

**DOE/OSTI--11689**  
**June 1997**

# **Guidelines for Preparing and Transmitting the DOE F 1332.15 - Working Copy**

## **PREFACE**

The *Guidelines for Preparing and Transmitting the DOE F 1332.15 - Working Copy* is being made available to DOE sites to assist in the preparation and transmittal of the DOE F 1332.15. The Office of Scientific and Technical Information (OSTI) would appreciate receiving comments on the guidance provided and the presentation of that guidance. Please send comments to [1332.15@ccmail.osti.gov](mailto:1332.15@ccmail.osti.gov).

## **TABLE OF CONTENTS**

Introduction

List of Acronyms

Section 1: DOE F 1332.15 - Before You Begin

Section 2: Preparation of DOE F 1332.15

Section 3: Providing Information for Standard Generalized Markup Language and Comma-Delimited  
ASCII Versions of DOE F 1332.15

Section 4: Transmitting a completed DOE F1332.15 to OSTI

Section 5: The OSTI SGML Character Set for DOE F 1332.15 input

Appendix 1. Funding Office Codes

Appendix 2. Language Names and Codes

Appendix 3. Country and International Organization Names and Codes

Appendix 4. State and Province Codes

## INTRODUCTION

The *Guidelines for Preparing and Transmitting the DOE F 1332.15* provides guidance for the completion and submittal of the latest version of DOE F 1332.15, *Announcement and Distribution of Department of Energy (DOE) Scientific and Technical Information (STI)*, which is currently (2-96). The form can now be submitted in paper or as an electronic file. Electronic files can be accepted as World Wide Web (WWW) input or as a Standard Generalized Markup Language (SGML) or Comma Delimited ASCII file submitted through the Internet or on a diskette or compact disc (CD). Each of these formats, with related specifications and instructions, are described in the sections listed below. Additional information can be obtained by contacting the Department's Office of Scientific and Technical Information (OSTI) at telephone number (423) 576-1191 or at email address [1332.15@ccmail.osti.gov](mailto:1332.15@ccmail.osti.gov).

For many years, the paper version of DOE F 1332.15 has provided the data required by OSTI to accurately process and/or announce and disseminate the results of work funded by DOE or performed in DOE facilities. In addition to providing announcement and distribution information, the form also has supported the official approval and release process required for contract deliverables.

With the increased use of non-paper media (e.g., open systems networks such as the Internet, computer media such as CDS and diskettes, and audiovisual materials such as audio and video cassettes) for the exchange of Departmental STI products, it was recognized that non-paper versions of the form were also needed. Additional information on the non-paper media being used for the STI products and for use in preparing a database record for the Department's OpenNet database was also required. In response, OSTI has revised the form and developed alternative methods for submission.

The following information is provided:

- Section 1 - General information concerning the structure and content of DOE F 1332.15, who should submit the form, and when the form should be submitted. A copy of the form is included in this section.
- Section 2 - Guidelines for selecting and entering all information needed to complete the form for all types of submittal. It is specifically useful for the paper and WWW versions of the form. The guidelines follow the order of the fields on the form.
- Section 3 - Additional guidelines for entering information using the SGML and Comma Delimited ASCII versions of the form. The guidelines follow the order of the fields on the form.
- Section 4 - Procedures for transmitting to OSTI the forms which have been prepared according to the guidelines given in Sections 2 and 3.
- Section 5 - Guidelines for using the OSTI SGML Character Set when submitting the form via the WWW or an SGML-formatted file.

When your site is considering initiating electronic submission of either DOE F 1332.15 or full text information for the first time (e.g., via the Internet, diskettes, or CDS), contact OSTI for assistance in meeting your site's individual needs.

To obtain format or transmission specifications for unlimited full text in electronic form, contact OSTI or consult the information on DOE's Electronic Exchange Initiative home page at:

<http://www.doe.gov/osti/eei/eei.html>

**NOTE:** Sensitive, proprietary, or other information for which access is restricted by statute or regulation shall **not** be transmitted via open systems networks (e.g., the Internet) unless authorization and/or encryption has been coordinated with OSTI in advance. Information included in the DOE F 1332.15 should be publicly releasable (no classified, sensitive, proprietary or other limited access information).

## List of Acronyms

ANSI	American National Standards Institute
B&R Code	Budget and Reporting Code
CD	Compact disc
CRADA	Cooperative Research and Development Agreement
DOE	U.S. Department of Energy
DOE F 1332.15	U.S. Department of Energy form ' <i>U.S. Department of Energy Announcement and Distribution of Department of Energy (DOE) Scientific and Technical Information</i> '
DTD	Document Type Definition
ESTSC	DOE Energy Science and Technology Software Center
FOIA	Freedom of Information Act
FTP	File Transfer Protocol
HTML	Hypertext Markup Language
ISBN	International Standard Book Number
ISO	International Organization for Standardization
ISSN	International Standard Serial Number
M&O	DOE Management and Operating contractors
NISO	National Information Standards Organization
OSTI	Office of Scientific and Technical Information
OUO	Official Use Only
PDF	Adobe Acrobat Portable Document Format
PTS	CRADA Project Task Statement
NTIS	National Technical Information Service
SBIR	Small Business Innovation Research
STTR	Small Business Technology Transfer
SGML	Standard Generalized Markup Language
STI	Scientific and Technical Information
TIFFG4	Tagged Image File Format Group 4
TIMS	Technical Information Monitoring System
UCNI	Unclassified Controlled Nuclear Information
URL	Uniform Resource Locator
WWW	World Wide Web



## Guidelines for Preparing and Transmitting the DOE F 1332.15 - Working Copy

### Section 1. DOE F 1332.15 - Before You Begin

#### TABLE OF CONTENTS

##### **Who should submit the form**

##### **What formats can be used to submit the form**

##### **What information is included in the form**

##### **FIGURE 1. Page 1 of DOE F 1332.15 (2-96)**

DOE F 1332.15, *Announcement and Distribution of Department of Energy (DOE) Scientific and Technical Information (STI)* (Figure 1), is used by the DOE Office of Scientific and Technical Information (OSTI) to determine the announcement and dissemination that the Department's STI should receive.

A copy of the form must be submitted for each STI product reporting the results of work funded by the Department or performed in Departmental facilities. Information products, such as contract proposals, funding status, routine construction or inventory reports, and similar products, that may be required under the terms of the contract or agreement, should not be submitted to OSTI unless they contain scientific and technical information. DOE F 1332.15 should not be used for reprints of published literature such as journal articles or book chapters; these can be sent to OSTI without use of the form. Additional information can be obtained by contacting OSTI at telephone number (423) 576-1191 or at E-mail address [1332.15@ccmail.osti.gov](mailto:1332.15@ccmail.osti.gov).

##### **Who should submit the form**

DOE, DOE Management and Operating (M&O) contractors, multiprogram laboratories, single program laboratories, and other DOE facilities should complete DOE F 1332.15 and submit it with the STI product to OSTI for processing in accordance with programmatic direction and the instructions of DOE Order 1430.1D, *Scientific and Technical Information Management* and its accompanying guide, DOE G 1430.1D-1, *Guide to the Management of Scientific and Technical Information*.

Financial Assistance Recipients should complete the designated sections in Part I. Forward the form along with the STI product to the DOE Contracting Officer who will complete the rest of the form and submit the package to OSTI. The DOE Contracting Officer may require the grantee or awardee to complete other parts of the form and also may require the grantee or awardee to submit the package directly to OSTI. Check your specific grant or award requirements.

##### **What formats can be used to submit the form**

Beginning with version (2-96), DOE F 1332.15 can be submitted

- in paper
- as a Standard Generalized Markup Language (SGML) file
- as a Comma Delimited ASCII file
- as World Wide Web (WWW) input

The paper version of DOE F 1332.15 (2-96) is scannable by OSTI. Input to the form should be typed or generated by a printer and not handwritten. Contact OSTI to obtain paper copies of the form for use by your site.

SGML and Comma Delimited ASCII files may be submitted electronically, i.e., through a network such as the Internet or other computer media such as a diskette or compact disc (CD).

Input to the WWW version of the form may be submitted to OSTI via the Internet after sites obtain an access password from OSTI.

When you are considering initiating electronic submission of either DOE F 1332.15 or full text information (e.g., via the Internet, diskettes, or CDS), contact OSTI for assistance in meeting your site's individual needs.

The full text and the DOE F 1332.15 may be submitted together (e.g., the paper DOE F 1332.15 attached to the paper full text or both parts sent in the same file via the Internet) or separately (e.g., a DOE F 1332.15 sent via the Internet and a paper full text or both parts sent in separate files via the Internet). When they are submitted separately, it facilitates processing at OSTI if a duplicate copy of the DOE F 1332.15 is attached to the full text.

**NOTE:** Information products containing sensitive, proprietary, or other information for that access is restricted by statute or regulation shall not be transmitted via open systems networks (e.g., the Internet) unless authorization and/or encryption has been coordinated with OSTI in advance. Information included in the accompanying DOE F 1332.15 form should be publicly releasable (no classified, sensitive, proprietary, or other limited access information).

### **What information is included in the form**

DOE F 1332.15 (2-96), (Figure 1), is divided into three parts. Part I, Information Product Identification, includes the title of the product, various identifiers (such as report numbers and contract numbers) related to it, a description of the product itself and the method of transmittal to OSTI. Part II, Information Product Announcement and Handling, provides recommendations for announcing the product and authorization to release it. Part III, Bibliographic Information, provides additional information needed for completing a database record for OpenNet and/or other DOE databases.

A completed DOE F 1332.15 should contain at least the following information in order for OSTI to appropriately process and announce the STI product:

- contract or grant number (Part I.A.2.)
- product title (Part I.A.3.)
- funding office or Budget and Reporting (B&R) code (Part I.A.4. or I.A.5.)
- filename or format for full text (Part I.A.9., I.C.2.c.(1), I.C.2.c.(2), I.C.2.c.(3), or I.C.2.c.(4))
- identification of the type of product (Part B. 1., 2., 3., or 4.)
- recommendation for announcement and handling (Part II.A.)
- official release (Part II.B.)

To be used for an OpenNet database record, the form should also include the following information:

- non-NTIS availability if the product will not be available from the National Technical Information Service (NTIS) or if the product will have a dual availability (Parts II.A.4.a.1. and 2.)
- field office acronym (Part II.A.4.b.)
- declassification status/date (Part II.A.4.c.)

DOE F 1332.15  
(2-96) (p. 1 of 4)  
(All other versions are  
obsolete.)

**U. S. DEPARTMENT OF ENERGY  
ANNOUNCEMENT AND DISTRIBUTION OF DEPARTMENT OF ENERGY (DOE)  
SCIENTIFIC AND TECHNICAL INFORMATION (STI)**

OMB Control No.  
1910-1400

*(When submitting form, input should be typed, not handwritten.)*

**PART I Information Product Identification**

---

**A. Identifiers**

**1. Product/Report Nos.**

**2. Award/Contract Nos.**

\_\_\_\_\_

**3. Title**

\_\_\_\_\_

*(Grantees and Awardees skip to Part 1.B.)*

**4. Funding Office(s)**

**5. B&R Code(s)**

**6. Project ID(s)**

\_\_\_\_\_

**7. CRADA Nos.**

**8. UC/C Category(ies)**

**9. Information Product Filename**

\_\_\_\_\_

**B. Information Product Description**

**1. Report**

a. Type  Quarterly  Semiannual  Annual  Final  Topical

Other (Specify) \_\_\_\_\_

b. Dates covered (mm/dd/yyyy) \_\_\_\_ / \_\_\_\_ / \_\_\_\_ thru \_\_\_\_ / \_\_\_\_ / \_\_\_\_

**2. Conference**

a. Type  Conference paper  Published proceedings  Other (Specify) \_\_\_\_\_

b. Conference title (No abbreviations) \_\_\_\_\_

c. Conference location (city/state/country) \_\_\_\_\_

d. Conference dates (mm/dd/yyyy) \_\_\_\_ / \_\_\_\_ / \_\_\_\_ thru \_\_\_\_ / \_\_\_\_ / \_\_\_\_

e. Conference sponsor(s) \_\_\_\_\_

**3. Software** (Note: Additional forms are required. Follow instructions provided with this form.)

**4. Other** (Provide complete description.) \_\_\_\_\_

\_\_\_\_\_

**C. Information Product Format**

\_\_\_ **1. Product not submitted to OSTI** (*i.e., electronic version*) \_\_\_\_\_

- a. Location (FTP, URL, etc.) \_\_\_\_\_
- b. File format \_\_\_ SGML \_\_\_ HTML \_\_\_ Postscript \_\_\_ PDF \_\_\_ TIFFG4 \_\_\_ Other (*Specify*) \_\_\_\_\_
- c. SGML bibliographic record available \_\_\_ With product \_\_\_ Separately (*Specify*) \_\_\_\_\_

\_\_\_ **2. Product submitted to OSTI** (*i.e., electronic, paper, audiovisual, or computer medium*)

a. Number of copies

- \_\_\_ (1) Two for unclassified processing      \_\_\_ (2) \_\_\_ copies for program unclassified distribution
- \_\_\_ (3) One for classified processing      \_\_\_ (4) \_\_\_ copies for standard classified distribution
- \_\_\_ (5) \_\_\_ copies for OSTI to reproduce (*Complete part C.3.*)
- \_\_\_ (6) Other (*Complete part C.3.*)

b. SGML bibliographic record submitted to OSTI \_\_\_ With product \_\_\_ Separately (*Specify*) \_\_\_\_\_

c. Method of transmittal to OSTI

\_\_\_ (1) **Electronic** (*e.g., FTP, E-mail*) (*Note: Transmit only unclassified unlimited information not subject to access limitations over open systems. Contact OSTI for further information.*)

(a) File format \_\_\_ SGML \_\_\_ HTML \_\_\_ Postscript \_\_\_ PDF \_\_\_ TIFFG4 \_\_\_ Other (*Specify*) \_\_\_\_\_

\_\_\_ (2) **Computer medium** (*e.g., magnetic tape or diskette*) (*Complete all. Provide a separate electronic or print abstract.*)

(a) Quantity/type (*Specify*) \_\_\_\_\_

(b) Machine compatibility (*Specify*) \_\_\_\_\_

(c) Operating system (*Specify*) \_\_\_\_\_

(d) File format \_\_\_ SGML \_\_\_ HTML \_\_\_ Postscript \_\_\_ PDF \_\_\_ TIFFG4 \_\_\_ Other (*Specify*) \_\_\_\_\_

\_\_\_ (3) **Audiovisual Material** (*Complete all. Provide a separate electronic or print abstract.*)

(a) Quantity/type (*Specify*) \_\_\_\_\_

(b) Machine compatibility (*Specify*) \_\_\_\_\_

(c) Sound \_\_\_ Yes \_\_\_ No      (d) Color \_\_\_ Yes \_\_\_ No      (e) Playing time \_\_\_\_\_

\_\_\_ (4) **Paper**

\_\_\_ **3. Additional instructions/explanations** \_\_\_\_\_

**D. Contact** (*Person knowledgeable about the information product and its submission*)

Name \_\_\_\_\_ Position \_\_\_\_\_ Phone \_\_\_\_\_

Organization \_\_\_\_\_ E-Mail \_\_\_\_\_

**PART II Information Product Announcement and Handling**

*(DOE/DOE Contractors complete; Grantees and Awardees complete as instructed by contracting officer)*

**A. Recommendations** *(Mark at least one)*

**1. Unlimited Announcement** *(Available to U.S. and non-U.S. public)*

**2. Unlimited Announcement/U.S. Dissemination Only**

**3. Classified** *(Standard announcement)*

**4. OpenNet**

a. Non-NTIS Availability *(Required if not available from NTIS)*

(1) Accession Number \_\_\_\_\_ (2) Document Location \_\_\_\_\_

b. Field Office Acronym \_\_\_\_\_

c. Declassification date *(mm/dd/yyyy)* \_\_\_\_ / \_\_\_\_ / \_\_\_\_       Sanitized       Never classified

**5. Special Handling** *(Legal basis must be noted below.)*

a. Copyrighted material       All       Part *(Specify)* \_\_\_\_\_

b. Unclassified Controlled Nuclear Information (UCNI)

c. Export Control/ITAR/EAR

d. Temporary hold pending patent review

e. Translation of copyrighted material

f. Small Business Innovation Research (SBIR)      Release date *(mm/dd/yyyy)* \_\_\_\_ / \_\_\_\_ / \_\_\_\_

g. Small Business Technology Transfer (STTR)      Release date *(mm/dd/yyyy)* \_\_\_\_ / \_\_\_\_ / \_\_\_\_

h. Proprietary

i. Protected CRADA information      Release date *(mm/dd/yyyy)* \_\_\_\_ / \_\_\_\_ / \_\_\_\_

j. Official Use Only (OUO)

k. Program-Directed Special Handling *(Specify)* \_\_\_\_\_

l. Other *(Specify)* \_\_\_\_\_

**B. Releasing Official**

**1. Patent Clearance** *(Mark one)*

a. Submitted for DOE patent clearance      Date submitted *(mm/dd/yyyy)* \_\_\_\_ / \_\_\_\_ / \_\_\_\_

b. DOE patent clearance has been granted

c. DOE patent clearance not required

**2. Released by**      Name \_\_\_\_\_      Date *(mm/dd/yyyy)* \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Phone \_\_\_\_\_      E-mail \_\_\_\_\_

**PART III Bibliographic Information**

*(Note: Providing the following information is optional. For information products that are to be included in the OpenNet Database, the following information will be used for the OpenNet Database records. For all information products, it will be used in announcing those products, as appropriate, to other parts of the DOE community.)*

**A. Personal Author/Affiliation** \_\_\_\_\_

\_\_\_\_\_

**B. Performing Organization** \_\_\_\_\_

\_\_\_\_\_

**C. Date of Publication** (mm/dd/yyyy) \_\_\_\_ / \_\_\_\_ / \_\_\_\_

**D. Pages/Size** \_\_\_\_\_

**E. Abstract** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**F. Subject Terms** \_\_\_\_\_

\_\_\_\_\_

**G. OpenNet Document Type** \_\_\_\_\_

**H. OpenNet Document Categories** \_\_\_\_\_

\_\_\_\_\_

**I. OpenNet Addressee** \_\_\_\_\_

\_\_\_\_\_

Guidelines for Preparing and Transmitting the DOE F 1332.15 - Working Copy

Section 2.Preparation of DOE F 1332.15

TABLE OF CONTENTS

**PART I Information Product Identification**

**I.A. Identifiers**

**I.A.1. Product/Report Numbers**

**I.A.2. Award/Contract/Grant Numbers**

**I.A.3. Title**

**I.A.4. Funding Office**

**I.A.5. Budget and Reporting (B&R) Classification Code(s)**

**I.A.6. Project ID(s)**

**I.A.7. CRADA Numbers**

**I.A.8. Unclassified/Classified (UC/C) Distribution Category**

**I.A.9. Information Product Filename**

**I.B. Information Product Description**

**I.B.1. Report**

**I.B.1.a. Report Type**

**I.B.1.b. Dates Covered**

**I.B.2. Conference**

**I.B.2.a. Conference Type of Publication**

**I.B.2.b. Conference Title**

**I.B.2.c. Conference Location**

**I.B.2.d. Conference Dates**

**I.B.2.e. Conference Sponsors**

**I.B.3. Software**

**I.B.4. Other**

**I.C. Information Product Format**

**I.C.1. Product not submitted to OSTI**

**I.C.1.a. Product Location**

**I.C.1.b. File Format**

**I.C.1.c. SGML bibliographic record**

**I.C.2. Product submitted to OSTI**

**I.C.2.a. Number of copies**

**I.C.2.b. SGML bibliographic record submitted to OSTI**

**I.C.2.c. Method of transmittal to OSTI**

**I.C.2.c.(1). Electronic**

**I.C.2.c.(1)(a) File Format**

**I.C.2.c.(2) Computer medium**

**I.C.2.c.(2)(a) Quantity/Type of Computer Medium**

**I.C.2.c.(2)(b) Machine Compatibility for Computer Medium**

**I.C.2.c.(2)(c) Operating System**

**I.C.2.c.(2)(d) File Format**

**I.C.2.c.(3) Audiovisual Material**

**I.C.2.c.(3)(a) Quantity/Type of Audiovisual Material**

**I.C.2.c.(3)(b) Machine Compatibility for Audiovisual Material**

- I.C.2.c.(3)(c) Sound
- I.C.2.c.(3)(d) Color
- I.C.2.c.(3)(e) Playing Time
- I.C.2.c.(4) Paper
- I.C.3. Additional instructions/explanations
- I.D. Contact
- PART II Information Product Announcement and Handling**
- II.A. Recommendations for Announcement and Handling**
- II.A.1. Unlimited Announcement (Available to U.S. and non-U.S. public)**
- II.A.2. Unlimited Announcement/U.S. Dissemination Only**
- II.A.3. Classified**
- II.A.4. OpenNet**
- II.A.4.a. Non-NTIS Availability**
- II.A.4.a.(1). OpenNet Accession Number**
- II.A.4.a.(2). Location of OpenNet Document**
- II.A.4.b. OpenNet Field Office Acronym**
- II.A.4.c. OpenNet Declassification Status and OpenNet Declassification Date**
- II.A.5. Special Handling**
- II.A.5.a. Copyrighted Material**
- II.A.5.b. Unclassified Controlled Nuclear Information (UCNI)**
- II.A.5.c. Export Control/ITAR/EAR**
- II.A.5.d. Temporary hold pending patent review**
- II.A.5.e. Translation of Copyrighted Material**
- II.A.5.f. Small Business Innovation Research (SBIR)**
- II.A.5.g. Small Business Technology Transfer (STTR)**
- II.A.5.h. Proprietary**
- II.A.5.i. Protected CRADA information**
- II.A.5.j. Official Use Only (OUO)**
- II.A.5.k. Program-Directed Special Handling**
- II.A.5.l. Other**
- II.B. Releasing Official**
- II.B.1. Patent Clearance**
- II.B.1.a. Patent Submitted for DOE Patent Clearance**
- II.B.1.b. DOE Patent Clearance Granted**
- II.B.1.c. DOE Patent Clearance Not Required**
- II.B.2. Released by**
- III.A. Personal Author/Affiliation**
- III.B. Performing Organization**
- III.C. Date of Publication**
- III.D. Pages/Size**
- III.E. Abstract**
- III.F. Subject Terms**
- III.G. OpenNet Document Type**
- III.H. OpenNet Document Categories**
- III.I. OpenNet Addressee**

Section 2 provides guidelines for selecting and entering all information needed to complete the form for all types of submittal. The guidelines follow the order of the fields on the form.

