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~~TOP SECRET/RD~~

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revised

THE SECRETARY OF DEFENSE
WASHINGTON, D.C. 20301

25 APR 1977

MEMORANDUM FOR THE ASSISTANT TO THE PRESIDENT FOR NATIONAL SECURITY AFFAIRS

SUBJECT: Single Integrated Operational Plan (SIOP) Targeting Philosophy

This memorandum responds to your question regarding Soviet fatalities if population were attacked directly in the SIOP rather than following current policy, which targets industry. The estimates provided are the result of manual calculations using data bases which were not designed to allow precise computation of the results of a population attack.

In the most recent dynamic Soviet/U.S. wargame simulation, the largest option in the current SIOP [redacted] E.O. 13526, section 3.3(b)(5) targeting plan) is estimated to produce Soviet fatalities of about 33 percent (84.5M) of the total population (includes estimated effects from fallout). If we were to directly target Soviet population with today's SIOP weapons, including the [redacted] E.O. 13526, section 3.3(b)(5) the estimated fatalities would increase to about 44 percent (115M).

The above estimates do not reflect the range of uncertainty about fallout-related fatalities nor do they consider the possible effects of varying blast and fallout shelter postures. Preliminary analysis has indicated that direct population attacks are less sensitive to assumed population sheltering postures than are economic attacks. However, available intelligence does not permit high confidence analysis in this area.

Harold Brown

cc: DCL King

OSD(PA&E) CONT NR [redacted]

Classified by Sec Def
EXEMPT FROM GENERAL DECLASSIFICATION SCHEDULE OF EXECUTIVE ORDER 11652. CATEGORY 3
DECLASSIFY ON 31Dec1997

4906

OSD Roy No. #

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08M-3248

SEC DEF CONTR No. X-1200



~~TOP SECRET~~
OFFICE OF THE SECRETARY OF DEFENSE
DIRECTOR, PLANNING AND EVALUATION

WASHINGTON, D. C. 20301

22 April 1977

MEMORANDUM FOR THE SECRETARY OF DEFENSE

SUBJECT: SIOP Targeting Philosophy (U)

The Chairman, JCS proposed a response to a question asked by Dr. Brzezinski regarding the effect of using SIOP forces to target Soviet population directly vice current policy, which is to target economic installations. In general, the JCS response stated that the current SIOP is estimated to produce Soviet fatalities of about 33 percent (84.5 million) of the total population, and that by targeting population directly, the forces would cause fatalities of about 44 percent (115 million). These figures include estimated collateral fatalities due to fallout.

In your notation on the proposed CJCS response, you asked DP&E to validate the JCS results and asked whether the hypothetical retargeting (of people vice industry) would make the outcome less dependent on the potential degree of sheltering of the population and to what extent.

We have not been able to directly validate the JCS numbers (a) because the JCS analysis, performed by the Joint Strategic Target Planning Staff in Omaha, included manually-created aimpoints which we cannot duplicate, and (b) because we do not have access to the mix of weapons or the planning factors which are used in the SIOP laydown.

However, an analysis of theoretical attacks using exemplar weapon yields does provide what we believe are upper and lower bounds on prompt urban fatalities--i.e., no fallout effects--resulting from attacks on industry and from attacks on population directly. These results are summarized in TAB A and, for your information, the weapon response curves from which the data were extracted are also included.

The partials for the percent of total population fatalities resulting from economic and direct population attacks differ in the DP&E analysis because of the sensitivity of collateral prompt urban fatalities to weapon yield. These are not directly comparable to the partials for the JCS SIOP economic and theoretical population attack because the JCS analysis employed a force with a mix of yields and included fallout fatalities. Since the P&E analysis does not refute the reasonableness of that analysis, I recommend that the JCS numbers be used in the response to Dr. Brzezinski and have incorporated them into our proposed draft attached at TAB B.

~~Classified by Acting Dir, Planning & Evaluation
EXEMPT FROM AUTOMATIC DOWNGRADING AND DECLASSIFICATION
EXECUTIVE ORDER 11652, FEBRUARY 17, 1976, PARAGRAPH 1.4
DECLASSIFIED ON 31 December 1997~~

~~TOP SECRET~~

ODP/E
AC+L



We have examined the sensitivity of the results of theoretical industry and population attacks to two population sheltering postures and find that the fatalities caused by direct attacks on population are less sensitive to the degree of sheltering. The results are summarized in the table below. The analysis assumes that the entire urban population is protected to the indicated hardness and that blast overpressure is the only kill mechanism. 10 psi is roughly equivalent to the protection afforded by a multi-story masonry building whereas 36 psi equates to a reinforced concrete igloo with two feet of earth cover. The assumption that the entire urban population is protected to 36 psi is very severe. In fact, only a small percentage of the Soviet urban population could be protected at this level.

