Carnot	
Jecree	

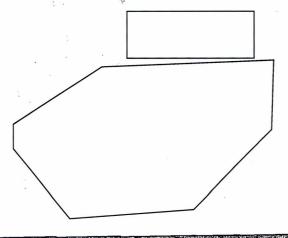
DECLASSIFIED UNDER AUTHORITY OF THE INTERAGENCY SECURITY CLASSIFICATION APPEALS PANEL. E.O. 13526, SECTION 5.3(b)(3)
ISCAP No. 2010-063, Document 5 Date 7017 26, 2013

# Soviet Nuclear Weapons Logistics Operations (U)

A Defense S&T Intelligence Report

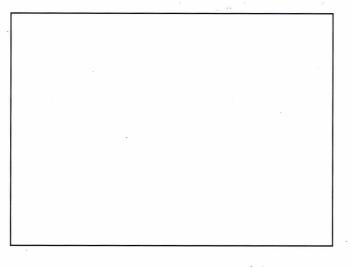


Defense Intelligence Agency



Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424

Secret



Withheld from public release by
Defense Intelligence Agency
under statutory authority
of the Department of Defense,
10 USC § 424

## Secret

SOVIET NUCLEAR WEAPONS LOGISTICS OPERATIONS (U)

*
A Defense S&T Intelligence Report
Date: April 1988
Information Cutoff Date: 1 November 1987

This is a Department of Defense Intelligence Document prepared by the Nuclear Energy Division Directorate for Scientific and Technical Intelligence,

Defense Intelligence Agency

Authors

Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424

-Secret PROPERTY OF DIA LIBRARY

# Secret

#### PREFACE

This report presents a summary of the DIA current analysis of Soviet nuclear weapons logistics operations. The major subject areas are Soviet nuclear weapons logistics organization, storage, transport, security, and training and operations. This report supercedes a report with the same title and short title number dated March 1986.

Questions	and com	ments o	concerning	q t	his	report	can	be	addressed	to	the	Def	ense
Intelligen	ce Agen	cy (Att	n:	٦,	Was	hington	, DC	2	0340-6160.	R	eque	sts	for
additional	copies	should	be sent	τo	ŪĨΑ	(Attn:			1.		-		

(Reverse Blank) iii

Secret

## Secret

## TABLE OF CONTENTS

		Page
DIA P	ublications on Soviet Nuclear Weapons Logistics	
I.	SUMMARY AND CONCLUSIONS	ix
II.	ORGANIZATION	1
III.	NUCLEAR WEAPONS STORAGE BUNKER DESIGN	ŝ
	A. General	3
	E.O. 13526, section 3.3(b)(1)  E. F.	3 3 3 4 9
IV.	NUCLEAR WEAPONS STORAGE SYSTEM	15
	A. B. E.O. 13526, section 3.3(b)(1)	15 15 15 22 23 26 28 28
٧.	TRANSPORT	35
ý.	A. Rail Transport of Nuclear Weapons  B. Air Transport of Nuclear Weapons  C. Truck Transport of Nuclear Weapons  D. Sea Transport	35 36 39 45
VI.	TRAINING AND OPERATIONS	47
	A. National Stockpile Sites B. Tactical Missile Support Units C. Air Forces D. Naval Units E. SRF Units	47 47 48 54 55
VII.	SECURITY	57
	A. B. C. D. 13526, section 3.3(b)(1)	57 57 58 62

Secret

## Secret

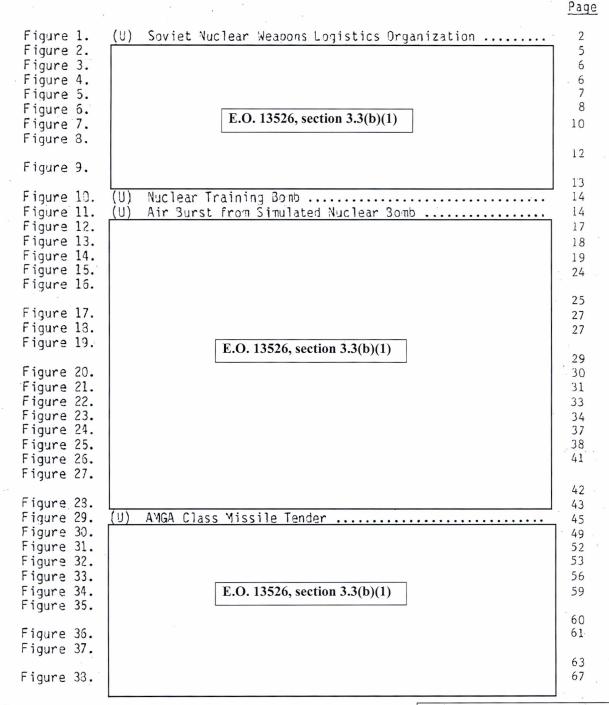
E.O. 13526, section 3.3(b)(1)

	Page
VIII.	65
APPENDIX A:	67
APPENDIX B: National Stockpiles Sites	75
APPENDIX C:	77
APPENDIX D:	
	83
APPENDIX E:	85
APPENDIX F: NWSS for SS-12 Units	87
APPENDIX G:	89
APPENDIX H:	93
APPENDIX I:	95
APPENDIX J: Estimated Aircraft Nuclear Weapons Loads	97
APPENDIX K:	99
APPENDIX L:	103
APPENDIX M:	105
APPENDIX N:	107
APPENDIX 0: Identified Mobile Missile Nuclear Storage	109

E.O. 13526, section 3.3(b)(1)

## Secret

#### LIST OF ILLUSTRATIONS



Secret

## Secret

		Page
Figure 39.		
Figure 40.		68
Figure 41.		69
Figure 42.		.70
Figure 43.		71
		72
Figure 44.	E.O. 13526, section 3.3(b)(1)	73
Figure 45.		. 74
Figure 46. Figure 47.		- 76
Figure 48.		80
Figure 49.		81 84
Figure 50. Figure 51.		91
Figure 52.		92 94
Figure 53.		100
Figure 54.		101

# LIST OF TABLES

Ι.	E.O. 13526, section 3.3(b)(1)	11
II.	(S) Estimated Soviet Nuclear Weapons Storage Capability in	
	Eastern Europe	21
III.	(C) Nuclear Weapons Convoy	44

## Secret

E.O. 13526, section 3.3(b)(1)

# SUMMARY AND CONCLUSIONS

A. (S) The Soviets have assigned the control of their nuclear weapons logistics operations to the 12th Main Directorate of the Ministry of Defense (12th GUMO) and to the 6th Directorate of each of the major military services of the Soviet armed forces.
B. The Soviets have developed a large nuclear weapons infrastructure
/ Most of the NWSS are located in the western USSR or Eastern Europe.
C. The Soviets use trains, aircraft and ships for long distance movement of nuclear weapons.
D. \s
E. K
E.O. 13526, section 3.3(b)(1)  (Reverse Blank)  ix  Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424

# **Secret**

E.O. 13526, section 3.3(b)(1)

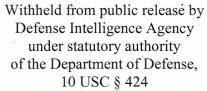
#### SECTION II

## ORGANIZATION

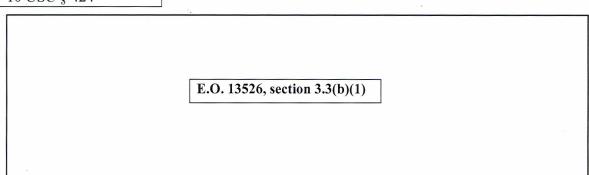
A. (SUMO) is the Soviet central level organization responsible for the Soviet nuclear weapons logistics program. In peacetime, the 12th GUMO controls national stockpile sites (NSS)
Concrots   Mactonal Scockpite Sites (NSS)
B. ( Within each major military service a Sixth Directorate probably controls all nuclear weapons logistics units and operations.
Tho 6th
organizations are administratively subordinate to the 12th GUMO (Fig 1).
C. (S)
0. 1
E. N

E.O. 13526, section 3.3(b)(1)

Secret



## -Secret



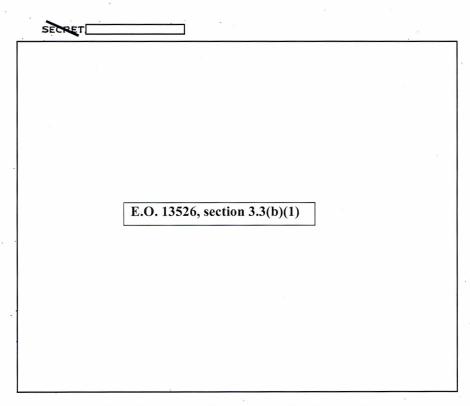


Figure 1. (U) Soviet Nuclear Weapons Logistics Organization.

# Secret

E.O. 13526, section 3.3(b)(1)

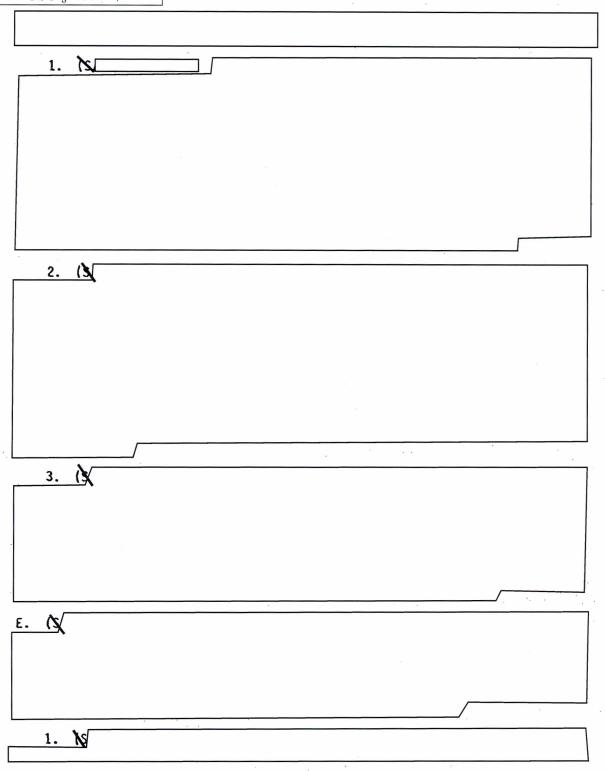
# SECTION III

# NUCLEAR HEAPONS STORAGE BUNKER DESIGN

many common requirements.	age bunkers [ features probabl	y imposed by Sovie	The two design	ability
B. (S			· · · · · · · · · · · · · · · · · · ·	
(-4				
				4
c. (s	/	4		·
n <b>k</b> c				
D. (S				
				1
13526 scation 2	2(b)(1)		Withheld from pub	
13526, section 3	3(b)(1)	3	Withheld from pub Defense Intellige under statutory	nce Agency