This section is specifically useful for completing the paper and World Wide Web (WWW) versions of the form. All examples in this section are based on the format of data on the paper or in the WWW versions of the form.

### *Paper version*

Figure 1 is a full size copy of the paper version of the form and may be copied for completion and transmittal to the Department of Energy (DOE) Office of Scientific and Technical Information (OSTI). Because the information on the paper version of the form will be converted to an electronic form via scanning, the information should be typed or printed. Enter information slightly above the printed lines. If not enough space has been provided on the form, for example for the abstract, indicate that additional information is provided in an attachment. Type or print the attachment, indicating the part of the form to that the information relates. Information on transmitting the form to OSTI is included in Section 4., *Transmitting a completed DOE F 1332.15 to OSTI.*

### *WWW version*

The WWW version of DOE F 1332.15 requires site identification and a password. Use of this form requires site identification (field *Site*) and a password (field *Password*) that must be obtained from OSTI. This electronic version of the form provides OSTI with releasing authorization. A copy may be printed at the originating site for retention by the releasing official. Figure 2 is a copy of the form as it appears on the WWW. Information on transmitting the form to OSTI is included in Section 4., *Transmitting a completed DOE F 1332.15 to OSTI.*

**NOTE:** Due to processing constraints, the Web version of DOE F 1332.15 does not allow submission of Parts II.A.3 or II.A.5. Therefore, the paper version of DOE F 1332.15 must be submitted for information products that are either classified or require special handling.

## **PART I Information Product Identification**

### **I.A. Identifiers**

This part includes the full title of the STI product and identifiers used to define the STI product, such as report numbers, contract or grant numbers, distribution categories, and funding sources.

#### **I.A.1. Product/Report Numbers**

**Description:** The alphanumeric identification numbers assigned to an STI product by the organization that issued that product or that made it available for distribution are entered in this field.

It is essential that a unique primary report or product number be assigned to each product. A complete and accurate number should be entered.

**NOTE:** Project ID number(s) are entered in Part I.A.6. CRADA numbers are entered in Part I.A.7. The International Standard Book Number (ISBN) and International Standard Serial Number (ISSN) are entered in Part I.C.3.

Report numbers can be created according to the guidelines given in American National Standard ANSI/NISO Z39.23, *Standard Technical Report Number 'Format and Creation,'* or the procedures provided below. Report numbers should be formatted exactly as specified in these instructions unless the site has received approval for the modification from OSTI.

A report number consists of a standardized prefix (report code) separated from a free form suffix (sequential group) by a double hyphen (--). The prefix is usually alphabetic and the suffix is usually numeric. Only hyphens and slashes are allowed

in a report number; spaces are not allowed. Standardized abbreviations are used in the prefix and suffix. Sites are encouraged to contact OSTI for approval of new report number prefixes prior to submittal of the STI product to OSTI.

OSTI has already approved report prefixes for use by most DOE offices and M&O Contractors.

**Examples:** DOE/NE--123 [Headquarters DOE Programs]  
DOE/OR--123 [DOE Operations Offices]  
DOE/LLW--123-Vol.1 [Major Project Offices]  
ANL/TM--001 [M&O Contractors]  
DOE/METC--96/1234 [Energy Technology Centers]

Other DOE contractors should use "DOE/" and the final seven characters from the applicable contract or grant number. A forward slash must separate the first two of the seven characters from the last five digits of the contract/grant number. Complete the number with a double hyphen followed by a sequential number for each product/report produced under the contract. For example, the first product/report number produced under contract number AC03-79AL12345 should have the number DOE/AL/12345--1 and the second product would have the number DOE/AL/12345--2.

**Examples:** DOE/AL/12345--1  
DOE/AL/12345--2

Additional suffix information may be added to identify multiple volumes, parts, revisions, etc. A separate DOE F 1332.15 should be provided for each of those multiple parts.

**Examples:** DOE/AL/12345--1-Vol.1  
DOE/METC--96/1234-Rev.1  
ANL/TM--001-Vol.1-Pt.1

More than one product/report number may be provided. Multiple numbers are separated with a semicolon and a space. When more than one number is entered, **the first number is considered the primary report number**; it should identify the submitting organization. All other numbers are considered secondary report numbers.

**Examples:** DOE/AL/12345--1-Rev.1  
ANL/TM--001; DOE/AL/12345--1-Rev.1; DOE/OR--55

**NOTE:** For work performed for another agency, the funding agency may assign a non-DOE agency product/report number to the STI product. If so, provide the non-DOE number in this field.

**Examples:** TVA--96-12345  
ANL/TM--001; NUREG/CR--12345

## I.A.2. Award/Contract/Grant Numbers

**Description:** The award/contract/grant number(s) entered in this field is the DOE or other government agency number assigned to the contract, project, etc., under that the research was conducted or the STI product was produced. For DOE, this is the

identifying number of the legal document that constitutes the agreement between the Department and the awardee. In order to assure that DOE contract deliverables are properly identified, it is essential that contract or grant numbers are provided on the DOE F 1332.15.

**NOTE:** The CRADA (Cooperative Research and Development Agreement) number and the CRADA Project Task Statement Number are entered in Part I.A.7.

Enter the number as it appears on the legal document directing the research or other activity. The number usually consists of 14 characters and has one of the following formats:

**Examples:** AC03-79NE01834  
W-31109-ENG-38

The primary DOE award or contract number under that the work was funded is entered first. Additional award/contract numbers, including non-DOE numbers, related to the product may be entered. Separate multiple numbers with a semicolon and a space.

For a non-DOE contract, the term Contract, Grant, Project, or Agreement, should precede the number, followed by a space and the number as it appears on the publication. Multiples are separated with a semicolon and a space. If more than one number for a type of agreement is entered, separate them with a semicolon and a space. If more than one type of agreement is entered, precede each number with the type of agreement.

**Example:** AC03-79NE01834; AC05-84OR21400; Contract NSA-79-12345; Grant UI-550859/10

### I.A.3. Title

**Description:** The title is the distinguishing or identifying name of the product. Provide the title exactly as it appears on the product itself, including part, volume, date ranges, and similar information. Capitalize only the first word of the title, proper nouns, and acronyms. Secondary or supplementary information (e.g., subtitle information) is separated from the main title by a period and a space.

**Examples:** High-mass multijet events at the Fermilab Proton-Antiproton Collider. Quarterly report, January-March 1995  
  
Energy 2000. Pt. 12

### I.A.4. Funding Office

**Description:** This information is essential for assigning proper credit to the DOE Program Office providing support/sponsorship/funding.

Enter the symbol or name of the DOE Program Office providing support/sponsorship/funding for the work described in the STI product.

For projects funded by more than one Program Office, indicate all sources of DOE funding in descending order of dollar amount of funding appropriated. Also indicate funding agency for work for others. Separate multiple offices with a semicolon and a space.

**Examples:** DOE/ER  
EE-10  
DOE/NE; NRC; TVA  
NASA  
Office of Nuclear Energy  
Defense Programs

#### **I.A.5. Budget and Reporting (B&R) Classification Code(s)**

**Description:** The Budget and Reporting (B&R) classification code is the code used by all levels of management for collecting, reporting and tracking financial data along program or technical lines.

Enter the B&R code of the DOE Program Office first that is responsible for funding the specific project producing the information product. Additional codes may be provided and should be entered in descending funding order. Separate codes with a semicolon and a space.

**NOTE:** For accurate accountability to the program office, it is essential that the B&R code(s) agree with the funding office identified for the STI product in part I.A.4.

**Examples:** GB0509000  
KA0100000; KP0102000

#### **I.A.6. Project ID(s)**

**Description:** This is the unique and permanent Project Identification Number (ID) assigned to the project by the Operations Office, DOE Program Office, laboratory or other installation to identify this particular research project for the Department's R&D Tracking System.

Enter the number as given on the STI product. More than one number may be entered; separate numbers with a semicolon and a space.

**Examples:** P/ORNL--2533  
P/ORNL--2533; TTP/RL439005

#### **I.A.7. CRADA Numbers**

**Description:** This field is used for the Cooperative Research and Development Agreement (CRADA) number or the CRADA Project Task Statement (PTS) number. A Cooperative Research and Development Agreement (CRADA) is a written agreement between one or more federal partners, laboratories, or other federal facilities and one or more non-federal parties under that the government provides personnel, facilities, equipment or other resources, with or without reimbursement (but not funds to non-federal parties) for the purpose of cooperative research and development. There may be a Project Task Statement where cooperative research is undertaken under a CRADA.

The CRADA number should be formatted as a 'C', slash, laboratory or site code, double hyphen, and a suffix assigned by the site. The PTS number should be formatted as a 'CP', slash, laboratory or site code, a double hyphen, and a suffix assigned by the site. More than one number may be provided; separate the numbers with a semicolon and a space.

**Examples:** C/ORNL--91-0123  
C/ORNL--91-0123; C/LBL--BG-94-124  
CP/ORNL--92-0045  
CP/LBL--P-BG-94-073; C/LBL--006

#### I.A.8. Unclassified/Classified (UC/C) Distribution Category

**Description:** The DOE Program Office-directed distribution category scheme is used to allow targeted distribution of DOE-originated or DOE-sponsored unclassified or classified STI products.

Enter the appropriate DOE Program Office distribution category code from the latest revision of DOE/OSTI--4500, *Program Distribution for Unclassified Scientific and Technical Reports - Instructions and Category Scope Notes*, for unclassified (UC) distribution or from the latest revision of DOE/OSTI--3679, *Standard Distribution for Classified Scientific and Technical Reports - Instructions and Category Scope Notes*, for classified © distribution. (Copies of these publications with updates are available from OSTI.) More than one category number may be entered; separate them with a semicolon and a space.

**NOTE:** For accurate accountability to program offices, the UC category should match the DOE Program Office responsible for funding of research (Part 1.A.4).

<b>Examples:</b>	<u>Unclassified</u>	<u>Classified</u> (Paper version only)
	UC-101	C-24
	UC-1210	C-44c
	UC-400; UC-50	C-74; C-74a
	UC-528	

#### I.A.9. Information Product Filename

**Description:** This is the filename assigned by the originating site to the file containing the STI product being described on the DOE F 1332.15. This filename provides the unique electronic link between the full text and the DOE F 1332.15.

It is **essential** that the Information Product Filename be provided on both the DOE F 1332.15 and on the full text when an electronic STI product is submitted.

Contact OSTI for procedures on creating a filename for the STI product.

**Example:** 3960615A.02A

#### I.B. Information Product Description

This section provides a description of the STI product. Products are submitted to OSTI for sharing with DOE, other contractors, other government agencies and, when applicable, the public. STI products for that a DOE F 1332.15 is needed include reports, conference literature, software and similar STI products. DOE F 1332.15 should not be used for reprints of published literature such as journal articles and book chapters; these should be submitted to OSTI without a copy of the form. At least one of the Parts B.1., 2., 3., or 4., should be selected when a DOE F 1332.15 is provided.

##### I.B.1. Report

**Description:** Scientific and technical reports convey the results of basic or applied research, development, demonstration or environmental activities and support decisions based

on those results. A report includes the ancillary information necessary for interpreting, applying and replicating the results or techniques of an investigation.

**Example:**       X   1. Report

### I.B.1.a. Report Type

**Description:** There are two main types of scientific and technical reports: progress reports and topical reports. Topical reports are comprehensive statements of the work performed on a specific task or phase of a contract or agreement. Most STI deliverables are progress reports. Progress reports cover a specified period of time (e.g., monthly, quarterly, semiannual, annual, interim, final) and summarize work performed for those specific reporting periods. The final progress report should be a comprehensive description of the results achieved over the life of the contract or other agreement and may summarize all previous progress and topical reports related to the project. Periods covered by progress reports should match requirements of the contract to be properly identified by the Technical Information Monitoring System (TIMS). Occasionally, a report may cover more than one period of time, in that case both should be included on the form, i.e., a final report may also cover the last annual reporting period.

**Examples:**   a. Type    Quarterly    Semiannual   X   Annual    Final    Topical . . .

                  a. Type . . .   X   Other (Specify) Bimonthly

                  a. Type    Quarterly    Semiannual   X   Annual   X   Final    Topical . . .

### I.B.1.b. Dates Covered

**Description:** Enter the beginning and ending dates of the period covered by the research reported in the STI product. The dates are entered as the two-digit month, a slash, the two-digit day, a slash, and the four-digit year. The beginning date of coverage is entered first and is followed by the ending date. If the report does not have a period of coverage, enter the publication date as both the beginning and ending dates. For paper and WWW versions of DOE F 1332.15, if the report covers multiple periods, enter the first period here and the other periods in Part I.C.3. Additional Instructions/Explanations.

**Examples:**   b. Dates covered . . . 01/01/1995 thru 03/31/1995     [quarterly report]

                  b. Dates covered . . . 04/00/1996 thru 04/00/1996     [publication date used]

### I.B.2. Conference

**Description:** Many STI products are prepared for use at a conference, meeting, seminar, congress, colloquium, symposium, or similar gathering. Information about these products should be included in this part.

**Example:**       X   2. Conference

### I.B.2.a. Conference Type of Publication

**Description:** This field indicates the format of the information presented at a conference, seminar, or similar gathering. Conference products include conference papers, published proceedings, or a conference summary. A conference paper is an individual paper

prepared for presentation at or presented at a conference. Published proceedings are collections that contain the full text or abstracts of papers presented at the conference. A conference summary should be submitted as a proceedings.

- Examples:**
- a. Type  Conference paper  Published proceedings  Other . . .
  - a. Type  Conference paper . . .  Other (Specify) Abstracts
  - a. Type . . .  Published Proceedings  Other (Specify) Abstracts

#### I.B.2.b. Conference Title

**Description:** The complete formal name of the conference is entered in this field. Acronyms used in the conference title should be entered, but do not abbreviate words in the title. When two or more conference titles are cited, separate them with a semicolon and a space.

- Examples:**
- b. Conference title . . . Waste Management 1996
  - b. Conference title . . . DOE Conference on Radiation Dosimetry; NRC Workshop on Instrumentation

#### I.B.2.c. Conference Location

**Description:** The place where the conference was held is entered in this field. Enter the name of the city, the state or province code, and country (in parentheses). If the conference was held at more than one location, separate the locations with a semicolon and a space. If titles for two or more conferences occurring at different locations were entered in Part I.B.2.b., enter the locations in the same order as the titles were entered.

- Example:**
- c. Conference location . . . Tucson, AZ (US)\_\_\_\_\_
  - c. Conference location . . . Tucson, AZ (US); Washington, DC (US)\_\_\_\_\_

#### I.B.2.d. Conference Dates

**Description:** The beginning and ending dates of the conference are entered here. The conference dates are entered as the two-digit month, a slash, the two-digit day, a slash, and the four-digit year. The beginning date of the conference is entered first and is followed by the ending date of the conference. If the conference was held on only one day, enter the day, the month, and the year as both the beginning and ending date.

For the paper and WWW versions of the form, if the conference was held on more than one date, enter the first date in this part and the other dates in Part I.C.3; separate multiples with a semicolon and space. If titles for two or more conferences occurring on different dates were entered in Part I.B.2.b., enter the first date in this part and the other dates in Part I.C.3, entering them in the same order as the titles were entered and separating multiples with a semicolon and space.

- Examples:**
- d. Conference dates . . . 02/25/1995 thru 02/25/1995
  - d. Conference dates . . . 02/25/1995 thru 02/28/1995
  - d. Conference dates . . . 12/30/1994 thru 01/02/1995

### I.B.2.e. Conference Sponsors

**Description:** The organization(s) sponsoring the conference is entered here. Enter the name of the sponsor as given on the STI product or other source of conference information. More than one sponsor may be present; multiples are separated with a semicolon and a space. If titles for two or more conferences were entered in Part I.B.2.b., enter sponsors in the same order as the titles were entered; it is not necessary to repeat a sponsor that sponsored two or more of the conferences.

**Examples:** e. Conference sponsor(s) American Nuclear Society  
e. Conference sponsor(s) DOE; NRC

### I.B.3. Software

**Description:** This part is used for designating scientific and technical software products developed for DOE or others at DOE facilities. Software consists of computer programs and routines and includes subroutines, related groups of routines, or programs and databases. Software products include the software and the associated supporting documentation. The software and documentation may be provided on different media, e.g., the software may be on diskettes, 8mm cassettes, 1/4-inch cartridges, magnetic tapes, or CDS, and the associated documentation may be in paper or electronic format.

In accordance with DOE G 1430.1D, scientific and technical software (unlimited, copyrighted, or controlled access) should be submitted to the DOE Energy Science and Technology Software Center (ESTSC) located at OSTI. Submit software that is not site specific and is of use to others. To obtain required forms and instructions, contact ESTSC at (423) 576-2606 or fax (423) 576-6436 or E-mail [estsc@adonis.osti.gov](mailto:estsc@adonis.osti.gov).

**Example:**  3. Software

### I.B.4. Other

**Description:** 'Other' types of products include data files, theses, or other STI products not covered by Part I.B.1., 2. or 3. Specify the type of product.

**NOTE:** Reprints of journal articles, book chapters, and other published STI products should be submitted to OSTI without use of DOE F 1332.15. If the reprint is to be credited to a specific contract or grant, indicate this on the reprint. Information from reprints is included in OSTI databases. Due to copyright issues, OSTI does not maintain a record copy of reprints.

**Example:**  4. Other . . . data file

### I.C. Information Product Format

This Part provides information on the physical or electronic carrier used for the STI product. Any STI product submitted should be in a form that can serve as the official permanent record copy. The submission should be of sufficient quality to allow successful scanning, printing or reproduction.

### I.C.1. Product not submitted to OSTI

**Description:** At this time all STI products should be submitted to OSTI. Because Part I.C.1. is expected to be available in the future, information on completing Parts I.C.1.a., b., and c. is included here.

**Example:** X 1. Product not submitted to OSTI

**NOTE:** Even though STI products are submitted to OSTI, an alternate availability, especially for electronic formats, may be reported in Part I.C.3.

#### I.C.1.a. Product Location

**Description:** Provide a complete address sufficient to access a complete electronic copy of the STI product, such as the FTP (File Transfer Protocol) site or the URL (Uniform Resource Locator). More than one address may be entered; separate addresses with a semicolon and a space.

**NOTE:** For products submitted to OSTI that are also available at an electronic site, the electronic address (FTP, URL, etc.) may be entered in Part I.C.3.

**Example:** a. Location (FTP, URL, etc.) URL http://\*\*\*\*\*

#### I.C.1.b. File Format

This field identifies the file format in that the full text has been made available via a network or computer-generated medium. The following file formats have been designated as standard Departmental formats for electronic document exchange:

- SGML (Standard Generalized Markup Language)
- HTML (Hypertext Markup Language)
- Postscript
- PDF (Adobe Acrobat Portable Document Format)
- TIFFG4 (Tagged Image File Format Group 4)

These formats are described in the paragraphs below. See DOE G 1430.1D-1, *Guide to the Management of Scientific and Technical Information*, Part II, Chapter 5 (revised) for additional information on the electronic exchange of Departmental information.

**Standard Generalized Markup Language (SGML)**, ISO 8879, is recognized as the best business practice for document interchange. SGML is a flexible and neutral data format, independent of proprietary formats, and universally accessible. SGML facilitates reuse and automation, and it has few limitations in its ability to express complex scientific and technical information. In addition, SGML satisfies all foundational assumptions identified in Paragraph 5.2 of DOE G 1430.1D-1, Part II, and is currently the Department's document format of choice for the electronic exchange of information.

**Hypertext Markup Language (HTML)** is an application of SGML that has a specific Document Type Definition (DTD) and fixed tag set. Because HTML is a neutral data format and universally accessible, it is an acceptable transitional document exchange format. Although HTML does have limitations in terms of its ability to express complex documents, such as STI, it is viewed as a viable interim option.

**Postscript** is a page description language that allows documents to be transmitted electronically with all original formatting and graphics intact. OSTI is currently accepting Postscript as an exchange format because, in addition to being an established industry standard for document printing, it is a format that is easily converted to other media (e.g., paper, fax, PDF, image formats, etc.). Postscript files can be saved from a standard word processing package such as Microsoft Word or Corel's WordPerfect. Once created, the Postscript files can be delivered electronically to OSTI.

**Portable Document Format (PDF)** is a proprietary format owned by Adobe Systems Incorporated, that can best be described as an enhancement of the Postscript format. The PDF format maintains almost complete fidelity to the original document and is an efficient solution for providing electronic access to documents. Through the use of Adobe's Acrobat™ PDF Writer driver, PDF files can be created by printing to PDF from word processing and other desktop publishing applications. By using a viewing application such as Adobe™ Acrobat™, PDF files can be browsed on-screen or they can be printed to local or remote printers.

**TIFF Group 4 (TIFFG4)** is an acceptable interim format for electronic exchange of STI that is currently being used for a number of DOE and DOE contractor activities. To ensure consistency, the standard for submissions to OSTI is TIFF CCITT Group 4 as indicated in DOE G 1430.1D-1, Part II, Chapter 5 (revised).

**Description:** Mark the file format being used for the full text. Check "Other" **only** when special arrangements have been made with OSTI to provide an STI product in a non-standard format. If the file is available in more than one format, indicate all the formats in that it is available.

When the STI product is text, e.g., a report or conference paper, the format should be one of the standard formats unless special arrangements have been made with OSTI to send the product in a non-standard format. If arrangements have been made to send a non-standard format, select 'Other' and specify the format.

When the STI product is not text, e.g., a data file, select "Other" and specify the file format.

- Examples:**
- b. File format  SGML  HTML  Postscript  PDF  TIFFG4 . . .
  - b. File format  SGML . . .  Other (Specify) WordPerfect 6.1
  - b. File format  SGML . . .  Other (Specify) WordPerfect 6.1

#### I.C.1.c. SGML bibliographic record

**Description:** This field is used to indicate the availability of an SGML-formatted bibliographic record prepared in accordance with DOE/OSTI--11685, *Guide for Transmitting Standard Generalized Markup Language (SGML) Encoded Bibliographic Records*.