PROMPT URBAN FATALITIES/PERCENT OF TOTAL POPULATION

E.O. 13526, section 3.3(b)(4)(5)

SHELTER POSTURE	WEAPON TYPE *		
	POSEIDON	SRAM	MM-II
1. 10 PSI			
a. Industry Attack	27M/10%	43M/17%	57M/22%
b. Population Attack	71M/28%	75M/29%	77M/30%
2. 36 PSI			
a. Industry Attack	1M/-	3M/1%	3M/1%
b. Population Attack	42M/16%	48M/19%	49M/19%

* Attack level equal to 70% economic value destroyed.

I have incorporated a summary statement regarding sensitivity to sheltering in my proposed response to Dr. Brzezinski.

Milton A. Margolis
Milton A. Margolis
Acting Director,
Planning and Evaluation

Attachments

Withheld from public release by the Department of Defense under E.O. 13526 § 6.2(a) as Formerly Restricted Data

ODP&E(SP-SFD):King/Bott:mjm:8Apr77
Rm 2E274:70361

SecDef's chron file
DepSecDef's copy
Special Assistant's copy
OSD Mailroom
Acting Dir, P&E's copy
ODP&E DC&L
Mr. King
ODP&E(SP-SFD) Comeback cy, 2E-274

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SECRET

~~SECRET~~ / RD

TAB A

SUMMARY OF PROMPT URBAN FATALITIES - ECONOMIC VERSUS POPULATION ATTACKS

Withheld from public release
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under E.O. 13526 § 6.2(a) as
Formerly Restricted Data.

WEAPON TYPE	POSEIDON	SRAM	MM-II
ATTACK LEVEL	[REDACTED]		
PROMPT URBAN FATALITIES*/PERCENT OF TOTAL POPULATION**			
1. a. Economic attack: 70% economic value destroyed***	31M/12%	51M/20%	65M/25%
b. Population attack: Same attack level as 1a.	72M/28%	75M/29%	78M/30%

2. a. Economic attack: [REDACTED]	16M/6%	36M/14%	83M/32%
b. Population attack: [REDACTED]	47M/18%	51M/20%	99M/38%

3. a. Economic attack: [REDACTED]	26M/10%	55M/21%	(No Data)
b. Population attack: [REDACTED]	65M/25%	81M/31%	(No Data)

