REDACTED COPY

D00050671





SECRET RD

TCG-NAS-2

(U) Joint DOE/DoD **Topical Classification Guide for Nuclear Assembly Systems**

March 1997

U.S. DEPARTMENT OF ENERGY Office of Classification Washington, DC 20585

DEPARTMENT OF ENERGY	DECLASSIFICATION REVIEW
1 ⁵⁷ Review Date: 11/19/2019 Authority: DC X DD	DE FERMINATION (CIRCLE NUMBER(S)) CLASSIF CATION RETAINED Z. CLASSIFICATION CHANGED TO:
Name: R.L. Shankle 2" Review Date: 6/14/2021	Z. CLA TFICATION CHANGED TO: 3. CONTANS NO DOE CLASSIFIED INFO 4. COORDINGTE WITH:
Authority: DD	CLASSIFICATION CANCELED CLASSIFIED IN FORRACKETED
Name: J. Stoner, AU-68	7. OTHER (SPECITY):

CRITICAL NUCLEAR WEAPONS DESIGN INFORMATION DOD INSTRUCTION 5210.02 THES

RESTRICTED DATA

This document contains Bestricted Data as defined by the Atomic Energy Act 1954, as amended. Unauthorized disclosure is subject to Administrative and Criminal Sanctions.

Classified by:

Edith A. Chalk, Director

Office of Technical Guidance

Derived from:

CG-W-5, 10/16/95

20190013561

SECRET RD

UNCLASSIFIED -

CLASSIFICATION/CONTROL GUIDANCE REQUEST
NAME: DATE:/
ORGANIZATION:PHONE NUMBER:
SHORT TITLE OF GUIDANCE:
LONG TITLE OF GUIDANCE:
CHECK THE APPLICABLE AREA AND ENTER THE REQUIRED INFORMATION
I NEED COPIES OF THIS GUIDANCE
JUSTIFICATION:
CHANGE OF ADDRESS:
PLEASE REMOVE MY NAME FROM THE DISTRIBUTION LIST
I TRANSFERRED MY COPY OF THIS GUIDANCE TO:
ORGANIZATION:
I MADE COPIES OF THIS GUIDANCE FOR:
ORGANIZATION:
INSTRUCTIONS: You may FAX this to the Classification Guidance Administrator, AU-62, at (301) 903-7444.
Headquarters Elements: Send this request to the Office of Technical Guidance, Office of Classification, AU-62.
Field Elements: Send this request to your local classification officer.
NOTE: THIS SAMPLE MAY BE REPRODUCED AS NEEDED; OTHER FORMATS ARE ACCEPTABLE AS LONG AS THE REQUIRED INFORMATION IS PROVIDED.

TCG-NAS-2

Joint DOE/DoD
Topical
Classification
Guide for
Nuclear Assembly
Systems (U)

Approved by:

Charles C. Wilson

Assistant Deputy to the Under Secretary of Defense for Policy Support

U.S. Department of Defense

Approved by:

3-7-97

A. Bivan Siebert FOR

Director, Office of Declassification

U.S. Department of Energy

TCG-NAS-2 (U) Joint DOE/DoD Topical Classification Guide for Nuclear Assembly Systems

RECORD OF PAGE CHANGES

Date of Change:	Entered by (Initial/Date):
June 1999	TGA
August 1999	TGA
November 1999	TGA
February 2001	TGA
August 2002	TGA
April 2003	TGA
08/03/2015	AU-62
02/05/2019	AU-62
	June 1999 August 1999 November 1999 February 2001 August 2002 April 2003 08/03/2015

TCG-NAS-2

(U) Joint DOE/DoD Topical Classification Guide for Nuclear Assembly Systems

TABLE OF CONTENTS

INITO	DDUCTION	
		atra 1
	Use of Guidelı	
Б.	Scope	IUO-I
	Cancellation/Supersession	
D.	Authority	1110-2 ntro 2
Ε,	Classification Categories and Levels	1110-2 -4 2
Г. С	Use of the Designation "U"	1110-3 otro 2
G.	Transclassified Foreign Nuclear Information (TFNI)	1110-3
	Official Use Only (OUO) Information	1110-3
l.	Marking Of Documents	1110-5
J.	Special Considerations	11(O-5
۲.	Ranges in Classification Levels	
L.	Format of Topics	1110~0 -4 C
	Obtaining Copies of a Guide	
IN.	Questions/Suggestionsli	าเเด-6
		- DOE
CHAP	TER 1 DELETED General Discussion	DOE
A.	General Discussion	1-1 b(3)
B.	Reasons for Classification	1-1
C.	Broad Guidance	1-1
D.	Topics	1-3
CHAP	TER 2 DELETED General Discussion	DOE
A.	General Discussion	b(3)
B.	Reasons for Classification	2-1
	Broad Guidance	
	Topics	
_,		
CHAE	PTER 3 DELETED	DOE
CHAP	PTER 3 DELETED General Discussion	b(3)
Α.	Reasons for Classification	3-1
	Broad Guidance	
D.	Topics	ა-ა
		DOE
	PTER 4 DELETED	h(3)
A.	General Discussion	4-1
	Reasons for Classification	
	Broad Guidance	
D.	Topics	4-5
		202
CHAB	TER 5 DELETED	DOE
	General Discussion	5-1 b(3)
/ \.		🗸 1

TABLE OF CONTENTS (Continued)

B.	Reasons for Classification	5 - 2	
	Broad Guidance		
D.	Topics	5-6	
	Customa and the control of the contr	Contract of State States	DOE
CHAP	PTER 6 DELETED		b (3)
Α.	PTER 6 DELETED General Discussion	6-1	B(-)
B.	Reasons for Classification	6-1	
C.	Broad Guidance	6-2	
D.	Topics	6-3	
СНАЕ	PTER 7 DELETED General Discussion		DOE
	General Discussion	71	b (3)
A.	Reasons for Classification	1⁻1 7_1	
	Broad Guidance		
	Topics		
D.	10pics	1-3	
			DOE
CHAP	PTER 8 DELETED		b(3)
Α.	General Discussion	8-1	D(3)
	Reasons for Classification		
C.	Broad Guidance	8-2	
D.	Topics	8-5	
		abilitantia (Usinii)	DOT
CHAF	PTER 9 DELETED		DOE
	General Discussion	9-1	b (3)
	Reasons for Classification		
	Broad Guidance		
	Topics		
٥.	i obioo iliilii ilii ilii ilii ilii ilii		

APPENDIX A - DEFINITIONS

APPENDIX B - ABBREVIATIONS AND ACRONYMS

INDEX

TABLE OF CONTENTS (Continued) LIST OF FIGURES DELETED BOE b(3)

s 11 - w

. .

TCG-NAS-2 (U) Joint DOE/DoD Topical Classification Guide for Nuclear Assembly Systems

INTRODUCTION

A. Use of Guide

This guide is approved for use by Derivative Classifiers and Derivative Declassifiers within their programmatic areas of expertise. Topics in this guide contain guidance for determining whether information is classified or unclassified. If the information concerns a specific Department of Energy (DOE) or National Nuclear Security Administration (NNSA) site or program, a local guide pertaining to that site or program may have been issued and should be consulted. This guide may be used to determine if foreign nuclear information is Transclassified Foreign Nuclear Information (TFNI), and, if so, at what level. If the work being performed is not funded by DOE or NNSA and the funding organization has not issued a classification guide, this classification guide must be used for Restricted Data (RD) and Formerly Restricted Data (FRD) subject areas. This guide may be used for National Security Information (NSI) subject areas provided (1) the information is within the scope of the guide, and (2) the agency funding the work agrees that the guide is valid for the work.

This guide is approved for use by any DOE or NNSA employee or contractor employee for determining whether information is Official Use Only (OUO).