If an SGML-tagged bibliographic record is attached to the STI product, mark "with product." If the record is available separately, mark "separately" and indicate availability.

**NOTE:** This bibliographic information can be included in the DOE F 1332.15, in that case a separate bibliographic record is not needed.

- Examples:**
- c. SGML bibliographic record available  With product  Separately (specify)
  - c. SGML bibliographic record available . . .  Separately (specify) URL http://\*\*\*

## I.C.2. Product submitted to OSTI

**Description:** An STI product may be submitted to OSTI via an electronic network, as audiovisual material (e.g., audio- or video cassette), as a computer medium (e.g., CDS, diskettes, magnetic tapes), or in paper. Complete this section when submitting one or more copies of the information product to OSTI.

**Example:**  X  2. Product submitted to OSTI

### I.C.2.a. Number of copies

**Description:** Indicate the number of copies of the STI product being sent to OSTI according to the following specifications.

For questions concerning the number of copies to provide to OSTI for distribution or questions related to printing or reproduction, call: (423) 576-1191.

OSTI will expect the following number of copies for each option:

- (1) Unclassified processing: Submit only two copies for unclassified processing unless program distribution (Option 2) is requested for paper, audiovisual material, or computer medium, such as diskette or CD. Choose Option 6 if the STI product is sent via a network.
- (2) Program unclassified distribution: For program unclassified distribution of paper, audiovisual, or computer media, submit the number of copies specified in the latest edition of DOE/OSTI--4500, *Program Distribution for Unclassified Scientific and Technical Reports - Instructions and Category Scope Notes*. Program unclassified distribution of electronic STI products sent over a network is not currently available.
- (3) Classified processing: Send one copy for classified processing.

**NOTE:** This option cannot be selected via the WWW version of the form.

- (4) Standard classified distribution: Send the number of copies specified in the latest edition of DOE/OSTI--3679, *Standard Distribution for Classified Scientific and Technical Reports - Instructions and Category Scope Notes*, for standard classified distribution.

**NOTE:** This option cannot be selected via the WWW version of the form.

- (5) Reproduction by OSTI: For paper submissions, provide one completely legible original reproducible paper copy per guidance in DOE G 1430.1D-1. A high-contrast photocopy is acceptable as a second copy. For audiovisual materials or computer media, provide two reproducible copies. Complete Part I.C.3. - *Additional instructions/explanation*, e.g., indicate the number of copies to be reproduced by OSTI. OSTI must have funding available in deposit accounts for any printing or other reproduction requests prior to initiation of the request.
- (6) Other: Complete Part I.C.3. - *Additional instructions/explanations*. Select this option when sending full text via a network and indicate the type of transmittal in Part I.C.3. Also select this option for special directed distribution. Indicate the number of copies being sent in Part I.C.3.

**NOTE:** OSTI converts paper copy documents to an electronic form via scanning. The quality of the scanned product is directly affected by the quality of the original product. The following issues may affect the quality of the scanned product:

- Information printed on the cover needs to contrast clearly with the cover.
- Covers printed in dark colors do not scan well.
- Color photographs do not scan well.
- The page margins should be no less than 1 inch.
- Use 10 or 12 point serif type size for report text. For non-text matter (e.g., footnotes and indexes), the smallest acceptable type size is 8 point.
- Page size for technical reports should be the standard 8-1/2 x 11 inches.
- Use portrait orientation.

**Examples:**      X   (1) Two for unclassified processing  
                     X   (5)   2   copies for OSTI to reproduce  
                     X   (6) Other

### I.C.2.b. SGML bibliographic record submitted to OSTI

**Description:** This field is used to indicate the availability of an SGML-formatted bibliographic record prepared in accordance with DOE/OSTI--11685, *Guide for Transmitting Standard Generalized Markup Language (SGML) Encoded Bibliographic Records*.

If an SGML-tagged bibliographic record is attached to the STI product, mark “with product.” If the record is available separately, mark “separately” and indicate availability.

**NOTE:** This bibliographic information can be included in the DOE F 1332.15, in that case a separate bibliographic record is not needed.

**Examples:**    b. SGML bibliographic record submitted . . .   X   With product \_\_\_ Separately . . .  
                   b. SGML bibliographic record submitted. . .   X   Separately (specify) SRS.951015

### I.C.2.c. Method of transmittal to OSTI

This part indicates how the STI product will be transmitted to OSTI: electronically via a network or other computer medium, as an audiovisual product, or as paper.

#### I.C.2.c.(1). Electronic

**Description:** Use this field for computer-generated products sent to OSTI over a network, e.g., FTP, E-mail.

**Example:**      X   (1) Electronic

#### I.C.2.c.(1)(a) File Format

**Description:** Information about the file format used for exchanging the STI product is entered here. Standard Departmental formats for electronic document exchange are SGML, HTML, Postscript, PDF, and TIFFG4 as described in Part I.C.1.b.. See DOE G 1430.1D-1, *Guide to the Management of Scientific and Technical Information*, Part II, Chapter 5 (revised), for additional guidance on the electronic exchange of information.

When the STI product is text, e.g., a report or conference paper, the format should be one of the standard formats unless special arrangements have been made with OSTI to send the product in a non-standard format. If arrangements have been made to send a non-standard format, select 'Other' and specify the format.

When the STI product is not text, e.g., a data file, select "Other" and specify the file format.

If the file is submitted in two or more formats, all formats in that it is submitted should be selected.

**Examples:** (a) File format  SGML  HTML  Postscript  PDF  TIFFG4 . . .

(a) File format  SGML . . .  Other (Specify) WordPerfect 6.1

(a) File format  SGML . . .  Other (Specify) WordPerfect 6.1

### **I.C.2.c.(2) Computer medium**

**Description:** This part is used for full text provided to OSTI on computer-generated media such as CDS, diskettes, or magnetic tapes.

**NOTE:** Provide a separate electronic or paper copy of an abstract for the STI product. The abstract may be entered in Part III.E. of the DOE 1332.15 or sent separate item. If an electronic version of the abstract is provided separately, it should be in one of the standard formats (SGML, HTML, Postscript, PDF, TIFFG4). (See Part III.E. Abstract for additional information.)

**Example:**  (2) Computer medium

#### **I.C.2.c.(2)(a) Quantity/Type of Computer Medium**

**Description:** This part specifies the type and number of pieces of the computer medium.

**Example:** (a) Quantity/type (Specify) 1 3.5 inch diskette

#### **I.C.2.c.(2)(b) Machine Compatibility for Computer Medium**

**Description:** This part describes the particular machine with that the medium is compatible and any other machine requirements for using the computer medium.

**Example:** (b) Machine compatibility (Specify) IBM PC-compatible, hard disk, 16 MB

#### **I.C.2.c.(2)(c) Operating System**

**Description:** This part provides the operating system software and other requirements necessary to implement the machine-readable file.

**Example:** Operating system (Specify) Windows 95

#### **I.C.2.c.(2)(d) File Format**

**Description:** Information about the file format used for exchanging the STI product is entered here. Standard Departmental formats for electronic document exchange are SGML,

HTML, Postscript, PDF, and TIFFG4 as described in Part I.C.1.b. See DOE G 1430.1D-1, *Guide to the Management of Scientific and Technical Information*, Part II, Chapter 5 (revised)) for additional guidance on the electronic exchange of information.

When the STI product is text, e.g., a report or conference paper, the format should be one of the standard formats unless special arrangements have been made with OSTI to send the product in a non-standard format. If arrangements have been made to send a non-standard format, select 'Other' and specify the format.

When the STI product is not text, e.g., a data file, select "Other" and specify file format.

If the file is submitted in two or more formats, all formats in that it is submitted should be selected.

- Examples:** (d) File format  SGML  HTML  Postscript  PDF  TIFFG4 . . .
- (d) File format  SGML . . .  Other (Specify) WordPerfect 6.1
- (d) File format  SGML . . .  Other (Specify) WordPerfect 6.1

### I.C.2.c.(3) Audiovisual Material

**Description:** This part applies to audio and/or visual STI products such as audio- or videocassettes.

**NOTE:** Provide a separate electronic or paper copy of an abstract for the STI product. If an electronic version of the abstract is provided, it should be in one of the standard formats (SGML, HTML, Postscript, PDF, TIFFG4). (See Part III.E. Abstract for additional instructions.)

**Example:**  (3) Audiovisual Material

#### I.C.2.c.(3)(a) Quantity/Type of Audiovisual Material

**Description:** This part specifies the type and number of pieces of the audiovisual material.

**Example:** (a) Quantity/type (Specify) 2 videocassettes

#### I.C.2.c.(3)(b) Machine Compatibility for Audiovisual Material

**Description:** This part describes the particular machine with that the information product is compatible.

**Example:** (b) Machine compatibility (Specify) VHS

#### I.C.2.c.(3)(c) Sound

**Description:** This part indicates whether or not the audiovisual material has sound.

**Example:** © Sound  Yes  No

### I.C.2.c.(3)(d) Color

**Description:** This part indicates whether or not the information product is in color.

**Examples:** (d) Color  Yes  No

(d) Color  Yes  No

### I.C.2.c.(3)(e) Playing Time

**Description:** This is the actual length of time the audiovisual material plays.

**Example:** (e) Playing time 44 minutes

### I.C.2.c.(4) Paper

**Description:** This part is used when a paper copy of the STI product is sent to OSTI.

**Example:**  (4) Paper

### I.C.3. Additional instructions/explanations

**Description:** This field is for any other pertinent information related to an STI product that has not been provided in any other section. Information that may be provided here includes the following:

- Sufficient instructions for OSTI to process, announce or distribute the STI product
- Additional dates for Part I.B.1.b., Report Dates Covered, or Part I.B.2.d., Conferences Dates
- Complete funding information when requesting services from OSTI
- The number of copies to be reproduced by OSTI
- A note that mailing labels are included
- Alternate availabilities for the STI product when a copy of the product is submitted to OSTI, e.g., the URL if a paper copy is submitted and the STI product is also available on the WWW
- For full text sent via a network, enter the phrase, '1 copy sent via' and the type of transmission (FTP, E-mail, etc.)

**Examples:**  3. Additional instructions/explanations Mailing list is attached.

3. Additional instructions/explanations 1 copy sent via FTP.

3. Additional instructions/explanations I.B.2.d. additional date, 05/01/96 thru 05/10/96.

### I.D. Contact

**Description:** Provide name, position, telephone, organization and E-mail address for a person familiar with the STI product whom OSTI can contact if additional information is needed for processing the product. This contact person may or may not be the author of the STI product.

**Example:** Name James Smith Position Research Manager Phone (423) 576-0000  
Organization ItCanHappen E-Mail smithj@cmail.ich.com

## **PART II Information Product Announcement and Handling**

### **II.A. Recommendations for Announcement and Handling**

DOE is obligated to make available the results from federally funded work to the widest extent possible. OSTI makes distribution of STI products on behalf of DOE strictly in accordance with existing laws, regulations and/or written DOE Program Office guidance. Recommendations to restrict access to STI products must have a legal basis or be accompanied by written programmatic guidance. Questions concerning current laws and guidance may be referred to OSTI at (423) 576-1191.

**Select at least one** of the following recommendations.

#### **II.A.1. Unlimited Announcement** (Available to U.S. and non-U.S. public)

**Description:** Select this part to allow the unrestricted, unlimited distribution of the product including announcement in the *DOE Reports Bibliographic Database* (URL <http://www.doe.gov/html/dra/dra.html>), and, when applicable: DOE distribution to appropriate addressees listed in the latest edition of DOE/OSTI--4500, *Program Distribution for Unclassified Scientific and Technical Reports - Instructions and Category Scope Notes*; electronic distribution for access by Government Printing Office (GPO) Depository Libraries maintaining energy collections; distribution to the National Technical Information Service (NTIS) for sale to the U.S. and non-U.S. public.

**Example:**  X  1. Unlimited Announcement

#### **II.A.2. Unlimited Announcement/U.S. Dissemination Only**

**Description:** STI products suitable for this designation are those that otherwise are not protectable under the Freedom of Information Act (FOIA), but whose content falls under the subject areas described in the sensitive subjects attachment of DOE Order 1240.2B, *Unclassified Visits and Assignments by Foreign Nationals*.

**Example:**  X  2. Unlimited Announcement/U.S. Dissemination Only

#### **II.A.3. Classified**

**Description:** STI products will receive specific announcement and distribution by OSTI in accordance with the latest revision of DOE/OSTI--3679, *Standard Distribution for Classified Scientific and Technical Reports - Instructions and Category Scope Notes*. This information will be announced to the DOE community on a need to know basis. This information should **not** be transmitted to OSTI on open systems networks such as the Internet.

**NOTE:** This option is not available on the WWW version of DOE F 1332.15.

**Example:**  X  3. Classified

#### **II.A.4. OpenNet**

**Description:** STI products will be announced on the Department's OpenNet Database in accordance with the Department's Openness Initiative. All STI products declassified and **determined to be publicly releasable** after October 1, 1994, must be

announced on OpenNet. Additionally, older declassified STI products and any never classified STI products of significant or historical public interest may be announced in keeping with the Department's intent to be open with and accountable to the public.

When the DOE F 1332.15 for a declassified STI product is submitted to OSTI electronically, an **authoritative classification change notice** (paper only) in accordance with DOE Order 5650.2B, *Identification of Classified Information*, must also be submitted at the same time for STI documents in OSTI's classified collection.

If an information product is selected for announcement on OpenNet, date of publication, Part III.C., is required on the WWW version of the DOE F 1332.15.

**Example:**     X 4. OpenNet

#### II.A.4.a. Non-NTIS Availability

This information **must** be provided if the STI product will also be available at a location other than NTIS.

##### II.A.4.a.(1). OpenNet Accession Number

**Description:** The Accession Number is a **unique** identifier of up to 15 alphanumeric characters only (A-Z, a-z, or 0-9), beginning with a two-character prefix identifying the controlling operations/field office (see Part II.A.4.b. below). The transmitting field or program office is responsible for assuring that the number is unique within its jurisdiction.

**Example:**     (1) Accession Number OR95000052

##### II.A.4.a.(2). Location of OpenNet Document

**Description:** This field identifies where the public may go to obtain a copy of the document at a location other than NTIS. At a minimum, this entry must contain a point of contact and enough additional information to enable a user to order a document (e.g., address, phone number, fax number, E-mail address, etc.). More than one location can be entered; separate multiple locations with a semicolon and a space.

**Example:**     (2) Document Location Oak Ridge Public Document Reading Room, 200 Administration Road, Room G-217, Oak Ridge, TN 37830, (423) 576-1216 or (423) 241-4780

##### II.A.4.b. OpenNet Field Office Acronym

**Description:** Use the acronym provided in '*OPENNET DeClassified Information Database Specifications*,' revised December 15, 1994, to indicate the appropriate field or program office. (Copies are available from OSTI.) The following offices are included in the current listing:

AL	Albuquerque Operations Office
CH	Chicago Operations Office
CI	Congressional and Intergovernmental Affairs
DP	Defense Programs
EH	Environment, Safety and Health
EM	Environmental Management
ER	Energy Research
GC	General Counsel
GF	Golden Field Office

HR	Human Resources and Administration
ID	Idaho Operations Office
IG	Inspector General
NE	Nuclear Energy
NN	Nonproliferation and National Security
NV	Nevada Operations Office
OO	Oakland Operations Office
OR	Oak Ridge Operations Office
PO	Policy, Planning and Program Evaluation
RF	Rocky Flats Field Office
RL	Richland Operations Office
SR	Savannah River Operations Office

**Example:** b. Field Office Acronym OR

#### II.A.4.c. OpenNet Declassification Status and OpenNet Declassification Date

**Description:** This information is required for all declassified or sanitized documents being entered into OpenNet.

Provide the declassification date for any document that has been declassified and determined to be publicly releasable. Mark "Sanitized" for documents with portions deleted for privacy or security reasons and enter the date in the declassification date field. Mark "Never classified" for any STI product of significant or historical public interest that has never been classified and that is being announced in keeping with the Department's intent to be open with and accountable to the public. Do not use 'Never classified' for any STI product that has declassified or sanitized sections.

**Examples:** c. Declassification date . . . 12/30/1995 \_\_\_ Sanitized \_\_\_ Never classified

c. Declassification date . . . \_\_\_ Sanitized X Never classified

#### II.A.5. Special Handling

Special handling includes the types of STI discussed in this section. The specific legal basis for restricting access must be provided. All STI products will be announced and distributed as widely as possible in accordance with existing laws, regulations, or official guidance.

**NOTE:** Information products containing sensitive, proprietary, or other information for that access is restricted by statute or regulation shall not be transmitted via open systems networks (e.g., the Internet) unless authorization and/or encryption has been coordinated with OSTI in advance. Information included in the accompanying DOE F 1332.15 form should be publicly releasable (no classified, sensitive, proprietary, or other limited access information).

**NOTE:** Currently, OSTI internal processing constraints will not allow receipt of the DOE F 1332.15 form via the WWW for information products receiving a Special Handling designation. In the interim, sites should submit paper copy versions of the DOE F 1332.15 for these STI products.

##### II.A.5.a. Copyrighted Material

**Description:** The author or designated copyright holder of an STI product owns the legal rights to reproduce, publish and sell the material. Any copyright claim on part or all of the contents of the information product affects the reproduction and distribution of the product by OSTI. Copyrighted material cannot be given unlimited distribution unless an unlimited distribution release has been provided to OSTI.

Select 'All' when the STI product is copyrighted in its entirety. Select 'Part' when only part of the product is copyrighted; indicate the copyrighted part(s) in the space provided.

**Examples:**     a. Copyrighted material    All    Part (Specify) \_\_\_\_\_

a. Copyrighted material    All    Part (Specify) Appendix A

#### **II.A.5.b. Unclassified Controlled Nuclear Information (UCNI)**

**Description:**    This information will be announced to the DOE community on a need to know basis. This information should **not** be transferred to OSTI on open systems networks such as the Internet.

**Example:**         b. Unclassified Controlled Nuclear Information (UCNI)

#### **II.A.5.c. Export Control/ITAR/EAR**

**Description:**    Select this part for information that may not be exported without approval from the U.S. Department of Commerce or Department of State.

**Example:**         c. Export Control/ITAR/EAR

#### **II.A.5.d. Temporary hold pending patent review**

**Description:**    Select this part when a temporary hold is placed on the document while the patent status is reviewed.

**NOTE:** Notify OSTI when patent release is granted.

**Example:**         d. Temporary hold pending patent review

#### **II.A.5.e. Translation of Copyrighted Material**

**Description:**    Select this part for a translation of a copyrighted STI product.

**Example:**         e. Translation of copyrighted material

#### **II.A.5.f. Small Business Innovation Research (SBIR)**

**Description:**    The SBIR program is a federal initiative to provide funding to research and development efforts of a high risk nature that may have excellent commercial potential.

Include the estimated release date for the STI product in accordance with the terms of the agreement when this part is selected.

**Example:**         f. Small Business Innovation Research (SBIR)   Release date . . . 03/25/1999

#### **II.A.5.g. Small Business Technology Transfer (STTR)**

**Description:**    The STTR program is a federal program similar to the SBIR program defined above. However it differs in that a small company proposing to use this program must team with a nonprofit research institution such as a university or federal laboratory.

Include the estimated release date for the STI product in accordance with the terms of the agreement when this part is selected.

**Example:**  X  g. Small Business Technology Transfer (STTR) Release date . . . 08/31/2001

**II.A.5.h. Proprietary**

**Description:** Select this part for technical data that contains trade secrets developed at private expense. This information may not be disclosed outside the government without prior approval from the originator.

**Example:**  X  h. Proprietary

**II.A.5.i. Protected CRADA information**

**Description:** Protected CRADA information includes STI products generated under Cooperative Research and Development Agreements (CRADAs) and marked as containing protected CRADA information under the National Competitiveness and Technology Transfer Act of 1989.

Include the estimated release date for the STI product in accordance with the terms of the agreement when this part is selected.

**Example:**  X  i. Protected CRADA information Release date . . . 07/15/1999

**II.A.5.j. Official Use Only (OUO)**

**Description:** Official Use Only covers information that may be protected under the provisions of the FOIA (Freedom of Information Act) or Privacy Act and for that none of the other designations is applicable.

**Example:**  X  j. Official Use Only (OUO)

**II.A.5.k. Program-Directed Special Handling**

**Description:** The program office provides the guidelines for announcing this information. Provide a reference to specific program guidance or attach a copy of the specific guidance.

**Example:**  X  k. Program-Directed Special Handling (Specify) Applied Technology

**II.A.5.l. Other**

**Description:** Select this part for STI products whose announcement or distribution must be limited based on laws, regulations or official guidance not covered in the preceding parts.

**Example:**  X  l. Other (Specify) Man to Mars Nuclear Program

**II.B. Releasing Official**

This part identifies the person officially releasing the STI product for distribution as well as the patent clearance status of the product. The appropriate releasing official is determined by the source of the STI, the contracting instrument and the internal organizational responsibilities. Do not forward the form to OSTI until after appropriate review and release.

### II.B.1. Patent Clearance

**Description:** This part indicates the patent clearance status and provides the date submitted for a patent that is still in the DOE patent clearance process.

**Example:**  X  1. Patent Clearance (Mark one)

#### II.B.1.a. Patent Submitted for DOE Patent Clearance

**Description:** Use this part if the STI product has been submitted for patent clearance, and clearance has not yet been received. Provide the date the patent was submitted for review.

**NOTE:** Notify OSTI when patent release is granted.

**Example:**  X  a. Submitted for DOE patent clearance Date submitted . . . 09/18/1996

#### II.B.1.b. DOE Patent Clearance Granted

**Description:** Use this part when DOE patent clearance has been granted.

**Example:**  X  b. DOE patent clearance has been granted

#### II.B.1.c. DOE Patent Clearance Not Required

**Description:** Use this part when DOE patent clearance is not required.

**Example:**  X  c. DOE patent clearance not required

### II.B.2. Released by

**Description:** The appropriate releasing official is determined by the source of the STI, the contracting instrument and the internal organizational responsibilities. Do not forward the form to OSTI until after appropriate review and release of the STI product.