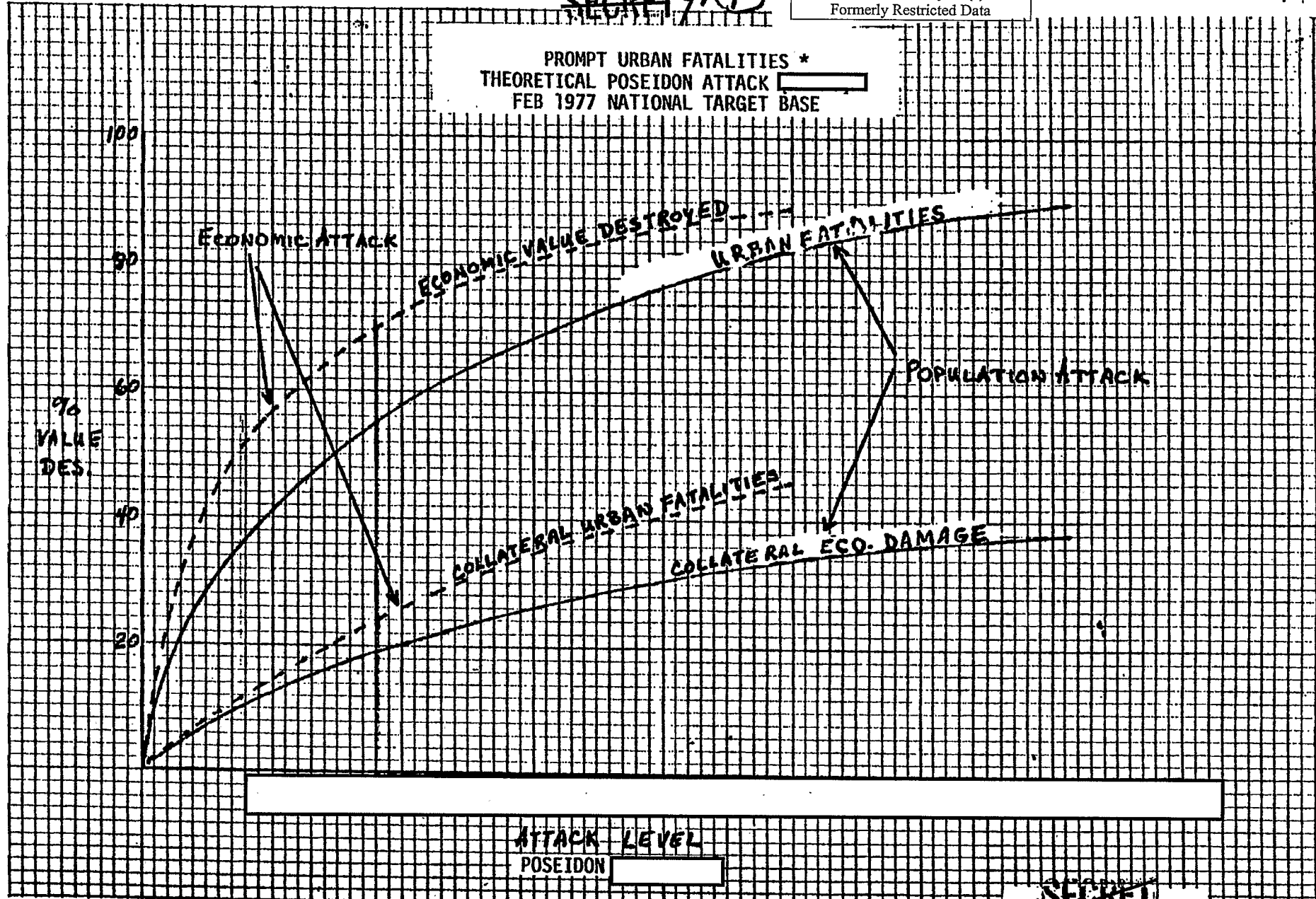
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Formerly Restricted Data

* Prompt urban fatalities using criteria of AP-550, Physical Vulnerability Handbook - Nuclear Weapons.
** There are approximately 130M people or one-half the Soviet population in the urban population data base.
*** Number of weapons varies with yield. See attached response curves.

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Formerly Restricted Data

PROMPT URBAN FATALITIES *
THEORETICAL POSEIDON ATTACK []
FEB 1977 NATIONAL TARGET BASE



* AP 550 Criteria: Combined Effects of Airblast and Radiation.