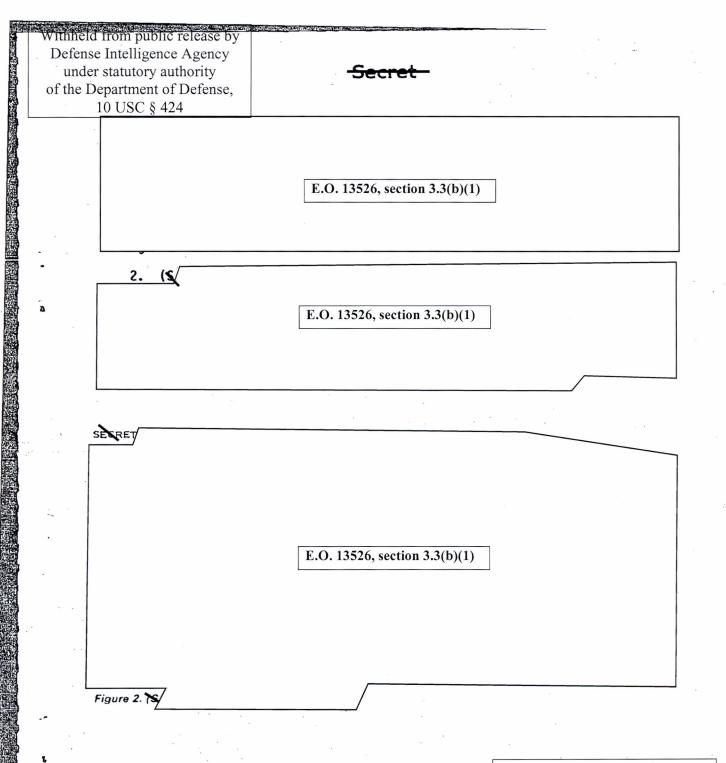
E.O. 13526, section 3.3(b)(1)

Secret



E.O. 13526, section 3.3(b)(1)

Secret

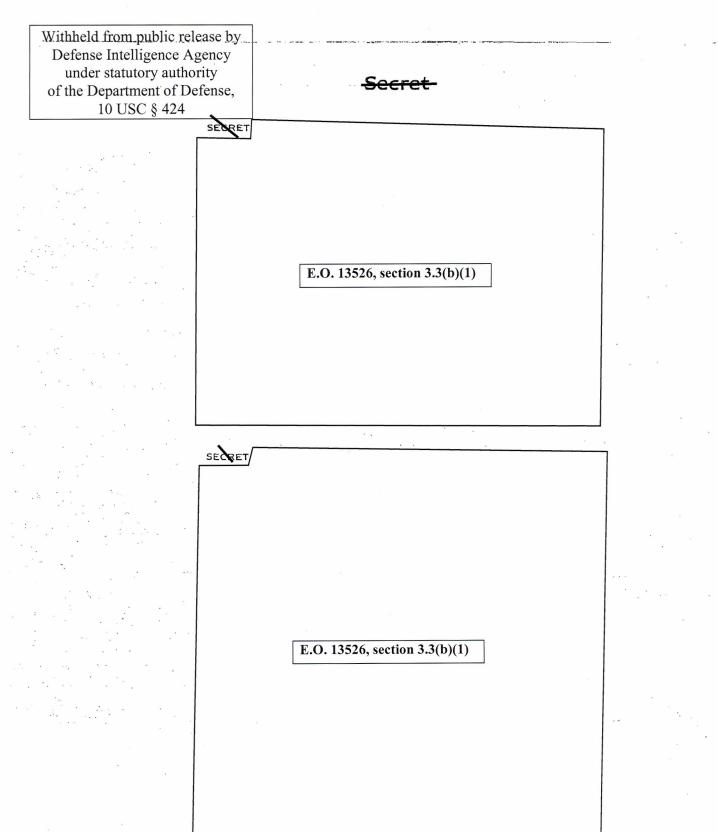


## Secret

	E.O. 13526, section 3.3(b)(1)		
Figure 3.		E.O. 135	26, section 3.3(b)(
	4		
SERET			4
SERET			· · · · · · · · · · · · · · · · · · ·
SERRET			
SECRET			
SERET			
SERET			
SERET	E.O. 13526, section 3.3(b)(1)		
SERET	E.O. 13526, section 3.3(b)(1)		
SERET	E.O. 13526, section 3.3(b)(1)		
SERET	E.O. 13526, section 3.3(b)(1)		
SERET	E.O. 13526, section 3.3(b)(1)		

Secret

Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424 SECRET E.O. 13526, section 3.3(b)(1) Figure 5. Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424

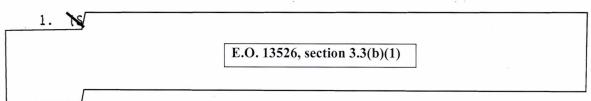


Secret

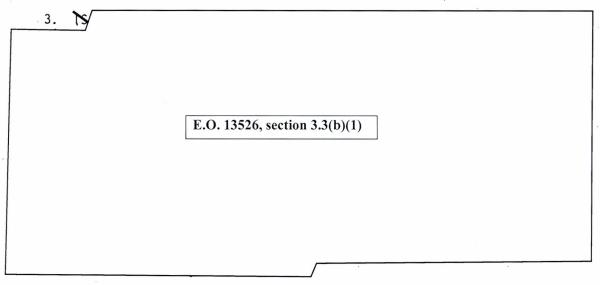
Figure 6.

# Secret

F. (U) Storage Capacities of Soviet Bunkers

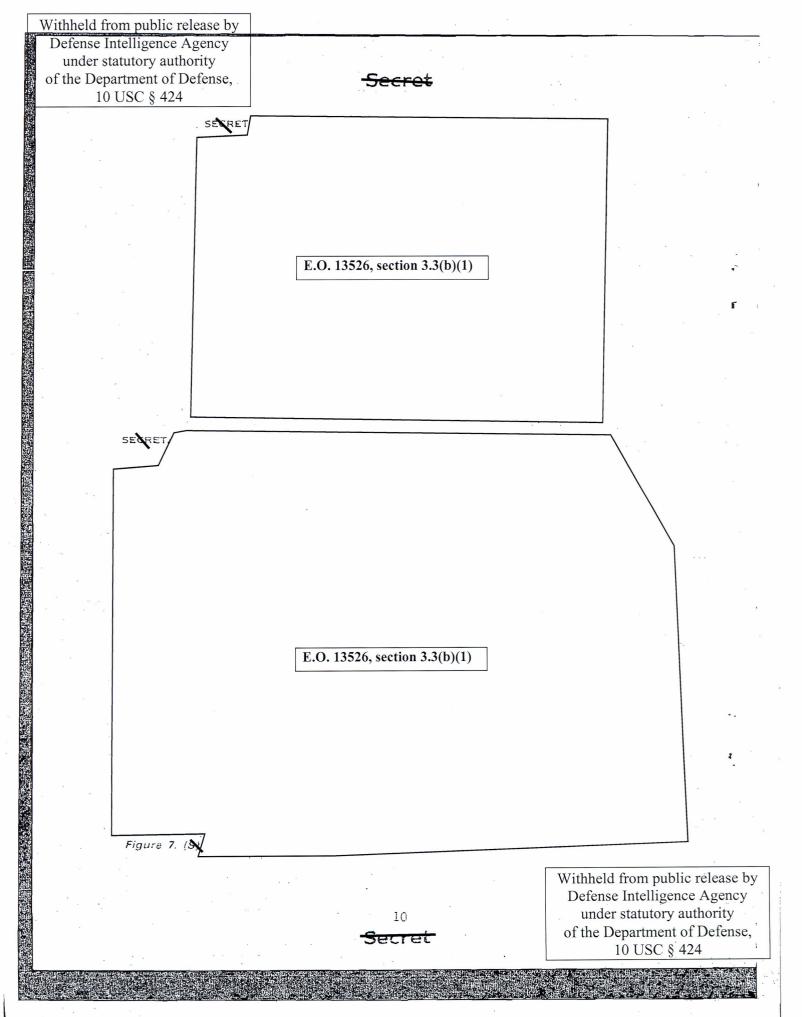


2. (S A nuclear weapon contains high explosive material, fissile material, and electrical components. Like all weapons, it must function with certainty if used against the enemy, but otherwise must be safe to handle, transport, and store. Periodic inspections of the nuclear weapons and replacement of limited life components during storage are important. Weapons in storage must be readily accessible for this maintenance work. Accessibility is also necessary for the rapid extraction of nuclear weapons from the bunker for operational purposes and during emergencies. Thus, the basic parameters for storage of nuclear weapons are accessibility and mobility for the purposes of maintenance, generation, and safety.



4. (S)
E.O. 13526, section 3.3(b)(1)

Secret

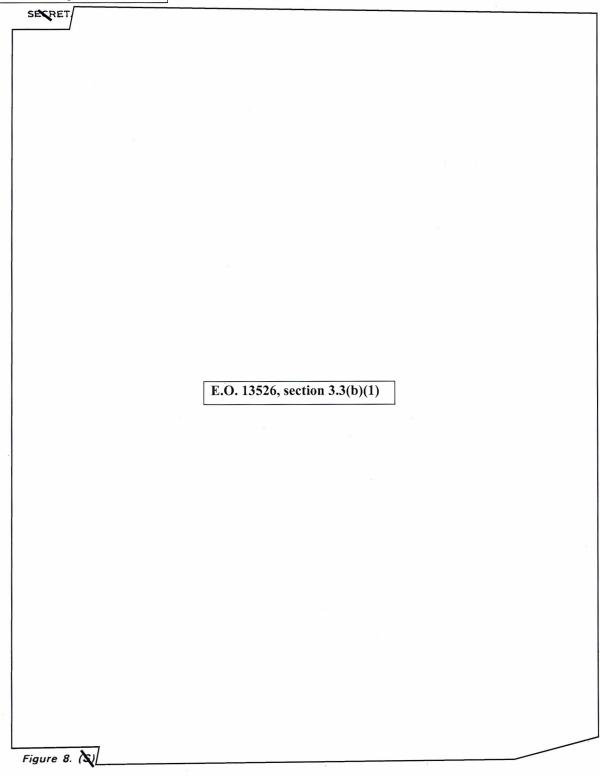


## Secret

TABLE I

E.O. 13526, section 3.3(b)(1)

