

Office of the Secretary of Defense
Chief, RDD, ESD, WHS
Date: 18 Feb 2016 Authority: EO 13526
Declassify: X Deny in Full: _____
Declassify in Part: _____
Reason: _____
MDR: 16 -M- 0967

5 USC 552

#97

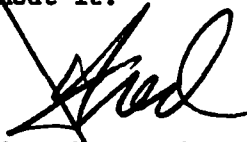
OFFICE OF THE UNDER SECRETARY OF DEFENSE
FOR RESEARCH AND ENGINEERING

Date 30 July 1984



Memo for LEC Boykin

I believe that the attached insert is on a word processor in your office. Would you please have the indicated change made.

We need it ASAP; the committee is threatening to print the record without it.


Frederick S. Holmes, Jr.
COL, USA

Please call 56413 for pickup when ready.


Here is the corrected
type - 

Page determined to be Unclassified
Reviewed Chief, RDD, WHS
IAW EO 13526, Section 3.5
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16-M-0967

NOTE TO TYPIST: Below are examples of completed inserts. The text used contains instructions on completing this form. Read each box before beginning to type.
Supplemental instructions are available from your Service/Agency.

DIALOGUE/REPEAT THE QUESTION

ANSWER ONLY

DIALOGUE/DO NOT REPEAT THE QUESTION

CLASSIFICATION	CONTROL	DATE	REASON	APPROVAL

GENERAL DECLASSIFICATION AUTHORITY: 25 USC 552

DATE: FEB 18 2016

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INSERT FOR THE RECORD						
HOUSE SENATE	APPROPRIATIONS COMMITTEE	Y	HOUSE SENATE	ARMED SERVICES COMMITTEE	HOUSE SENATE	OTHER
HEARING DATE	TRANSCRIPT PAGE NO.	LINE NO.	INSERT NO.			
1 MAR 84			Q.12			

ABM Treaty

Question: The research, development, or testing of anti-satellite weapons is not prohibited by the 1972 ABM Treaty, yet many of the technologies being investigated for advanced ASAT systems are the same as those under study for BMD development. Because of this, do you feel that the development of ASATs will inevitably result in a progressive erosion of the treaty?

Answer: The development of ASAT systems should not result in erosion of the ABM Treaty. This is because the US ASAT system currently under development would have no practical utility for defense against ballistic missiles. The US has no plans to develop a more advanced system. Theoretical concepts for advanced ASAT systems could have some applications to ballistic missile defense, but generally, the technical capabilities required of conceptual ASAT systems, such as power level and tracking accuracy for directed energy weapons, and the number of systems available would not be adequate for BMD.

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OFFICE								
Strategic Arms Control Policy, OASD/ISP								
ACTION OFFICER/EXTENSION						DATE PREPARED		
LtCol Boykin, X70030						22 JUN 84		
COORDINATION								
OFFICE	SDIO	STAR	620/oc					
NAME	<i>Rankine</i>		RH					
DATE	21 July 84	25 July 84	1/30/84					

INSERT FOR THE RECORD						
HOUSE	APPROPRIATIONS COMMITTEE	X	HOUSE	ARMED SERVICES COMMITTEE	HOUSE	OTHER
SENATE			SENATE		SENATE	
HEARING DATE	TRANSCRIPT PAGE NO.		LINE NO.		INSERT NO.	
1 MAR 1984			Q1		Q1	

VIOLATION OF ABM TREATY

QUESTION: Do any of the budget requests entail programs which might violate the 1972 U.S.--Soviet ABM Treaty?

ANSWER: These budget requests are for research on a broad range of defensive technologies, and are fully consistent with the ABM Treaty as are the research and technology demonstrations which will be conducted as part of the program.

The SDI program as with other research and development programs will be conducted in such a manner so as to comply fully with the ABM treaty using mechanisms that have worked effectively since the Treaty was signed over 12 years ago. The Department of Defense has thorough, comprehensive procedures and mechanisms for insuring compliance of its programs with strategic arms control agreements. The Administration reports annually to Congress on U.S. military programs and their compliance with arms agreements through Arms Control Impact Statements.