Provide the releasing official's name, the release date, and the releasing official's telephone number and E-mail address.

**Example:** Name James B. Howard Date (mm/dd/yyyy) 01/12/1996  
Phone (423) 576-0000 E-mail howardjb@ccmail.abs.com

## **PART III Bibliographic Information**

Part III includes information, such as authorship, publication date, and subject coverage, useful for providing a complete description of the STI product. For information products that are to be included in the OpenNet Database, the information will be used to complete the OpenNet Database records. For all STI products, the information will be used in announcing those products, as appropriate, to other parts of the DOE community and the public.

### III.A. Personal Author/Affiliation

**Description:** Provide the name of the person(s) who prepared/authored/edited/compiled the STI product. More than one author may be provided; separate multiple authors with a semicolon and a space.

Include the affiliation, i.e., the name and location of the organization where the author was employed when the research was conducted, if this is different from the corporate source provided in Part III.B. or if Part III.B. is not provided. If the affiliation for any author is different from the corporate source, enter an affiliation for each author. Enclose the affiliation in parentheses. More than one affiliation may be provided for an author; separate multiple affiliations with a semicolon and a space. A country code should be provided after the city/state. Refer to Appendix 3., 'Country and International Organization Names and Codes,' for a complete listing of available country codes.

- Examples:** A. Personal Author/Affiliation Fields, J.M. (ed.)
- A. Personal Author/Affiliation Fields, J.M. (ed.) (University of Illinois, Urbana, IL (US))
- A. Personal Author/Affiliation Jones, T.M. (Environmental Restoration, Inc., Oak Ridge, TN (US); University of Tennessee, Chattanooga, TN (US)); Markay, A.R. III (Waste Removal Ltd., Ottawa, ON (Canada))

### III.B. Performing Organization

**Description:** Provide the name and location of the organization/corporate source that performed the research or issued the STI product. More than one organization may be given; separate multiples with a semicolon and a space. A country code should be provided after the city/state. Refer to Appendix 3., 'Country and International Organization Names and Codes,' for a complete listing of available country codes.

**Example:** B. Performing Organization Los Alamos National Laboratory, Los Alamos, NM (US)

### III.C. Date of Publication

**Description:** Provide the date when the STI product was published or issued.

**Example:** C. Date of Publication . . . 01/03/1997

### III.D. Pages/Size

**Description:** Provide the total number of pages or other designation that indicates the size of the information product.

- Examples:** D. Pages/Size 105 p. [paper]
- D. Pages/Size 120 min. [audiocassette]
- D. Pages/Size 130070 KB [CD]
- D. Pages/Size 125 images [number of images in a TIFFG4 file]

### III.E. Abstract

**Description:** Provide a clear and concise English language summary of the information content of the product. The abstract length should be no more than 2,000 characters. Beginning October 31, 1997, 5,000 characters will be accepted in the abstract field.

**NOTE:** The abstract should not contain proprietary or other sensitive information.

**Example:** E. Abstract High cost and poor performance have hurt the market for electric cars, but more states are passing emission control regulations that will make electric cars more attractive. Federal funding also will promote research on electric vehicle technologies. There is much work to do on battery recharging, range expansion, and weight to make electric cars desirable to the public. Other alternatives for reducing auto emissions are explored. The ultimate fate of electric cars will be decided by consumers.

### III.F. Subject Terms

**Description:** Provide terms, e.g., keywords or subject descriptors, that describe the content of the publication. More than one term may be entered; separate multiple terms with a semicolon and a space. Do not include subject terms related to the access restriction of the STI product.

A list of OpenNet subject terms that can be used for information products that will be included in the OpenNet Database is available at URL:

<http://www.doe.gov/html/osti/opennet/lists/sterms.html>

**Example:** F. Subject Terms ELECTRIC AUTOMOBILES; TECHNOLOGY; BATTERIES

### III.G. OpenNet Document Type

**Description:** For information products that will be included in the OpenNet Database, provide the appropriate document type based on the list in ' "OPENNET" DeClassified Information Database Data Input Specifications,' revised December 15, 1994. Only one document type should be entered. The complete list of OpenNet document types is available at URL:

[http://www.doe.gov/html/osti/opennet/lists/doc\\_type.html](http://www.doe.gov/html/osti/opennet/lists/doc_type.html)

**Example:** G. OpenNet Document Type report

### III.H. OpenNet Document Categories

**Description:** For information products that will be included in the OpenNet Database, provide the appropriate two-level subject categories based on the list in ' "OPENNET" DeClassified Information Database Data Input Specifications,' revised December 15, 1994. More than one category may be provided; separate multiples with a semicolon and a space.

The list of OpenNet document categories is available at URL:

<http://www.doe.gov/html/osti/opennet/opencats.html>

**Example:** H. OpenNet Document Categories Reactors/Production Reactors; Science and Technology/Physics

### III.I. OpenNet Addressee

**Description:** For an information product such as a memo, letter, or similar type of product that will be included in the OpenNet Database, provide the name and address of the recipient

of the information product in this field. More than one addressee may be provided; separate multiple addresses with a semicolon and a space.

**Example:** I. OpenNet Addressee Smith, J.F., Hollingbetts Supplies, Augusta, Georgia (US)

Guidelines for Preparing and Transmitting the DOE F 1332.15 - Working Copy

Section 3. Providing Information for Standard Generalized Markup Language and  
Comma-Delimited ASCII Versions of DOE F 1332.15

TABLE OF CONTENTS

- A. OSTI Administrative Fields
    - 1. OSTI Barcode.
    - 2. Source of Bibliographic Input
  - B. Fields included in the DOE F 1332.15
- PART I Information Product Identification
- I.A. Identifiers
    - I.A.1. Product/Report Numbers
    - I.A.2. Award/Contract/Grant Numbers
    - I.A.3. Title
    - I.A.4. Funding Office
    - I.A.5. Budget and Reporting (B&R) Classification Code(s)
    - I.A.6. Project ID(s)
    - I.A.7. CRADA Numbers
    - I.A.8. Unclassified/Classified (UC/C) Distribution Category
    - I.A.9. Information Product Filename
  - I.B. Information Product Description
    - I.B.1. Report
      - I.B.1.a. Report Type
      - I.B.1.b. Dates Covered
    - I.B.2. Conference
      - I.B.2.a. Conference Type of Publication
      - I.B.2.b. Conference Title
      - I.B.2.c. Conference Location
      - I.B.2.d. Conference Dates
      - I.B.2.e. Conference Sponsors
    - I.B.3. Software
    - I.B.4. Other
  - I.C. Information Product Format
    - I.C.1. Product not submitted to OSTI
      - I.C.1.a. Product Location
      - I.C.1.b. File Format
      - I.C.1.c. SGML Bibliographic Record Availability
    - I.C.2. Product Submitted to OSTI
      - I.C.2.a. Number of Copies Submitted
      - I.C.2.b. SGML Bibliographic Record Availability
      - I.C.2.c. Method of Transmittal to OSTI
        - I.C.2.c.(1) Electronic
          - I.C.2.c.(1)(a) File Format
        - I.C.2.c.(2) Computer Medium
          - I.C.2.c.(2)(a) Quantity/Type of Computer Medium
          - I.C.2.c.(2)(b) Machine Compatibility for Computer Medium
          - I.C.2.c.(2)(c) Operating System

- I.C.2.c.(2)(d) File Format
- I.C.2.c.(3) Audiovisual Material
  - I.C.2.c.(3)(a) Quantity/Type of Audiovisual Material
  - I.C.2.c.(3)(b) Machine Compatibility for Audiovisual Material
  - I.C.2.c.(3)(c) Sound
  - I.C.2.c.(3)(d) Color
  - I.C.2.c.(3)(e) Playing Time
- I.C.2.c.(4) Paper
- I.C.3. Additional instructions/explanations
- I.D. Contact
- PART II Information Product Announcement and Handling
  - II.A. Recommendations for Announcement and Handling
    - II.A.1. Unlimited Announcement (Available to U.S. and non-U.S. public)
    - II.A.2. Unlimited Announcement/U.S. Dissemination Only
    - II.A.3. Classified
    - II.A.4. OpenNet
      - II.A.4.a. Non-NTIS Availability
        - II.A.4.a.(1) OpenNet Accession Number
        - II.A.4.a.(2) Location of OpenNet Document
      - II.A.4.b. OpenNet Field Office Acronym
      - II.A.4.c. OpenNet Declassification Status and OpenNet Declassification Date
    - II.A.5. Special Handling
      - II.A.5.a. Copyrighted Material
      - II.A.5.b. Unclassified Controlled Nuclear Information (UCNI)
      - II.A.5.c. Export Control/ITAR/EAR
      - II.A.5.d. Temporary hold pending patent review
      - II.A.5.e. Translation of Copyrighted Material
      - II.A.5.f. Small Business Innovation Research (SBIR)
      - II.A.5.g. Small Business Technology Transfer (STTR)
      - II.A.5.h. Proprietary
      - II.A.5.i. Protected CRADA Information
      - II.A.5.j. Official Use Only (OUO)
      - II.A.5.k. Program-Directed Special Handling
      - II.A.5.l Other
  - II.B. Releasing Official
    - II.B.1. Patent Clearance (Mark one)
      - II.B.1.a. Patent Submitted for DOE Patent Clearance
      - II.B.1.b. DOE Patent Clearance Granted
      - II.B.1.c. DOE Patent Clearance Not Required
    - II.B.2. Released By
- Part III Bibliographic Information
  - III.A. Personal Author/Affiliation
  - III.B. Performing Organization
  - III.C. Date of Publication
  - III.D. Pages/Size
  - III.E. Abstract
  - III.F. Subject Terms
  - III.G. OpenNet Document Type
  - III.H. OpenNet Document Categories
  - III.I. OpenNet Addressee
- C. Additional Bibliographic Fields Available in the SGML DTD
  1. REFERENCE NUMBER
  2. TRANSLATION NOTE
  3. LANGUAGE (CODE)

4. NOTES
5. ACADEMIC DEGREE
6. US DOE PROJECT/NONPROJECT
7. COUNTRY OF ORIGIN
8. COUNTRY OF PUBLICATION
9. CORPORATE ENTRY CODE

This section includes procedures for selecting and entering information in Standard Generalized Markup Language- (SGML) and Comma Delimited ASCII-formatted versions of DOE F 1332.15 (2-96). The procedures follow the order of the fields on the form. The entries provide the DOE F 1332.15 part number, a description of the content of the field, an example from the paper version of the form, comments on input of the information in the corresponding SGML or Comma Delimited ASCII field, and examples of that input for the SGML and Comma Delimited ASCII formats.

The sequence of fields for both formats **must** follow exactly the sequence of fields on the DOE F 1332.15.

#### *SGML-Formatted Input*

This electronic input is formal SGML-formatted input with a Document Type Definition (DTD). Specifications for formatting of the fields are given in this section. The SGML format allows for several fields that are not included on DOE F 1332.15; these are included in the following guidelines at the point in that they occur in the DTD. Information on the DTD and transmitting the form to OSTI is included in Section 4., *Transmitting a completed DOE F 1332.15 to OSTI*.

#### *Comma Delimited ASCII Input*

This electronic input will have fields delimited by a comma. Specifications for formatting information input are given in this section. Note that there must be a field in the Comma Delimited ASCII file for every field on the DOE F 1332.15 whether or not there is information to be input in the field. Information on structuring the file and transmitting it to OSTI is included in Section 4., *Transmitting a completed DOE F 1332.15 to OSTI*.

**NOTE:** Information products containing sensitive, proprietary, or other information for that access is restricted by statute or regulation shall not be transmitted via open systems networks (e.g., the Internet) unless authorization and/or encryption has been coordinated with OSTI in advance. Information included in the accompanying DOE F 1332.15 form should be publicly releasable (no classified, sensitive, proprietary, or other limited access information).

### **A. OSTI Administrative Fields**

The following fields provide information used by OSTI in processing DOE F 1332.15 records received in electronic files. These fields are not included in the paper version of the form.

#### **1. OSTI Barcode.**

**Description:** A unique identification number consisting of 1 or 2 letters and 8 numbers assigned to each STI product by OSTI

**SGML Tag Name**  
OSTI Barcode

**SGML Tag**  
<OSTIBRCD>

**Comments (SGML):** If OSTI is providing barcodes to your site, enter the barcode in this field. If you are using the version beginning with 'DE', replace the 'DE' with an 'M'.

**SGML Example:** <OSTIBRCD>M96000001</OSTIBRCD>

**Comments (ASCII):** This field is not included in the Comma Delimited ASCII format.

## 2. Source of Bibliographic Input

**Description:** A standardized code identifying the organization providing the information. Contact OSTI for an authorized code.

<u>SGML Tag Name</u>	<u>SGML Tag</u>
Source of Bibliographic Input	<BS>

**Comments (SGML):** Enter the standardized code for your organization.

**SGML Example:** <BS>SRS</BS>

**Comments (ASCII):** This information is included in the file name.

## **B. Fields included in the DOE F 1332.15**

The following fields are included in the DOE F 1332.15.

### **PART I Information Product Identification**

#### **I.A. Identifiers**

This part includes the full title of the STI product and identifiers used to define the STI product, such as report numbers, contract or grant numbers, distribution categories, and funding sources.

##### **I.A.1. Product/Report Numbers**

**Description:** The alphanumeric identification numbers assigned to an STI product by the organization that issued that product or that made it available for distribution are entered in this field.

It is essential that a unique primary report or product number be assigned to each product. A complete and accurate number should be entered.

**NOTE:** Project ID number(s) are entered in Part I.A.6. CRADA numbers are entered in Part I.A.7. The International Standard Book Number (ISBN) and International Standard Serial Number (ISSN), are entered in Part I.C.3.

Report numbers can be created according to the guidelines given in American National Standard ANSI/NISO Z39.23, *Standard Technical Report Number 'Format and Creation,'* or the procedures provided in Section 2, 'Preparation of DOE F 1332.15,' Part I.A.1., 'Product/Report Numbers.' Contact OSTI for additional information. Report numbers should be formatted exactly as specified in these instructions unless the site has received approval for the modification from OSTI.

A report number consists of a standardized prefix (report code) separated from a free form suffix (sequential group) by a double hyphen (--). The prefix is usually alphabetic and the suffix is usually numeric. Only hyphens and slashes are allowed in a report number; spaces are not allowed. Standardized abbreviations are used in the prefix and suffix. Sites are encouraged to contact OSTI for approval of new report number prefixes prior to submittal of the STI product to OSTI.

More than one product/report number may be provided. Multiple numbers are separated with a semicolon and a space. When more than one number is entered, the first number is considered the primary report number; it should identify the submitting organization. All other numbers are considered secondary report numbers.

**NOTE:** For work performed for another agency, the funding agency may assign a non-DOE agency product/report number to the STI product. If so, provide the non-DOE number in this field.

**Paper Examples:** DOE/AL/12345--1  
DOE/NE--123  
DOE/OR--123  
DOE/LLW--123-Vol.1  
DOE/AL/12345--1-Vol.1  
DOE/METC--96/1234-Rev.1  
ANL/TM--001-Vol.1-Pt.1; DOE/AL/12345--1-Rev.1; DOE/OR--55  
TVA--96-12345  
ANL/TM--001-Vol.1-Pt.1; NUREG/CR--12345

<u>SGML Tag Name</u>	<u>SGML Tag</u>
Primary Report Number	<RN>
Secondary Report Number	<SR>

**Comments (SGML):** The SGML-tagged format uses two fields for this information. The first number is considered the primary report number and is entered in SGML tag <RN>. Any additional numbers are considered secondary numbers and are entered in SGML tag <SR>. Use the same format for secondary report numbers as for primary report numbers. Multiple secondary report numbers are separated with a semicolon and a space.

**SGML Examples:** <RN>ANL-TM--001</RN>  
<SR>DOE/METC--96/1234-Rev.1; TVA--96-12345</SR>

**Comments (ASCII):** Enter the product/report number in this field. If more than one number has been assigned, enter all of them in this same field, separating the numbers with a semicolon and a space.

**ASCII Example:** ;"ANL-TM--001",  
;"DOE/METC--96/1234-Rev.1; TVA--96-12345",

## I.A.2. Award/Contract/Grant Numbers

**Description:** The award/contract/grant number(s) entered in this field is the DOE or other government agency number assigned to the contract, project, etc., under that the research was conducted or the STI product was produced. For DOE, this is the identifying number of the legal document that constitutes the agreement between the Department and the awardee. In order to assure that DOE contract deliverables are properly identified, it is essential that contract or grant numbers are provided on the DOE F 1332.15.

**NOTE:** The CRADA (Cooperative Research and Development Agreement) number and the CRADA Project Task Statement Number are entered in Part I.A.7.

Enter the number as it appears on the legal document directing the research or other activity. The number usually consists of 14 characters and has one of the following formats:

**Paper Examples:** AC03-79NE01834  
W-31109-ENG-38

The primary DOE award or contract number under that the work was funded is entered first. Additional award/contract numbers, including non-DOE numbers, related to the product may be entered. Separate multiple numbers with a semicolon and a space.

For a non-DOE contract, the term Contract, Grant, Project, or Agreement should precede the number, followed by a space and the number as it appears on the publication. Multiples are separated with a semicolon and a space. If more than one number for a type of agreement is entered, separate them with a semicolon and a space. If more than one type of agreement is entered, precede each number with the type of agreement.

**Paper Example:** AC03-79NE01834; AC05-84OR21400; Contract NSA 79-12345; Grant UI-550859/10

<u>SGML Tag Name</u>	<u>SGML Tag</u>
Contract Number (DOE)	<CN>

**SGML Examples:** <CN>AC03-79NE01834</CN>

<CN>AC03-79NE01834; AC05-84OR21400; Contract NSA 79-12345; Grant UI-550859/10</CN>

**ASCII Examples:** ,"AC03-79NE01834",

,"AC03-79NE01834; AC05-84OR21400; Contract NSA 79-12345; Grant UI-550859/10",

### I.A.3. Title

**Description:** The title is the distinguishing or identifying name of the product. Provide the title exactly as it appears on the product itself, including part, volume, date ranges, and similar information. Capitalize only the first word of the title, proper nouns, and acronyms. Secondary or supplementary information (e.g., subtitle information) is separated from the main title by a period and a space.

**Paper Examples:** High-mass multijet events at the Fermilab Proton-Antiproton Collider. Quarterly report, January-March 1995

Energy 2000. Pt. 12

<u>SGML Tag Name</u>	<u>SGML Tag</u>
Primary Title (M)	<TLM>

**SGML Examples:** <TLM>High-mass multijet events at the Fermilab Proton-Antiproton Collider. Quarterly report, January-March 1995</TLM>





**SGML Tag Name**  
CRADA Number

**SGML Tag**  
<CNCR>

**SGML Examples:** <CNCR>C/ORNL--91-0123</CNCR>  
<CNCR>C/ORNL--91-0123; C/LBL--BG-94-124</CNCR>  
<CNCR>CP/ORNL--92-0045</CNCR>  
<CNCR>CP/LBL--P-BG-94-073; C/LBL--006</CNCR>

**ASCII Examples:** , "C/ORNL--91-0123 " ,  
, "C/ORNL--91-0123; C/LBL--BG-94-124 " ,  
, "CP/ORNL--92-0045 " ,  
, "CP/LBL--P-BG-94-073; C/LBL--006 " ,

#### I.A.8. Unclassified/Classified (UC/C) Distribution Category

**Description:** The DOE Program Office-directed distribution category scheme is used to allow targeted distribution of DOE-originated or sponsored unclassified or classified STI products.

Enter the appropriate DOE Program Office distribution category code from the latest revision of DOE/OSTI--4500, *Program Distribution for Unclassified Scientific and Technical Reports - Instructions and Category Scope Notes*, for unclassified (UC) distribution or from the latest revision of DOE/OSTI--3679, *Standard Distribution for Classified Scientific and Technical Reports - Instructions and Category Scope Notes*, for classified © distribution. (Copies of these publications with updates are available from OSTI.) More than one category number may be entered; separate them with a semicolon and a space.

**NOTE:** For accurate accountability to program offices, the UC category should match the DOE Program Office responsible for funding of research (Part I.A.4.).

<b>Paper Examples:</b>	<u>Unclassified</u>	<u>Classified</u> (Paper version only)
	UC-101	C-24
	UC-1210	C-44c
	UC-400; UC-500	C-74; C-74a
	UC-528	

**SGML Tag Name**  
Distribution Category

**SGML Tag**  
<DC>

**Comments (SGML):** Contact OSTI for information on inclusion of Classified Distribution Categories.

**SGML Examples:** <DC>UC-528</DC>  
<DC>UC-400; UC-500</DC>

**Comments (ASCII):** Enter all the codes in a single field.

**ASCII Examples:** , "UC-528",  
, 'UC-400; UC-500',

### I.A.9. Information Product Filename

**Description:** This is the filename assigned by the originating site to the file containing the STI product being described on the DOE F 1332.15. This filename provides the unique electronic link between the full text and the DOE F 1332.15.

It is **essential** that the Information Product Filename be provided on both the DOE F 1332.15 and on the full text when an electronic STI product is submitted.

Contact OSTI for procedures on creating a filename for the STI product.

**Paper Example:** 3960615A.02A

<u>SGML Tag Name</u>	<u>SGML Tag</u>
Information Product Filename	<INFPRDFN>

**SGML Example:** <INFPRDFN>3960615A.02A</INFPRDFN>

**ASCII Example:** , "3960615A.02A",

### I.B. Information Product Description

This section provides a description of the STI product. Products are submitted to OSTI for sharing with DOE, other contractors, other government agencies and, when applicable, the public. STI products for that a DOE F 1332.15 is needed include reports, conference literature, software and similar STI products. DOE F 1332.15 should not be used for reprints of published literature such as journal articles and book chapters; these should be submitted to OSTI without a copy of the form. At least one of the Parts B.1., 2., 3., or 4., should be selected when a DOE F 1332.15 is provided.

#### I.B.1. Report

**Description:** Scientific and technical reports convey the results of basic or applied research, development, demonstration or environmental activities and support decisions based on those results. A report includes the ancillary information necessary for interpreting, applying and replicating the results or techniques of an investigation.

