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June 8, 1984

To: Technology Assessment Board
From: Jack Gibbons *J. Gibbons*

Subject: Background Paper on "Directed Energy Missile Defense in Space"

In the materials I sent to you on May 24th I included a 5/23/84 memo to file on my meeting with General Abrahamson. I noted that he had told me to expect a more detailed critique than the one we already refuted. On Wednesday afternoon June 6 I received the attached letter from Deputy Secretary of Defense Taft, enclosing a copy of the Space Defense Background Paper annotated with 61 comments and requesting that OTA withdraw the paper. A preliminary review indicates that the principal objections are those contained in General Abrahamson's earlier critique stated more carefully and in greater detail.

In an effort to settle the issue of alleged serious technical errors and also the plausibility of Dr. Carter's assumptions in the Background Paper, I have asked a small panel* of knowledgeable outside individuals to review the paper and the DOD critique, and report to me on the matter as rapidly as possible. I will share this review with you as soon as it is available (hopefully within two weeks). Of course, I will wait until that time to decide about what response should be made to DOD.

I regret the time we have all lost in dealing with challenges to this particular document and believe that the new review procedures I sent to you on 5/25 will prevent the recurrence of such problems, as well as improve the process of release of OTA materials.

*In an effort to protect the members of the Panel from getting too many phone calls, I will not release their names until they have completed their review. They are:

Lt. Gen. Glenn A. Kent, USAF (ret.). Senior staff member, RAND Corporation; former Director, Weapons Systems Evaluation Group, U.S. Air Force; recent service on Defense Science Board and Air Force Scientific Advisory Board.

The Honorable William J. Perry. Managing Partner, Hambrecht & Quist. Member, Technology Assessment Advisory Council. Member, Scowcroft Commission. Former Under Secretary of Defense for Research and Engineering.

Professor Charles Townes. University Professor of Physics, University of California (Berkeley). Nobel Prize for work in developing the laser. Member, Defense Science Board. Chaired two commissions convened by Secretary of Defense Weinberger to examine issues relating to MX basing.

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THE DEPUTY SECRETARY OF DEFENSE

WASHINGTON, D.C. 20301

4 JUN 1984

Dr. John H. Gibbons
Director
Office of Technology Assessment
United States Congress
Washington, D. C. 20510

Dear Dr. Gibbons:

On April 24, 1984 the Senate Foreign Relations Subcommittee on Arms Control, Oceans, International Operations, and Environment released a background paper prepared by Dr. Ashton Carter under the auspices of the Office of Technology Assessment. This paper, which I understand was neither reviewed nor approved by the Technology Assessment Board, contains serious technical errors. Dr. Carter's report is also misleading about the goals of the Strategic Defense Initiative research program, which are to provide future leaders with options for decisions to enhance our security and international stability with effective strategic defense. In view of the serious errors in Dr. Carter's report, I ask that the Office of Technology Assessment withdraw the report.

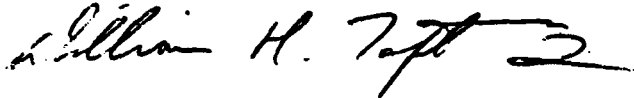
Following release of Dr. Carter's report, I had it reviewed by four independent organizations, all of whom Dr. Carter cited as contributors in the introduction to his report. These independent evaluations were unanimously critical of Dr. Carter's report. Central to all arguments in the report are the analyses of the number of weapons in orbit needed to counter a postulated threat. For example, by choosing inappropriately short ranges for directed energy weapons, incorrect calculation of "absentee ratios" (the ratio of the total number of satellites in orbit to the number needed to negate a given threat), and poor choice of orbital placement of satellites, false conclusions are drawn concerning the promise of new ballistic missile defense technologies. The combination of these errors lead to an estimate of on-orbit satellite constellation size and weight, wrong by at least a factor of two and in some cases a factor of fifty.

Dr. Carter's paper contains numerous other significant errors. These errors are detailed in the attached document, which represents a consensus among all reviewers.

The Defensive Technologies Study and the Strategic Defense Initiative, which follows from that study, are not discussed in the report, although there is a clear implication that Dr. Carter's report deals with these topics. The fundamental objective of the Strategic Defense Initiative is to answer the questions that Dr. Carter repeatedly cites in his paper as requiring more data. Yet, the critical need for a research program to answer these questions is not acknowledged.

I am sure that you would wish to correct the deficiencies in Dr. Carter's report before any more erroneous impressions are given. Lest the report be used inappropriately before these corrections are made, I ask that the report be formally withdrawn while our staffs work together to address these issues.

Sincerely,

A handwritten signature in black ink, appearing to read "William H. Taft, IV". The signature is written in a cursive style with a prominent flourish at the end.

William H. Taft, IV

Congress of the United States

JOHN H. GIBBONS
DIRECTOR

OFFICE OF TECHNOLOGY ASSESSMENT

WASHINGTON, D.C. 20510

6/12/84

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JOHN H. GIBBONS

June 12, 1984

To: Board Staff
From: Eugenia Ufholz

FYI

The Honorable William H. Taft, IV
Deputy Secretary of Defense
U.S. Department of Defense
The Pentagon, Room 3E944
Washington, D.C. 20301

Dear Mr. Taft:

This is in response to your letter of June 4, requesting that I formally withdraw the OTA Background Paper by Dr. Ashton Carter on "Directed Energy Missile Defense in Space."

The main burden of your letter is the allegation that the paper "contains serious technical errors," as detailed in the document you enclosed. The OTA staff has reviewed these allegations and maintains that Dr. Carter's paper does not contain serious technical errors and that his assumptions are as plausible as those of your reviewers. However, because of the extraordinary nature of your request that this paper be "formally withdrawn," I have asked several distinguished outsiders not associated with earlier reviews of Dr. Carter's paper to review his paper and your critique and to report back to me as soon as possible.

You also state that the OTA paper is misleading about the goals of the Strategic Defense Initiative (SDI). While the paper makes a case that a "perfect" defense is extremely remote, it was not intended to describe the goals of the SDI or to evaluate them in any comprehensive way. Rather, the paper's subject matter is a review of some of the technologies whose development the SDI is addressing and an introductory discussion of the criteria against which these technologies must be measured.

I appreciate and share your concern that misleading impressions should be avoided to the extent possible, especially regarding this complex and controversial issue. To withdraw the paper while the review I have requested is under way would give the misleading impression that OTA now has reason to believe that the paper as published is seriously flawed. Such an action is therefore clearly out of the question. I hope, however, that the review can be completed and the matter resolved as quickly as possible.

Sincerely,



John H. Gibbons

cc: The Honorable Morris K. Udall
The Honorable Ted Stevens

cc: Director's Office
Assistant Directors
CRPA
Operations Manager
Administrative Officer
Budget & Finance Officer
Press Officer
Publishing Officer
Information Center Manager