B. Scope

This classification guide provides the authority and a basis for determining the classification to be assigned to information concerning Nuclear Assembly Systems (NAS) of Nuclear Weapons.

The amount and variety of information generated since the inception of nuclear weapon development is quite large. Consequently, it is not practical to compile into a single document all the detailed classification guidance necessary to address comprehensively all such information.

CG-W-5, Joint DOE/DoD Nuclear Weapon Classification Policy Guide, establishes the broad outline of nuclear weapon classification policy. This guide, and the other topical guides, represent the second tier of a multi-level system of guidance.

The topical guides expand upon the policy and guidance encompassed by CG-W-5 to provide more detailed classification guidance on specific aspects of nuclear weapons in research, development, design, production and stockpile. Local guides address even more specific issues, such as individual components or systems, and provide very detailed guidance.

Information pertaining to specified weapons and that relating to unspecified weapons (sometimes referred to as designated and undesignated weapons) are often assigned different classification levels. As used in this guide, a specified weapon is one identified by a unique designator, such as a B, Mk, or W number, or six-digit part number, a delivery vehicle, or a system. "Unspecified weapon," on the other hand, means weapons in general.

The classifications prescribed in this guide apply equally to nuclear weapons, models and replicas of nuclear weapons, configurations for nuclear weapons training, nuclear weapon test devices, and peaceful nuclear explosive devices.

C. Cancellation/Supersession

This classification guide supersedes TCG-NAS-1. Joint DOE/DoD Topical Classification Guide for Nuclear Assembly Systems, September 1985.

DELETED

DOE b(3)

DOE b(3)

DELETED

D. Authority

Statutory/Regulatory/Executive Order Authorities

The Atomic Energy Act (AEA) of 1954 is the authority to classify certain information related to the design, manufacture, or utilization of atomic weapons and the production of special nuclear material the release of which could risk the common defense and security. Government-wide regulations for classifying and declassifying RD and FRD are contained in 10 Code of Federal Regulations (CFR) Part 1045, Nuclear Classification and Declassification.

Executive Order (E.O.) 13526, Classified National Security Information, is the authority to classify certain information that requires protection from unauthorized disclosure because it could cause damage to the national security. Government-wide requirements for classifying, safeguarding, and declassifying National Security Information (NSI) are contained in 32 CFR Part 2001, Classified National Security Information.

The Freedom of Information Act (5 U.S.C. §552) exemptions are used as the basis for DOE OUO determinations.

2. Agency Directives

DOE O 475.2B, *Identifying Classified Information*, establishes the program to identify information classified under the Atomic Energy Act (Restricted Data, Formerly Restricted, and Transclassified Foreign Nuclear Information) or Executive Order 13526, *Classified National Security Information*, so that it can be protected against unauthorized dissemination.

NOTE: This order states that classification guidance must be identified or the use of source documents must be approved for all DOE or Non-DOE-funded work performed in a classified subject area that may generate derivatively classified documents or materials.

Department of Defense Manual 5200.01, DoD Information Security Program, establishes the Department of Defense (DoD) Information Security Program. Department of Defense Instruction 5210.02, Access to and Dissemination of Restricted Data and Formerly Restricted, establishes policies, assigns responsibilities, and prescribes procedures governing access to, and dissemination of data classified as RD and FRD by the DoD.

DOE O 471.3, Administrative Change 1, Identifying and Protecting Official Use Only Information, and DOE M 471.3-1, Administrative Change 1, Manual for Identifying and Protecting Official Use Only Information, contain the responsibilities for managing and administering DOE's OUO program and the requirements for identifying and protecting information as OUO.

E. Classification Categories and Levels

Each topic designating information as classified must identify both the classification category and the classification level. Classification categories and levels are defined as follows:

1. Classification Categories

Restricted Data (RD). Classified information that concerns (1) the design, manufacture, or utilization of atomic weapons; (2) the production of special nuclear material; or (3) the use of special nuclear material in the production of energy, except for that information that has been declassified or removed from the RD category under Section 142 of the AEA.

<u>Formerly Restricted Data (FRD)</u>. Classified information concerning the military utilization of atomic weapons that has been removed from the RD category under Section 142d of the AEA.

<u>Transclassified Foreign Nuclear Information</u> (<u>TFNI</u>). Classified information concerning foreign nuclear programs that has been removed from the RD category under Section 142e of the AEA.

National Security Information (NSI).
Classified information that has been determined under E.O. 13526, or any predecessor Executive Order to require protection against unauthorized disclosure.

2. Classification Levels

The following levels of classification, listed in descending order of sensitivity, are applied to any category of classified information:

<u>Top Secret (TS).</u> Information whose unauthorized disclosure could reasonably be expected to cause exceptionally grave damage to the national security that the appropriate official is able to identify or describe.

<u>Secret (S)</u>. Information whose unauthorized disclosure could reasonably be expected to cause serious damage to the national security that the appropriate official is able to identify or describe.

Confidential (C). Information whose unauthorized disclosure could reasonably be expected to cause either undue risk to the common defense and security (if RD or FRD information) or damage to the national security (if NSI) that the appropriate official is able to identify or describe.

F. Use of the Designation "U"

Certain topics in this guide contain the designation "U" indicating that the information is not classified. However, such information is not automatically approved for release to the public, as it may be subject to other controls that are outside of the purview of this guide.

G. Transclassified Foreign Nuclear Information (TFNI)

Transclassified Foreign Nuclear Information is intelligence-related information concerning foreign nuclear programs (e.g., foreign nations, organizations, and may include non-state actors) for which comparable U.S. information would be RD or design-related FRD. Examples

of U.S. design-related FRD for which comparable foreign nuclear information has the potential to be TFNI are weapon and device yields and design of nonnuclear components (e.g., safing, arming, fuzing, and firing components), While U.S. nuclear stockpile numbers and storage locations are FRD, they are not design-related; therefore, comparable foreign information is not TFNI. Intelligence information on foreign stockpile numbers and storage locations does, however, have the potential to be NSI. TFNI does not include (a) information concerning the nuclear programs for the United Kingdom or Canada, (b) information generated under the Tripartite Agreement concerning the development of gas centrifuges, and (c) information exchanged pursuant to an agreement for cooperation. Such information does not fall under the transclassification agreements and may still be RD.

The RD and design-related FRD topics in this guide may be used to make TFNI determinations for collected intelligence on foreign nuclear programs, as described above. Any technical evaluation of foreign nuclear program information by a U.S./UK/Canadian government asset that confirms or impugns its credibility, uses RD or design-related FRD in evaluating the foreign nuclear program information, gives insight to the U.S. nuclear weapons program, or reveals U.S. RD information is RD. This will occur when foreign nuclear program information is compared to U.S. RD technology or if U.S. RD technology is used as a basis for analysis of the foreign information.

H. Official Use Only (OUO) Information

Certain unclassified information may be OUO if it (1) has the potential to damage Government, commercial, or private interests if disseminated to persons who do not need to know the information to perform their jobs or other DOE authorized activities, and (2) may be exempt from public release under the Freedom of Information Act (FOIA). [NOTE: As of March 2011, Exemption 2, Circumvention of Statute, no longer applies and should not be used for OUO determinations.] Generally, a program or support office decides whether information under its cognizance is OUO. In this case, [Enter the appropriate agency or organization] has decided that information

identified by specific topics in this guide is OUO. Any document containing such information must be marked as OUO.

Each topic that indicates information is OUO includes a notation of the proper FOIA exemption number and category to insert in the OUO front marking. A description of the applicable categories follows:

"Exemption 3, Statutory Exemption."
Protects information the disclosure of which is specifically protected by law and is not otherwise controlled. (Example: The Federal Technology Transfer Act allows Federal agencies to protect for 5 years any commercial and business confidential information that results from a Cooperative Research and Development Agreement with a non-Federal party.)