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 Date: FEB 18 2018

OFFICE						
OUSDRE/S&TNF/Defensive Systems						
ACTION OFFICER/EXTENSION					DATE PREPARED	
L. R. Dausin/52680					2 APR 1984	
COORDINATION						
OFFICE	STINF					
NAME	Shank					
DATE	AGABY					

INSERT FOR THE RECORD						
HOUSE	APPROPRIATIONS COMMITTEE	X	HOUSE	ARMED SERVICES COMMITTEE	HOUSE	OTHER
SENATE			SENATE		SENATE	
HEARING DATE	TRANSCRIPT PAGE NO.	LINE NO.	INSERT NO.			
1 MAR 1984		Q7	Q7			

SDI AND OTHER INITIATIVES

QUESTION: Do any of the budget requests composing the SDI entail programs which might violate other treaty commitments, such as those contained in the 1976 Outer Space Treaty, or the 1963 Partial Test Ban Treaty?

ANSWER: This initiative, contemplating only research on a broad range of defensive technologies, is fully consistent with current US treaty obligations. The 1967 Outer Space Treaty prohibits placing nuclear weapons or weapons of mass destruction in orbit. The 1963 Partial Test Ban Treaty prohibits nuclear weapons tests "or any other nuclear explosion" in the atmosphere, in outer space, and under water. The US SDI program of broad-based R&D is entirely consistent with these treaties. Any testing in the atmosphere, in outer space and under water, as part of this effort, will not involve nuclear devices.

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OFFICE		OUSDRE/S&INF/Defensive Systems					
ACTION OFFICER/EXTENSION		MR. LAWRENCE R. DAUSIN/52680				DATE PREPARED	
		26 MAR 1984					
COORDINATION							
OFFICE	ST&INF						
NAME	J. Hunt						
DATE	30 Mar 84						

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HOUSE	APPROPRIATIONS COMMITTEE	Y	HOUSE	ARMED SERVICES COMMITTEE	HOUSE	OTHER
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1 MAR 1984		06	06			

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MIRVs ON ERIS

QUESTION: Is ERIS being developed to carry multiple interceptors? If so, would this violate the ABM Treaty restrictions on MIRVed ABM systems?

ANSWER: The ERIS is intended to be a small, light weight, low cost exoatmospheric interceptor which will carry a single hit to kill miniature homing vehicle. A competitive contract award is in progress. Contractor proposals (multiple) for an ERIS design will follow contract award.

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No SECURITY objection to
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MAY 4 1984

SECURITY REVIEW, ACSI, HQDA

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OFFICE		OUSDR&E/S&TNF/Defensive Systems					
ACTION OFFICER/EXTENSION		L. R. DAUSIN/52680				DATE PREPARED	
						2 APRIL 1984	
COORDINATION							
OFFICE	S&TNF/CD3	S&TNF					
NAME	L. R. Dausin	Shank					
DATE	4 May 84	11 May 84					

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HOUSE	ARMED SERVICES COMMITTEE	SENATE	ARMED SERVICES COMMITTEE	SENATE	ARMED SERVICES COMMITTEE
1 Mar 84	TRANSCRIPT PAGE NO.	LINE NO.	LINE NO.	LINE NO.	LINE NO.
				Column 72	

STRATEGIC DEFENSE INITIATIVE

Classification:

Question: The Strategic Defense Initiative reportedly calls for a number of technical demonstrations of key technologies. What will these tests entail, and when are they scheduled? Would any of them violate the ABM Treaty's provision not to develop, test, or deploy ABM systems or components which are sea-based, air-based, space-based, or mobile land-based?