**Paper Example:**  X  1. Report

<u>SGML Tag Name</u>	<u>SGML Tag</u>
Bibliographic Information/Report	<BIBRPT>
Type of Record	<DT>

**Comments (SGML):** The SGML tag <BIBRPT> is a group tag for Part I.B.1. and its subelements.  
When Part I.B.1 is selected, enter SGML tag <BIBRPT>, then enter an 'R' in SGML tag <DT>.

**SGML Example:** <BIBRPT><DT>R</DT>

**Comments (ASCII):** When Part I.B.1. is selected, enter an 'R'

**ASCII Example:** , "R",

### I.B.1.a. Report Type

**Description:** There are two main types of scientific and technical reports: progress reports and topical reports. Topical reports are comprehensive statements of the work performed on a specific task or phase of a contract or agreement. Most STI deliverables are progress reports. Progress reports cover a specified period of time (e.g., monthly, quarterly, semiannual, annual, interim, final) and summarize work performed for those specific reporting periods. The final progress report should be a comprehensive description of the results achieved over the life of the contract or other agreement and may summarize all previous progress and topical reports related to the project. Periods covered by progress reports should match requirements of the contract to be properly identified by the Technical Information Monitoring System (TIMS). Occasionally, a report may cover more than one period of time, in that case both should be included on the form, i.e., a final report may also cover the last annual reporting period.

**Paper Examples:** a. Type \_\_\_ Quarterly \_\_\_ Semiannual X Annual \_\_\_ Final \_\_\_ Topical . . .

a. Type . . . X Other (Specify) Bimonthly

a. Type \_\_\_ Quarterly \_\_\_ Semiannual X Annual X Final \_\_\_ Topical . . .

#### **SGML Tag Name**

Report Type  
Other

#### **SGML Tag**

<RPTTYPE>  
<OTHER>

**Comments (SGML):** This is a subfield within the SGML group tag <BIBRPT>.

Enter the code representing the type of report from the following list in SGML tag <RPTTYPE>: Q = Quarterly, S = Semiannual, A = Annual, F = Final, T = Topical.

Multiples are allowed. Separate letter entries with a semicolon and space. Do not separate a letter entry and the <OTHER> tag with a semicolon and space.

If 'Other' has been selected, enter SGML tag <RPTTYPE>, follow it with SGML tag <OTHER>, and then the free form text included in the form.

**SGML Examples:** <BIBRPT><DT>R</DT><RPTTYPE>A</RPTTYPE>

<BIBRPT><DT>R</DT><RPTTYPE>A; F</RPTTYPE>

<BIBRPT><DT>R</DT><RPTTYPE><OTHER>Bimonthly</OTHER>  
</RPTTYPE>

**Comments (ASCII):** Allow a separate field for each type of report listed on the form. Enter the code representing the type of report from the following list in the appropriate

field: Q = Quarterly, S = Semiannual, A = Annual, F = Final, T = Topical.  
 When 'Other' is selected, enter the term 'Other' in one field and then enter the specified type in the following field. More than one code may be selected; enter the codes in the appropriate fields.

**ASCII Examples:** , "R", "", "", "A", "", "", "", "",  
 , "R", "", "", "", "", "", "OTHER", "Bimonthly",  
 , "R", "", "", "A", "F", "", "", "",

### I.B.1.b. Dates Covered

**Description:** Enter the beginning and ending dates of the period covered by the research reported in the STI product. The dates are entered as the two-digit month, a slash, the two-digit day, a slash, and the four-digit year. The beginning date of coverage is entered first and is followed by the ending date. If the report does not have a period of coverage, enter the publication date as both the beginning and ending dates. If the report covers multiple periods, enter them in chronological order, separating them with a semicolon and a space.

**Paper Examples:** b. Dates covered . . . 01/01/1995 thru 03/31/1995 [quarterly report]  
 b. Dates covered . . . 04/00/1996 thru 04/00/1996 [publication date used]

<b><u>SGML Tag Name</u></b>	<b><u>SGML Tag</u></b>
Report Dates Covered	<RPTDTCOV>

**Comments (SGML):** This is the last subfield within the SGML group tag <BIBRPT>. When entering the date range, replace the word 'thru' with a hyphen (-). After entering the report dates covered, close with the ending group tag </BIBRPT>.

**SGML Example:** <BIBRPT><DT>R</DT><RPTTYPE>A</RPTTYPE>  
 <RPTDTCOV>01/01/1995-03/31/1995</RPTDTCOV></BIBRPT>  
 <BIBRPT><DT>R</DT><RPTTYPE>A</RPTTYPE>  
 <RPTDTCOV>01/01/1995-03/31/1995; 04/01/1995-06/30/1995</RPTDTCOV></BIBRPT>

**Comments (ASCII):** When entering the date range, replace the word 'thru' with a hyphen (-).

**ASCII Examples:** , "R", "", "", "A", "", "", "", "", "01/01/1995-03/31/1995",  
 , "R", "", "", "A", "", "", "", "", "01/01/1995-03/31/1995; 04/01/1995-06/30/1995",

### I.B.2. Conference

**Description:** Many STI products are prepared for use at a conference, meeting, seminar, congress, colloquium, symposium, or similar gathering. Information about these products should be included in this part.

**Paper Example:**   X   2. Conference

<b><u>SGML Tag Name</u></b>	<b><u>SGML Tag</u></b>
Bibliographic Information/Conference	<BIBCNF>
Type of Record	<DT>
Literary Indicator	<LI>

**Comments (SGML):** The SGML Tag <BIBCNF> is a group tag for Part I.B.2. and its subelements.

When Part I.B.2 is selected, enter SGML tag <BIBCNF>. Then enter an 'R' in the SGML tag <DT> and a 'K' in SGML tag <LI>.

**SGML Example:** <BIBCNF><DT>R</DT><LI>K</LI>

**Comments (ASCII):** When Part I.B.2 is marked, enter the letters 'RK'. Do not separate the letters.

**ASCII Example:** , "RK",

### I.B.2.a. Conference Type of Publication

**Description:** This field indicates the format of the information presented at a conference, seminar, or similar gathering. Conference products include conference papers, published proceedings, or a conference summary. A conference paper is an individual paper prepared for presentation at or presented at a conference. Published proceedings are collections that contain the full text or abstracts of papers presented at the conference. A conference summary should be submitted as a proceedings.

**Paper Examples:** a. Type  X  Conference paper   Published proceedings   Other . . .

a. Type   Conference paper . . .  X  Other (Specify)  Abstracts

a. Type . . .  X  Published Proceedings  X  Other (Specify)  Abstracts

<b><u>SGML Tag Name</u></b>	<b><u>SGML Tag</u></b>
Report Type	<RPTTYPE>
Other	<OTHER>

**Comments (SGML):** This is a subfield within the SGML group tag <BIBCNF>. Enter the code representing the type of conference literature from the following list in SGML tag <RPTTYPE>: C = Conference Paper; P = Published Proceedings. If 'Other' has been selected, enter SGML tag <RPTTYPE>, follow it with SGML tag <OTHER>, and then the free form text included in the form. Use of a letter and the <OTHER> tag is allowed. Do not separate the letter and the <OTHER> tag.

**SGML Examples:** <BIBCNF><DT>R</DT><LI>K</LI><RPTTYPE>C</RPTTYPE>

<BIBCNF><DT>R</DT><LI>K</LI><RPTTYPE>  
<OTHER>Abstracts</OTHER></RPTTYPE>

<BIBCNF><DT>R</DT><LI>K</LI><RPTTYPE>P  
<OTHER>Abstracts</OTHER></RPTTYPE>

**Comments (ASCII):** Allow a separate comma, quote, end quote, comma, sequence for each type of publication listed on the form. Enter the code representing the type of conference literature from the following list in the appropriate field: C =



c. Conference location . . . Tucson, AZ (US); Washington, DC (US)

<b><u>SGML Tag Name</u></b>	<b><u>SGML Tag</u></b>
Conference Place	<CL>

**Comments (SGML):** This is a subfield within the SGML group tag <BIBCNF>.

**SGML Examples:** <BIBCNF><DT>R</DT><LI>K</LI><RPTTYPE>C  
</RPTTYPE><CTE>Waste management 1993</CTE><CL>Tucson, AZ  
(US)</CL>

<BIBCNF><DT>R</DT><LI>K</LI><RPTTYPE>C  
</RPTTYPE><CTE>Waste management 1993</CTE><CL>Tucson, AZ (US);  
Washington, DC (US)</CL>

**Comments (ASCII):** Multiple locations should be separated by a semicolon and a space within the field.

**ASCII Examples:** , "RK", "C", "", "", "", "Waste management 1993", "Tucson, AZ (US)",  
"RK", "C", "", "", "", "Waste management 1993", "Tucson, AZ (US); Washington, DC  
(US)",

#### I.B.2.d. Conference Dates

**Description:** The beginning and ending dates of the conference are entered here. The conference dates are entered as the two-digit month, a slash, the two-digit day, a slash, and the four-digit year. The beginning date of the conference is entered first and is followed by the ending date of the conference. If the conference was held on only one day, enter the day, the month, and the year as both the beginning and ending date.

For SGML and ASCII input, if the conference was held on more than one date, enter all the dates in this part, separate multiples with a semicolon and space. If titles for two or more conferences occurring on different dates were entered in Part I.B.2.b., enter the dates in the same order as the titles were entered; separate multiples with a semicolon and space.

**Paper Examples:** d. Conference dates . . . 02/25/1995 thru 02/25/1995  
d. Conference dates . . . 02/25/1995 thru 02/28/1995  
d. Conference dates . . . 12/30/1994 thru 01/02/1995

<b><u>SGML Tag Name</u></b>	<b><u>SGML Tag</u></b>
Conference Dates	<CD>

**Comments (SGML):** This is a subfield within the SGML group tag <BIBCNF>. Replace the word 'thru' with a hyphen (-).

**SGML Examples:** <BIBCNF><DT>R</DT><LI>K</LI><RPTTYPE>C  
</RPTTYPE><CTE>Waste management 1993</CTE>  
<CL>Tucson, AZ (US)</CL><CD>02/25/1995-02/25/1995</CD>  
  
<BIBCNF><DT>R</DT><LI>K</LI><RPTTYPE>C </RPTTYPE><CTE>Waste

management 1993</CTE><CL>Tucson, AZ (US)</CL><CD>02/25/1995-02/28/1995</CD>

<BIBCNF><DT>R</DT><LI>K</LI><RPTTYPE>C  
</RPTTYPE><CTE>Waste management 1993</CTE>  
<CL>Tucson, AZ (US)</CL><CD>12/30/1994-01/02/1995</CD>

<BIBCNF><DT>R</DT><LI>K</LI><RPTTYPE>C </RPTTYPE><CTE>Waste  
management 1993</CTE><CL>Tucson, AZ (US)</CL><CD>02/25/1995-  
02/28/1995; 3/25/1995-03/28/1995</CD>

**Comments (ASCII):** Replace the word 'thru' with a hyphen (-).

**ASCII Examples:** , "RK", "C", "", "", "", "Waste management 1993", "Tucson, AZ (US)", "02/25/1995-02/28/1995",

, "RK", "C", "", "", "", "Waste management 1993", "Tucson, AZ (US)", "02/25/1995-02/28/1995",

, "RK", "C", "", "", "", "Waste management 1993", "Tucson, AZ (US)", "12/30/1994-01/02/1995",

, "RK", "C", "", "", "", "Waste management 1993", "Tucson, AZ (US)", "02/25/1995-02/28/1995; 03/25/1995-03/28/1995",

#### I.B.2.e. Conference Sponsors

**Description:** The organization(s) sponsoring the conference is entered here. Enter the name of the sponsor as given on the STI product or other source of conference information. More than one sponsor may be present; multiples are separated with a semicolon and a space. If titles for two or more conferences were entered in Part I.B.2.b., enter sponsors in the same order as the titles were entered; it is not necessary to repeat a sponsor that sponsored two or more of the conferences.

**Paper Examples:** e. Conference sponsor(s) American Nuclear Society

e. Conference sponsor(s) DOE; NRC

<b><u>SGML Tag Name</u></b>	<b><u>SGML Tag</u></b>
Conference Sponsor	<CNFSPNS>

**Comments (SGML):** This is the last subfield within the SGML group tag <BIBCNF>. After entering the conference sponsor, close with the ending group tag </BIBCNF>.

**SGML Example:** <BIBCNF><DT>R</DT><LI>K</LI><RPTTYPE>C </RPTTYPE><CTE>Waste  
Management 1993</CTE><CL>Tucson, AZ (US)</CL><CD>02/25/1995-  
02/28/1995 </CD><CNFSPNS>American Nuclear Society</CNFSPNS>  
</BIBCNF>

<BIBCNF><DT>R</DT><LI>K</LI><RPTTYPE>C </RPTTYPE><CTE>Waste  
Management 1993</CTE><CL>Tucson, AZ (US)</CL><CD>02/25/1995-  
02/28/1995 </CD><CNFSPNS>DOE; NRC</CNFSPNS></BIBCNF>

**Comments (ASCII):** Multiple sponsors should be separated by a semicolon and a space within the field.

**ASCII Examples:** , "RK", "C", "", "", "", "Waste management 1993", "Tucson, AZ (US)", "02/25/1995-02/28/1995", "American Nuclear Society",  
 , "RK", "C", "", "", "", "Waste management 1993", "Tucson, AZ (US)", "02/25/1995-02/28/1995", "DOE; NRC",

### I.B.3. Software

**Description:** This part is used for designating scientific and technical software products developed for DOE or others at DOE facilities. Software consists of computer programs and routines and includes subroutines, related groups of routines, or programs and databases. Software products include the software and the associated supporting documentation. The software and documentation may be provided on different media, e.g., the software may be on diskettes, 8mm cassettes, 1/4-inch cartridges, magnetic tapes, or CDS, and the associated documentation may be in paper or electronic format.

In accordance with DOE G 1430.1D-1, scientific and technical software (unlimited, copyrighted, or controlled access) should be submitted to the DOE Energy Science and Technology Software Center (ESTSC) located at OSTI. Submit software that is not site specific and is of use to others. To obtain required forms and instructions, contact ESTSC at (423) 576-2606 or fax (423) 576-6436 or E-mail [estsc@adonis.osti.gov](mailto:estsc@adonis.osti.gov).

**Paper Example:**   X   3. Software

<b><u>SGML Tag Name</u></b>	<b><u>SGML Tag</u></b>
Bibliographic Information/Software	<BIBSOFT>
Type of Record	<DT>

**Comments (SGML):** The SGML Tag <BIBSOFT> is the group tag for Part I.B.3. When Part I.B.3. is selected, enter SGML tag <BIBSOFT>, then enter 'CM' in the SGML tag <DT>. Because there are no subelements for Part I.B.3., enter the ending group tag </BIBSOFT>.

**SGML Example:** <BIBSOFT><DT>CM</DT></BIBSOFT>

**Comments (ASCII):** Enter 'CM' when entry Part I.B.3. is selected.

**ASCII Example:** , "CM",

### I.B.4. Other

**Description:** 'Other' types of products include data files, theses, or other information products not covered by Part I.B.1., 2. or 3. Specify the type of product.

**NOTE:** Reprints of journal articles, book chapters, and other published STI products should be submitted to OSTI without use of DOE F 1332.15. If the reprint is to be credited to a specific contract or grant, indicate this on the reprint. Information from reprints is included in OSTI databases. Due to copyright issues, OSTI does not maintain a record copy of reprints.

**Paper Example:**   X   4. Other . . . data file

<b><u>SGML Tag Name</u></b>	<b><u>SGML Tag</u></b>
Bibliographic Information/Other	<BIBOTH>
Type of Record	<DT>
Other	<OTHER>

**Comments (SGML):** The SGML Tag <BIBOTH> is the group tag for Part I.B.4.

Enter SGML tag <BIBOTH>, then enter the letter 'O' in the SGML tag <DT>, the SGML tag <OTHER>, and the free form text. Close with the SGML ending tag </BIBOTH>.

**SGML Example:** <BIBOTH><DT>O</DT><OTHER>data file</OTHER></BIBOTH>

**Comments (ASCII):** When Part I.B.4. is selected, enter the letter O in one field and the type of product in the following field.

**ASCII Example:** , "O", "data file",

### **I.C. Information Product Format**

This Part provides information on the physical or electronic carrier used for the STI product. Any STI product submitted should be in a form that can serve as the official permanent record copy. The submission should be of sufficient quality to allow successful scanning, printing or reproduction.

#### **I.C.1. Product not submitted to OSTI**

At this time all STI products should be submitted to OSTI. Because Part I.C.1. is expected to be available in the future, information on completing Parts I.C.1.a., b., and c. is included here.

**Paper Example:**  1. Product not submitted to OSTI

**NOTE:** Even though STI products are submitted to OSTI, an alternate availability, especially for electronic formats, may be reported in Part I.C.3.

<b><u>SGML Tag Name</u></b>	<b><u>SGML Tag</u></b>
Not Submitted to OSTI	<NTSBOSTI>

**Comments (SGML):** The SGML tag <NTSBOSTI> is a group tag for Part I.C.1. and its subelements. When Part I.C.1. is selected, enter the SGML tag <NTSBOSTI>.

**SGML Example:** <NTSBOSTI>

**Comments (ASCII):** Enter the phrase 'Product not submitted to OSTI' when this part is selected.

**ASCII Example:** , "Product not submitted to OSTI",

#### **I.C.1.a. Product Location**

**Description:** Provide a complete address sufficient to access a complete copy of the STI product, such as the FTP (File Transfer Protocol) site or the URL (Uniform Resource Locator). More than one address may be entered; separate addresses with a semicolon and a space.

**NOTE:** For products submitted to OSTI that are also available at an electronic site, the electronic address (FTP, URL, etc.) may be entered in Part I.C.3.

**Paper Example:** a. Location (FTP, URL, etc.) URL http://\*\*\*\*\*

**SGML Tag Name**  
Electronic Address

**SGML Tag**  
<ELECADDR>

**Comments (SGML):** This is a subfield within the SGML group tag <NTSBOSTI>. Enter the SGML tag <NTSBOSTI>, the phrase "Available at" and the location.

**SGML Example:** <NTSBOSTI><ELECADDR>Available at URL http://\*\*\*\*\* </ELECADDR>

**Comments (ASCII):** Enter the phrase 'Available at' followed by the location.

**ASCII Example:** , "Product not submitted to OSTI", "Available at URL http://\*\*\*\*\*",

### I.C.1.b. File Format

This field identifies the file format in that the full text has been made available via a network or computer-generated medium. The following file formats have been designated as standard Departmental formats for electronic document exchange:

- SGML (Standard Generalized Markup Language)
- HTML (Hypertext Markup Language)
- Postscript
- PDF (Adobe Acrobat Portable Document Format)
- TIFFG4 (Tagged Image File Format Group 4)

These formats are described in the paragraphs below. See DOE G 1430.1D-1, *Guide to the Management of Scientific and Technical Information*, Part II, Chapter 5 (revised)) for additional information on the electronic exchange of Departmental information.

**Standard Generalized Markup Language (SGML)**, ISO 8879, is recognized as the best business practice for document interchange. SGML is a flexible and neutral data format, independent of proprietary formats, and universally accessible. SGML facilitates reuse and automation, and it has few limitations in its ability to express complex scientific and technical information. In addition, SGML satisfies all foundational assumptions identified in Paragraph 5.2 of DOE G 1430.1D-1, Part II, and is currently the Department's document format of choice for the electronic exchange of information.

**Hypertext Markup Language (HTML)** is an application of SGML that has a specific Document Type Definition (DTD) and fixed tag set. Because HTML is a neutral data format and universally accessible, it is an acceptable transitional document exchange format. Although HTML does have limitations in terms of its ability to express complex documents, such as STI, it is viewed as a viable interim option.

**Postscript** is a page description language that allows documents to be transmitted electronically with all original formatting and graphics intact. OSTI is currently accepting Postscript as an exchange format because, in addition to being an established industry standard for document printing, it is a format that is easily converted to other media (e.g., paper, fax, PDF, image formats, etc.). Postscript files can be saved from a standard word processing package such as Microsoft Word or Corel's WordPerfect. Once created, the Postscript files can be delivered electronically to OSTI.

**Portable Document Format (PDF)** is a proprietary format owned by Adobe Systems Incorporated, that can best be described as an enhancement of the Postscript format. The PDF format maintains almost complete fidelity to the original document and is an efficient solution for providing electronic access to documents. Through the use of Adobe's Acrobat™ PDF Writer driver, PDF files can be created by printing to PDF from word processing and other desktop publishing applications. By using a viewing application such as Adobe™ Acrobat™, PDF files can be browsed on-screen or they can be printed to local or remote printers.

**TIFF Group 4 (TIFFG4)** is an acceptable interim format for electronic exchange of STI that is currently being used for a number of DOE and DOE contractor activities. To ensure consistency, the standard for submissions to OSTI is TIFF CCITT Group 4 as indicated in DOE G 1430.1D-1, Part II, Chapter 5 (revised).

**Description:** Mark the file format being used for the full text. Check 'Other' **only** when special arrangements have been made with OSTI to provide an STI product in a non-standard format. If the file is available in more than one format, indicate all the formats in that it is available.

When the STI product is text, e.g., a report or conference paper, the format should be one of the standard formats unless special arrangements have been made with OSTI to send the product in a non-standard format. If arrangements have been made to send a non-standard format, select 'Other' and specify the format.

When the STI product is not text, e.g., a data file, select 'Other' and specify the file format.

- Paper Examples:**
- b. File format \_SGML \_HTML \_Postscript \_PDF \_TIFFG4 . . .
  - b. File format \_SGML . . . \_Other (Specify) WordPerfect 6.1
  - b. File format \_SGML . . . \_Other (Specify) WordPerfect 6.1

<b><u>SGML Tag Name</u></b>	<b><u>SGML Tag</u></b>
File Description	<FILEDESC>
Other	<OTHER>

**Comments (SGML):** This is a subfield within the SGML group tag <NTSBOSTI>. Enter the format name in SGML tag <FILEDESC>. If 'Other' is selected, enter SGML tag <OTHER> and then the free form text designating the format. More than one format may be selected. Separate formats by a semicolon and a space. Do not enter a semicolon and space between a format name and the <OTHER> tag.