"Exemption 4, Commercial/Proprietary."
Protects trade secrets and commercial or financial information obtained from a person that would cause damage to the source or to program effectiveness if disclosed. (Examples: scientific and manufacturing process; commercial or financial information in connection with bids, contracts, or proposals and other related information received in confidence; Agency credit card numbers or bank account numbers; security measures for commercial entities performing work for the Government.)

"Exemption 5, Privileged Information."
Protects the Government's decision-making process. (Examples: letters, memoranda, issue papers, reports, and other documents that contain advice, opinions, or recommendations on new or revised Government decisions and policies.)

"Exemption 6, Personal Privacy." Protects personnel, medical, and similar files the disclosure of which would constitute a clearly unwarranted invasion of personal privacy or create a risk of identity theft. (Examples: social security numbers, date of birth associated with an individual, medical history associated with an individual.)

"Exemption 7, Law Enforcement." Protects information compiled for law enforcement purposes, including the prevention of illegal acts. (Examples: classification guidance or excerpts of classification guidance; witness statements; identity of firms or individuals being investigated for alleged irregularities involving contracting with DOE when no indictment has been obtained; information obtained in confidence in the course of a criminal investigation; law enforcement or security manuals; security measures to protect Federal buildings or personnel.)

For more information concerning OUO, refer to DOE O 471.3, Administrative Change 1, *Identifying and Protecting Official Use Only Information*, and DOE M 471-3-1, Administrative Change 1, *Manual for Identifying and Protecting Official Use Only Information*, or the Office of Classification's Classification Training Institute webpage.

Each topic that indicates information is OUO must show the exemption that applies. This should be done by including a *NOTE*, either below the topic or at the beginning of the section, citing the proper exemption code number and short title. The following example illustrates the form an OUO topic might take:

101 Information reveals...

OUO

NOTE: OUO category is "Exemption 7, Law Enforcement."

An OUO determination does not mean that the information is exempt from public release under the FOIA, but it has the potential to damage governmental, commercial, or private interests if disseminated to persons who do not need to know the information to perform their jobs or other DOE authorized activities. The determination as to whether a document qualifies for exemption from public release under the FOIA requires further analysis by a FOIA denying official. The OUO markings alert DOE personnel that the document must be protected appropriately and reviewed prior to release.

I. Marking Of Documents

The originator is responsible for ensuring that classified documents are marked appropriately, not the Derivative Classifier or Derivative Declassifier. DOE O 471.6, Administrative Change 2, *Information Security*, contains information on marking requirements. Also refer to the DOE CMPC Marking Resource for additional information.

Documents containing any RD or FRD should not be portion marked (unless required by agreement with another agency when preparing joint documents). However, documents containing only TFNI or NSI must be portion marked as required by E.O. 13526. Marking instructions for DoD classifiers are found in Volume 2 to Department of Defense Manual 5200.01, DoD Information Security Program.

Certain RD topics contain the notation "(N)" or the statement "May be (N)." (N) is an abbreviation for Critical Nuclear Weapons Design Information (CNWDI). CNWDI applies only to the DoD and is defined as Top Secret RD or Secret RD revealing the theory of operation or design of the components of a thermonuclear or fission bomb, warhead, demolition munition, or test device. Specifically excluded is information concerning arming. fuzing, and firing systems, limited-life components, and total contained quantities of fissionable, fusionable, and high explosive materials, by type. Among these excluded items are the components that DoD personnel set, maintain, operate, test, or replace. Documents containing CNWDI must be marked as such prior to transfer to the DoD. (See DOE O 452.8, Control of Nuclear Weapon Data, for details.)

The employee who determines a document contains OUO information ensures it is marked appropriately. DOE M 471.3-1, Administrative Change 1, *Manual for Identifying and Protecting Official Use Only Information*, contains information on marking requirements.

J. Special Considerations

Inconsistent Guidance. Inconsistent guidance may be ambiguous, outdated, or in conflict with other guidance. When such guidance is encountered, the Derivative Classifier or Derivative Declassifier must contact the appropriate classification office for assistance.

No Guidance. If a Derivative Classifier or Derivative Declassifier cannot determine the proper classification of an element of information using guidance approved for his/her use, the Derivative Classifier or Derivative Declassifier must contact the appropriate classification office for assistance.

"No Comment" Policy. Occasionally, classified information appears without authorization in the public domain. For information on how to respond to such information, see Classification Bulletin GEN-16 Revision 2, "No Comment" Policy on Classified Information in the Open Literature, and Volume 1 to Department of Defense Manual 5200.01, DoD Information Security Program.

Association. The significance of information often depends upon its context. Therefore, two unique pieces of unclassified information when considered together may reveal classified information. If the decision to classify is based on a topic, then a Derivative Classifier may make the decision. If the decision is not based on a topic, an Original Classifier must make the decision for NSI and the Director, Office of Classification, must make the decision for RD/FRD information. When two portions of a portion-marked document are classified based on their association, both portions must be portion marked at the same level and category.

Compilation. A document may be classified because of compilation when a large number of qualitatively similar pieces of unclassified information considered together contain some added value (such as the completeness or comprehensiveness of the information) that warrants classification. If the decision to classify is based on a topic, then a Derivative Classifier may make the decision. If the decision is not based on a topic, an Original Classifier must make the decision for NSI and the Director, Office of Classification, must make the decision for RD/FRD information. A document classified for this reason is never portion marked and must contain the following statement: "This document has been classified as a compilation and must not be used as a source document for a derivative classification decision."

DELETED

DOE b(3)

DOE b(3)

DELETED

K. Ranges in Classification Levels

A topic in a classification guide may show a range for the classification level. For example:

U-TS

Classification level can be from Unclassified to Top Secret

U/TS

Classification level is either

Unclassified or Top Secret

In either case, subtopics or *NOTES* explain when each classification level applies.

L. Format of Topics

<u>RD and FRD Topics.</u> The format of these topics is as follows:

102 Guidance topic

vCat

v = Classification level (TS, S, C)

Cat = Category (RD or FRD)

M. Obtaining Copies of a Guide

Unless otherwise indicated on the guide or by the Office of Classification, local copying of a guide is permitted. However, to ensure that each person with a copy of a guide receives change notices and revisions, the person's name must be on a distribution list for that guide maintained by Headquarters or the local Classification Officer.

Inside the front cover of this guide is a Classification/Control Guidance Request form that may be used to obtain guides or to report distribution changes.

For DoD personnel, questions concerning local distribution of guidance or bulletins should be forwarded to:

Defense Technical Information Center 8725 John J. Kingman Road Suite 0944 Fort Belvoir, VA 22060-6218

N. Questions/Suggestions

Any comments or suggestions may be forwarded through the local classification office to the Director, Office of Technical Guidance, using the Classification Issue/Comment Sheet inside the back cover of this guide. The completed comment sheet can be sent, as appropriate, to the following classified or unclassified addresses:

Classified Address

Office of Classification

ATTN: Office of Technical Guidance

AU-62, (Intended Recipient)

U.S. Department of Energy

P.O. Box A

Germantown, MD 20875-0963

Unclassified Address
Office of Classification
ATTN: Office of Technical Guidance
AU-62/Germantown Building
U.S. Department of Energy
1000 Independence Avenue, SW.
Washington, D.C. 20585-1290

For questions concerning administrative aspects or distribution of the guide, please contact the Technical Guidance Administrator at (301) 903-3688.