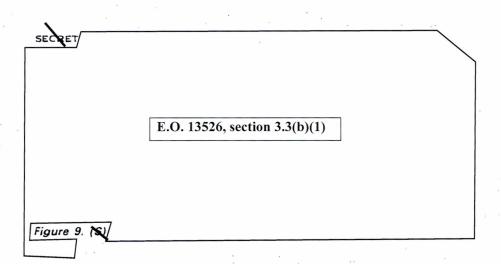
## Secret



12 -Secret

## Secret

Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424



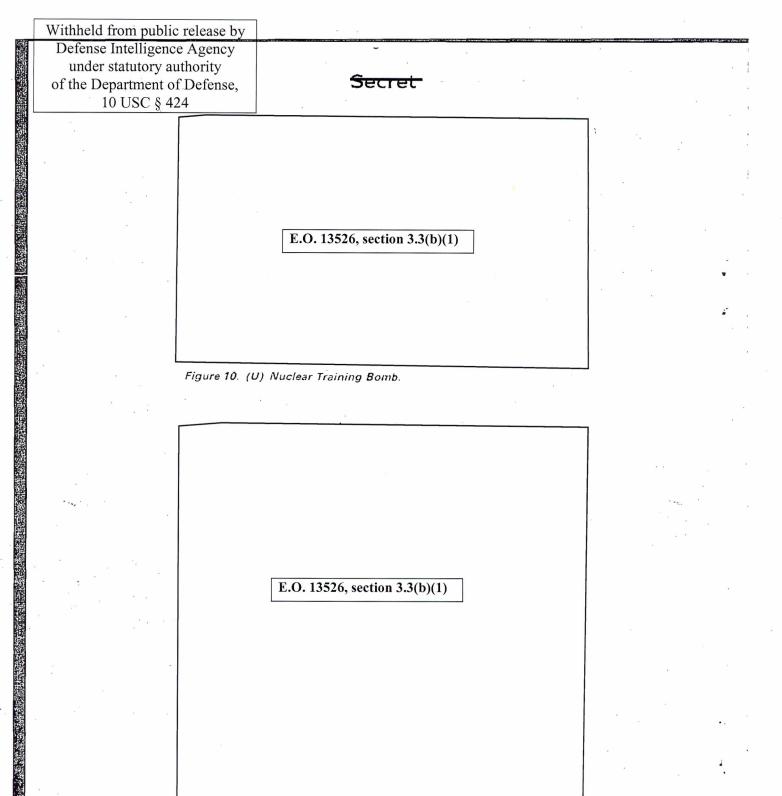


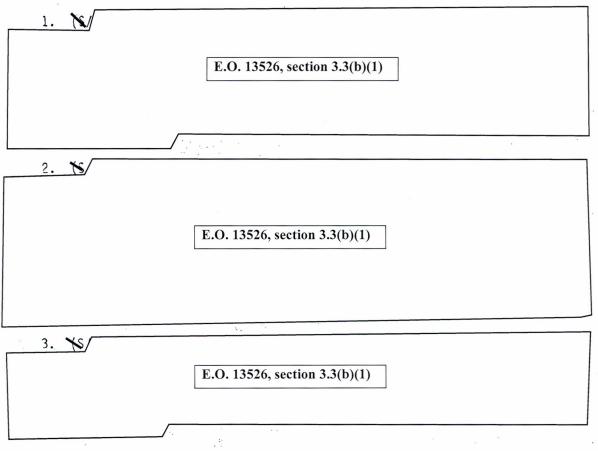
Figure 11. (U) Air Burst from Simulated Nuclear Bomb.

## Secret

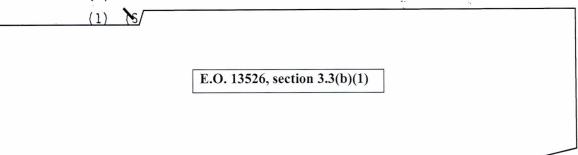
#### SECTION IV

#### NUCLEAR WEAPONS STORAGE

A. (U) National Stockpile Sites



- B. (U) Direct Support Sites
  - 1. (U) Tactical Missile and Artillery Units
    - a. (U) Tactical Missile NWSS in USSR



-Secret

Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424 E.O. 13526, section 3.3(b)(1) E.O. 13526, section 3.3(b)(1) (2)(34/ E.O. 13526, section 3.3(b)(1) (3) E.O. 13526, section 3.3(b)(1) (4)

Secret

E.O. 13526, section 3.3(b)(1)

## Secret

SECRET E.O. 13526, section 3.3(b)(1) Figure 13.

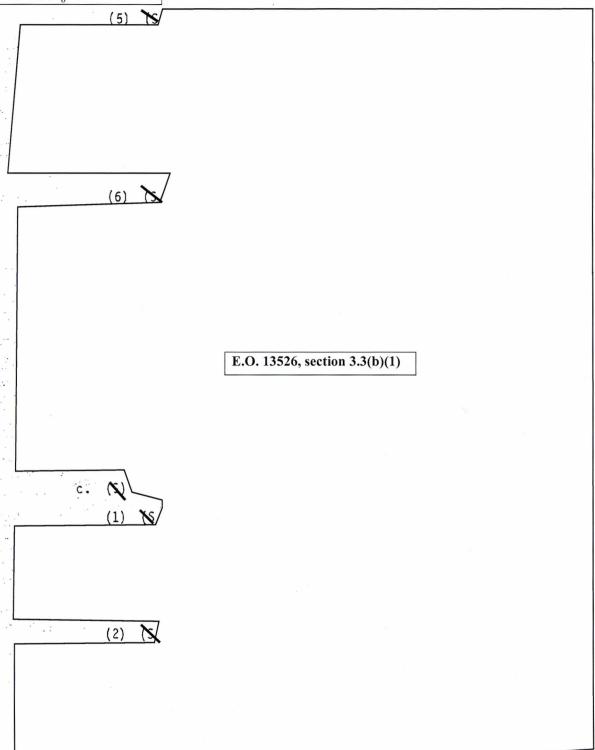
.

18

C

10 USC § 424

## Secret



20 Socret

## Secret

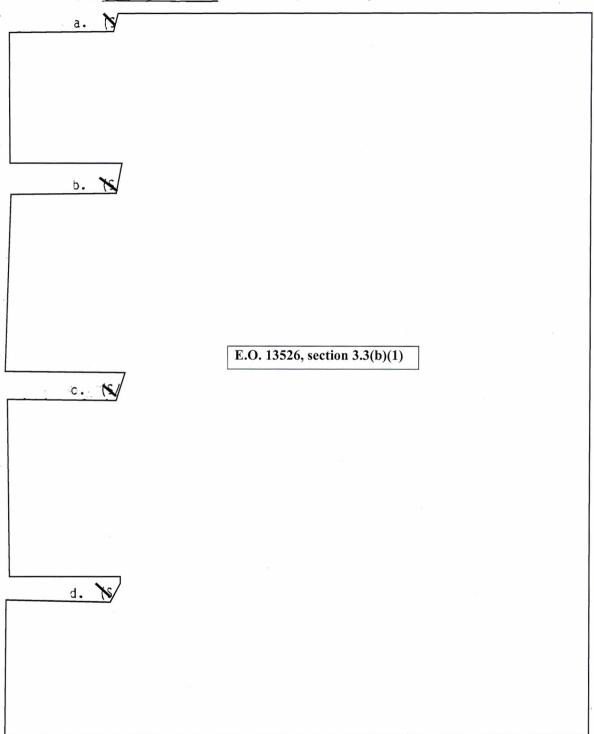
TABLE II

ESTIMATED SOVIET NUCLEAR WEAPONS STORAGE CAPABILITY IN EASTERN EUROPE (\$

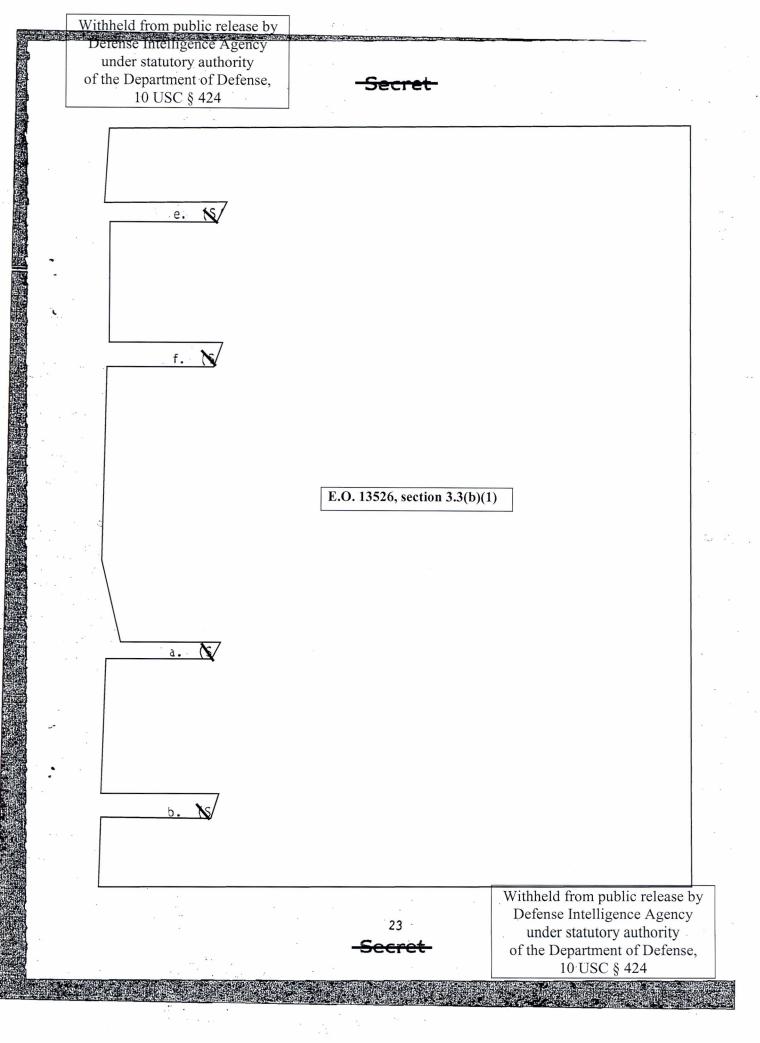
GERMANY
POLAND
CZECHOSLOVAKIA
HUNGARY
BUL GARIA

# Secret

2. (U) Air Forces Units



Secret



Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424 E.O. 13526, section 3.3(b)(1)

