July 23, 1982

The Honorable Ronald Reagan, President
The United States of America
The White House
Washington, D.C. 20500

Dear Mr. President:

I am writing to invite your attention to an important new class of defensive nuclear weapons systems which are presently in their initial stages of development. Until very recently, nuclear weapons were correctly characterized as means of mass destruction. It now appears that they can also be employed in space to defend against both nuclear and conventional attacks with minimal loss of human life, but with very great military effectiveness.

Nuclear weapons scientists have developed and, in one very notable instance, have successfully tested novel means for converting the energy of special types of not very large hydrogen bombs into hitherto unprecedented forms and then directing these in highly effective fashions against enemy targets. Operating in space against distant targets in space, the effects of some of these techniques are expected to be spectacularly destructive; however, it is enemy warheads, rockets and satellites, not lives, which will be destroyed. Used against possibly very large areas of enemy territory from a region of space overhead, the effects of other of these techniques are expected to quite comprehensively devastate both civilian and military equipment with no discernable direct effects on the people in the territory so affected.

There are reasons to believe that the Soviet Union might be a few years ahead of us in each of these areas of development; it is only recently that our understanding has advanced to the level where we could appreciate the significance of previously puzzling Soviet emphasis on the aspects of science and technology pertinent to the development of these weapons. Because of their extraordinary potential, it seems likely that the Soviets would seek an early opportunity to employ such means to negate our offensive strategic capabilities, the more so as a "bloodless" victory would be in prospect.

These considerations have been brought to the attention of all relevant people in your Administration, but action has yet to be taken which is commensurate with both the threat and the opportunity. I am therefore appealing to you for a mandate to vigorously explore and exploit the technological opportunities in defensive applications of nuclear weaponry.
Because of the potential of these new types of nuclear weapons, this matter is the most important one in strategic military affairs since the advent of the hydrogen bomb. Your Science Advisor, Dr. George Keyworth, is familiar with these topics, and has very kindly offered to convey this message to you. Secretary Weinberger has written in support of an accelerated developmental program, but to no obvious effect.

Specifically, an increase over the present budget request for FY'83 of at least $55 million for immediate acceleration of relevant nuclear weapons research, development and testing is needed at the Livermore Laboratory, and substantially more will be required in subsequent years, if even one of these approaches bears the anticipated fruit. The Los Alamos Laboratory, which is still developing its program in these areas, can be expected to need comparably stepped-up funding in the FY'84 period and beyond.

My recent discussions of these prospects with senior members of the Congress suggest that they would welcome your leadership in this matter, especially as the pertinent FY'83 authorization action is still pending in Senator Warner's Subcommittee, and the appropriations process for the DoE Defense Programs has yet to generate legislation at even the subcommittee level in either House.

If the Soviets should be the first to develop and deploy these defensive nuclear weapons, the Free World is in the deepest possible trouble. However, if we act in this matter promptly and with the full vigor of which we are capable, we may end the Mutual Assured Destruction era and commence a period of assured survival on terms favorable to the Western Alliance. Commencing this effort may also constitute a uniquely effective reply to those advocating the dangerous inferiority implied by a "nuclear freeze."

Thank you for your consideration of this matter, and even more for the excellent leadership which our country is enjoying under your Administration.

Sincerely,

Edward Teller

cc: The Honorable James Edwards
    The Honorable George A. Keyworth, II
    The Honorable Casper Weinberger
    The Honorable William R. Wilson