loss of hearing can also lead to paranoid behavior among the elderly. Research underscoring this fact is reported in the Oct. 12 LANCET by a team of British otolaryngologists and psychiatrists.

A. F. Cooper and his colleagues at the University of Newcastle upon Tyne studied 132 mental hospital patients, average age 68. Sixty-five of the patients were paranoid. Sixty-seven had other kinds of psychiatric problems. None of the patients had been mentally ill before the age of 50.

One hundred and eleven of the 132 patients were interviewed and tested for hearing. Other sources of information included psychiatric hospital records and case reports from ear, nose and throat departments. The remaining 21 patients were not tested for hearing loss for various reasons, but psychiatric and social records from the hospital provided information about their deafness.

The Newcastle team found that hearing loss was significantly greater among the paranoid patients than among the controls (46.3 percent versus 38.1 percent). The percentage of hearing loss among the controls was comparable to that in the general population of the same age. What's more, deafness among the paranoids was almost entirely severe longstanding bilateral deafness, which is most commonly caused by chronic middle-ear disease. Fifteen paranoid patients were identified as having had hearing problems from early childhood or even from childhood. Others had probably had hearing problems just as long, but records were not available to document it.

Cooper and his team conclude "that there is an excess of patients with paranoid psychoses who are hard of hearing, and who have been so since early or middle age. . . . The long interval between the onset of deafness and the onset of psychoses seems to offer opportunities for prevention." □