Figure 15. A

ecret

## -Secret

SECRET E.O. 13526, section 3.3(b)(1) Figure 16. A

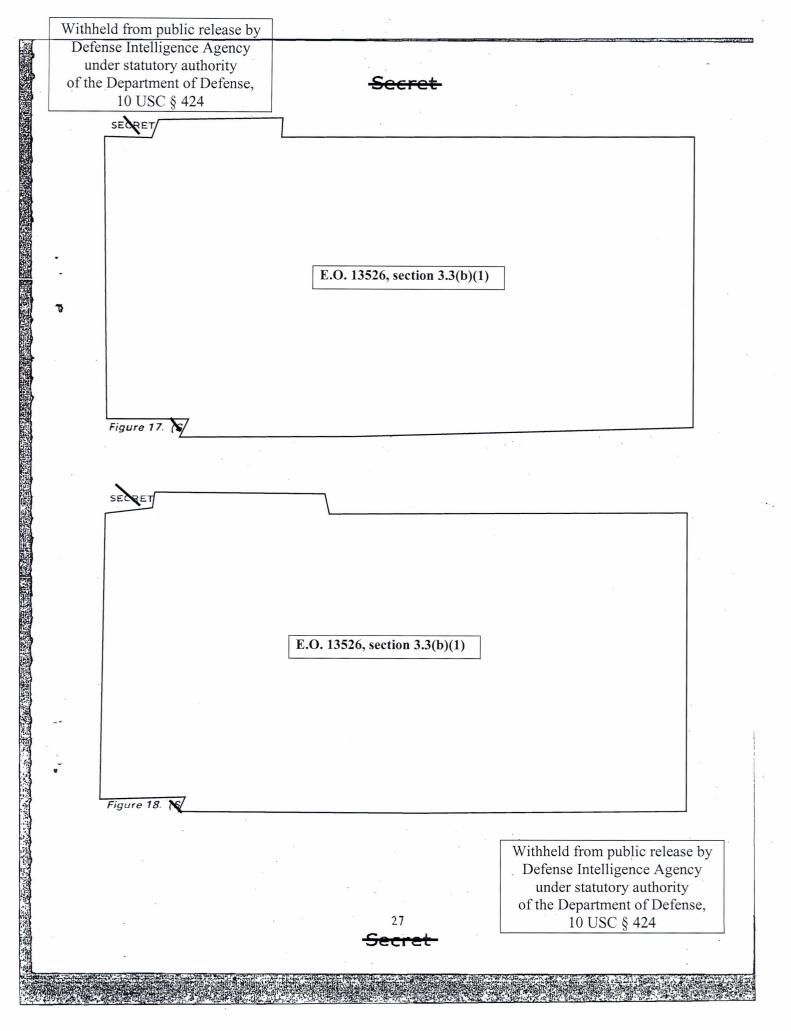
25

Canada

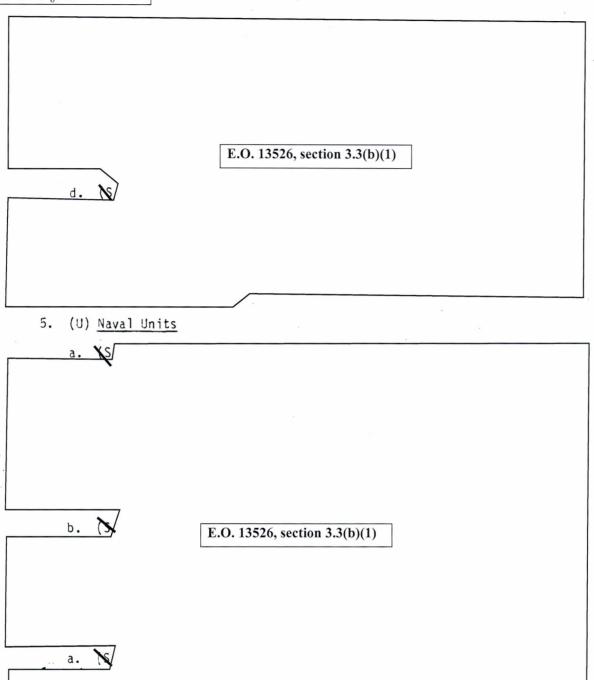
Secret

3 3 3 3 .2 .	
c. (%)	E.O. 13526, section 3.3(b)(1)
4. (U) Air Defense Uni  a. (V)  surface-to-air and air-to-standpoint are capable of	ts  ]) The Soviet Air Defense Force currently has both air missile (SAM/AAM) systems that from a technical being equipped with nuclear warheads.
b. <b>%</b>	E.O. 13526, section 3.3(b)(1)
c. 🐼	

26 <del>Secret</del>



### Sacrat

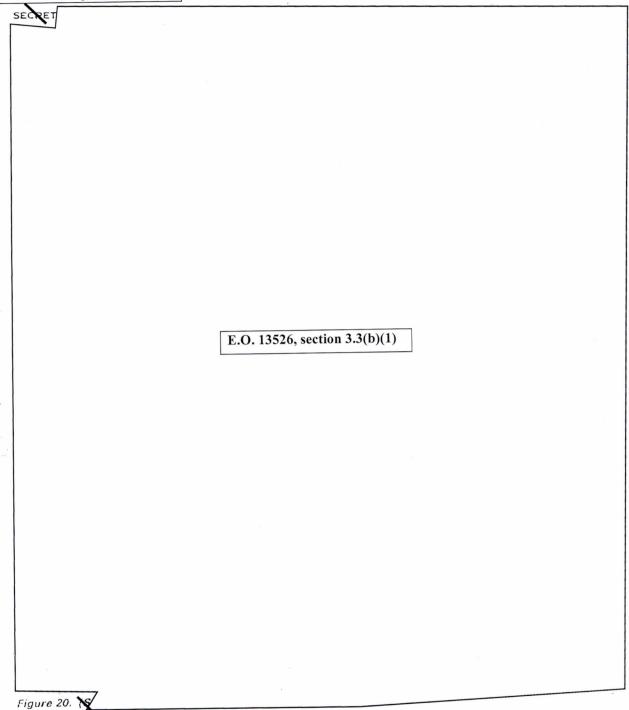


Secret

Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424 E.O. 13526, section 3.3(b)(1) Figure 19. K Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense,

10 USC § 424

# -Secret-

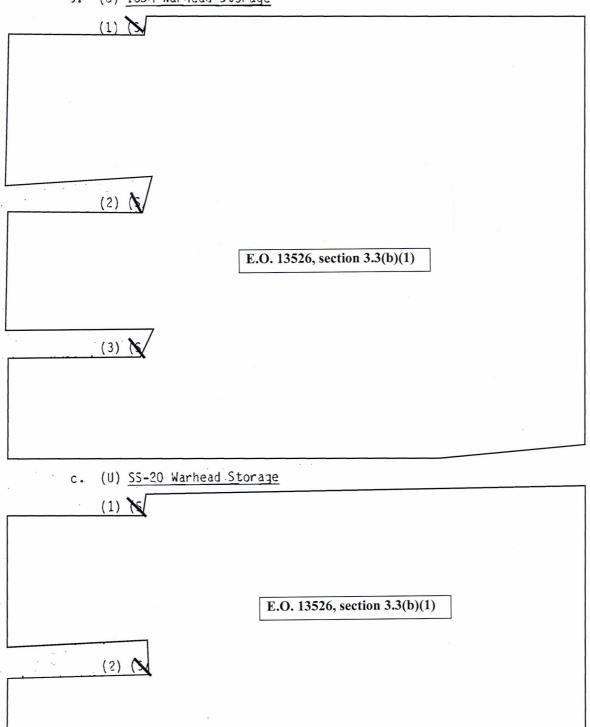


Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424 SECRET E.O. 13526, section 3.3(b)(1) Figure 21.