- SGML Examples:**
- ```
<NTSBOSTI><ELECADDR>Available at URL http://*****</ELECADDR>
<FILEDESC>SGML</FILEDESC>
```
- ```
<NTSBOSTI><ELECADDR>Available at URL http://*****</ELECADDR>
<FILEDESC><OTHER>WordPerfect 6.1</OTHER></FILEDESC>
```
- ```
<NTSBOSTI><ELECADDR>Available at URL http://*****</ELECADDR>
<FILEDESC>SGML<OTHER>WordPerfect 6.1</OTHER></FILEDESC>
```



, "Product not submitted to OSTI", "Available at URL  
http://\*\*\*\*\*", "SGML", " ", " ", " ", " ", " ", " ", " ", "Available at URL http://\*\*\*\*\*", "

### I.C.2. Product Submitted to OSTI

**Description:** An STI product may be submitted to OSTI via an electronic network, as audiovisual material (e.g., audio- or videocassette), as a computer medium (e.g., CDS, diskettes, magnetic tapes), or in paper. Complete this section when submitting one or more copies of the information product to OSTI.

**Paper Example:**  2. Product submitted to OSTI

| <b>SGML Tag Name</b> | <b>SGML Tag</b> |
|----------------------|-----------------|
| Submitted to OSTI    | <SBMTOSTI>      |

**Comments (SGML):** The SGML tag <SBMTOSTI> is a group tag for Part I.C.2. and its subelements. When Part I.C.2. is selected, enter the SGML tag <SBMTOSTI>.

**SGML Example:** <SBMTOSTI>

**Comments (ASCII):** Enter the phrase 'Product submitted to OSTI' when the STI product will be sent to OSTI.

**ASCII Example:** , "Product submitted to OSTI",

#### I.C.2.a. Number of Copies Submitted

**Description:** Indicate the number of copies of the STI product being sent to OSTI according to the following specifications.

For questions concerning the number of copies to provide to OSTI for distribution or questions related to printing or reproduction, call: (423) 576-1191.

OSTI will expect the following number of copies for each option:

- (1) Unclassified processing: Submit only two copies for unclassified processing unless program distribution (Option 2) is requested for paper, audiovisual material, or computer medium, such as diskette or CD. Choose Option 6 if the STI product is sent via a network.
- (2) Program unclassified distribution: For program unclassified distribution of paper, audiovisual, or computer media, submit the number of copies specified in the latest edition of DOE/OSTI--4500, *Program Distribution for Unclassified Scientific and Technical Reports - Instructions and Category Scope Notes*. Program unclassified distribution of electronic STI products sent over a network is not currently available.
- (3) Classified processing: Send one copy for classified processing.

**NOTE:** This option cannot be selected via the WWW version of the form.

- (4) Standard classified distribution: Send the number of copies specified in the latest edition of DOE/OSTI--3679, *Standard Distribution for Classified Scientific and Technical Reports - Instructions and Category Scope Notes*, for standard classified distribution.

**NOTE:** This option cannot be selected via the WWW version of the form.

- (5) Reproduction by OSTI: For paper submissions, provide one completely legible original reproducible paper copy per guidance in DOE G 1430.1D-1. A high-contrast photocopy is acceptable as a second copy. For audiovisual materials or computer media, provide two reproducible copies. Complete Part I.C.3. - *Additional instructions/explanation*, e.g., indicate the number of copies to be reproduced by OSTI. OSTI must have funding available in deposit accounts for any printing or other reproduction requests prior to initiation of the request.
- (6) Other: Complete Part I.C.3. - *Additional instructions/explanations*. Select this option when sending full text via a network and indicate the type of transmittal in Part I.C.3. Also select this option for special directed distribution. Indicate the number of copies being sent in Part I.C.3.

**NOTE:** OSTI converts paper copy documents to an electronic form via scanning. The quality of the scanned product is directly affected by the quality of the original product. The following issues may affect the quality of the scanned product:

- Information printed on the cover needs to contrast clearly with the cover.
- Covers printed in dark colors do not scan well.
- Color photographs do not scan well.
- The page margins should be no less than 1 inch.
- Use 10 or 12 point serif type size for report text. For non-text matter (e.g., footnotes and indexes), the smallest acceptable type size is 8 point.
- Page size for technical reports should be the standard 8-1/2 x 11 inches.
- Use portrait orientation.

**Paper Examples:**  (1) Two for unclassified processing  
 (5)   2   copies for OSTI to reproduce  
 (6) Other

| <b>SGML Tag Name</b> | <b>SGML Tag</b> |
|----------------------|-----------------|
| Copies Submitted     | <CPYSBMT>       |
| Copy Option 1        | <UNCL>          |
| Copy Option 2        | <STD>           |
| Copy Option 3        | <CLAS>          |
| Copy Option 4        | <CLASSTD>       |
| Copy Option 5        | <REPRO>         |
| Copy Option 6        | <OTHER>         |

**Comments (SGML):** The SGML tag <CPYSBMT> is a subgroup tag within the group tag <SBMTOSTI>. Process the options as follows:

If Option 1 is selected, enter the subgroup tag <CPYSBMT>, tag <UNCL>, and a '2.'

**SGML Examples:** <SBMTOSTI><CPYSBMT><UNCL>2</UNCL></CPYSBMT>

If Option 2 is selected, enter the subgroup tag <CPYSBMT>, tag <STD>, and the number of copies provided.

<SBMTOSTI><CPYSBMT><STD>28</STD></CPYSBMT>

Option 3 should not be selected on the electronic version of DOE F 1332.15.

Option 4 should not be selected on the electronic version of DOE F 1332.15.

This information will be announced to the DOE community on a need to know basis. This information should **not** be transferred to OSTI on open systems networks such as the Internet.

If Option 5 is selected, enter the subgroup tag <CPYSBMT>, tag <REPRO>, and the number of copies being sent for reproduction. Enter number of copies in Part I.C.3.

<SBMTOSTI><CPYSBMT><REPRO>2</REPRO></CPYSBMT>

If Option 6 is selected, enter the subgroup tag <CPYSBMT>, and the tag <OTHER>.

<SBMTOSTI><CPYSBMT><OTHER></OTHER></CPYSBMT>

**Comments (ASCII):** Each copy selection is treated as a separate field.

**ASCII Examples:** , "Product submitted to OSTI", "X", "", "", "", "", "", "", "", "", "", [OPTION 1]  
 , "Product submitted to OSTI", "", "", "", "", "X", "28", "", "", "", [OPTION 2]  
 , "Product submitted to OSTI", "", "", "", "", "", "X", "2", "", [OPTION 5]  
 , "Product submitted to OSTI", "", "", "", "", "", "", "", "", "OTHER", [OPTION 6]

#### I.C.2.b. SGML Bibliographic Record Availability

**Description:** This field is used to indicate the availability of an SGML-formatted bibliographic record prepared in accordance with DOE/OSTI--11685, *Guide for Transmitting Standard Generalized Markup Language (SGML) Encoded Bibliographic Records*.

If an SGML-tagged bibliographic record is attached to the STI product, mark 'with product.' If the record is available separately, mark 'separately' and indicate availability.

**NOTE:** This bibliographic information can be included in the DOE F 1332.15, in that case a separate bibliographic record is not needed.

**Paper Examples:** b. SGML bibliographic record submitted . . .  X  With product   Separately . . .  
 b. SGML bibliographic record submitted. . .  X  Separately (specify)  
  SRS.951015

| <b>SGML Tag Name</b>                   | <b>SGML Tag</b> |
|----------------------------------------|-----------------|
| SGML Bibliographic Record Availability | <SGMLBRAV>      |

**Comments (SGML):** The SGML tag <SGMLBRAV> is a subgroup tag within the group tag <SBMTOSTI>.

If the option 'With product' is selected, enter 'Available with product.' If the option 'Separately' is selected, enter 'Available at,' a space, and the free form text specifying the location or filename where the bibliographic record may be found.

**SGML Examples:** <SBMTOSTI><CPYSBMT><UNCL>2</UNCL></CPYSBMT>  
<SGMLBRAV>Available with product </SGMLBRAV>

<SBMTOSTI><CPYSBMT><UNCL>2</UNCL></CPYSBMT>  
<SGMLBRAV>Available at SRS.951015 </SGMLBRAV>

**Comments (ASCII):** If the option 'With product' is selected, enter 'Available with product.' If the option 'Separately' is selected, enter the phrase 'Available separately' in one field and the free form text specifying the location or filename where the bibliographic record may be found in the following field..

**ASCII Example:** , "Product submitted to OSTI", "2", "", "", "", "", "", "", "", "", "", "Available with product", "", "",  
,"Product submitted to OSTI", "2", "", "", "", "", "", "", "", "", "", "Available separately"  
,"SRS.951015",

### I.C.2.c. Method of Transmittal to OSTI

This part indicates how the STI product will be transmitted to OSTI: electronically via a network or other computer medium, as an audiovisual product, or as paper.

#### I.C.2.c.(1) Electronic

**Description:** Use this field for computer-generated products sent to OSTI over a network, e.g., FTP, E-mail.

When the STI product is text, e.g., a report or conference paper, the format should be one of the standard formats (SGML, HTML, Postscript, PDF, TIFFG4) unless special arrangements have been made with OSTI to send the product in a non-standard format. If arrangements have been made to send a non-standard format, select 'Other' and specify the format.

When the STI product is not text, e.g., a data file, select 'Other' and specify the file format.

**Paper Example:**  X  (1) Electronic

|                               |                 |
|-------------------------------|-----------------|
| <b>SGML Tag Name</b>          | <b>SGML Tag</b> |
| Transmittal Method/Electronic | <TRANSELC>      |

**Comments (SGML):** This is a subgroup tag within the group tag <SBMTOSTI>. If Part I.C.2.c.(1) is selected, enter the subgroup tag <TRANSELC>

**SGML Example:** <SBMTOSTI><CPYSBMT><UNCL>2</UNCL></CPYSBMT><SGMLBRAV>  
Available with product</SGMLBRAV><TRANSELC>

**Comments (ASCII):** Enter the word 'Electronic' when this part is selected.

**ASCII Example:** , "Product submitted to OSTI", "2", "", "", "", "", "", "", "", "", "Available with  
product", "", "", "Electronic",

**I.C.2.c.(1)(a) File Format**

**Description:** Information about the file format used for exchanging the STI product is entered here. Standard Departmental formats for electronic document exchange are SGML, HTML, Postscript, PDF, and TIFFG4 (Reference Part I.C.1.b.). See DOE G 1430.1D-1, *Guide to the Management of Scientific and Technical Information*, Part II, Chapter 5 (revised)) for additional guidance on the electronic exchange of information.

If the file is submitted in two or more formats, all formats in that it is submitted should be selected.

**Examples:** (a) File format  SGML  HTML  Postscript  PDF  TIFFG4 . . .

(a) File format  SGML . . .  Other (Specify) WordPerfect 6.1

(a) File format  SGML . . .  Other (Specify) WordPerfect 6.1

**SGML Tag Name**

File Description

Other

**SGML Tag**

<FILEDESC>

<OTHER>

**Comments (SGML):** This is the only subfield within the subgroup tag <TRANSELC>. Enter the format name in SGML tag <FILEDESC>. If 'Other' is checked, the format should be specified. Enter SGML tag <OTHER> and then the free form text specifying the format. After entering the file format, close with the ending subgroup tag </TRANSELC> and ending group tag </SBMTOSTI>.

If the file is sent to OSTI in more than one format, enter all of the formats. Separate formats by a semicolon and a space. Do not enter a semicolon and space between a format name and the <OTHER> tag.

**SGML Examples:** <SBMTOSTI><CPYSBMT><UNCL>2</UNCL></CPYSBMT><SGMLBRAV> Available with product</SGMLBRAV><TRANSELC><FILEDESC>SGML </FILEDESC></TRANSELC></SBMTOSTI>

<SBMTOSTI><CPYSBMT><UNCL>2</UNCL></CPYSBMT><SGMLBRAV> Available with product </SGMLBRAV><TRANSELC><FILEDESC><OTHER> WordPerfect 6.1</OTHER></FILEDESC></TRANSELC></SBMTOSTI>

<SBMTOSTI><CPYSBMT><UNCL>2</UNCL></CPYSBMT><SGMLBRAV> Available with product</SGMLBRAV><TRANSELC><FILEDESC>SGML <OTHER> WordPerfect 6.1</OTHER></FILEDESC></TRANSELC> </SBMTOSTI>

**Comments (ASCII):** Each file format is entered in a separate field. When 'Other' has been selected, enter the word 'Other' in one field and the file format in the following field. If more than one format is selected, enter the format designations in the appropriate fields.

**ASCII Examples:** , "Product submitted to OSTI", "2", "", "", "", "", "", "", "", "", "", "Available with product", "", "", "Electronic", "SGML", "", "", "", "", "", "", "", "", "", ""

, "Product submitted to OSTI", "2", "", "", "", "", "", "", "", "", "", "Available with product", "", "", "Electronic", "", "", "", "", "", "OTHER", "WordPerfect 6.1", "", ""





When the STI product is text, e.g., a report or conference paper, the format should be one of the standard formats unless special arrangements have been made with OSTI to send the product in a non-standard format. If arrangements have been made to send a non-standard format, select 'Other' and specify the format.

When the STI product is not text, e.g., a data file, select 'Other' and specify file format.

If the file is submitted in two or more formats, all formats in that it is submitted should be selected.

**Paper Examples:** (d) File format  SGML  HTML  Postscript  PDF  TIFFG4 . . .

(d) File format  SGML . . .  Other (Specify) WordPerfect 6.1

(d) File format  SGML . . .  Other (Specify) WordPerfect 6.1

**SGML Tag Name**

File Description

Other

**SGML Tag**

<FILEDESC>

<OTHER>

**Comments (SGML):** This is the last subfield in the subgroup tag <TRANSCM>. Enter the format name in the SGML tag <FILEDESC>. If 'Other' is checked, the format used should be specified. Enter SGML tag <OTHER> and then the free form text specifying the format. After entering the file format, close with the ending subgroup tag </TRANSCM> and the ending group tag </SBMTOSTI>.

More than one format may be selected. When formatting SGML, separate formats by a semicolon and a space. Do not enter a semicolon and space between a format name and the <OTHER> tag.

**SGML Examples:** <SBMTOSTI><CPYSBMT><UNCL>2</UNCL></CPYSBMT><SGMLBRAV>Available with product</SGMLBRAV><TRANSCM><QNTYPMED>1 3.5 inch diskette</QNTYPMED><MACHCOMP> IBM PC-compatible, hard disk, 16 MB</MACHCOMP><OPSYST>Windows 95</OPSYST><FILEDESC>**SGML**</FILEDESC></TRANSCM></SBMTOSTI>

<SBMTOSTI><CPYSBMT><UNCL>2</UNCL></CPYSBMT><SGMLBRAV>Available with product</SGMLBRAV><TRANSCM><QNTYPMED>1 3.5 inch diskette</QNTYPMED><MACHCOMP>IBM PC-compatible, hard disk, 16 MB</MACHCOMP><OPSYST> Windows 95</OPSYST><FILEDESC><OTHER>**WordPerfect 6.1**</OTHER></FILEDESC></TRANSCM></SBMTOSTI>

<SBMTOSTI><CPYSBMT><UNCL>2</UNCL></CPYSBMT><SGMLBRAV>Available with product</SGMLBRAV><TRANSCM><QNTYPMED>1 3.5 inch diskette</QNTYPMED><MACHCOMP>IBM PC-compatible, hard disk, 16 MB</MACHCOMP><OPSYST> Windows 95</OPSYST><FILEDESC>**SGML**<OTHER>**WordPerfect 6.1**</OTHER></FILEDESC></TRANSCM></SBMTOSTI>

**Comments (ASCII):** Each file format is entered in a separate field. When 'Other' has been selected, enter the word 'Other' in one field and the file format in the following field. If more than one format is selected, enter the format designations in the appropriate fields.









- Paper Examples:** X 3. Additional instructions/explanations Mailing list is attached.
- X 3. Additional instructions/explanations 1 copy sent via FTP.
- X 3. Additional instructions/explanations I.B.2.d. additional date, 05/01/96 thru 05/10/96.

|                                 |                        |
|---------------------------------|------------------------|
| <b><u>SGML Tag Name</u></b>     | <b><u>SGML Tag</u></b> |
| Information Product Format Note | <IPFRMNT>              |

**Comments (SGML):** Enter the additional instructions as free form text.

**SGML Example:** <IPFRMNT>Mailing list is attached.</IPFRMNT>

<IPFRMNT>1 copy sent via FTP.</IPFRMNT>

<IPFRMNT>I.B.2.d. additional date, 05/01/96 thru 05/10/96.</IPFRMNT>

**Comments (ASCII):** Enter the additional instructions as free form text.

**ASCII Examples:** , "Mailing list is attached.",

, "1 copy sent via FTP.",

, "I.B.2.d. additional date, 05/01/96 thru 05/10/96.",

#### I.D. Contact

**Description:** Provide name, position, telephone, organization and E-mail address for a person familiar with the STI product whom OSTI can contact if additional information is needed for processing the product. This contact person may or may not be the author of the STI product.

**Paper Example:** Name James Smith Position Research Manager Phone 423-576-0000  
Organization ItCanHappen E-Mail smithj@ccmail.ich.com

|                                 |                        |
|---------------------------------|------------------------|
| <b><u>SGML Tag Name</u></b>     | <b><u>SGML Tag</u></b> |
| Contact                         | <CONTACT>              |
| Contact Personal Name           | <CTPERSNM>             |
| Contact Position                | <CTPOSITN>             |
| Contact Telephone Number        | <CTPHONE>              |
| Contact Organizational Name     | <CTORGNAME>            |
| Contact Electronic Mail Address | <CTE-mail>             |

**Comments (SGML):** The five subfields are enclosed in the group tag <CONTACT>. Use SGML tag <CTPERSNM>, for 'Name'. Use SGML tag <CTPOSITN>, for 'Position'. Use SGML tag <CTPHONE>, for 'Phone'. Use SGML tag <CTORGNAME> for 'Organization', and SGML tag <CTE-mail> for E-mail.

**SGML Example:** <CONTACT><CTPERSNM>James Smith </CTPERSNM><CTPOSITN>Research Manager</CTPOSITN><CTPHONE>423-576-0000</CTPHONE><CTORGNAME>ItCanHappen</CTORGNAME><CTE-mail>smithj@ccmail.ich.com </CTE-mail></CONTACT>

**Comments (ASCII):** Each subfield is entered as a separate field. Enter information as free form text in each field.

**ASCII Example:** , "James Smith", "Research Manager", "423-576-0000",  
"ItCanHappen", "smithj@ccmail.ich.com",

## **PART II Information Product Announcement and Handling**

### **II.A. Recommendations for Announcement and Handling**

DOE is obligated to make available the results from federally funded work to the widest extent possible. OSTI makes distribution of STI products on behalf of DOE strictly in accordance with existing laws, regulations, and/or written DOE Program Office guidance. Recommendations to restrict access to STI products must have a legal basis or be accompanied by written programmatic guidance. Questions concerning current laws and guidance may be referred to OSTI at (423) 576-1191.

| <b><u>SGML Tag Name</u></b> | <b><u>SGML Tag</u></b> |
|-----------------------------|------------------------|
| Announcement Recommendation | <ANNRECMD>             |
| Announcement Release Date   | <ANNRELDT>             |
| Announcement Note           | <ANNNOTE>              |

**Comments (SGML):** The SGML group tag <ANNRECMD> is used for the entries in Part II.A. of DOE F 1332.15. Specific subfield tags are used for each announcement recommendation. The subfield tag for announcement release date is <ANNRELDT> and for announcement notes is <ANNNOTE>; use of each of these tags is described in the appropriate section below. The specific procedures and tags for the OpenNet information requested in II.A.4. are also described.

If more than one announcement recommendation has been selected, provide a separate entry for each as in the following example.

**SGML Example:** <ANNRECMD><ANNUNL></ANNUNL><ANNOPN>  
</ANNOPN></ANNRECMD>

**Comments (ASCII):** Each recommendation is entered in a separate field. Provide a separate entry for each recommendation when more than one announcement recommendation is selected. (Guidelines for Announcement Release Date, Announcement Notes, and OpenNet information are included in the appropriate sections).

**ASCII Example:** , "ANNUNL", "", "", "ANNOPN",

**Select at least one** of the following recommendations.

#### **II.A.1. Unlimited Announcement (Available to U.S. and non-U.S. public)**

**Description:** Select this part to allow the unrestricted, unlimited distribution of the product including announcement in the *DOE Reports Bibliographic Database* (URL <http://www.doe.gov/html/dra/dra.html>) and, when applicable, DOE distribution to appropriate addressees listed in the latest edition of DOE/OSTI--4500, *Program Distribution for Unclassified Scientific and Technical Reports - Instructions and Category Scope Notes*; electronic distribution for access by Government Printing Office (GPO) Depository Libraries maintaining energy collections; distribution to the

National Technical Information Service (NTIS) for sale to the U.S. and non-U.S. public.

**Paper Example:**      X   1. Unlimited Announcement

| <b><u>SGML Tag Name</u></b> | <b><u>SGML Tag</u></b> |
|-----------------------------|------------------------|
| Announcement Recommendation | <ANNRECMD>             |
| Announcement Unlimited      | <ANNUNL>               |

**Comments (SGML):**    When Part II.A.1. is selected, enter the SGML group tag <ANNRECMD> and the subfield tag <ANNUNL>. Because there are no other subfields, close with the ending group tag </ANNRECMD>.

**SGML Example:**        <ANNRECMD><ANNUNL></ANNUNL></ANNRECMD>

**Comments (ASCII):**    When Part II.A.1. is selected, enter the term 'ANNUNL'.

**ASCII Example:**        , "ANNUNL",

### II.A.2. Unlimited Announcement/U.S. Dissemination Only

**Description:**    STI products suitable for this designation are those that otherwise are not protectable under the Freedom of Information Act (FOIA), but whose content falls under the subject areas described in the sensitive subjects attachment of DOE Order 1240.2B, *Unclassified Visits and Assignments by Foreign Nationals*.