Answer: The Strategic Defense Initiative's program contains a number of experiments and technology demonstrations planned for the next several years. Principal among these are:

Surveillance, Acquisition, Tracking, and Kill Assessment

- Radar Discrimination Technology
- Optical Discrimination Technology
- Imaging Radar Technology
- Imaging Optical Technology
- Boost Surveillance and Tracking
- Space Surveillance and Tracking
- Airborne Optical Adjunct
- Ground Imaging Radar

Directed Energy Weapons

- Chemical Laser Device for Sapoe Application
- Fabrication of Large Mirrors
- Advanced Beam Control
- Precision Acquisition, Tracking and Pointing
- Excimer Lasers
- Free Electron Lasers
- Advanced Neutral Particle Beam Generation
- Adaptive Optics
- Feasibility of Advanced Directed Energy Concepts

Kinetic Energy Weapons

- Endoatmospheric Non-nuclear Interceptor
- Exoatmospheric Non-nuclear Interceptor
- Hypervelocity Launchers
- Space-Based Kinetic Kill Vehicles
- Short-Range Non-Nuclear Interceptor

Systems Concepts and Battle Management

- Test Bed Battle Management Algorithms and Software
- Test Bed Integrated Communications
- Fault Tolerant Hardware and Software
- Software Generation Processes
- Advanced Space-Qualified Processors

Survivability, Lethality, and Key Supporting Technologies

- Lethality and Target Hardening for Directed Energy and Kinetic Energy Kill Mechanisms
- Hardened Satellite Components
- Responsive Countermeasures
- Power and Power Conditioning Technologies

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OFFICE				424			
OUSDRE/OADEN				DATE PREPARED			
ACTION OFFICER/EXTENSION				11 July 1984			
COL BOLNES/56413							
COORDINATION							
OFFICE	SDIO	SXTNF	OUSD (P) STAEI				
NAME	Carbone	Shunk Maggiore Gardner	Stansberry				
DATE							

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DATE		DATE	
REMARKS	STANDARD FORM NO.	LINE NO.	SECTION NO.
1 Mar 84			Column 12

STRATEGIC DEFENSE INITIATIVE

[classification]

Details of these demonstrations have been provided to the Congress in the book, "Office of the Secretary of Defense, Justification of Estimates for Fiscal Year 1985 Submitted to Congress, February 1984, Research, Development Test and Evaluation, Defense Agencies," under program elements 63220D, 63221D, 63222D, 63223D, 63224D, pages 31 through 106 (classified). Additional details are being provided to the Congress in the individual program plans for each of the five program elements listed above.

Great care is being taken in planning the demonstrations to insure that each demonstration is in full compliance with the provisions of the ABM Treaty. We will not conduct any demonstration which would violate the ABM Treaty's provision not to develop, test, or deploy ABM systems or components which are sea-based, air-based, space-based, or mobile land based.

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ACTION OFFICER/EXTENSION		DATE PREPARED					
COL HOLMES/56413		11 July 1984					
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HOUSE	APPROPRIATIONS COMMITTEE	X HOUSE	ARMED SERVICES COMMITTEE	HOUSE	OTHER	
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1 Mar 84	49	1111	49L1111			

STRATEGIC DEFENSE INITIATIVE

(The information follows:)

The Strategic Defense Initiative (SDI) budget submission does not include funds specifically for anti-tactical missile (ATM) work; however, the SDI does include BMD technology efforts which have relevance to longer term solutions to the ATM mission. These efforts are located in the major categories of Kinetic Energy Weapons (KEW) and Surveillance, Acquisition, Tracking, and Kill Assessment (SATKA). Four of the more prominent programs are:

a. Endoatmospheric Non-nuclear Kill Technology--this program provides the technical underpinning for high speed interceptors operating within the atmosphere. It carries from basic research to analytical proof-of-principle pacing technologies such as seekers, transpiration cooled windows, guidance and control schemes, signal processing, etc., that are crucial to effective ATM systems.

b. Endoatmospheric Interceptor Test--this program develops and demonstrates a high speed interceptor that could be used in an ATM role. It integrates and functionally demonstrates technologies from the Endoatmospheric Non-nuclear Kill technology program.

c. Airborne Optical Adjunct--this program integrates and demonstrates an optical system onto an airborne platform. Preliminary studies indicate that this system would be an effective and highly survivable defense component against short range, low trajectory missiles that characterize the threat to our European Allies.

d. Terminal Imaging Radar--this program develops and demonstrates a small imaging radar that is applicable in terminal defense against ICBM's and IRBM's.