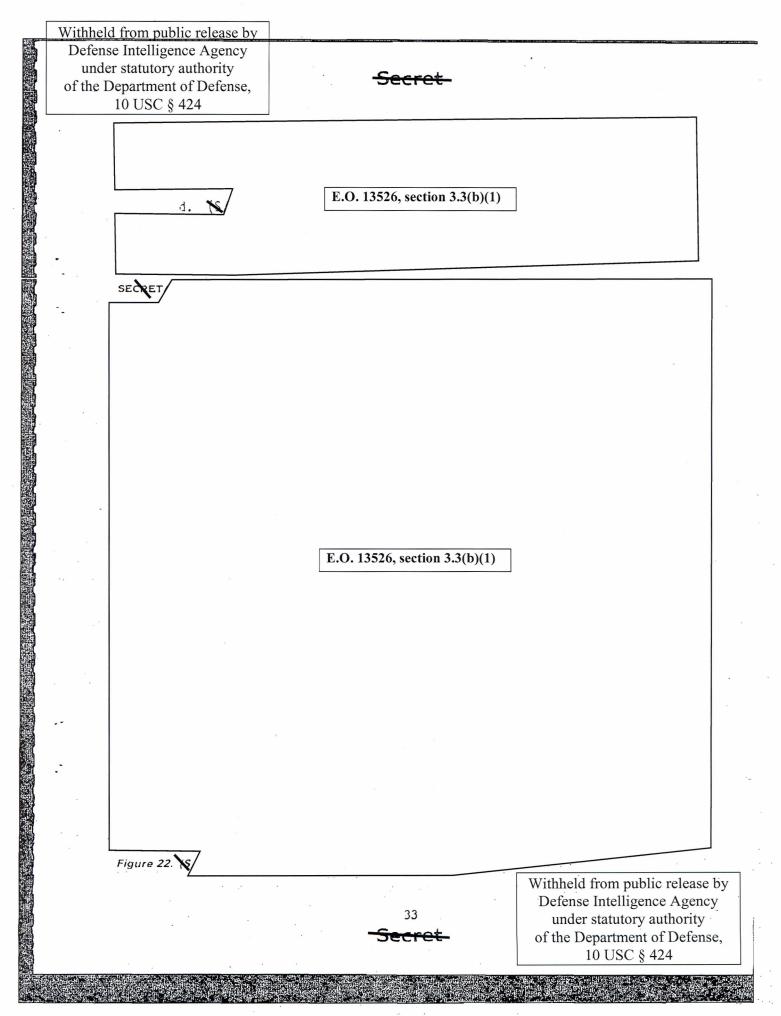
CACTAL

## Secret

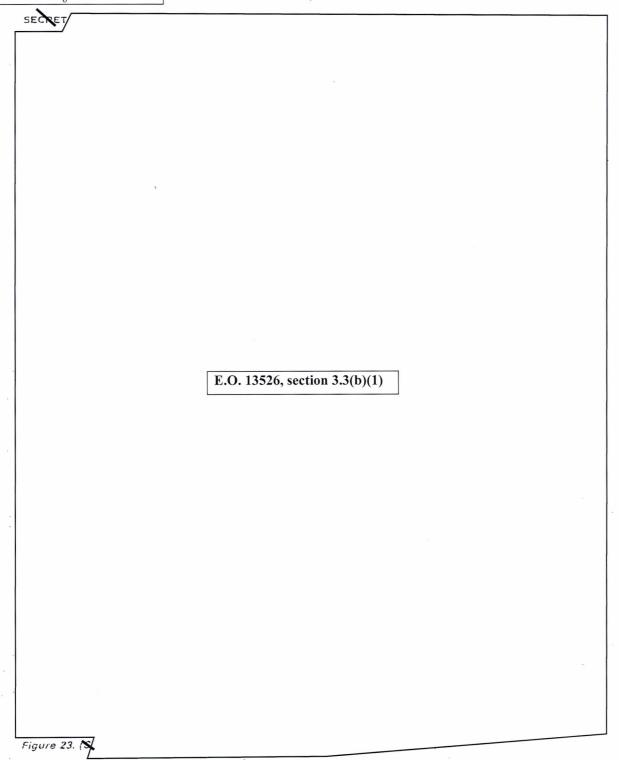
b. (U) ICBM Warhead Storage



32 Secret



#### Secret



34

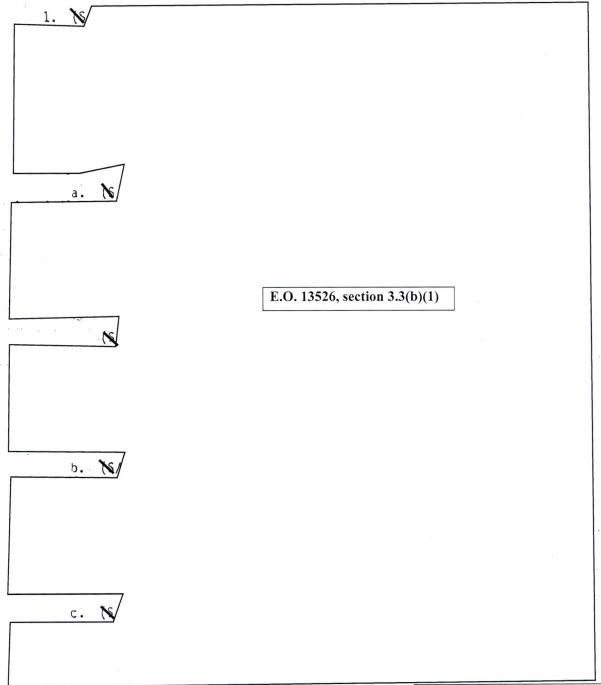
Secret

Secret

SECTION V

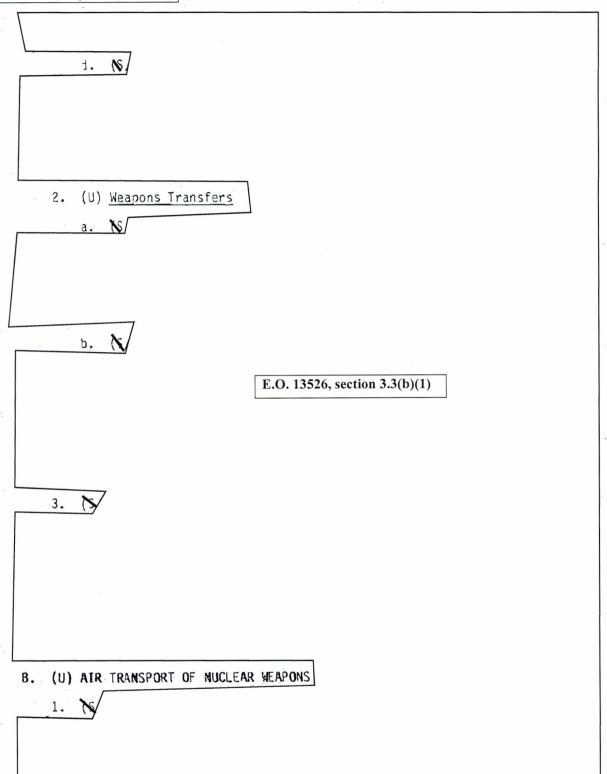
TRANSPORT

A. (U) Rail Transport of Nuclear Weapons

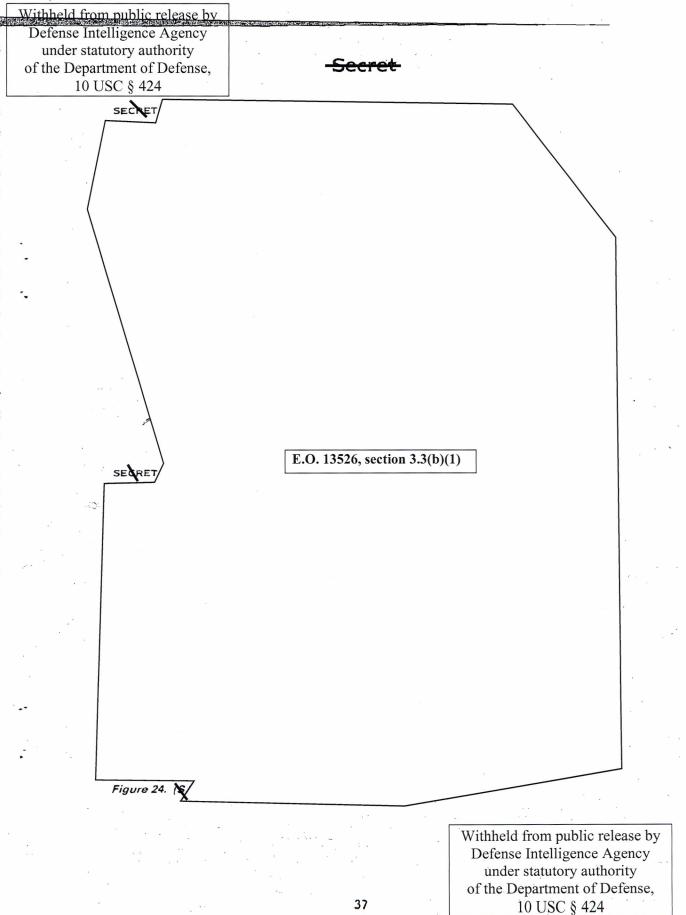


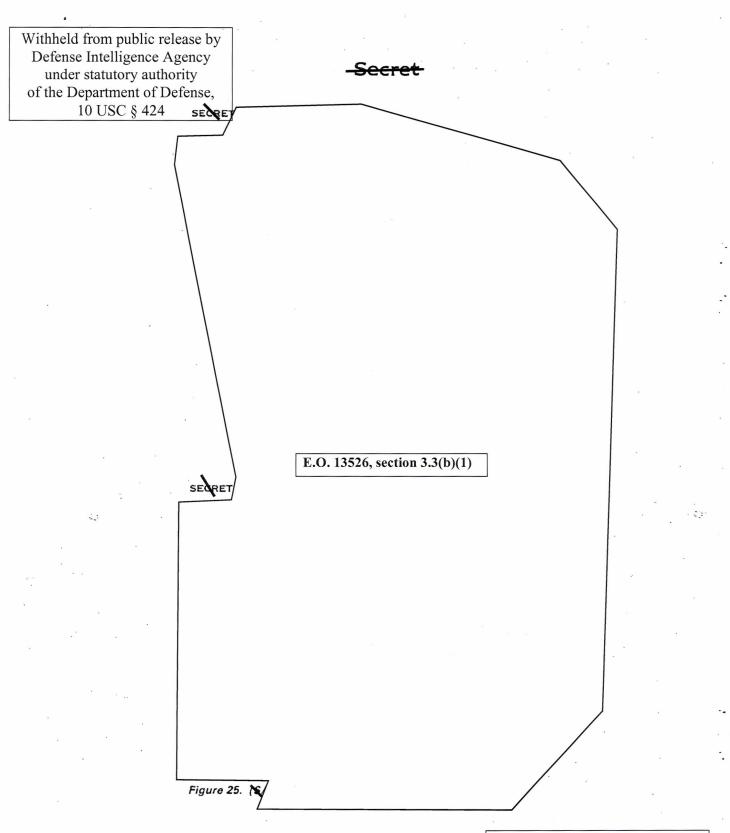
- Secret

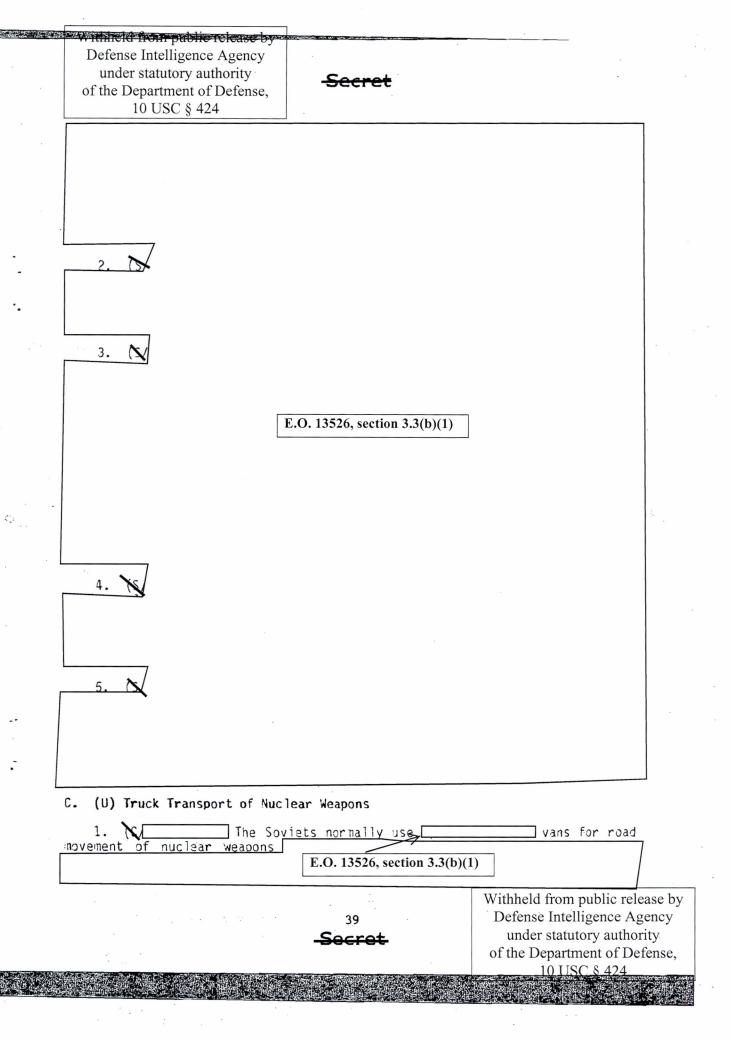
### Secret



36







Withheld from public release by
Defense Intelligence Agency
under statutory authority
of the Department of Defense,
10 USC § 424

E.O. 13526, section 3.3(b)(1)

3. (S)

E.O. 13526, section 3.3(b)(1)

4. (S)

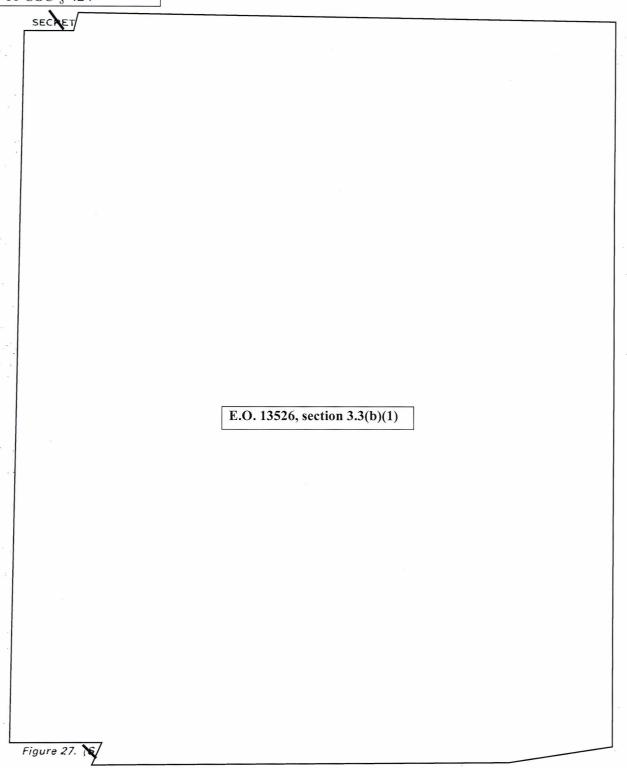
5. ( Table III shows the type of vehicles which would be in a Soviet nuclear weapons convoy. E.O. 13526, section 3.3(b)(1)