DoD users should forward their suggestions through channels to:

Deputy Assistant to the Secretary of Defense (Nuclear Matters) DASD/NM U.S. Department of Defense 3050 Defense Pentagon, Room 3B884 Washington, D.C. 20301-3050

the ways to be about

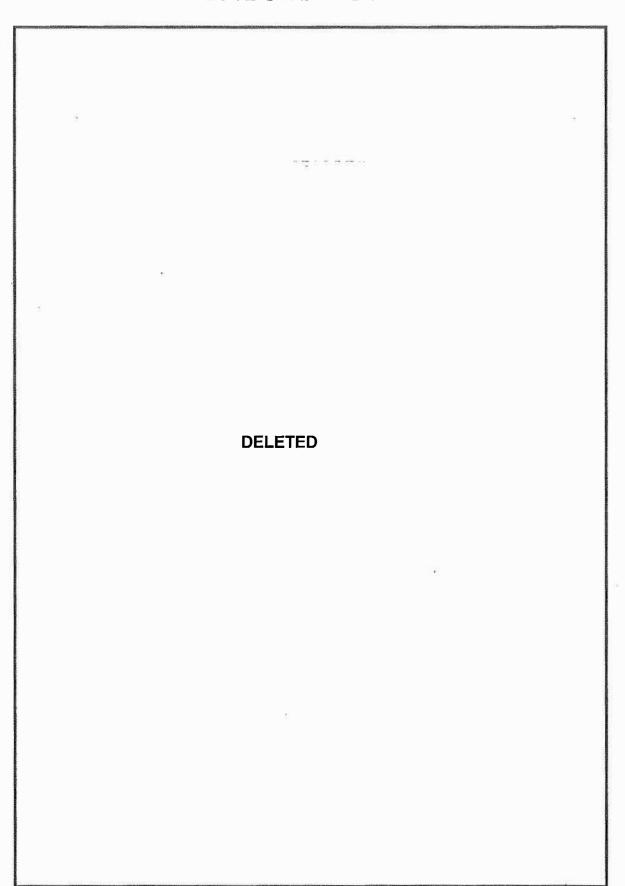
THIS PAGE INTENTIONALLY LEFT BLANK

APTER 1	
€ 60 (20 (20 (20 (20 (20 (20 (20 (20 (20 (2	AND THE PROPERTY OF THE PROPER
C. Broad Guidance	
DELETED	
*	b(3)
	The state of the s
	C. Broad Guidance

	git f g	
	# # # # # # # # # # # # # # # # # # #	
	DELETED	DOE b(3)
Consideration of		

D.	Topics	
	DELETED	DOE
		b(3)
	*	

3		
2 miles 2 mile		
	×	
and the same of th	DELETED	
CALLEGE CONTRACTOR CON		DOE b(3)
CONTRACTOR STREET, SECURIOR STREET, SECU		
THE SANGEST AND ADDRESS OF THE PARTY OF THE		
The second secon		47
The second secon		



DOE b(3)

.

3

.

	CHAPTER 2	
A CONTROL OF THE PARTY OF THE P	A. General Discussion DELETED	DOE b(3)
STATE OF THE STATE OF THE PROPERTY OF THE STATE OF THE ST	B. Reasons for Classification	

The Commence of the second of	DELETED	DOE b(3)
	C. Broad Guidance	

A CONTRACTOR OF THE PROPERTY O		
and the second s		
оди от елентичности од	DELETED	
		DOE b(3)
SMALECTO (CATALONIS MATERIAL MINISTER (CATALONIS MATERIAL MINISTER (CATALONIS MATERIAL MATERIA		
mandOrfowormannenscheibhidipser		
enticontratement in accelerabella (MEE) consess		
The second secon		

DELETED
DELETED
PELETED
•

DOE b(3)

D. Topics	W.
	y.
DELETED	
	DOE b(3)

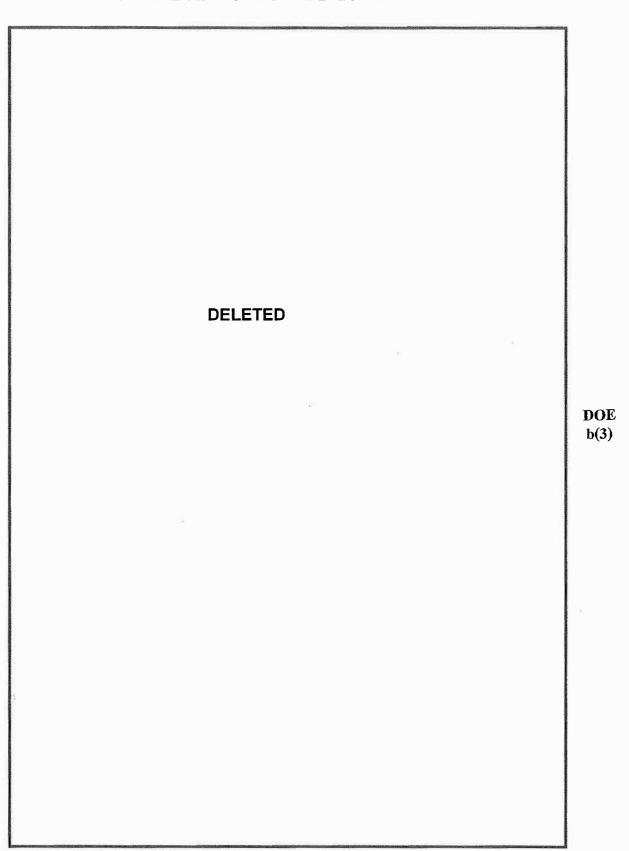
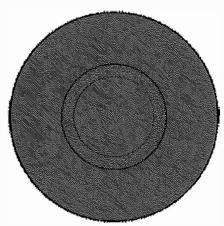


Table 1
(U) Multipurpose Test Object
(This table is Unclassified.)

Layer	Material	Density (g/cm ³)	Inner radius (cm)	Outer radius (cm)
1	Polyethylene	0.95	0	3
2	Tungsten	19.25	3	4
3	Polyethylene	0.95	4	8
4	Stainless Steel	8.03	8	8.03



(This figure is Unclassified.)
(U) Multipurpose Test Object

DELETED

DOE b(3)

DELETED	DOF b(3)

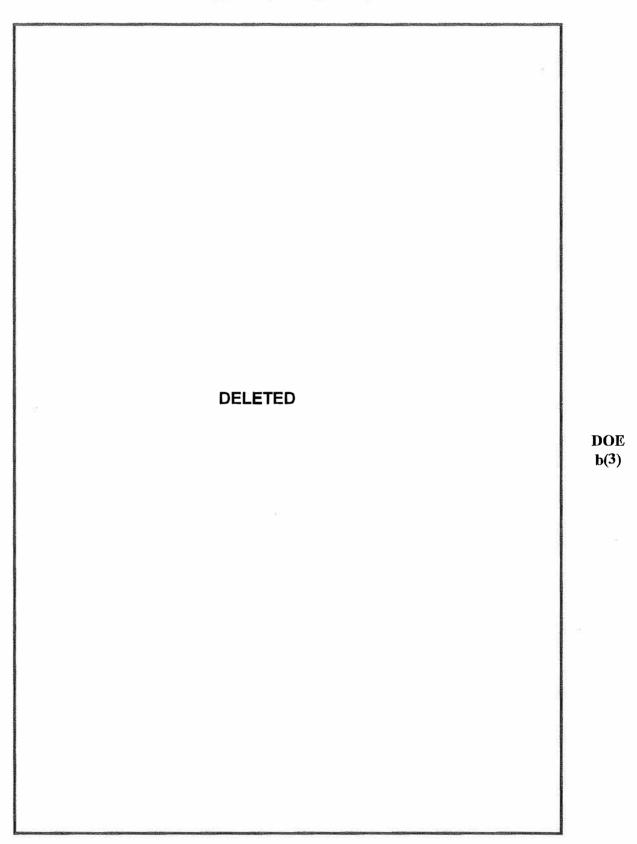
g 11 " m

OCCUPATION OF THE PROPERTY OF		oostaviis een vaamiissa Mittel Books Appu, Dataan Soosia aasta ka siideen Book	ging provided in Minister and Heavy more and the Control
()	v.		
	\$		X.
the state of the s	s g		