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OFFICE		OUSDR/ODDEV		419	
ACTION OFFICER/EXTENSION		COL BOLMES/56413		DATE PREPARED	
				22 Jun 1984	
COORDINATION					
OFFICE	STAF	SDIO			
NAME	Shank	Rankin			
DATE	27 June 84	28 June			

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HOUSE	APPROPRIATIONS COMMITTEE	HOUSE	ARMED SERVICES COMMITTEE	HOUSE	OTHER	
SENATE		SENATE		SENATE		
HEARING DATE 1 MAR 84		TRANSCRIPT PAGE NO.		LINE NO.		INSERT NO. Q.15

ABM Treaty

Question: When the 1972 ABM Treaty was signed, there was widespread consensus that defensive systems were destabilizing. It was felt that possession of an area defense might induce a nation to wage a first strike attack, thinking it could survive the campaign by knocking down the enemy's diminished retaliatory response. It was also felt that by increasing the plausibility of a first strike, pressures would be created to strike preemptively during a crisis. Now we hear that defensive weapons systems are potentially stabilizing. Please explain this change of opinion.

Answer: The SDI program is not based on a change of opinion, but on a potential change in technological capability. The question mistakenly asserts that in 1972 there was a widespread consensus that defense systems were destabilizing. This is not true; the principal concern was that effective defenses were at that time not technologically feasible. The current SDI program is investigating the prospect of systems with sufficient defensive capability to eliminate the effectiveness of ballistic missiles, particularly against military targets. This is because even if an attacker believed some of his missiles would leak through the defense, he would not know which ones. Therefore, he could not plan a useful counter-military first strike, and thus a more stable balance would exist. We are concurrently studying the strategic implications of an effective defense against ballistic missiles. Any deployment decision would be based on both the strategic and technological factors.

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 Reviewed Chief, RDD, WHS
 IAW EO 13526, Section 3.5
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OFFICE Strategic Arms Control Policy, OASD/ISP								
ACTION OFFICER/EXTENSION LtCol Boykin, X70030							DATE PREPARED 22 JUN 84	
COORDINATION								
OFFICE	SDIO	SP-AC	ASD/AC					
NAME	Rankine	Jr	RH					
DATE	21 July 84	25 July 84	7/30/84					

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HOUSE	APPROPRIATIONS COMMITTEE	HOUSE	ARMED SERVICES COMMITTEE	HOUSE	OTHER
SENATE		SENATE		SENATE	
HEARING DATE	TRANSCRIPT PAGE NO.	LINE NO.	INSERT NO.		
1 MAR 84			Q.14		

ABM Treaty

Question: If the treaty is abandoned due to an accelerated U.S. program in ballistic missile defenses, how will the Soviet Union most likely respond and in what ways could this adversely affect U.S. national security?

Answer: The SDI program will remain consistent with all U.S. treaty commitments, including the ABM Treaty. If, in the future, the SDI research program proves successful in identifying technologies capable of supporting an effective defense against ballistic missiles, the U.S. may wish to exploit these technologies to enhance deterrence and stability. Should this be the case, and recognizing that the Soviet Union has for many years pursued an extensive advanced ballistic missile defense technology program, we would hope that the Soviet Union could be engaged in discussions which could lead to agreements that would regulate the offensive and defensive deployments of both the U.S. and the Soviet Union.

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OFFICE				Strategic Arms Control Policy, OASD/ISP			
ACTION OFFICER/EXTENSION				DATE PREPARED			
LtCol Boykin, X70030				6 July 1984			
COORDINATION							
OFFICE	SDIO	STAR	OSD/IC				
NAME	Rankine	Ym	RH				
DATE	21 July 84	15 July 84	7/30/84				