Secret

Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424 SECRET E.O. 13526, section 3.3(b)(1) Figure 26. Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense,

10 USC § 424

Secret



Secret

10 USC § 424

## Secret

TABLE III

# NUCLEAR WEAPONS CONVOY (U)

Vehicles	<u>Occupants</u>
	E.O. 13526, section 3.3(b)(1)
, , , , , , , , , , , , , , , , , , , ,	

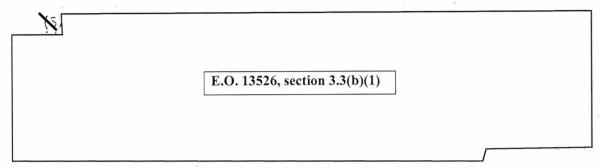
CONFIDENTIAL!	
COM TRATE INTO	

Secret

Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424

### Secret

D. Sea Transport



UNCLASSIFIED

Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424

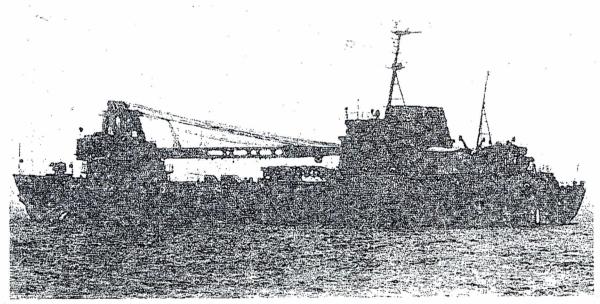


Figure 29. (U) AMGA Class Missile Tender.

(Reverse Blank)

Secret

### -Secret

### SECTION VI

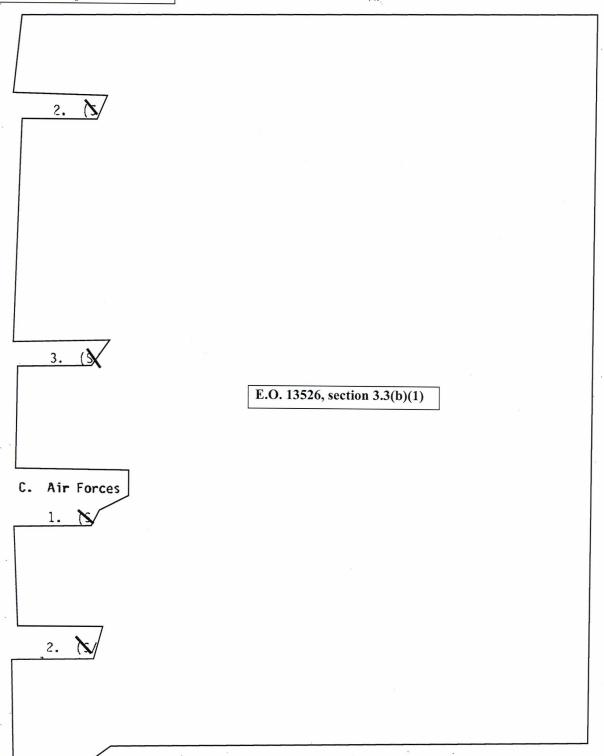
### TRAINING AND OPERATIONS

A. National Stockpile Sites

1.	
÷.	
2.	
	E.O. 13526, section 3.3(b)(1)
3.	
3. (8)	
B. Tactical Missile Support	Units
1.	

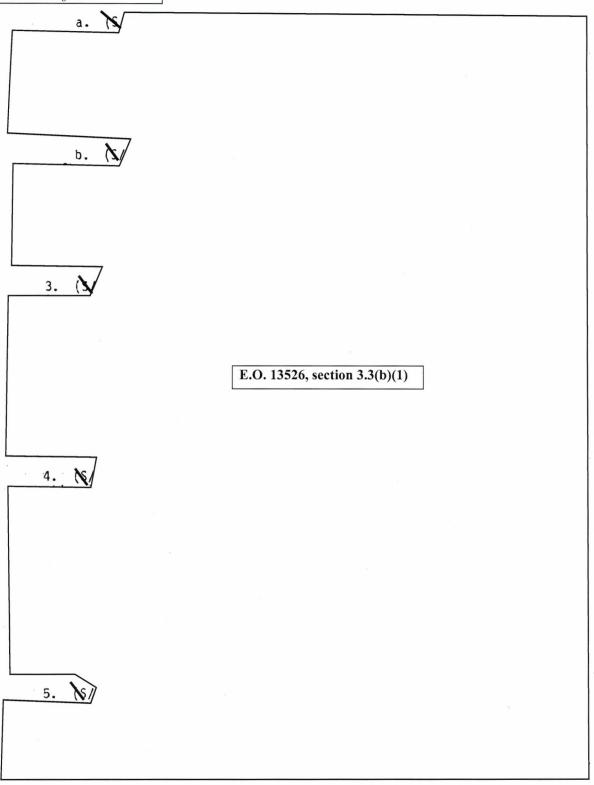
Secret

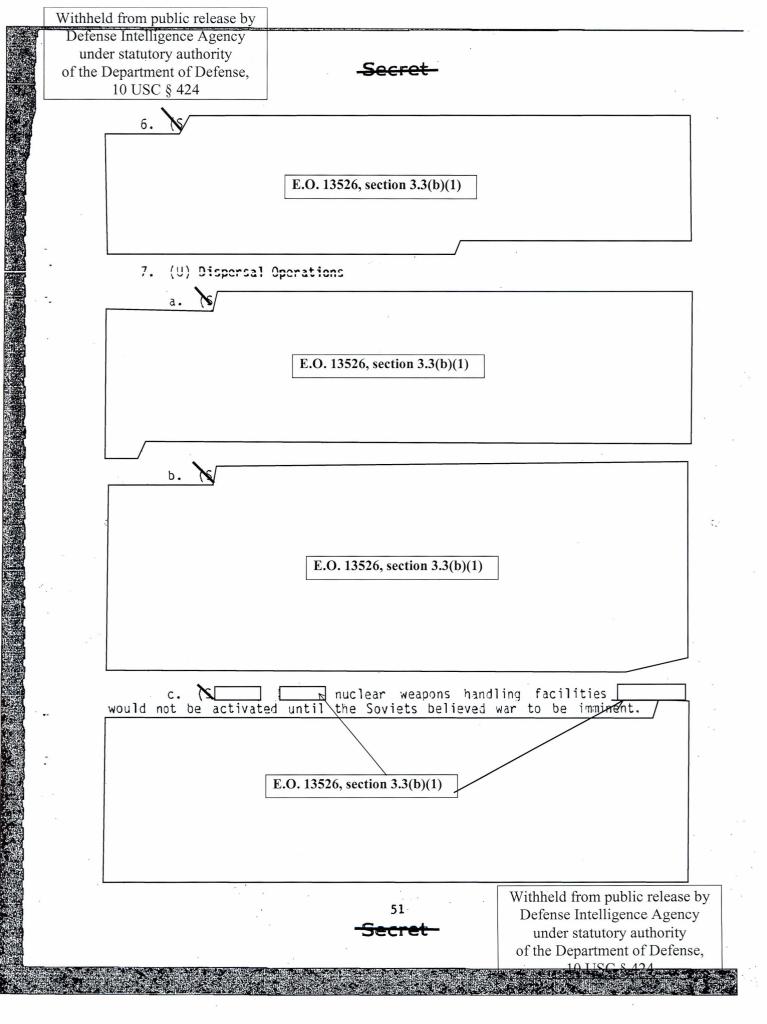
Secret



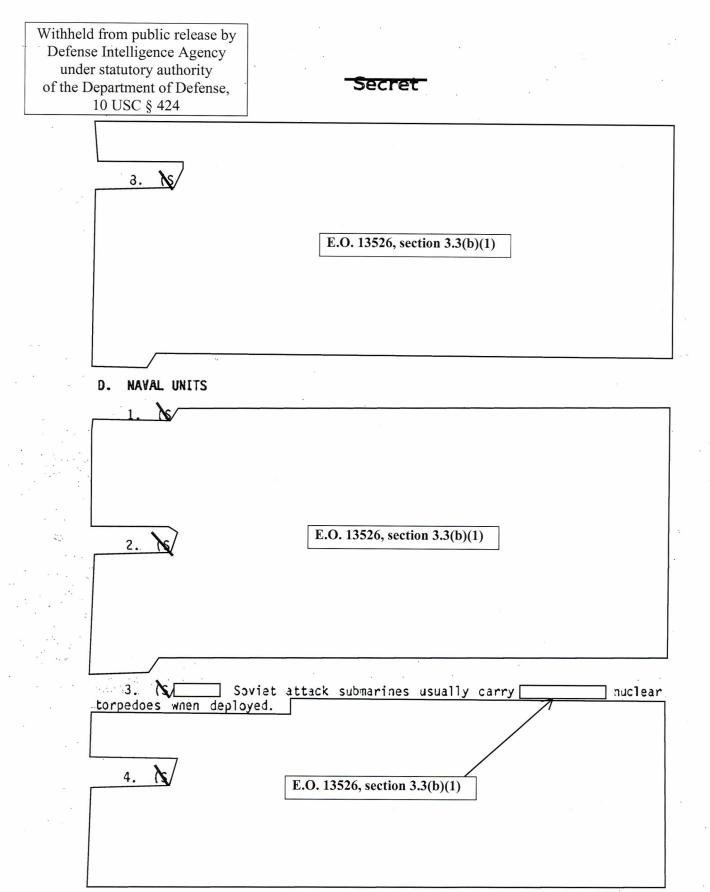
48 Socret

### Secret





Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424 SECRET E.O. 13526, section 3.3(b)(1) ÷: Figure 31.