Jan Carlo

-		
*BANDOSCOCKERCOCKECCOCCOCC	SI MINO	
CONTRACTOR CONTRACTOR	40	
TO CONTROL OF THE PROPERTY OF		
TOO THE PROPERTY OF THE PERSON NAMED IN COLUMN	£ ₩	
STEED COMPANY SECTION		
	DELETED	DOE
	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 	b(3)
ALCOHOLOGICAL TOTAL STREET		
CONTROL CONTROL		•3
		Name of the last o

1		
]		
 	₽	
1		
1	DELETED	
1		DOE b(3)
İ		
	e ·	
	uea.	
ï		



SECRET-RESTRICTED DATA

The second secon		
49		
V 400 (A)	DELETED	DOE
THE CONTRACTOR ASSESSMENT		b(3)
The second secon		
Town of providing the second of the second o	€	

	DELETED		DOE b(3)
			Balance and the second

DELETED	DOE b(3)

CONTRACTOR OF THE PROPERTY OF		
THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO I	DELETED	DOE b(3)
Committee of the commit		TOTAL TO ANY ELECTRICAL PROPERTY.

F#	Otherwise	U	
	DELETED	DO b(3)E 3)

DELETED	C. Broad Guidance	37
	5	DOE b(3)
		WANGER CONTROL OF THE PROPERTY
B. Reasons for Classification		
		<u> Handerster en </u>
		A CONTRACTOR OF THE CONTRACTOR

gs 1 5 -

8

THE RESERVE THE PROPERTY OF TH		
	DELETED	DOE b(3)

DELETED	DOE b(3)

N N .

U

DELETED	OE (3)
---------	--------

Sample Committee Contraction

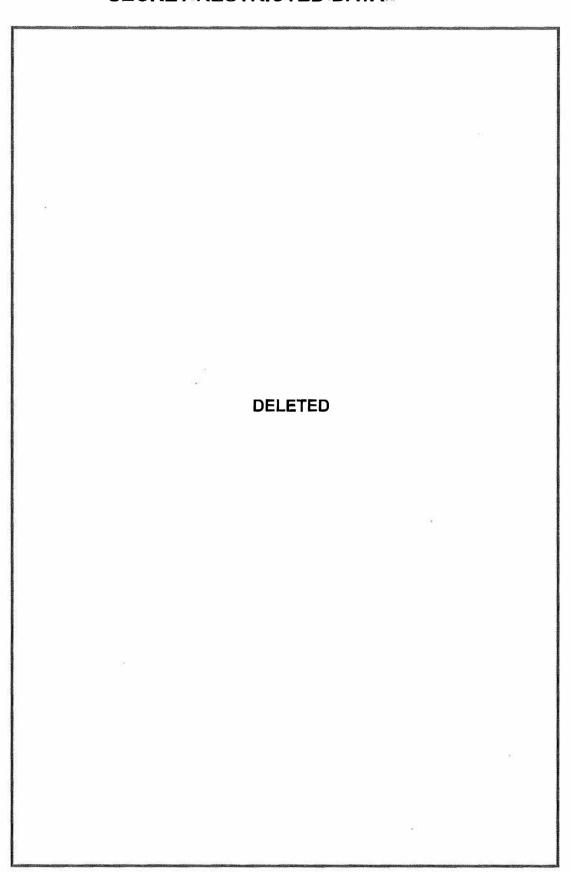
WANTED THE TOTAL THE PARTY OF T

Classificanc

C. Broad Guidance DOI b(3)

DELETED	DOE b(3)

D. T	`opics	
D. T	**DELETED	DOE b(3)



DOE b(3)

THE REAL PROPERTY.	DELETED	DOE b(3)	
notice comment bis particularity	DELETED	DOI b(3)	E
nacificamerand/Cilmonistra	*		
and in the substitute of the s		USBERTH ALL AND FOR THE AND FO	
entrone and the property of the second			
THE PROPERTY OF THE PERSON NAMED IN THE PERSON			
ALD PRODUCTION OF A COMMAND OF THE PARTY OF			

_	
	31 14 - G 244.
· ·	
all research	
and the same of th	
parameter &	
NAME OF THE PERSON	
and contracts	
· ·	
nd the second	
18500200480	
SHAMMIN	
200 istainee	DELETED
Media de la compansión de	
OCCUPANT	
THE PERSON NAMED IN COLUMN	
-	
C) 15 (15 (15 (15 (15 (15 (15 (15 (15 (15	
200	g.
Į	
A companies (A	
Į	
90	
and the same of th	
and the latest section of the latest section	
100000	
Dynamica	
NAMES OF TAXABLE PARTY.	

DELETED

SECRET RESTRICTED DATA

DOE b(3)

	Sufficient mass			
		¥.		and the second
				an proposed and the second
				No.
				And the second s
STATE OF THE STATE	9	DELETED		DO
				b(
0000 pp. 1000 pp. 100				manus properties
School of the second				Analysis generados sign
				Model in the substrate
				TOTAL CONTRACTOR CONTR
and the second			*	######################################
1				

The state of the s		
	DELETED	DOE b(3)
Account of the second contract of the second		
The second secon		

1	
	E.
	DELETED
	•
	y '
	xi
	#:

DELETED

DELETED	DOE b(3)

g - 11 ·

2

2

E S

No.

	CHAPTER 5	22
The state of the s	A. General Discussion	TO THE REAL PROPERTY OF THE PR
THE WHITE THE DISTRIBUTION OF THE PERSON NAMED IN COLUMN NAMED		
Mark The Control of t		de de destale de la companya de la c
DATE OF THE PERSON NAMED O		A STANCES AND A
CONTRACTOR SECURITION AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE P		DOE b(3)
	DELETED	ANT-NOTIONAL BRANCH CONTRACTOR
Section of the Sectio		REPTRIETURE OF THE PROPERTY OF
		Kamandali (1981-1984) kanandali (1981-1984) kanandali (1981-1984) kanandali (1981-1984) kanandali (1981-1984)

And year of the second production of the secon		
	DELETED	DOE b(3)
	B. Reasons for Classification	

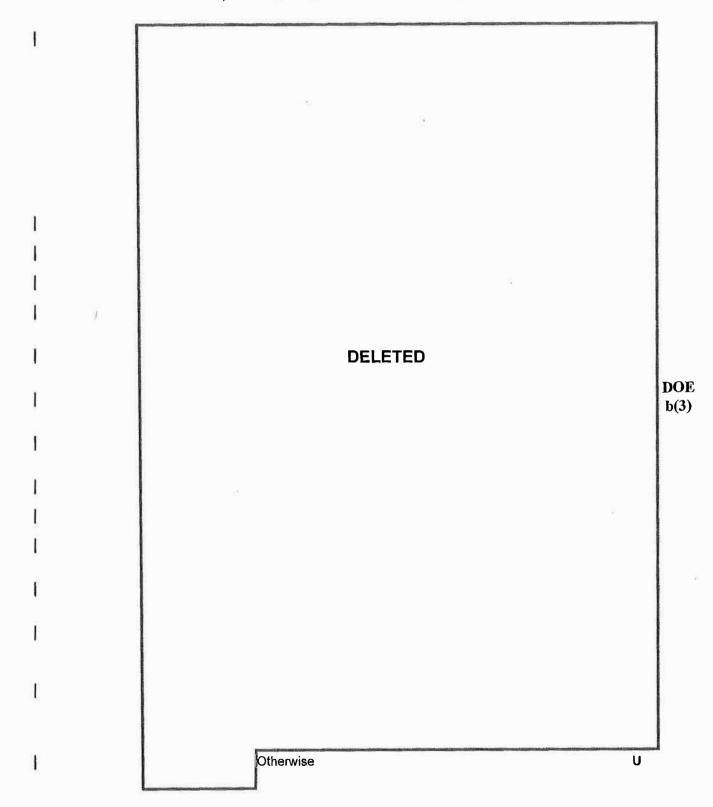
DELETED	DOE b(3)

