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## WHO'S AHEAD? EXAMINING THE NUCLEAR BALANCE

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### PUBLIC SOURCES

'Who's ahead?' is perhaps a crude question, but when applied to the strategic arms race, it is the one most often raised. Despite the thousands of nuclear weapons available to both superpowers, 'who's ahead' remains a question of great importance, affecting defence spending, force structures and arms control negotiating positions.

The significance of the question is rooted in the theory of nuclear deterrence. Mutual deterrence rests on the assumption that both sides have the ability to retaliate and inflict unacceptable damage on the enemy, even *after* having absorbed a first strike. A first strike is an attack carried out against the enemy's nuclear capability with the intent of eliminating his ability to retaliate in kind. If the 'attacker' is uncertain whether he can eliminate the enemy's ability to strike back, he is deterred from striking first, since the potential gain from such a first strike is far outweighed by the potential losses.

Thus, determining who is ahead involves more than counting which side has more weapons. It involves taking account of the characteristics of weapons and their ability to fulfil their functions. Essentially, the key to the balance is determining whether one side is moving substantially ahead in counterforce\* capability or is developing the capability to launch an effective first strike. This cannot be determined solely on the basis of a tally of weapons numbers on each side.

\* In *counterforce* targeting, missiles are targeted against missiles and other military installations. A nuclear strike against the enemy's population or industrial base, known as a *countervalue* strike, leaves the enemy missile force intact and able to retaliate.

Just as there is no single indicator of 'who's ahead', there is no single source of public information that will provide an accurate and full picture of the military balance. The Canadian government, like most other NATO members, must rely on the American government for accurate information on strategic nuclear forces. However, the American figures are themselves subject to debate, especially in the United States, where they are an important part of the larger public debate on defence spending, arms control and weapons procurement.

It is therefore important to examine more than one source for the nuclear balance and to understand the assumptions and the methodologies of each source. By analyzing and comparing various sources, it is possible to understand the areas of uncertainty and controversy in the debate about the capabilities and characteristics of strategic weapons systems, as well as to gain a better understanding of the balance itself.

*The Military Balance* is published annually by the London-based International Institute for Strategic Studies (IISS), and contains a detailed, worldwide listing of both conventional and nuclear forces. The data is based on a wide range of unlisted sources and is up-to-date as of 1 July of each year. The Institute notes that the data published is based on information available at the time; thus, changes from year to year do not necessarily reflect changes in national forces, but may be due to changes in the primary sources of information.

The Stockholm International Peace Research Institute (SIPRI) Yearbook, *World Armaments and Disar-*

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