54 Secret

Withheld from public release by
Defense Intelligence Agency
under statutory authority
of the Department of Defense,
10 USC § 424

5. No.

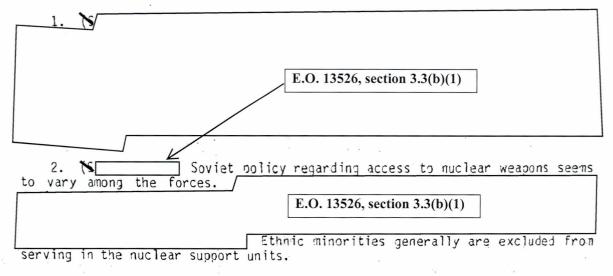
E. SRF Units
1. (A)

of the Department of Defense, 10 USC § 424

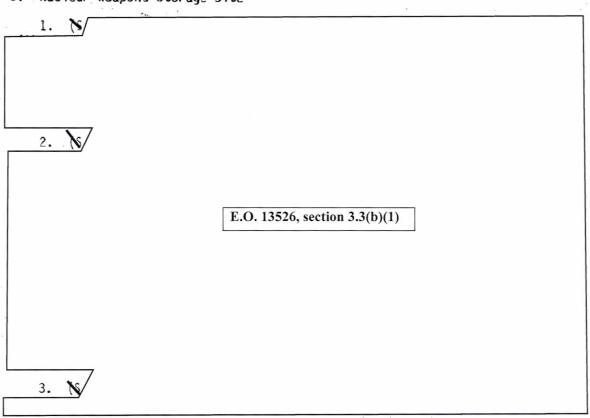
### -Secret

SECURITY

A. Nuclear Weapons Package



3. Nuclear Weapons Storage Site



Secret

### Secret

4. <b>\s</b>
E.O. 13526, section 3.3(b)(1)
C. Nuclear Weapons in Transit E.O. 13526, section 3.3(b)(1)  1. Long distance rail or air movements of nuclear weapons to or from the NSS is controlled by the 12th GUMO of the Ministry of Defense.
50. 556
E.O. 13526, section 3.3(b)(1)
2. \

58 Socret

under statutory authority of the Department of Defense, 10 USC § 424

#### Secret

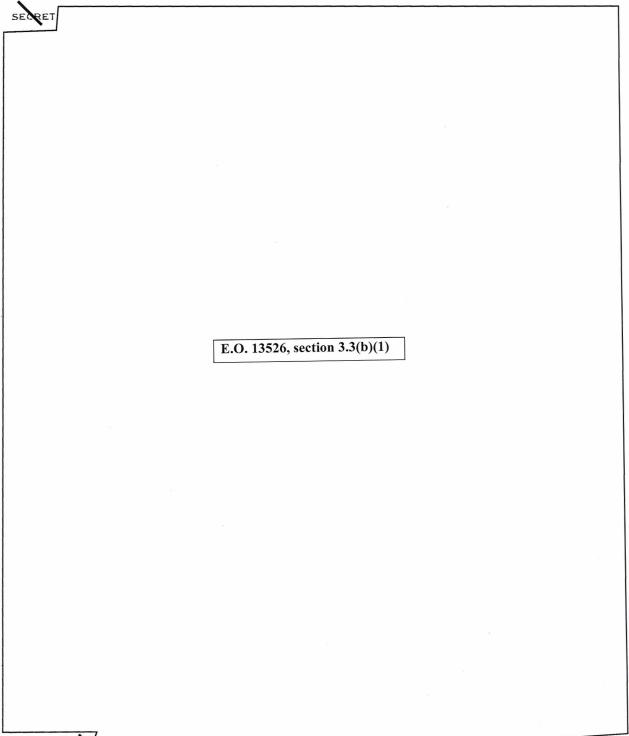


Figure 35. 16/

Secret

Withheld from public release by Defense Intelligence Agency under statutory authority -Secret of the Department of Defense, 10 USC § 424 E.O. 13526, section 3.3(b)(1) Figure 36. (S) Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424

Secret

E.O. 13526, section 3.3(b)(1) Nuclear Weapons Mating to Delivery Vehicle

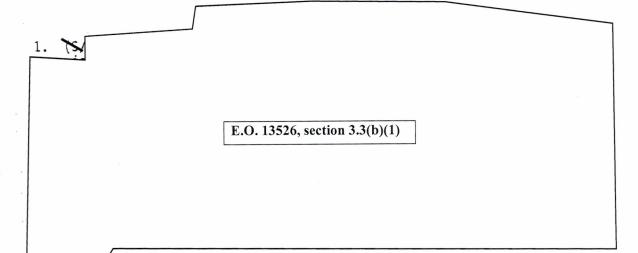
Secret



(Reverse Blank)

### -Secret

SECTION VIII



Withheld from public release by
Defense Intelligence Agency
under statutory authority
of the Department of Defense,
10 USC § 424

(Reverse Blank)

Sacrat

Appendix A

Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424 E.O. 13526, section 3.3(b)(1) Figure 38. Withheld from public release by Defense Intelligence Agency under statutory authority 67 of the Department of Defense, 10 USC § 424

### Secret

E.O. 13526, section 3.3(b)(1) Figure 39.

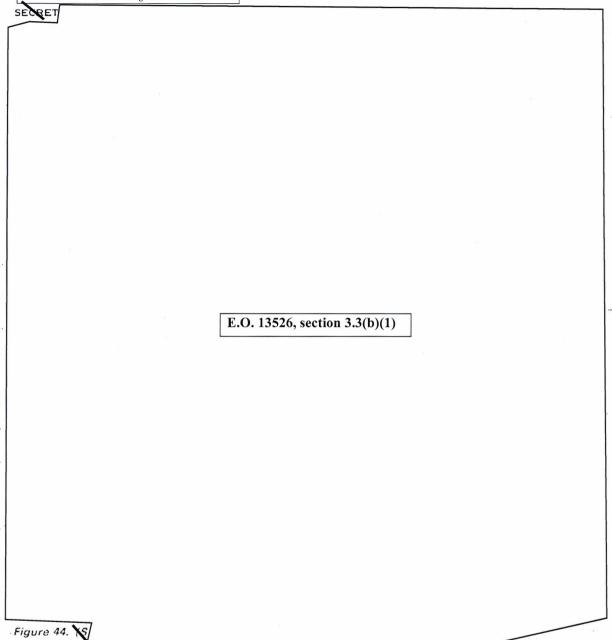
68

E.O. 13526, section 3.3(b)(1)

Figure 41.

Secret

Secret



	Withheld from public release by			
	Defense Intelligence Agency		The state of the s	TAP UNITAP IN
	under statutory authority	<b>C</b> 1		
	of the Department of Defense,	<del>Secret</del>		
	10 USC § 424			
1	SECRET			7
1				
				141
0.0				
4				
				1
				1
				1
	E.C	). 13526, section 3.3(b)(1)		
*				
*.				
. 1,				
"				
•				
:				
77				
				] .
	Figure 42. \S			
*			Width ald from mublic release	a br
		•	Withheld from public release	se by
		71	Defense Intelligence Ager under statutory authority	СУ
		/ L	Inder statiliory allinorin	V
		C	Call Description of CD C	
·		Secret	of the Department of Defer 10 USC § 424	nse,

# **Secret**

SEC LE I

E.O. 13526, section 3.3(b)(1)

Figure 43. XS

72 Secret

Secret

E.O. 13526, section 3.3(b)(1)

\_\_\_\_\_

Figure 45.

Secret

Appendix B

# Secret

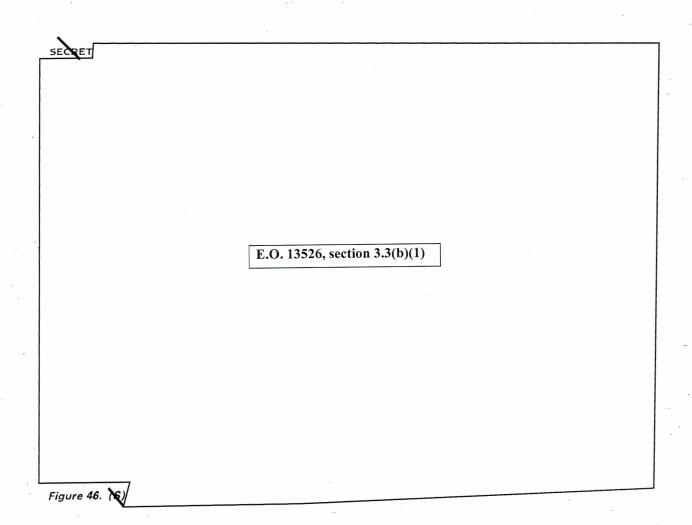
#### APPENDIX B

NATIONAL STOCKPILE SITES (U)

E.O. 13526, section 3.3(b)(1)

75 Secret

Secret



Appendix C

### Secret

APPENDIX C

E.O. 13526, section 3.3(b)(1)

### Secret

APPENDIX C ( CONTINUED)

E.O. 13526, section 3.3(b)(1)

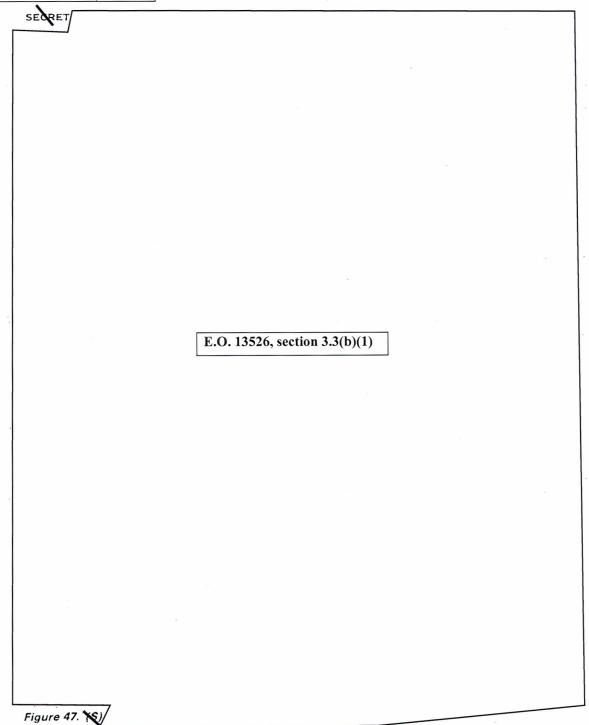
78 <del>Secret</del>

### Secret

APPENDIX C (CONTINUED)

E.O. 13526, section 3.3(b)(1)

Secret

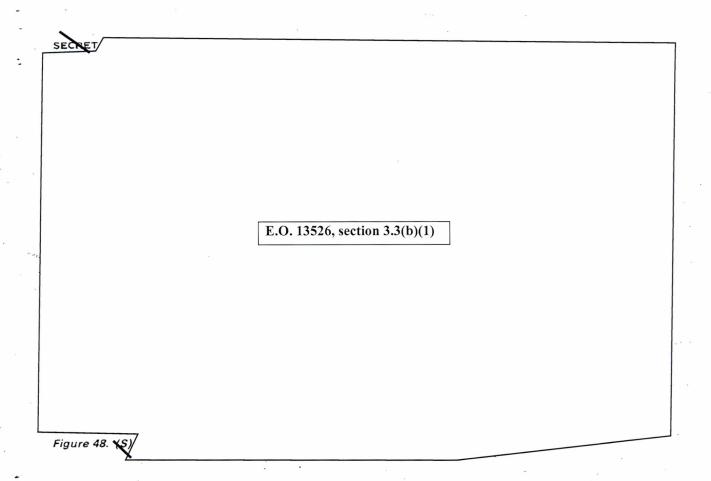


80

\_\_\_\_

### Secret

Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424



Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424

(Reverse Blank)

Secret

Appendix D

# Secret

APPENDIX D

E.O. 13526, section 3.3(b)(1)

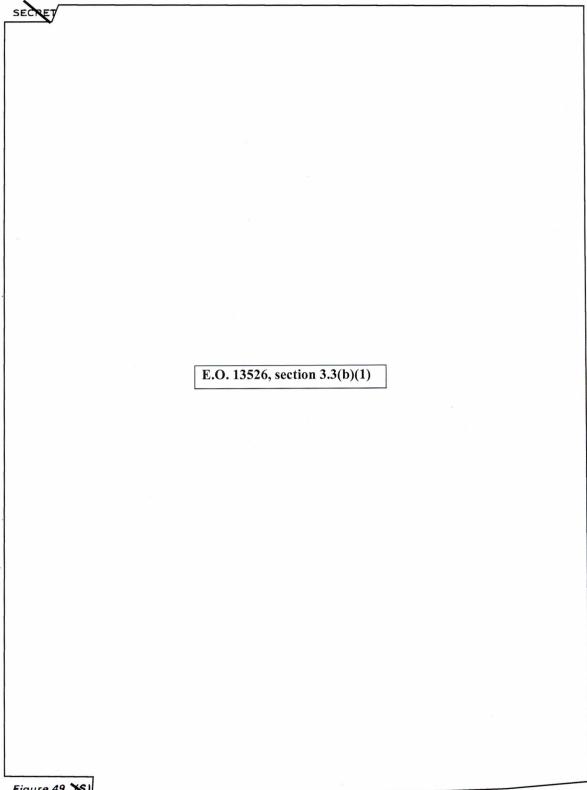


Figure 49.