The state of the s	8 F 2	
	DELETED	DOE b(3)
	×	

DELETED	DOE b(3)

D. Topics					
	DELETED	The second secon	DOE b(3)		

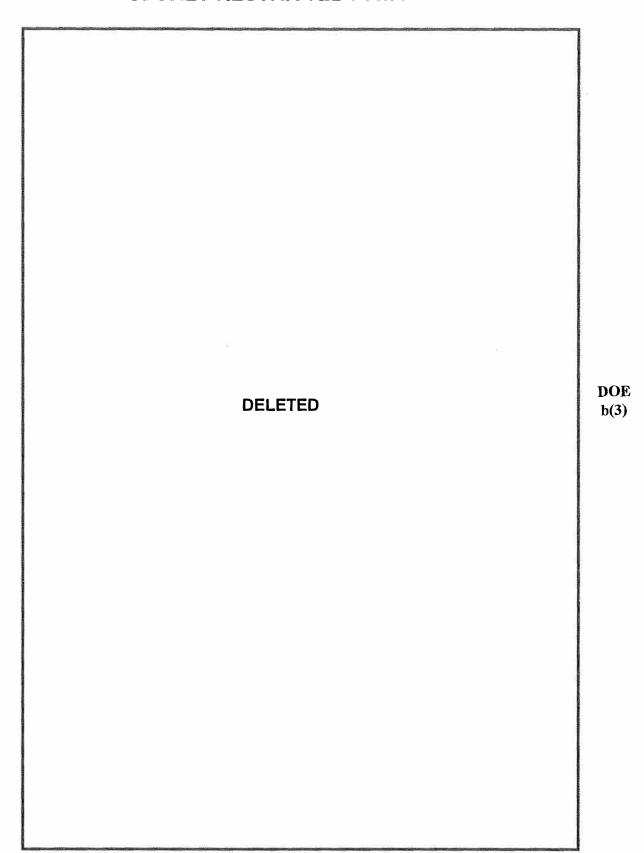
	ı	
1		
1		
1		
1		
1		DOE
1	DELETED	b(3)
1		
1		
1		
5		
1		
1		



68		
l		
1		
s.	DELETED	DOE b(3)
	ec	
	a a	

1		aΩ
1		
	DELETED	DOE b(3)
1		

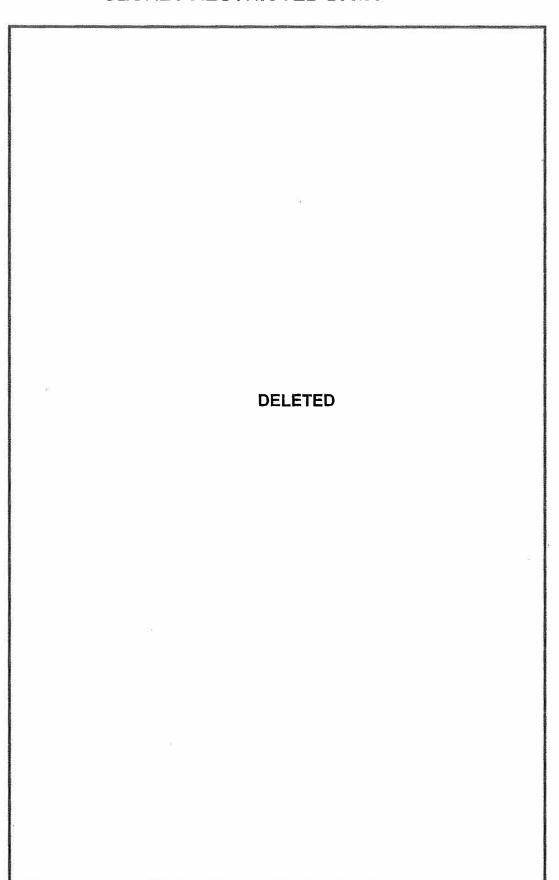
1		
1		
E .		
ľ		
1	·	
l	×	
l		
	a	
1		DOE
	DELETED	DOE b(3)
		D(3)
1		
ı		
i		
I		
1		
j		



NOTE: Classify the same as the information revealed.

DELETED	DOE b(3)

	Yield	
<u> INFORMATION OF THE PROPERTY </u>	DELETED	DOE b(3)
CHARLES OF THE PARTY OF THE PAR		



DOE b(3)

# #		noi
	DELETED	DOE b(3)

The second secon		
And the second s		DOE b(3)
And the second s	DELETED	
Management of the Control of the Con		
The same of the sa		

BANKELINE MEGAZONAN BANKAPATAN BANKAPATAN BANKAPATAN	
WANTED STREET,	DELETED
CACATERINATE SECULION CONTRACTOR	

DOE b(3)

	DELETED	DOE b(3)
productivary constructions of the constructions with some or selection productions of the construction of		

THIS PAGE INTENTIONALLY LEFT BLANK

	CHAPTER 6	
	A. General Discussion	
	DELETED	DOI b(3)
THE PARTY OF THE P	B. Reasons for Classification	

Ti ga inamanda a anggajaja ti na anama californi 1999	DELETED	C. Broad Guidance	DOE
			b(3)

D	. Topics	
	DELETED	DOE b(3)

THIS PAGE INTENTIONALLY LEFT BLANK

	CHAPTER 7	
A. General Discussion		
	DELETED	
	B. Reasons for Classification	DOE b(3)
	2	
	5	

	C. Broad Guidance
DELETED	DC b(s

D.	Topics	
	DELETED	DOE b(3)

DELETED	DOE b(3)

THIS PAGE INTENTIONALLY LEFT BLANK

	CHAPTER 8	
A. General Discussion		
	DELETED	DOE b(3)
	B. Reasons for Classification	
.es		
		f

					TO ANNUAL PROPERTY OF THE PROP	
					SCALE OF THE PARTY	
					new(ditty) (A.V.)	27
					and the second s	
	æ	c.	Broad Guida	ince		
					the state of the s	
					I	DOF
	D	ELETED			1	b(3)
					No. of the last of	
					de la constitución de la constit	
					water programme and the state of the state o	
					District Control of the Control of t	
6.						
					mines of the state	
					113	
					No.	

DELETED	DO1 b(3)

	3
DELETED	DOE b(3)
1522 1	
	COCCURRENCE AND THE COCCUR
	messadas grassociados grassocia
E.	
	Management of the Communication of the Communicatio

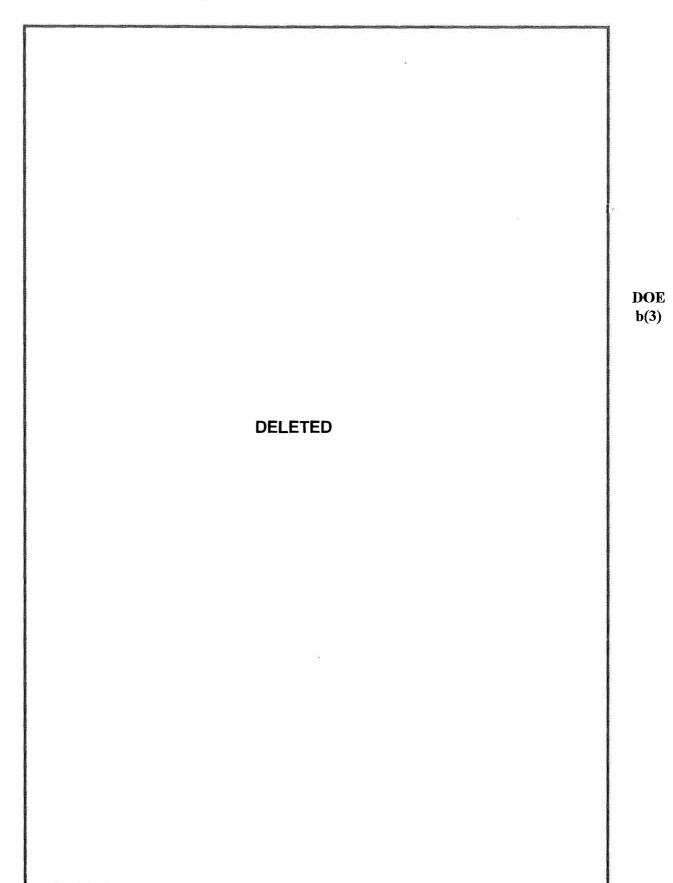
D. Topics	2
DELETED	
	DOE b(3)

