March 18, 1998

Honorable Thomas A. Daschle
Democratic Leader
United States Senate
Washington, D.C. 20510

Dear Mr. Leader:

In response to your letter of September 17, 1997, the Congressional Budget Office has estimated the budgetary impacts of four scenarios for strategic forces. Those scenarios would maintain U.S. strategic forces at a level of 6,000 warheads, lower warhead levels to 3,500 by 2003, and make further reductions to 2,500 warheads and 1,000 warheads. The enclosure discusses the budgetary impact of the alternatives over the next 10 years and in the long run.

CBO will address your request for estimates of the budgetary impact and security issues associated with other approaches to arms control in a forthcoming analysis. Those approaches would include placing all non-deployed warheads and weapons-grade materials in secure storage facilities and reducing the alert status of some or all of the nuclear forces.

If you wish further details on the estimates we would be pleased to provide them. The CBO contact is Raymond Hall.

Sincerely,

June E. O'Neill

Enclosure

cc: Honorable Trent Lott
Majority Leader

Honorable Strom Thurmond
Chairman
Committee on Armed Services

Honorable Carl Levin
Ranking Democratic Member
Committee on Armed Services

Honorable Jesse Helms
Chairman
Committee on Foreign Relations

Honorable Joseph R. Biden, Jr.
Ranking Democratic Member
Committee on Foreign Relations

Enclosure

Estimated Budgetary Impacts of Alternative Levels of Strategic Forces

For most of the last fifty years, the Department of Defense (DoD) has maintained a triad of forces to respond to the threat of nuclear warfare. Beginning in the 1970s, the size and shape of those strategic forces have been influenced by arms control agreements between the United States and the former Soviet Union. The first such agreement under the Strategic Arms Reductions Talks (START) calls for the United States to deploy no more than 6,000 warheads according to counting rules established in that treaty. START II calls for the United States to reduce its forces to 3,500 warheads by January 1, 2003, as written into the treaty, or December 31, 2007, as recently agreed upon by President Clinton and President Yeltsin. START I has been signed and ratified by both nations, but START II awaits ratification by the Russian Duma.

In response to a Congressional request, the Congressional Budget Office (CBO) has estimated the budgetary impacts of four alternative levels of strategic forces. The alternatives include remaining at START I levels, reducing to START II levels of 3,500 warheads by 2003 instead of 2007, and making further reductions to 2,500 warheads and 1,000 warheads.

U.S. forces are currently at START I levels, and the Administration's plan calls for reducing forces to START II levels by the end of 2007. CBO estimates that reducing forces to START II levels by the end of 2007 would save an average of $700 million a year through 2008 and about $800 million a year in the long run, compared to maintaining today's forces. (All estimates are expressed in constant 1998 dollars.) Making the START II reductions by 2003 would yield additional savings of $700 million through 2008.

Reducing strategic warheads to 2,500 could save about $1.5 billion dollars a year in the long run compared with funding for today's force levels or it might not yield any additional savings if few or no platforms are retired. For a limit of 1,000 warheads, CBO estimates that savings could increase to about $2 billion a year in the long run.

Cost of Current Nuclear Forces (6,000-Warhead Limit)

The national defense budget includes funding for nuclear offensive forces operated by the military services, Department of Energy weapons programs that build and maintain nuclear warheads, and strategic command, control, and communications (C3), and surveillance

systems. Nuclear offensive forces consist primarily of about 200 bombers, 550 land-based intercontinental ballistic missiles (ICBMs), and 18 Trident submarines. These forces are all armed with multiple nuclear warheads under the START I limit of 6,000 warheads.

In the fiscal year 1998 budget, the costs for current nuclear forces and supporting activities total about $20 billion. That includes about $8 billion for strategic offensive forces, about $4 billion for DOE programs, $6 billion for C3 and surveillance, and another $2 billion for treaty verification and other related programs. The 1998 total, however, includes just $2 billion for force modernization compared with the $4 billion CBO estimates would be necessary to replace and modernize today's offensive forces in the long run. For that reason, CBO would estimate the total costs of maintaining and supporting current nuclear force levels at $22 billion.

Defense spending contains still other sums that might reasonably be attributed to nuclear forces—including efforts to reduce the threat from other nation's nuclear forces. The Department of Energy will spend about $6 billion in 1998 to clean and restore the environment from decades of nuclear weapons production. Including the costs of missile defenses and strategic air defenses would add another $5 billion, bringing the total to $33 billion a year.