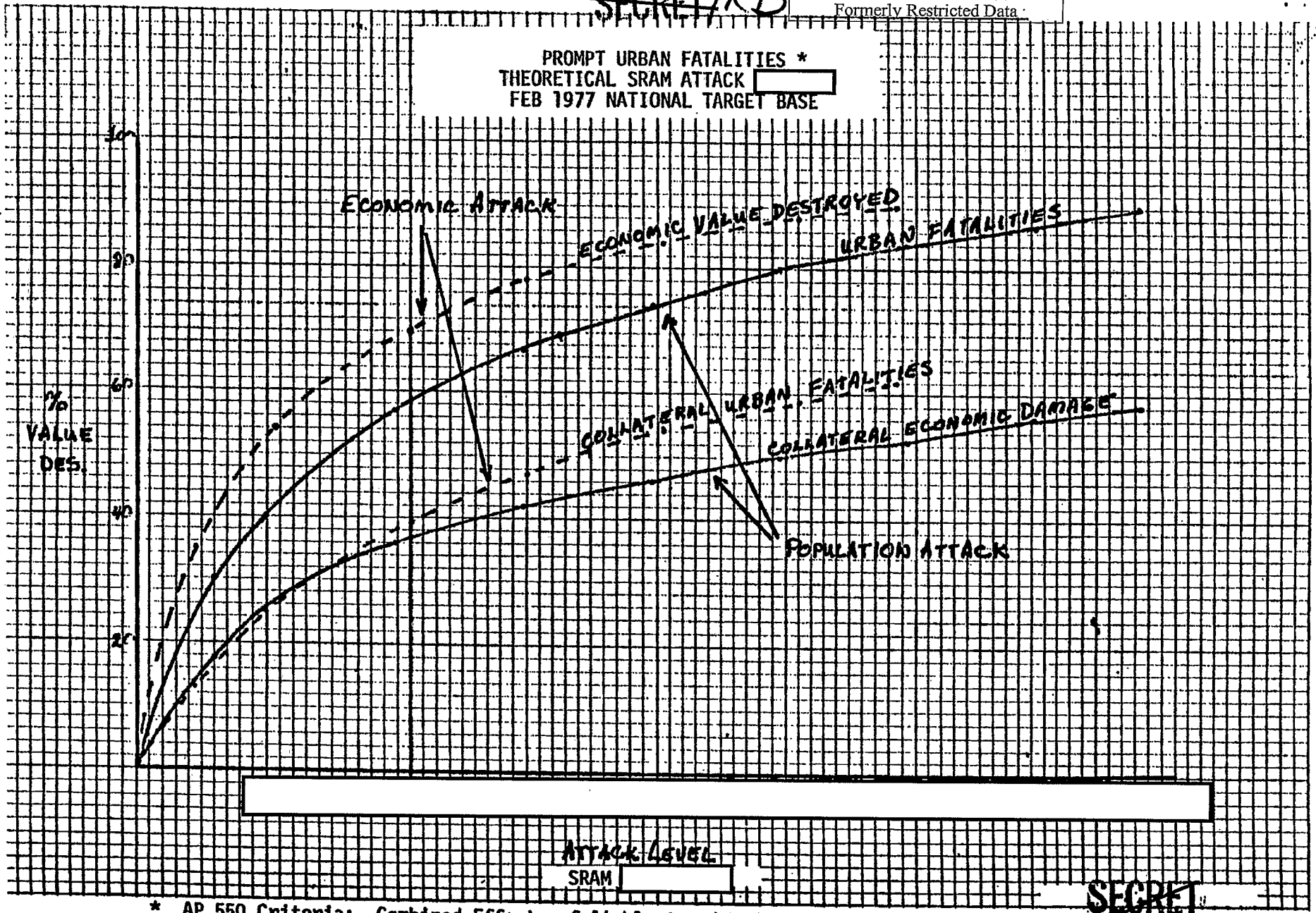
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Formerly Restricted Data

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~~SECRET~~ (RD)

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Formerly Restricted Data

PROMPT URBAN FATALITIES *
THEORETICAL SRAM ATTACK [REDACTED]
FEB 1977 NATIONAL TARGET BASE



* AP 550 Criteria: Combined Effects of Airblast and Radiation.

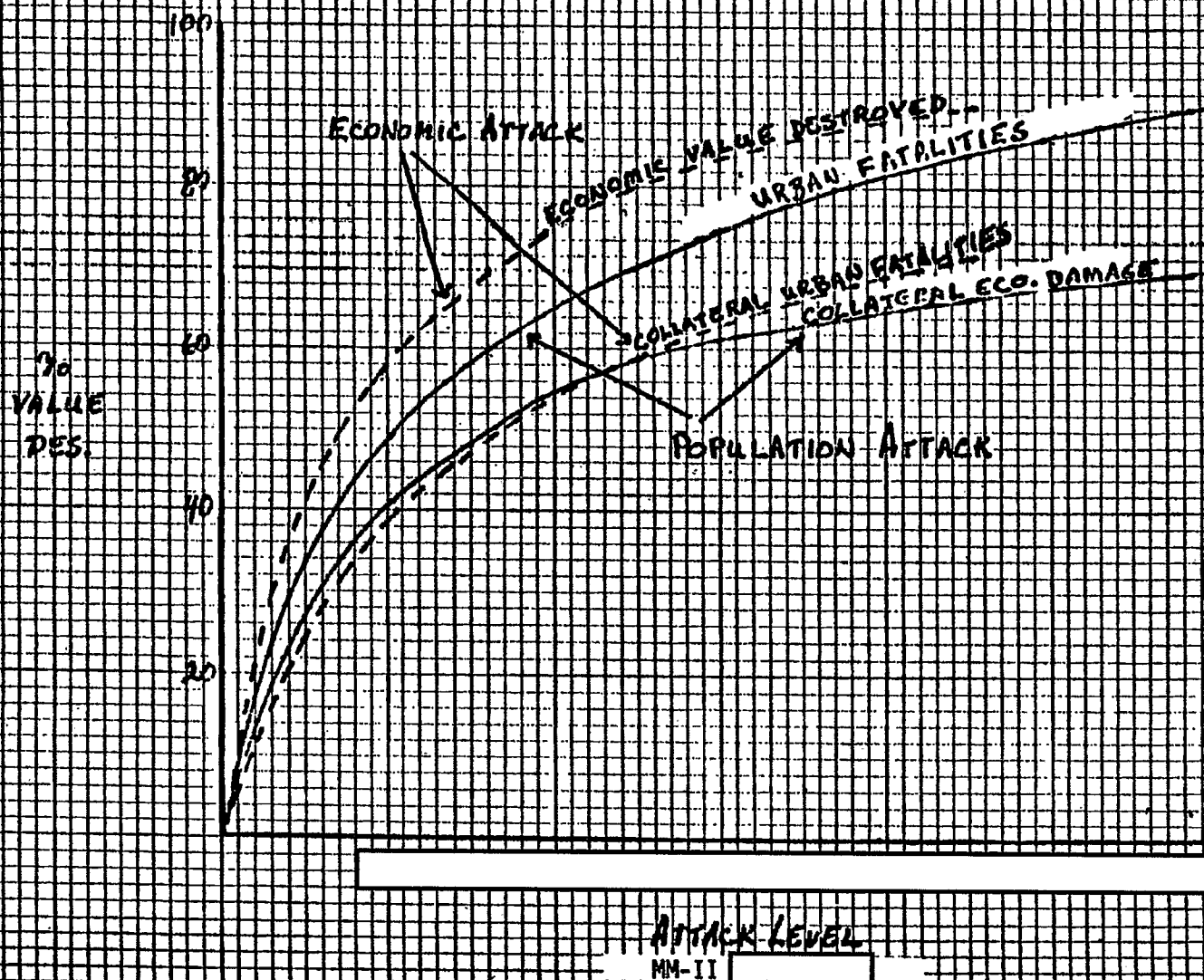
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Formerly Restricted Data

