## Private Members' Business

activate the amendment process. Parliamentarians for Global Action went about the world seeking countries that would meet that standard and they did that. There were 116 signatories to the partial test ban treaty. With hard work they were able to get 39 countries to sign a request demanding an amendment conference and that was accomplished a few years ago. As a result of those 39 countries making that request, later this year we will have an amendment conference to consider transposing or converting the partial test ban treaty into a comprehensive test ban treaty.

Why is this so important? What is the state of military power and nuclear power in the world today? In 1989, the last year for which we have figures, the countries of the world spent over \$1 trillion on arms of all kinds. The nuclear weapon states have accumulated approximately 60,000 nuclear weapons. Those 60,000 nuclear weapons have one million times more power than the bomb dropped on Hiroshima in 1945. There are 4 tonnes of TNT for every man, woman and child on the face of the earth—4 tonnes of TNT for every individual on the face of the earth—and are capable of destroying 800 million people in 12 hours. The more recent nuclear weapons are more accurate, faster, more concealable, and more mobile than ever before. I suppose the most dangerous of them are those that are found on the nuclear submarines because the nuclear submarines can travel the oceans of the world, always changing their positions. A single U.S. Trident submarine or a single Soviet Typhoon submarine has the power to destroy between 100 and 200 cities. A single submarine with its nuclear weapons can destroy between 100 and 200 cities. Together, the United States and the Soviet Union have 100 of these submarines.

These submarines can stay 100 miles off the coast of New England and hit almost any target in the United States. The same thing can be said for the American submarines in the Baltic Sea or in the Mediterranean. More troubling, these missiles carrying nuclear warheads can be launched by error and technical breakdown. The system is so decentralized and so operated by electronics that such errors and technical breakdowns can take place.

## • (1410)

We just have to look at what happened to the Challenger spacecraft in the United States, which is not a

nuclear spacecraft. Despite all the technology in the United States when this spacecraft was launched a few years ago, it exploded in air and all the Americans on that spacecraft were killed.

There was a similar occurrence in the Soviet Union with all its technology. Despite that technology there was the terrible accident at the Chernobyl nuclear power plant.

It is estimated that there have been 151 false alarms with respect to the launching of nuclear missiles in recent years.

We are confronted with a very serious situation, although there has been some progress in the last two years. In fact there has been some very encouraging progress since Secretary Gorbachev came to power in the Soviet Union a few years ago.

Since Mr. Gorbachev's coming to power and the more flexible response by the United States and NATO, we have had the conclusion of the intermediate nuclear forces treaty in 1987. We have had the recent treaty to ban chemical weapons. We had the Open Skies conference which was held here in Ottawa last week where agreement in principle was reached on the surveillance of NATO and Warsaw Pact countries by the aircraft of the other countries. We have the agreement for troop reductions in Europe to 195,000. We have the progress being made at the Geneva Conference and the Vienna Conference.

It is interesting to note that the Geneva talks, which have been going on since 1962, made virtually no progress whatsoever until about two years ago. Those talks went on every year since 1962. These were talks to deal with the control of strategic nuclear weapons. There was hardly any progress until Mr. Gorbachev came to power in the Soviet Union and now we see some progress.

As a matter of fact Mr. Gorbachev has proposed that all nuclear weapons be eliminated from the face of the earth by the year 2000. The United States for its part has proposed that they be cut in half as a first step in proceeding toward that goal.

The talks at Vienna are with respect to conventional armies in Europe. Again, substantial progress is being made. Those talks have been going on since 1973, although very little was done until recently.