84

Appendix E

Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424 APPENDIX E E.O. 13526, section 3.3(b)(1) Withheld from public release by Defense Intelligence Agency Reverse Blank) under statutory authority

of the Department of Defense, 10 USC § 424 Appendix F

### Secret

APPENDIX F

NWSS FOR SS-12 UNITS

**E.O.** 13526, section 3.3(b)(1)

(Reverse Blank)
87

Secret

Appendix G

Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424 APPENDIX G E.O. 13526, section 3.3(b)(1)

> 89 Secret

#### Secret

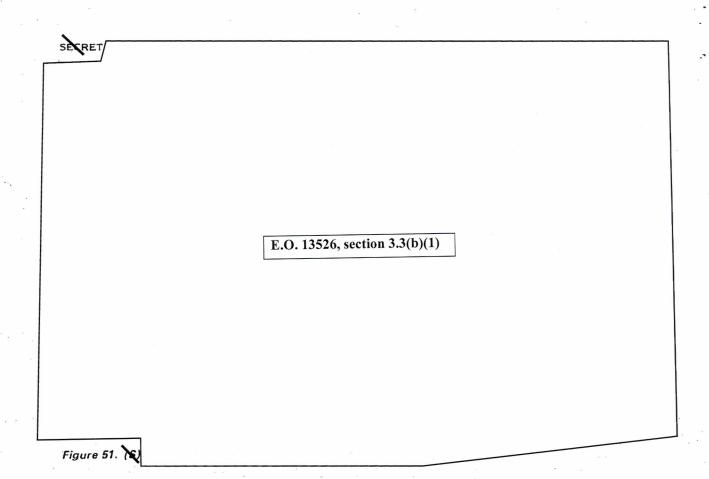
APPENDIX G (CONTINUED) E.O. 13526, section 3.3(b)(1)

> 90 <del>Secret</del>

under st	om public release by itelligence Agency authority			personal dead corp or and all file homeometric (a) is discovered.	
of the Depa	artment of Defense, USC § 424	<del>Secret</del>			
	SECRET			$\neg$	
•					
•					
				Tr.	
E 0611		E.O. 13526, section 3.3(b)(1)			
		2.0. 13320, section 3.5(b)(1)			
ī	a .				
£					
•.					
•					
	Figure 50.				
			Withheld from publ Defense Intelligen	ice Agency	
		91	of the Department	under statutory authority of the Department of Defens 10 USC § 424	

#### -Secret

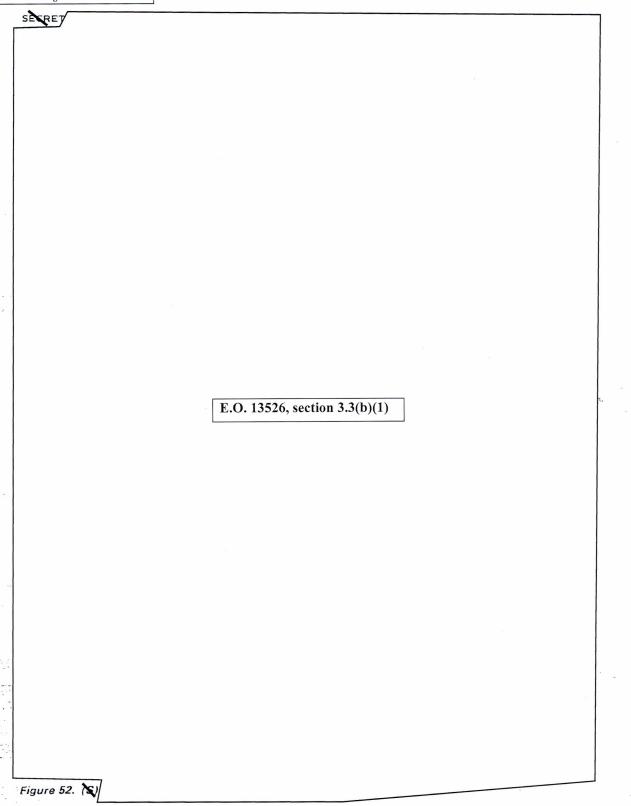
Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424



Appendix H

Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424 APPENDIX H E.O. 13526, section 3.3(b)(1)

### Secret



-94

Appendix I

Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424 APPENDIX I E.O. 13526, section 3.3(b)(1) Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, (Reverse Blank) 10 USC § 424

Appendix J

# Secret

### APPENDIX J

ESTIMATED AIRCRAFT NUCLEAR WEAPONS LOADS

E.O. 13526, section 3.3(b)(1)

Secret

Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424

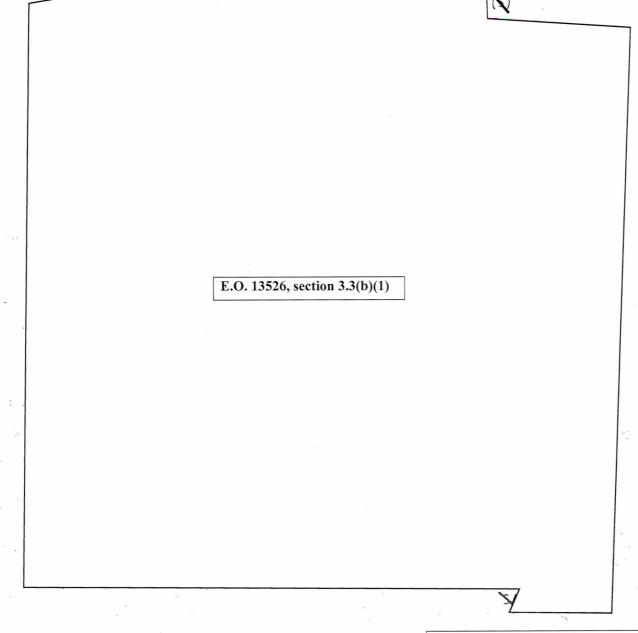
#### Socrat

E.O. 13526, section 3.3(b)(1)

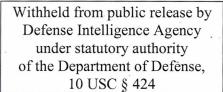
Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424 Appendix K

# -Secret

APPENDIX K



Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424



#### Secret

SECRET E.O. 13526, section 3.3(b)(1) Figure 53.

Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424

Withheld from public release	hv	T e		** *
Defense Intelligence Agend	Dy Dy			the time and desired the second desired the
under statutom, authority	-y			
under statutory authority		Secret	•	¥
of the Department of Defens	se,			
10 USC § 424		· · · · · · · · · · · · · · · · · · ·	·	
SECRET				
*				
0				
,				
•.				
				i -
. 1				
4. 1				
re a				
8.9.9		E.O. 13526, section 3.3(b)(1)		
eis:				
511				<i>i</i> )
*				
· · · ·				
w e				
				*
₹ ·				
•				>
Figure EA Sey				]
Figure 54.				
la.			e e e e e e e e e e e e e e e e e e e	
B	÷		Withheld from public rele	ease by
			Defense Intelligence Ag	gency
			under statutory author	
•		(Reverse Blank)	of the Department of De	fense.
	,	101	10 USC § 424	
	100	- 1	10 000 8 727	

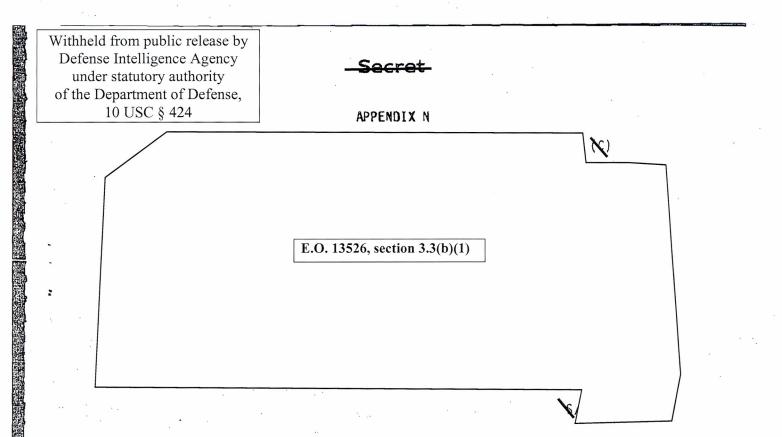
Appendix L

Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424 APPENDIX L E.O. 13526, section 3.3(b)(1) Withheld from public release by (Reverse Blank) Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424

Appendix M

Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424 APPENDIX M E.O. 13526, section 3.3(b)(1) Withheld from public release by (Reverse Blank) Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424

Appendix N



(Reverse Blank)

Secret

Appendix O

# Secret

### APPENDIX O

IDENTIFIED MOBILE MISSILE NUCLEAR STORAGE

E.O. 13526, section 3.3(b)(1)

Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424

(Reverse Blank)

Secret

under statutory authority of the Department of Defense, 10 USC § 424	DISTRIBU	TION LIST		
200 AND JOINT AGENCIES				
	$\neg$ $ $			
• ,				
• ,				
		UNIFIED AND SPECIFIED COMMANOS		
		ONTIFIED AND SPECIFIED COMMINGS	OTHERS	_
. DIA				
:				
. 🗡 , .				
* 1			8	
				1.
				╛
"			+ E	
				1,477
			DISTRIBUTION LIST	
			(MICROFICHE)	
			DOO AND JOINT AGENCIES	
*	U.S. NAVY	ix .	DIA	
•	•		ARMY	
				1
11 ' c '				
* ,	-			
			U.S. NAVY	] .
			U.S. NAVY	
			U.S. AIRFORCE	
				1
7, 1	. U.S. ACREDICE			]
			UNIFIED AND SPECIFIED COMMANDS	
W				
Y 4,				
ARMY		V		
				. `
		Wishbald from muhlip gale	1	
		Withheld from public rele Defense Intelligence Ag	ase by	

Secret

Withheld from public release by Defense Intelligence Agency under statutory authority of the Department of Defense, 10 USC § 424

Secret