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PROMPT URBAN FATALITIES *
THEORETICAL MM-II ATTACKS [REDACTED]
FEB 1977 NATIONAL TARGET BASE



* AP 550 Criteria: Combined Effects of Airblast and Radiation.

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by the Department of Defense
under E.O. 13526 § 6.2(a) as
Formerly Restricted Data

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Proposed SecDef memo for Asst to the Pres for NSA, subj:
SIOP Targeting Philosophy (U)

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~~UPON RECEIPT OF AUTHORITY
DOCUMENT~~

~~TOP SECRET~~

THE SECRETARY OF DEFENSE
WASHINGTON, D.C. 20301

MEMORANDUM FOR THE ASSISTANT TO THE PRESIDENT FOR NATIONAL SECURITY
AFFAIRS

SUBJECT: Single Integrated Operational Plan (SIOP) Targeting Philosophy

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[redacted] the estimated fatalities would increase to about 44 percent (115M).

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E.O. 13526, section 3.3(b)(5)

Classified by Wally Davis P+E
EXEMPT FROM AUTOMATIC DOWNGRADING AND DECLASSIFICATION SCHEDULE OF
EXECUTIVE ORDER 11652. IN CATEGORY 3.
DECLASSIFY ON 12/31/97

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OFFICE OF THE SECRETARY OF DEFENSE
OFFICE OF THE DIRECTOR, PLANNING AND EVALUATION
WASHINGTON, D. C. 20301

11 APR 1977

MEMORANDUM FOR MR. MARGOLIS

SUBJECT: SecDef Request Regarding SIOP Question (U)

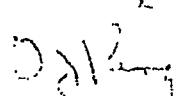
Milt,

Dr. Brzezinski asked "what would be the difference if U.S. SIOP forces attacked Soviet population rather than following current policy?"

Attached is our response to SecDef's request that we:

- Validate the JCS numbers proposed in response to the question;
- Examine the sensitivity of theoretical retargeting to the degree of sheltering; and
- Redraft the response to "ZB" in accordance with the results.

I recommend that you sign the attached memo to SecDef which forwards the results of our analysis as well as a proposed response to Dr. Brzezinski.


Terrence J. King
Director
Strategic Forces Division

Attachments

~~Unclassified from 1998~~

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OFFICE OF THE SECRETARY OF DEFENSE

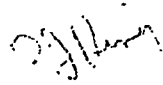
20 April 1977

Memo For Mr. Margolis

SUBJECT: SecDef Request Regarding SIOP
Question (U)

Milt,

We have changed the attached memo for SecDef and Tab A per your suggestions. I recommend the package be forwarded to the Secretary.


Terrence J. King
Director
Strategic Forces Division

Attachments

~~Unclassified when removed
from classified inclosures~~

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