	DELETED	
Design Principles		

DELETED	
	DOE b(3)
3	

1 1		
	DELETED	
1		
1		
		DOE b(3)
1		, ,
1		5

,		
The state of the s		
TOTAL STATE OF THE PERSON NAMED IN	DELETED	DOE
TOTAL STREET,	DELETED	b(3)
CONTRACTOR DESCRIPTION OF THE PERSON NAMED IN CO.		N N
CONTRACTOR DESCRIPTION OF STREET	₹)	
COCCUMENTATION OF TAXABLE PARTY AND TAXABLE PART		
SHOOT STREET, SHOOT SHOT SH		
THE RESERVE AND PERSONS ASSESSED.		
THE PERSON NAMED IN COLUMN NAM		
SECURIOR SEC		e:
Contraction of the last of the		
Section of the Publishment of th		
STREET, STREET	*	



DELETED	

DOE b(3)

THIS PAGE INTENTIONALLY LEFT BLANK

CHAPTER 9	
A. General Discussion	
DELETED	DO b(3
B. Reasons for Classification	D(.
Till the state of	
C. Broad Guidance	

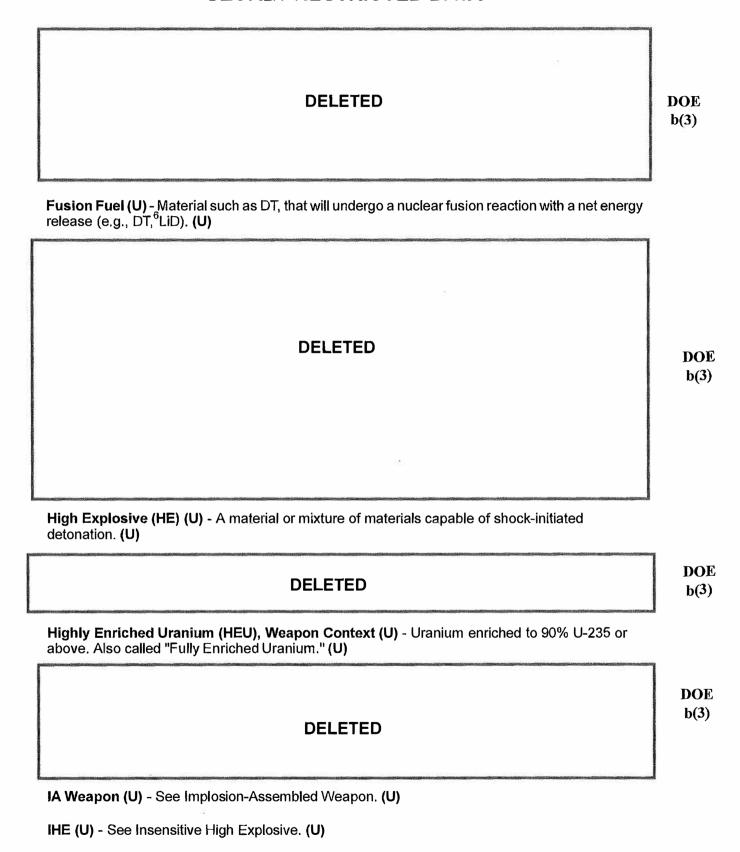
	D.	pics	
WIND BOOK CONTRACTOR OF THE PROPERTY OF THE PR			
mercephotogramman and second		DELETED	DOE
STATE OF STATE STATE OF STATE		DELETED	b(3)
CHARLES CANDERS COMMENTS		High war and the state of the s	
COCCUI DAMINISTRATIONS			
COMPANIONMENTON			
distriction of the last of the		Characteristics of the	
THE PROPERTY AND PERSONS			
COMMUNICATION OF THE PERSONS ASSESSED.			
TOSCHOLITERATE PRODUCES		AL ACCUSION DE LA CALLACTICA DE LA CALLA	
SOCIETATIONS SOCIETATION			

a a		í
	DELETED	DOE
		DOE b(3)
0.000		
1000		
ii ii		

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX A	
DEFINITIONS	
NOTE: CNWDI (N) notations are not included in the definitions. Active Stockpile (U) - Maintained in operational, ready for use configuration. Consists of: 1) deployed - warheads maintained on launchers or at an operational base, planned for wartime employment and maintained in a ready-to-use status; 2) active stockpile hedge - warheads located at an operational base or storage depot to augment or replace deployed warheads within weeks to months, and maintained in a ready-to-use status, though never uploaded onto a delivery platform; and 3) active stockpile logistics spares - located at an operational base or storage depot and used to replace deployed warheads for logistical purposes. (U)	
DELETED Boosting (U) - Enhancement of a fission reaction by thermonuclear neutrons where the energy	DOE b(3)
released in the TN reaction is a small fraction (a few percent) of the total. (U) DELETED	DOE b(3)

DELETED	
-38 (U) - See Tuballoy. (U)	CTS-07-07-07-07-07-07-07-07-07-07-07-07-07-
DELETED	
esignated Weapon (U) - See Specified Weapon. (U)	
esignator (U) - A unique alphanumeric identifier for a component or material, e.g., DOE art number, major component (MC), LANL type number (2J, LFxx), or Sandia Product n Pxxxxx). See also Nickname. The terms Designator and Nickname have frequently bee terchangeably and both are in use throughout the DOE complex. (U)	umber
DELETED	
nergy Balance (U) - A term used to describe the accounting for energy (i.e., conservat nergy) to include the form as a function of location and time in the modeling of a nuclear oplosive. (U)	
nergy) to include the form as a function of location and time in the modeling of a nuclear	
nergy) to include the form as a function of location and time in the modeling of a nuclear	



DELETED	DC b(
Inactive Stockpile (U) - Warheads retained in a nonoperational status for augmentation or replacement of warheads in the active stockpile. (U)	
INC (U) - Insertable Nuclear Component. See Insertable Nuclear Component and also see Convertible Weapon. (U)	
DELETED	DC b(
Initiator (U) - A device that emits neutrons to start a chain reaction. (U)	Militaria
INRAD (U) - See Intrinsic Radiation. (U)	
Insensitive High Explosive (IHE) (U) - HE that requires a shock of more than usual strength to cause detonation; this relative insensitivity contributes to weapon safety. (U)	
DELETED	DC b(

Intrinsic Radiation (INRAD) (U) - Any nuclear radiation emitted through the outer surface of a nuclear weapon in its normal storage condition. (U)

	Principal annual
DELETED	DOE b(3)
DELETED	DOE b(3)
DELETED	DOE b(3)

DOE b(3)
DOE b(3)
DOE b(3)