**Paper Example:**      X   2. Unlimited Announcement/U.S. Dissemination Only

| <b><u>SGML Tag Name</u></b>      | <b><u>SGML Tag</u></b> |
|----------------------------------|------------------------|
| Announcement Recommendation      | <ANNRECMD>             |
| Announcement Unlimited/U.S. Only | <ANNUSO>               |

**Comments (SGML):**    When Part II.A.2. is selected, enter the SGML group tag <ANNRECMD> and the subfield tag <ANNUSO>. Because there are no other subfields, close with the ending group tag </ANNRECMD>.

**SGML Example:**        <ANNRECMD><ANNUSO></ANNUSO></ANNRECMD>

**Comments (ASCII):**    When Part II.A.2. is selected, enter the term 'ANNUSO'.

**ASCII Example:**        , "", "ANNUSO",

### II.A.3. Classified

**Description:**    STI products will receive specific announcement and distribution by OSTI in accordance with the latest revision of DOE/OSTI--3679, *Standard Distribution for Classified Scientific and Technical Reports - Instructions and Category Scope Notes*. This information will be announced to the DOE community on a need to know basis. This information should **not** be transmitted to OSTI on open systems networks such as the Internet.

**Paper Example:**      X   3. Classified

| <b><u>SGML Tag Name</u></b> | <b><u>SGML Tag</u></b> |
|-----------------------------|------------------------|
| Announcement Recommendation | <ANNRECMD>             |
| Classified Announcement     | <ANNCLAS>              |

**Comments (SGML):** When Part II.A.3. is selected, enter SGML tag <ANNCLAS>. Because there are no other subfields, close with the ending group tag </ANNRECMD>.

**SGML Example:** <ANNRECMD><ANNCLAS></ANNCLAS></ANNRECMD>

**Comments (ASCII):** When Part II.A.3. is selected, enter the term 'ANNCLAS'.

**ASCII Example:** , "" , "" , "ANNCLAS" ,

#### II.A.4. OpenNet

**Description:** STI products will be announced on the Department's OpenNet Database in accordance with the Department's Openness Initiative. All STI products declassified and **determined to be publicly releasable** after October 1, 1994, must be announced on OpenNet. Additionally, older declassified STI products and any never classified STI products of significant or historical public interest may be announced in keeping with the Department's intent to be open with and accountable to the public.

When the DOE F 1332.15 for a declassified STI product is submitted to OSTI electronically, an **authoritative classification change notice** (paper only) in accordance with DOE Order 5650.2B, *Identification of Classified Information*, must also be submitted at the same time for STI documents in OSTI's classified collection.

**Paper Example:**  X  4. OpenNet

| <b><u>SGML Tag Name</u></b> | <b><u>SGML Tag</u></b> |
|-----------------------------|------------------------|
| Announcement Recommendation | <ANNRECMD>             |
| Announcement/OpenNet        | <ANNOPN>               |
| Bibliographic/OpenNet       | <BIBOPN>               |

**Comments (SGML):** When Part II.A.4. is selected, enter the SGML group tag <ANNRECMD> and the subfield tag <ANNOPN>. Next enter the subgroup tag <BIBOPN> and the subfield tags described below. Then close with the ending subfield tags </BIBOPN> and </ANNOPN> and the ending group tag </ANNRECMD>.

**SGML Example:** <ANNRECMD><ANNOPN><BIBOPN>

**Comments (ASCII):** When Part II.A.4. is selected, enter the term 'ANNOPN'.

**ASCII Example:** , "" , "" , "" , "ANNOPN" ,

#### II.A.4.a. Non-NTIS Availability

This information **must** be provided if the STI product will also be available at a location other than NTIS.

| <b><u>SGML Tag Name</u></b> | <b><u>SGML Tag</u></b> |
|-----------------------------|------------------------|
| Other Availability          | <OTHAVAIL>             |

**Comments (SGML):** The subfield tag <OTHAVAIL> is used to enclose the two subfields, <OPNACCNO> and <LOCOPN>.

**SGML Example:** <ANNRECMD><ANNOPN><BIBOPN><OTHAVAIL>

**Comments (ASCII):** Do not include a separate field for II.A.4.a. See II.A.4.a.(1) and II.A.4.a.(2).

#### II.A.4.a.(1) OpenNet Accession Number

**Description:** The Accession Number is a **unique** identifier of up to 15 alphanumeric characters only (A-Z, a-z, or 0-9), beginning with a two-character prefix identifying the controlling operations/field office (see Part II.A.4.b. below). The transmitting field or program office is responsible for assuring that the number is unique within its jurisdiction.

**Paper Example:** (1) Accession Number OR95000052

| <b>SGML Tag Name</b>     | <b>SGML Tag</b> |
|--------------------------|-----------------|
| OpenNet Accession Number | <OPNACCNO>      |

**Comments (SGML):** After entering the subfield tag <OPNACCNO>, enter the accession number as given.

**SGML Example:** <ANNRECMD><ANNOPN><BIBOPN><OTHAVAIL><OPNACCNO>  
**OR95000052</OPNACCNO>**

**Comments (ASCII):** Enter the accession number as free form text.

**ASCII Example:** , "", "", "", "ANNOPN", "OR95000052",

#### II.A.4.a.(2) Location of OpenNet Document

**Description:** This field identifies where the public may go to obtain a copy of the document at a location other than NTIS. At a minimum, this entry must contain a point of contact and enough additional information to enable a user to order a document (e.g., address, phone number, fax number, E-mail address, etc.). More than one location can be entered; separate multiple locations with a semicolon and a space.

**Paper Example:** (2) Document Location Oak Ridge Public Document Reading Room, 200 Administration Road, Room G-217, Oak Ridge, TN 37830, 423-576-1216 or 423-241-4780

| <b>SGML Tag Name</b>         | <b>SGML Tag</b> |
|------------------------------|-----------------|
| Location of OpenNet Document | <LOCOPN>        |

**Comments (SGML):** Enter the subgroup tag <LOCOPN> followed by the location information as free form text. The subfield ending tag </OTHAVAIL> follows this subfield.

**SGML Example:** <ANNRECMD><ANNOPN><BIBOPN><OTHAVAIL><OPNACCNO>  
**OR95000052</OPNACCNO><LOCOPN>Oak Ridge Public Document Reading Room, 200 Administration Road, Room G-217, Oak Ridge, TN 37830, 423-576-1216 and 423-241-4780</LOCOPN></OTHAVAIL>**

**Comments (ASCII):** Enter the location information as free form text within a single field.

**ASCII Example:** , "", "", "", "ANNOPN", "OR95000052", "Oak Ridge Public Document Reading Room, 200 Administration Road, Room G-217, Oak Ridge, TN 37830, 423-576-1216 and 423-241-4780",

#### II.A.4.b. OpenNet Field Office Acronym

**Description:** Use the appropriate acronym provided in ' "OPENNET" DeClassified Information Database Data Input Specifications,' revised December 15, 1994, to indicate the appropriate field or program office. (Copies are available from OSTI.) The following offices are included in the current listing:

|    |                                             |
|----|---------------------------------------------|
| AL | Albuquerque Operations Office               |
| CH | Chicago Operations Office                   |
| CI | Congressional and Intergovernmental Affairs |
| DP | Defense Programs                            |
| EH | Environment, Safety and Health              |
| EM | Environmental Management                    |
| ER | Energy Research                             |
| GC | General Counsel                             |
| GF | Golden Field Office                         |
| HR | Human Resources and Administration          |
| ID | Idaho Operations Office                     |
| IG | Inspector General                           |
| NE | Nuclear Energy                              |
| NN | Nonproliferation and National Security      |
| NV | Nevada Operations Office                    |
| OO | Oakland Operations Office                   |
| OR | Oak Ridge Operations Office                 |
| PO | Policy, Planning and Program Evaluation     |
| RF | Rocky Flats Field Office                    |
| RL | Richland Operations Office                  |
| SR | Savannah River Operations Office            |

**Paper Example:** b. Field Office Acronym OR

| <u>SGML Tag Name</u>      | <u>SGML Tag</u> |
|---------------------------|-----------------|
| OpenNet Field Office Code | <OPNFOCD>       |

**Comments (SGML):** Enter the acronym in SGML tag <OPNFOCD>.

**SGML Example:** <ANNRECMD><ANNOPN><BIBOPN><OTHAVAIL><OPNACCNO>  
OR95000052</OPNACCNO><LOCOPN>Oak Ridge Public Document Reading  
Room, 200 Administration Road, Room G-217, Oak Ridge, TN 37830, 423-576-  
1216 and 423-241-4780</LOCOPN></OTHAVAIL>  
<OPNFOCD>OR</OPNFOCD>

**Comments (ASCII):** Enter the appropriate field office acronym.

**ASCII Example:** ,",",",",", "ANNOPN", "OR95000052", "Oak Ridge Public Document Reading Room,  
200 Administration Road, Room G-217, Oak Ridge, TN 37830, 423-576-1216  
and 423-241-4780", "OR",

#### II.A.4.c. OpenNet Declassification Status and OpenNet Declassification Date

**Description:** This information is required for all declassified or sanitized documents being entered into OpenNet.

Provide the declassification date for any document that has been declassified and determined to be publicly releasable. Select 'Sanitized' for documents with portions deleted for privacy or security reasons and enter the date in the declassification date field. Select 'Never classified' for any STI product of significant or historical public interest that has never been classified and that is being announced in keeping with the Department's intent to be open with and accountable to the public. Do not use 'Never classified' for any STI product that has declassified or sanitized sections.

**Paper Examples:** c. Declassification date . . . 12/30/1995 \_\_\_ Sanitized \_\_\_ Never classified

c. Declassification date . . . \_\_\_ Sanitized X Never classified

| <u>SGML Tag Name</u>    | <u>SGML Tag</u> |
|-------------------------|-----------------|
| Declassification Status | <DECLST>        |
| Declassification Date   | <DECLDT>        |

**Comments (SGML):** When 'Sanitized' has been selected, enter an 'S,' and if 'Never classified' has been selected, enter an 'N.' Enter the declassified date provided for declassified or sanitized products as given in SGML tag <DECLDT>. After these fields are entered, enter the closing subfield tags </BIBOPN> and </ANNOPN> and the ending group tag </ANNRECMD>.

**SGML Examples:** <ANNRECMD><ANNOPN><BIBOPN><OTHAVAIL><OPNACCNO>OR95000052</OPNACCNO><LOCOPN>Oak Ridge Public Document Reading Room, 200 Administration Road, Room G-217, Oak Ridge, TN 37830, 423-576-1216 and 423-241-4780 </LOCOPN></OTHAVAIL> <OPNFOCD>OR</OPNFOCD><DECLDT>12/30/1995</DECLDT></BIBOPN></ANNOPN></ANNRECMD>

<ANNRECMD><ANNOPN><BIBOPN><OTHAVAIL><OPNACCNO>OR95000052</OPNACCNO><LOCOPN>Oak Ridge Public Document Reading Room, 200 Administration Road, Room G-217, Oak Ridge, TN 37830, 423-576-1216 and 423-241-4780</LOCOPN></OTHAVAIL><OPNFOCD>OR</OPNFOCD><DECLST>N</DECLST></BIBOPN> </ANNOPN></ANNRECMD>

**Comments (ASCII):** Enter the declassification date and declassification status in separate fields. For declassification status, enter an 'S' when 'Sanitized' has been selected, and enter an 'N' if never classified has been selected.

**ASCII Examples:** , "", "", "", "ANNOPN", "OR95000052", "Oak Ridge Public Document Reading Room, 200 Administration Road, Room G-217, Oak Ridge, TN 37830, 423-576-1216 and 423-241-4780", "OR", "12/30/1995",

, "", "", "", "ANNOPN", "OR95000052", "Oak Ridge Public Document Reading Room, 200 Administration Road, Room G-217, Oak Ridge, TN 37830, 423-576-1216 and 423-241-4780", "OR", "", "", "N"

### II.A.5. Special Handling

The specific legal basis for restricting access must be provided. All STI products will be announced and distributed as widely as possible in accordance with existing laws, regulations, or official guidance. Special handling includes the following types of STI.

**NOTE:** Information products containing sensitive, proprietary, or other information for that access is

restricted by statute or regulation shall not be transmitted via open systems networks (e.g., the Internet) unless authorization and/or encryption has been coordinated with OSTI in advance. Information included in the accompanying DOE F 1332.15 form should be publicly releasable (no classified, sensitive, proprietary, or other limited access information).

### II.A.5.a. Copyrighted Material

**Description:** The author or designated copyright holder of an STI product owns the legal rights to reproduce, publish and sell the material. Any copyright claim on part or all of the contents of the information product affects the reproduction and distribution of the product by OSTI but does not affect its announcement. Copyrighted material cannot be given unlimited distribution unless an unlimited distribution release has been provided to OSTI.

Select 'All' when the STI product is copyrighted in its entirety. Select 'Part' when only part of the product is copyrighted; indicate the copyrighted part(s).

**Paper Examples:**  a. Copyrighted material  All  Part (Specify)

a. Copyrighted material  All  Part (Specify) Appendix A

| <b>SGML Tag Name</b>        | <b>SGML Tag</b> |
|-----------------------------|-----------------|
| Announcement Recommendation | <ANNRECMD>      |
| Announcement/Copyrighted    | <ANNCOPY>       |
| Announcement Note           | <ANNNOTE>       |

**Comments (SGML):** When Part II.A.5.a. is selected, enter the SGML group tag <ANNRECMD>, the subfield tag <ANNCOPY> and the subfield tag <ANNNOTE>. Enter the word 'All' when 'All' has been selected on the form. Enter the word 'Part,' a colon, a space, and the free form text when 'Part' has been selected. After the <ANNNOTE> subfield is completed, close with the ending subfield tag </ANNCOPY> and ending group tag </ANNRECMD>.

**SGML Examples:** <ANNRECMD><ANNCOPY><ANNNOTE>All</ANNNOTE></ANNCOPY></ANNRECMD>

<ANNRECMD><ANNCOPY><ANNNOTE>Part: Appendix A</ANNNOTE></ANNCOPY></ANNRECMD>

**Comments (ASCII):** Enter the word 'All' if all of the product is copyrighted. Enter the word 'Part', in one field and a descriptive phrase in the following field if only part of the product is copyrighted.

**ASCII Examples:** ..., "ANNCOPY", "All", ...

..., "ANNCOPY", "", "Part", "Appendix A", ...

### II.A.5.b. Unclassified Controlled Nuclear Information (UCNI)

**Description:** This information will be announced to the DOE community on a need to know basis. This information should **not** be transmitted to OSTI on open systems networks such as the Internet.

**Paper Example:**      X   b. Unclassified Controlled Nuclear Information (UCNI)

| <b><u>SGML Tag Name</u></b> | <b><u>SGML Tag</u></b> |
|-----------------------------|------------------------|
| Announcement Recommendation | <ANNRECMD>             |
| Announcement/UCNI           | <ANNUCNI>              |

**Comments (SGML):**    When Part II.A.5.b. is selected, enter the SGML group tag <ANNRECMD> and the subfield tag <ANNUCNI>. Because there are no other subfields, close with the ending group tag </ANNRECMD>.

**SGML Example:**    <ANNRECMD><ANNUCNI></ANNUCNI></ANNRECMD>

**Comments (ASCII):**    Enter the term 'ANNUCNI' when this part is selected.

**ASCII Example:**    ..., "ANNUCNI", ...

### II.A.5.c. Export Control/ITAR/EAR

**Description:**    Select this part for information that may not be exported without approval from the U.S. Department of Commerce or Department of State.

**Paper Example:**      X   c. Export Control/ITAR/EAR

| <b><u>SGML Tag Name</u></b> | <b><u>SGML Tag</u></b> |
|-----------------------------|------------------------|
| Announcement Recommendation | <ANNRECMD>             |
| Announcement/Export Control | <ANNECI>               |

**Comments (SGML):**    When Part II.A.5.c. is selected, enter the SGML group tag <ANNRECMD> and the subfield tag <ANNECI>. Because there are no other subfields, close with the ending group tag </ANNRECMD>.

**SGML Example:**    <ANNRECMD><ANNECI></ANNECI></ANNRECMD>

**Comments (ASCII):**    Enter the term 'ANNECI' when this part is selected.

**ASCII Example:**    ..., "ANNECI", ...

### II.A.5.d. Temporary hold pending patent review

**Description:**    Select this part when a temporary hold is placed on the document while the patent status is reviewed.

**NOTE:** Notify OSTI when patent release is granted.

**Paper Example:**      X   d. Temporary hold pending patent review

| <b><u>SGML Tag Name</u></b> | <b><u>SGML Tag</u></b> |
|-----------------------------|------------------------|
| Announcement Recommendation | <ANNRECMD>             |
| Announcement/Patent Hold    | <ANNPAT>               |

**Comments (SGML):**    When Part II.A.5.d. is selected, enter the SGML group tag <ANNRECMD> and the subfield tag <ANNPAT>. Because there are no other subfields, close with the ending group tag </ANNRECMD>.

**SGML Example:** <ANNRECMD><ANNPAT></ANNPAT></ANNRECMD>

**Comments (ASCII):** Enter the term 'ANNPAT' when this part is selected.

**ASCII Example:** ..., "ANNPAT", ...

#### II.A.5.e. Translation of Copyrighted Material

**Description:** Select this part for a translation of a copyrighted STI product.

**Paper Example:**  X  e. Translation of copyrighted material

| <b>SGML Tag Name</b>        | <b>SGML Tag</b> |
|-----------------------------|-----------------|
| Announcement Recommendation | <ANNRECMD>      |
| Announcement/Translation    | <ANNTRNS>       |

**Comments (SGML):** When Part II.A.5.e. is selected, enter the SGML group tag <ANNRECMD> and the subfield tag <ANNTRNS>. Because there are no other subfields, close with the ending group tag </ANNRECMD>.

**SGML Example:** <ANNRECMD><ANNTRNS></ANNTRNS></ANNRECMD>

**Comments (ASCII):** Enter the term 'ANNTRNS' when this part is selected.

**ASCII Example:** ..., "ANNTRNS", ...

#### II.A.5.f. Small Business Innovation Research (SBIR)

**Description:** The SBIR program is a federal initiative to provide funding to research and development efforts of a high risk nature that may have excellent commercial potential.

Include the estimated release date for the STI product in accordance with the terms of the agreement when this part is selected.

**Paper Example:**  X  f. Small Business Innovation Research (SBIR) Release date . . . 03/25/1999

| <b>SGML Tag Name</b>        | <b>SGML Tag</b> |
|-----------------------------|-----------------|
| Announcement Recommendation | <ANNRECMD>      |
| Announcement/SBIR           | <ANNSBIR>       |
| Announcement Release Date   | <ANNRELDT>      |

**Comments (SGML):** When Part II.A.5.f. is selected, enter the SGML group tag <ANNRECMD> and the subfield tag <ANNSBIR>.

An Announcement Release Date is required when II.A.5.f.. has been selected. The date is entered as the two-digit month, a slash, the two-digit day, a slash, and the four-digit year. Enter the date in SGML tag <ANNRELDT>.

After the estimated release date has been entered, close with the ending subfield tag </ANNSBIR> and group tag </ANNRECMD>.

**SGML Example:** <ANNRECMD><ANNSBIR><ANNRELDT>03/25/1999</ANNRELDT>  
</ANNSBIR></ANNRECMD>

**Comments (ASCII):** When this part is selected, enter the term 'ANNSBIR' in one field and then enter the estimated release date in the following field.

**ASCII Example:** ..., "ANNSBIR", "03/25/1999", ...

#### II.A.5.g. Small Business Technology Transfer (STTR)

**Description:** The STTR program is a federal program similar to the SBIR program defined above. However it differs in that a small company proposing to use this program must team with a nonprofit research institution such as a university or federal laboratory.

Include the estimated release date for the STI product in accordance with the terms of the agreement when this part is selected.

**Paper Example:**  X  g. Small Business Technology Transfer (STTR) Release date . . .  
08/31/2001

| <b><u>SGML Tag Name</u></b> | <b><u>SGML Tag</u></b> |
|-----------------------------|------------------------|
| Announcement Recommendation | <ANNRECMD>             |
| Announcement/STTR           | <ANNSTTR>              |
| Announcement Release Date   | <ANNRELDT>             |

**Comments (SGML):** When Part II.A.5.g. is selected, enter the SGML group tag <ANNRECMD> and the subfield tag <ANNSTTR>.

An Announcement Release Date is required when Part II.A.5.g. has been selected. The date is entered as the two-digit month, a slash, the two-digit day, a slash, and the four-digit year. Enter the date in SGML tag <ANNRELDT>.

After the estimated release date has been entered, close with the ending subfield tag </ANNSTTR> and ending group tag </ANNRECMD>.

**SGML Example:** <ANNRECMD><ANNSTTR><ANNRELDT>08/31/2001</ANNRELDT>  
</ANNSTTR></ANNRECMD>

**Comments (ASCII):** When this part is selected, enter the term 'ANNSTTR' in one field and then enter the estimated release date in the following field.

**ASCII Example:** ..., "ANNSTTR", "08/31/2001", ...

#### II.A.5.h. Proprietary

**Description:** Select this part for technical data that contains trade secrets developed at private expense. This information may not be disclosed outside the government without prior approval from the originator.

**Paper Example:**  X  h. Proprietary

| <b><u>SGML Tag Name</u></b> | <b><u>SGML Tag</u></b> |
|-----------------------------|------------------------|
| Announcement Recommendation | <ANNRECMD>             |
| Announcement/Proprietary    | <ANNPROP>              |

**Comments (SGML):** When Part II.A.5.h. is selected, enter the SGML group tag <ANNRECMD> and the subfield tag <ANNPROP>. Because there are no other subfields, close with the ending group tag </ANNRECMD>.

**SGML Example:** <ANNRECMD><ANNPROP></ANNPROP></ANNRECMD>

**Comments (ASCII):** Enter the term 'ANNPROP' when this part is selected.

**ASCII Example:** ..., "ANNPROP", ...

#### II.A.5.i. Protected CRADA Information

**Description:** Protected CRADA information includes STI products generated under Cooperative Research and Development Agreements (CRADAs) and marked as containing protected CRADA information under the National Competitiveness and Technology Transfer Act of 1989.

Include the estimated release date for the STI product in accordance with the terms of the agreement when this part is selected.