Budgetary Impact of START II (3,500-Warhead Limit)

The START II treaty was signed by President George Bush and President Boris Yeltsin on January 3, 1993. It was ratified by the United States Senate in January 1996, but it awaits ratification by the Russian Duma. The treaty would allow Russia and the United States to have 3,500 strategic nuclear warheads, including no more than 1,750 warheads to be deployed on submarines. ICBMs could have only one warhead and must be no more powerful ("heavy") than the Russian SS-19 missile. The treaty also places limits on bombers and the use of missile silos. On March 21, 1997, Presidents Clinton and Yeltsin agreed to extend the deadline for START II implementation from January 1, 2003, to December 31, 2007.

Implementation by the end of 2007. DoD's current plans call for implementing START II according to the Clinton/Yeltsin agreement. The Navy would retire four of its oldest Trident submarines by 2003, and the Air Force would retire 50 Peacekeeper missiles by 2008. Relative to START I this plan would save an annual average of about $700 million through 2008—largely because of costs that the Navy would not have to bear. Under START I, the Navy would probably need funding for additional D5 missiles, modifications to four submarines that carry C4 missiles, and overhauls (including refueling the nuclear core) of

those four submarines. Acquiring the D5 missiles would cost an average of about $400 million a year through 2008, assuming the Navy would buy about 100 more missiles at about $40 million a missile—the approximate price of the most recent purchase. CBO estimates, based on data from the Navy, that costs to modify hardware and software would total about $250 million a boat and average about $100 million a year through 2008. Also, costs to overhaul the submarines would amount to about $175 million a boat and average about $70 million a year over the 1999-2008 period.

In addition, DoD's plan would save the costs of operating the four submarines and 50 Peacekeepers. Although those forces cost about $300 million a year to operate, DoD's plan would save only $1.3 billion through 2008—or an average of about $130 million a year—because the changes to Peacekeepers would not occur until after 2003.

Over the very long term, the difference between a START I force and a START II force would be about $800 million a year. In addition to about $300 million a year in operating costs, DoD would have to spend $500 million a year to replace aging systems. Those replacement costs would include about $400 million a year for the sea-based leg of the triad and about $100 million a year for Peacekeeper missiles.

Implementation by January 1, 2003. Early implementation of the START II treaty would result in additional savings of about $700 million due to earlier retirement of the Peacekeeper missiles. There would be no additional savings from retiring Trident submarines because the Administration plans to retire the submarines by 2003.

Savings From a 2,500-Warhead Limit

At the Helsinki Summit, Presidents Clinton and Yeltsin agreed to negotiate a treaty—often referred to as START III—that would call for a limit of 2,000 to 2,500 strategic warheads. The United States could implement such an agreement in many ways. Reducing the number of warheads carried by existing platforms would yield little or no additional savings. On the other hand, savings would be significant to the extent that submarines, land-based missiles, and bombers were eliminated. For example, if 200 Minuteman missiles and 10 bombers were taken from the force while Trident missiles were modified to carry 4 instead of 5 warheads, the 2,500-warhead limit would save about $1.5 billion a year compared to today's force levels or about $0.7 billion when compared to funding under START II. Those savings would stem not only from reduced costs for day-to-day operations but also from avoiding future costs to replace the aging systems. A 2,500-warhead limit could be realized in many other ways that would affect budgetary savings. For example, greater reductions in the number of platforms, including eliminating one leg of the triad entirely, would increase the savings.

Savings from a 1,000-Warhead Limit

An agreement to maintain no more than 1,000 warheads could save roughly $2 billion in the long run compared to funding for today's forces under START I. Savings would vary depending on how many Trident submarines, Minuteman missiles, and B-52 bombers were retained. As with a 2,500-warhead limit, reducing the number of warheads per sea-based missile and keeping 14 Trident submarines could contribute to meeting the objective, but it would not offer as much savings as reducing the number of submarines and arming each missile with more warheads. Similarly, whether B-52 bombers are retired, held in a reserve role, or devoted entirely to nonnuclear warfare would affect the budgetary impact. For example, paring the force by 200 Minuteman missiles and arming each missile in 14 Trident submarines with one warhead would save about $1.3 billion in the long run. Alternatively, if 300 Minuteman missiles, 20 bombers, and 8 Trident submarines were taken from the force, savings would total about $2.5 billion in the long run compared with START I forces.