A Contraction of the Contraction	PS te	E 258 (6) \$2	985 D Y	8-0		I)	r 8	11 (21)	= 1)
A B CONTROL OF THE PROPERTY OF									
LEGISTISTISTISTISTISTISTISTISTISTISTISTISTI									
									DOE
NASTRONINA ANTARANA MANANTA PORTA NASTRONINA NASTRONINA NASTRONINA NASTRONINA NASTRONINA NASTRONINA NASTRONINA			DE	LETED					b(3)
		p#:							
								The second section of the second seco	200
				93					
dereffichen dereffichen der									
Diction of the second of the s									
A A A A A A A A A A A A A A A A A A A									
erioticini receneration de la constitución de la co									
					.1:3				
Sylvinesed (SASTING)								ACCEPTATION OF THE PROPERTY OF	

DELETED	DOE b(3)
Sealed Pit (U) - One that is hermetically closed to protect nuclear materials from the external environment. (U) DELETED	DOE b(3)

DELETED	

Thermonuclear (TN) Weapon (U) - One that releases a significant fraction of its yield from the fusion process. See also Staged Weapon. **(U)**

Transplutonic Element (U) - One with an atomic number above 94. (U)

Tuballoy (Tu) (U) - Uranium metal with no more than the natural (0.7%) isotopic content of U-235. The "alloy" part of the name originated from the designation Tube Alloys Limited applied to the British wartime atomic energy project. Tuballoy is used to mean either natural or depleted uranium. **(U)**

DOE b(3)

Unspecified (Undesignated) Weapon (U) - Nuclear weapons in general, or one or more weapons not identifiable by specific W, Mk, or B numbers or by unique nomenclature, capabilities, components, delivery systems, or identifiers (including MC numbers, 6-digit part numbers, or TP line-item numbers). (U) DELETED DOE b(3)

 ${\bf Z}$ (U) - The symbol commonly used to denote atomic number. In usage, usually "low-Z" or "high-Z." (U)

APPENDIX B

ABBREVIATIONS AND ACRONYMS

The following acronyms and abbreviations are used in this guide. Acronyms and terms in *italics* are classified. For the purposes of classification, acronyms and abbreviations are classified the same as the terms they represent (whether stand-alone or in context).

	AFAP	Artillery-Fired Atomic Projectile	
	ALCM	Air-Launched Cruise Missile	
	ASTM	American Society for Testing and Materials	
	В	Bomb	
	CNWDI	Critical Nuclear Weapon Design Information [See also (N)]
CHILDRIC HARMAN AND THE CHILDRIC AND		DELETED	DOE b(3)
	DoD	Department of Defense	
ю	DT	Deuterium, tritium, or a mixture of the two	
etasioistatainneemen <mark>ojassyksiitasiataistataistataistatainneen on /mark>		DELETED	DOE b(3)
Ī	INL	Idaho National Laboratory	
1	INRAD	Intrinsic Radiation	
	JTA	Joint Test Assembly	
្	kt	Kiloton	
I	LANL	Los Alamos National Laboratory	

Limited-Life Component

LLC

	LLNL MC Mk MSB Mt (N) NAS	Lawrence Livermore National Laboratory Major Component or Military Characteristics Mark Modern Strategic Bomb Megaton Critical Nuclear Weapon Design Information (CNWDI) Nuclear Assembly System	
		DELETED	DOE b(3)
Bester	TN	Thermonuclear	
	U	uranium	
	UK	United Kingdom	
	US	United States	
	W	Warhead	

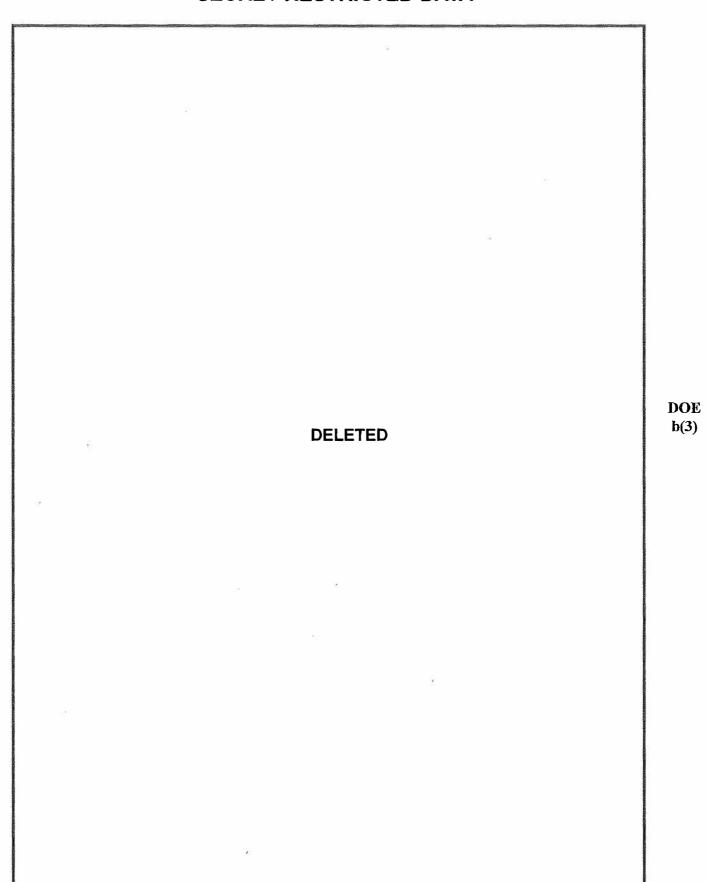
	INDEX	6 6 4 1	- APER-
		50	
	Ø		
25			The second secon
	30		200 martitus
	DELETED		D
	DELLIED		b
	120		
			Control of the Contro
			PARTITION AND A STATE OF THE ST
			est (Cristian Control
			100 March 1997
			- ALVAN
			NACTOR AND
			ментирова
			THE STATE OF THE S
		95	Nation of the last
			SHEW STANSFER

 SEGNET RESTRICTED DATA	
DELETED	DOE
	b(3)

*		
NAME AND ADDRESS OF THE OWNER, WHEN PERSON O		
STATE OF THE PERSON NAMED IN COLUMN NAMED IN C		
The state of the s		
THE REAL PROPERTY AND PERSONS ASSESSMENT OF THE PERSONS ASSESSMENT OF		
The second secon	DELETED	DOF b(3)
		3
THE REAL PROPERTY AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS N		
The state of the s		

	THE HER COMMEND IS IN FIG. 1997. MARKET BETTER MAKEN WAS AND HER STATE OF THE STATE	
		real by Constitution of the constitution of t
	DELETED	DOE b(3)
de l'ambient spirale de l'ambient de l'ambie		
managing and the control of the cont	g.	STORM MANAGEMENT OF THE STORM AND ADDRESS OF T

DELETED	DOE b(3)



P		
NOT THE RESIDENCE AND THE PROPERTY OF THE PROP		
	DELETED	DOE b(3)
TO A STAN ASSESSMENT OF THE PROPERTY OF THE PR		
CONTRACTOR AND ADDRESS OF THE PROPERTY OF THE		

DELETED	DO b(3

E

The state of the s	DELETED	DOE b(3)
The state of the s		

	DELETED	DOE b(3)
A TOTAL CONTRACTOR OF THE PROPERTY OF THE PROP		Audicinium Annicolomium annicol

(Classification when filled in)

CLASSIFICATION ISSUE/COMMENT SHEET				
TO: (See Introduction for Classified/Unclassified address)	THRU:			
FROM:(Organization)	NAME:DATE:			
CLASSIFICATION ISSUE: (Describe to Use additional pages/attachments as necessary.)	he problem including the classification guide short title and the affected topics.			
RECOMMENDED SOLUTION: (To be	e completed by submitter. Use additional pages/attachments as necessary.)			
ANALYSIS:				
RECOMMENDATION:				
For Use By AU-62 Only				
ACTION NUMBER:	ACTION OFFICER:			

(Classification when filled in)

		ä			
		£		<u>a</u>	
			0		8
			ů.		
ad F					
	9				