**Paper Example:**  X  I. Protected CRADA information Release date . . .  07/15/1999

| <b>SGML Tag Name</b>         | <b>SGML Tag</b> |
|------------------------------|-----------------|
| Announcement Recommendation  | <ANNRECMD>      |
| Announcement/Protected CRADA | <ANNCRDA>       |
| Announcement Release Date    | <ANNRELDT>      |

**Comments (SGML):** When Part II.A.5.i. is selected, enter the SGML group tag <ANNRECMD> and the subfield tag <ANNCRDA>.

An Announcement Release Date is required when Part II.A.5.i. has been selected. The date is entered as the two-digit month, a slash, the two-digit day, a slash, and the four-digit year. Enter the date in SGML tag <ANNRELDT>

After the estimated release date has been entered, close with the ending subfield tag </ANNCRDA> and ending group tag </ANNRECMD>.

**SGML Example:** <ANNRECMD><ANNCRDA><ANNRELDT>07/15/1999</ANNRELDT></ANNCRDA></ANNRECMD>

**Comments (ASCII):** When this part is selected, enter the term 'ANNCRDA' in one field and then the estimated release date in the following field.

**ASCII Example:** ..., "ANNCRDA", "07/15/1999", ...

#### II.A.5.j. Official Use Only (OUO)

**Description:** Official Use Only covers information that may be protected under the provisions of the FOIA (Freedom of Information Act) or Privacy Act and for that none of the other designations are applicable.

**Paper Example:**  X  j. Official Use Only (OUO)

| <b><u>SGML Tag Name</u></b> | <b><u>SGML Tag</u></b> |
|-----------------------------|------------------------|
| Announcement Recommendation | <ANNRECMD>             |
| Announcement/OUO            | <ANNOUO>               |

**Comments (SGML):** When Part II.A.5.j. is selected, enter the SGML group tag <ANNRECMD> and the subfield tag <ANNOUO>. Because there are no other subfields, close with the ending group tag </ANNRECMD>.

**SGML Example:** <ANNRECMD><ANNOUO></ANNOUO></ANNRECMD>

**Comments (ASCII):** Enter the term 'ANNOUO' when this part is selected.

**ASCII Example:** ..., "ANNOUO", ...

### II.A.5.k. Program-Directed Special Handling

**Description:** The program office provides the guidelines for announcing this information. Provide a reference to specific program guidance or attach a copy of the specific guidance.

**Paper Example:**  X  k. Program-Directed Special Handling (Specify)  Applied Technology

| <b><u>SGML Tag Name</u></b>   | <b><u>SGML Tag</u></b> |
|-------------------------------|------------------------|
| Announcement Recommendation   | <ANNRECMD>             |
| Announcement/Program-Directed | <ANNSPCL>              |
| Announcement Note             | <ANNNOTE>              |

**Comments (SGML):** When Part II.A.5.k. is selected, enter the SGML group tag <ANNRECMD> and the subfield tag <ANNSPCL>.

Subfield <ANNNOTE> is used when announcement recommendation II.A.5.k. has been selected. Enter the free form text provided in the SGML tag. If a copy of the guidance is attached to the DOE F 1332.15, indicate that in this field. Then close with the ending subfield tag </ANNSPCL> and ending group tag </ANNRECMD>.

**SGML Example:** <ANNRECMD><ANNSPCL><ANNNOTE>Applied Technology  
</ANNNOTE></ANNSPCL></ANNRECMD>

**Comments (ASCII):** When this part is selected, enter the term 'ANNSPCL' in one field and then enter the free form text in the following field.

**ASCII Example:** ..., "ANNSPCL", "Applied Technology", ...

### II.A.5.I Other

**Description:** Select this part for STI products whose announcement or distribution must be limited based on laws, regulations or official guidance not covered in the preceding parts.

**Paper Example:**  X  I. Other (Specify)  Man to Mars Nuclear Program

| <b><u>SGML Tag Name</u></b> | <b><u>SGML Tag</u></b> |
|-----------------------------|------------------------|
| Announcement Recommendation | <ANNRECMD>             |
| Announcement/Other          | <ANNOTHER>             |
| Announcement Note           | <ANNNOTE>              |

**Comments (SGML):** When Part II.A.5.I. is selected, enter the SGML group tag <ANNRECMD> and the subfield tag <ANNOTHER>.

Subfield <ANNNOTE> is used when announcement recommendation II.A.5.I. has been selected. Enter free form text provided in the SGML tag. Then close with the ending subfield tag </ANNOTHER> and ending group tag </ANNRECMD>.

**SGML Example:** <ANNRECMD><ANNOTHER><ANNNOTE>Man to Mars Nuclear Program</ANNNOTE></ANNOTHER></ANNRECMD>

**Comments (ASCII):** When this part is selected, enter the term 'ANNOTHER' in one field and then enter the free form text in the following field.

**ASCII Example:** ..., "ANNOTHER", "Man to Mars Nuclear Program", ...

## II.B. Releasing Official

This part identifies the person officially releasing the STI product for distribution as well as the patent clearance status of the product. The appropriate releasing official is determined by the source of the STI, the contracting instrument, and the internal organizational responsibilities. Do not forward this form to OSTI until after appropriate review and release.

### II.B.1. Patent Clearance (Mark one)

**Description:** This part indicates the patent clearance status and provides the date submitted for a patent that is still in the DOE patent clearance process.

**Paper Example:**  X  1. Patent Clearance (Mark one)

| <u>SGML Tag Name</u> | <u>SGML Tag</u> |
|----------------------|-----------------|
| Patent Clearance     | <PATCLR>        |

**Comments (SGML):** This is the group tag for the patent clearance information.

**SGML Example:** <PATCLR>

**Comments (ASCII):** Enter the term 'PATCLR' to begin this part.

**ASCII Example:** ..., "PATCLR", ...

#### II.B.1.a. Patent Submitted for DOE Patent Clearance

**Description:** Use this part if the STI product has been submitted for patent clearance, and clearance has not yet been received. Provide the date the patent was submitted for review.

**NOTE:** Notify OSTI when patent release is granted.

**Paper Example:**  X  a. Submitted for DOE patent clearance Date submitted . . . 09/18/1996

| <u>SGML Tag Name</u>    | <u>SGML Tag</u> |
|-------------------------|-----------------|
| Patent Clearance Status | <PATCLRST>      |
| Patent Submitted Date   | <PATSUBDT>      |

**Comments (SGML):** When Part II.B.1.a. is selected, a patent submitted date must also be provided. Enter the word, 'Submitted,' in SGML tag <PATCLRST>. Enter the date in SGML tag <PATSUBDT> as the two-digit month, a slash, the two-digit day, a slash, and the four-digit year.

After the date has been entered, close with the ending group tag </PATCLR>.

**SGML Example:** <PATCLR><PATCLRST>Submitted</PATCLRST><PATSUBDT>09/18/1996</PATSUBDT></PATCLR>

**Comments (ASCII):** When this part is selected, enter the term 'Submitted' in one field and then enter the date as the two-digit month, a slash, the two-digit day, a slash, and the four-digit year in the following field.

**ASCII Example:** ..., "PATCLR", "Submitted", "09/18/1996", ...

### II.B.1.b. DOE Patent Clearance Granted

**Description:** Use this part when DOE patent clearance has been granted.

**Paper Example:**  b. DOE patent clearance has been granted

| <u>SGML Tag Name</u>    | <u>SGML Tag</u> |
|-------------------------|-----------------|
| Patent Clearance Status | <PATCLRST>      |

**Comments (SGML):** When Part II.B.1.b. is selected, enter 'Granted' in SGML tag <PATCLRST>. Because there are no other subfields, close with the group ending tag </PATCLR>.

**SGML Example:** <PATCLR><PATCLRST>Granted</PATCLRST></PATCLR>

**Comments (ASCII):** When this part is selected, enter the word 'Granted' in the third field following 'PATCLR'

**ASCII Example:** ..., "PATCLR", "", "", "Granted", ...

### II.B.1.c. DOE Patent Clearance Not Required

**Description:** Use this part when DOE patent clearance is not required.

**Paper Example:**  c. DOE patent clearance not required

| <u>SGML Tag Name</u>    | <u>SGML Tag</u> |
|-------------------------|-----------------|
| Patent Clearance Status | <PATCLRST>      |

**Comments (SGML):** When Part II.B.1.c. is selected, enter 'Not required' in SGML tag <PATCLRST>. Because there are no other subfields, close with the group ending tag </PATCLR>.

**SGML Example:** <PATCLR><PATCLRST>Not required</PATCLRST></PATCLR>

**Comments (ASCII):** When this part is selected, enter the phrase 'Not Required' in the fourth field following 'PATCLR'.

**ASCII Example:** ..., "PATCLR", "", "", "", "Not required", ...

## II.B.2. Released By

**Description:** The appropriate releasing official is determined by the source of the STI, the contracting instrument and the internal organizational responsibilities. Do not forward the form to OSTI until after appropriate review and release of the STI product.

Provide the releasing official's name, the release date, and the releasing official's telephone number and E-mail address.

**Paper Example:** Name James B. Howard Date (mm/dd/yy) 01/12/1996  
Phone 423-576-0000 E-mail howardjb@ccmail.abs.com

| <b>SGML Tag Name</b>    | <b>SGML Tag</b> |
|-------------------------|-----------------|
| Releasing Official      | <RELOFFCL>      |
| Personal Name           | <PERSNAME>      |
| Released Date           | <RELDATE>       |
| Telephone Number        | <PHONE>         |
| Electronic Mail Address | <E-mail>        |

**Comments (SGML):** The four subfields are enclosed in the group tag <RELOFFCL>. Use SGML tag <PERSNAME>, for 'name', SGML tag <RELDATE>, for 'Date', SGML tag <PHONE>, for 'Phone' and SGML tag <E-mail> for 'E-mail'. Close with the ending group tag </RELOFFCL>.

**SGML Example:** <RELOFFCL><PERSNAME>James B. Howard</PERSNAME>  
<RELDATE>01/12/1996</RELDATE><PHONE>423-576-0000</PHONE><E-mail>howardjb@ccmail.abs.com</E-mail></RELOFFCL>

**Comments (ASCII):** Enter the term 'RELOFFCL' in one field. Enter the name, date, telephone number and E-mail address in separate fields in that order following 'RELOFFCL'.

**ASCII Example:** ..., "RELOFFCL", "James B. Howard", "01/12/1996", "423-576-0000", "howardjb@ccmail.abs.com", ...

## **Part III Bibliographic Information**

Part III includes information, such as authorship, publication date, and subject coverage, useful for providing a complete description of the STI product. For information products that are to be included in the OpenNet Database, the information will be used to complete the OpenNet Database records. For all STI products, the information will be used in announcing those products, as appropriate, to other parts of the DOE community and the public.

### III.A. Personal Author/Affiliation

**Description:** Provide the name of the person(s) who prepared/authored/edited/compiled the STI product. More than one author may be provided; separate multiple authors with a semicolon and a space.

Include the affiliation, i.e., the name and location of the organization where the author was employed when the research was conducted, if this is different from the

corporate source provided in Part III.B. or if Part III.B. is not provided. If the affiliation for any author is different from the corporate source, enter an affiliation for each author. Enclose the affiliation in parentheses. More than one affiliation may be provided for an author; separate multiple affiliations with a semicolon and a space. A country code should be provided after the city/state. Refer to Appendix 3., 'Country and International Organization Names and Codes,' for a complete listing of available country codes.

**Paper Examples:** A. Personal Author/Affiliation Fields, J.M. (ed.)

A. Personal Author/Affiliation Fields, J.M. (ed.) (University of Illinois, Urbana, IL (US))

A. Personal Author/Affiliation Jones, T.M. (Environmental Restoration, Inc., Oak Ridge, TN (US); University of Tennessee, Chattanooga, TN (US)); Markay, A.R. III (Waste Removal Ltd., Ottawa, ON (Canada))

| <b>SGML Tag Name</b>                      | <b>SGML Tag</b> |
|-------------------------------------------|-----------------|
| Personal Author (Monographic)/Affiliation | <AUTHRM>        |
| Personal Author                           | <AU>            |
| Personal Author Affiliation               | <AFFIL>         |

**Comments (SGML):** <AUTHRM> is the group tag for the <AU> and <AFFIL> subfield tags. The <AU> tag is used for the name of the personal author. The <AFFIL> tag is used for the name of the organization, i.e., the affiliation. Only one occurrence of <AU> and <AFFIL> should occur within an occurrence of <AUTHRM>.

Enter the group tag <AUTHRM>, the subfield tag <AU>, the personal author name in inverted format, and the ending tag </AU>. If the affiliation is different from the performing organization (Part III.B.), enter the <AFFIL> tag, the affiliation, and the ending tag </AFFIL>. Close with the ending group tag </AUTHRM>.

**SGML Examples:** <AUTHRM><AU>Fields, J.M. (ed.)</AU></AUTHRM>

<AUTHRM><AU>Fields, J.M. (ed.)</AU><AFFIL>(University of Illinois, Urbana, IL (US))</AFFIL></AUTHRM>

**Comments SGML:** When more than one author is present, begin a new <AUTHRM> group for each author.

**NOTE:** More than one affiliation may be provided for an author. Multiple affiliations for an author are separated by a semicolon and a space and enclosed in parentheses.

**SGML Example:** <AUTHRM><AU>Jones, T.M.</AU><AFFIL>(Environmental Restoration, Inc., Oak Ridge, TN (US); University of Tennessee, Chattanooga, TN (US)) </AU><AFFIL><AUTHRM><AU>Markay, A.R. III</AU><AFFIL>(Waste Removal Ltd., Ottawa, ON (Canada))</AU><AFFIL>

**Comments (ASCII):** Enter the author and affiliation in the same field. Separate multiple authors with a semicolon and a space.

More than one affiliation may be provided for an author. Multiple affiliations for an author are separated by a semicolon and a space and enclosed in parentheses.

**ASCII Examples:** ..., "Fields, J.M. (ed.)", ...  
..., "Fields, J.M. (ed.) (University of Illinois, Urbana, IL (US))", ...  
..., "Jones, T.M. (Environmental Restoration, Inc., Oak Ridge, TN (US); University of Tennessee, Chattanooga, TN (US)); Markay, A.R. III (Waste Removal Ltd., Ottawa, ON (Canada))", ....

### III.B. Performing Organization

**Description:** Provide the name and location of the organization/corporate source that performed the research or issued the STI product. More than one organization may be given; separate multiples with a semicolon and a space. A country code should be provided after the city/state. Refer to Appendix 3., 'Country and International Organization Names and Codes,' for a complete listing of available country codes.

**Paper Example:** B. Performing Organization Los Alamos National Laboratory, Los Alamos, NM (US)

| <u>SGML Tag Name</u> | <u>SGML Tag</u> |
|----------------------|-----------------|
| Corporate Entry Text | <CS>            |

**Comments (SGML):** The corporate name and location are entered in SGML tag <CS>.

**SGML Example:** <CS>Los Alamos National Laboratory, Los Alamos, NM (US)</CS>

**Comments (ASCII):** Enter the name and location of the performing organization in the same field.

**ASCII Example:** ..., "Los Alamos National Laboratory, Los Alamos, NM (US)", ...

### III.C. Date of Publication

**Description:** Provide the date when the STI product was published or issued. The date is entered as the two-digit month, a slash, the two-digit day, a slash, and the four-digit year.

**Paper Example:** C. Date of Publication . . . 05/03/1996

| <u>SGML Tag Name</u> | <u>SGML Tag</u> |
|----------------------|-----------------|
| Publication Date     | <PBD>           |

**SGML Example:** <PBD>05/03/1996</PBD>

**Comments (ASCII):** Enter the date of publication as the two-digit month, a slash, the two digit day, a slash, and the four digit year.

**ASCII Example:** ..., "05/03/1996", ...

### III.D. Pages/Size

**Description:** Provide the total number of pages or other designation that indicates the size of the information product.



**ASCII Example:** ..., "High cost and poor performance have hurt the market for electric cars, but more states are passing emission control regulations that will make electric cars more attractive. Federal funding also will promote research on electric vehicle technologies. There is much work to do on battery recharging, range expansion, and weight to make electric cars desirable to the public. Other alternatives for reducing auto emissions are explored. The ultimate fate of electric cars will be decided by consumers.", ...

### III.F. Subject Terms

**Description:** Provide terms, e.g., keywords or subject descriptors, that describe the content of the publication. More than one term may be entered; separate multiple terms with a semicolon and a space. Do not include subject terms related to the access restriction of the STI product.

A list of OpenNet subject terms that can be used for information products that will be included in the OpenNet Database is available at URL:

<http://www.doe.gov/html/osti/opennet/lists/sterms.html>

**Paper Example:** F. Subject Terms ELECTRIC AUTOMOBILES; TECHNOLOGY; BATTERIES

| <u>SGML Tag Name</u> | <u>SGML Tag</u> |
|----------------------|-----------------|
| Subject Terms        | <SUBJTERM>      |

**SGML Example:** <SUBJTERM>ELECTRIC AUTOMOBILES; TECHNOLOGY; BATTERIES</SUBJTERM>

**ASCII Example:** ..., "ELECTRIC AUTOMOBILES; TECHNOLOGY; BATTERIES", ...

### III.G. OpenNet Document Type

**Description:** For information products that will be included in the OpenNet Database, provide the appropriate document type based on the list in ' "OPENNET" DeClassified Information Database Data Input Specifications,' revised December 15, 1994. The complete list of OpenNet document types is available at URL:

[http://www.doe.gov/html/osti/opennet/lists/doc\\_type.html](http://www.doe.gov/html/osti/opennet/lists/doc_type.html).

Only one document type should be entered.

**Paper Example:** G. OpenNet Document Type report

| <u>SGML Tag Name</u>   | <u>SGML Tag</u> |
|------------------------|-----------------|
| Bibliographic/OpenNet2 | <BIBOPTWO>      |
| OpenNet Document Type  | <DTOPN>         |

**Comments (SGML):** The group tag <BIBOPTWO> is used for DOE F 1332.15 Parts III G., H., and I. and should be entered first when any of these fields are present. For Part III.G., enter SGML tag <DTOPN> and the document type.

**SGML Example:** <BIBOPTWO><DTOPN>report</DTOPN>

**Comments (ASCII):** Enter the standardized OpenNet document type.

**ASCII Example:** ..., "report", ...

### III.H. OpenNet Document Categories

**Description:** For information products that will be included in the OpenNet Database, provide the appropriate two-level subject categories based on the list in ' "OPENNET" *DeClassified Information Database Data Input Specifications*, ' revised December 15, 1994. More than one category may be provided; separate multiples with a semicolon and a space

The list of OpenNet document categories is available at URL:

<http://www.doe.gov/html/osti/opennet/opencats.html>.

**Paper Example:** H. OpenNet Document Categories Reactors/Production Reactors; Science and Technology/Physics

| <b>SGML Tag Name</b>        | <b>SGML Tag</b> |
|-----------------------------|-----------------|
| Bibliographic/OpenNet2      | <BIBOPTWO>      |
| OpenNet Document Categories | <OPNDOCCT>      |

**Comments (SGML):** The group tag <BIBOPTWO> is used for DOE F 1332.15 Parts III G., H., and I. and should be entered first when any of these fields are present. For Part III.H., enter the SGML tag <OPNDOCCT> followed by the document category. More than one category may be provided; multiples are separated by a semicolon and a space.

**SGML Example:** <BIBOPTWO><DTOPN>report</DTOPN><OPNDOCCT>  
Reactors/Production Reactors; Science and  
Technology/Physics</OPNDOCCT>

**Comments (ASCII):** Enter the document categories in a single field, separating multiples with a semicolon and a space.

**ASCII Example:** ..., "report", "Reactors/Production Reactors; Science and Technology/Physics", ...

### III.I. OpenNet Addressee

**Definition:** For an information product such as a memo, letter, or similar type of non-STI product that will be included in the OpenNet Database, provide the name and address of the recipient of the information product in this field. More than one addressee may be provided; separate multiple addresses with a semicolon and a space.

**Paper Example:** I. OpenNet Addressee Smith, J.F., Hollingbetts Supplies, Augusta, GA (US)

| <b>SGML Tag Name</b>   | <b>SGML Tag</b> |
|------------------------|-----------------|
| Bibliographic/OpenNet2 | <BIBOPTWO>      |
| Addressee              | <ADDRSTO>       |

**Comments (SGML):** The group tag <BIBOPTWO> is used for DOE F 1332.15 Parts III.G., H., and I. and should be entered first when any of these fields are present. For Part

III.I., enter the text in SGML tag <ADDRSTO>. More than one addressee may be entered; multiple addressees are separated by a semicolon and a space.

**SGML Example:** <BIBOPTWO><DTOPN>report</DTOPN><OPNDOCCT>Reactors/Production Reactors; Science and Technology/Physics</OPNDOCCT>  
<ADDRSTO>Smith, J.F., Hollingbetts Supplies, Augusta, GA (US)</ADDRSTO></BIBOPTWO>

**Comments (ASCII):** Enter the free-form text, separating multiples with a semicolon and a space.

**ASCII Example:** ..., "report", "Reactors/Production Reactors; Science and Technology/Physics", "Smith, J.F., Hollingbetts Supplies, Augusta, GA (US)", ...

### C. Additional Bibliographic Fields Available in the SGML DTD

The following fields are included in the SGML DTD for those sites wishing to submit a more complete bibliographic record.

#### 1. REFERENCE NUMBER

**Description:** This field is used for the incoming serial record number, i.e., the unique identifying number assigned to each record by the input source. The incoming serial record number is formatted as the two-digit calendar year followed by a six-digit serial number. The first record issued for a new year will always be "000001." Serial numbers for succeeding records for that year are assigned in ascending sequence (000002, 000003, etc). The serial number sequence begins with 000001 again at the start of the next new year.

| <u>SGML Tag Name</u> | <u>SGML Tag</u> |
|----------------------|-----------------|
| Reference Number     | <TRN>           |

**SGML Example:** <TRN>96000001</TRN>

#### 2. TRANSLATION NOTE

**Description:** The citation to the source, or original, document, i.e., the publication from that a translation was made, is entered here. Input should begin with either "Translated from" or "Translation of," followed by the citation to the source document. The citation should provide sufficient information to allow a user to obtain a copy of the source document. If the translation does not contain a complete citation to the source document, then enter any information that is available. If no translation information is available, enter the statement: "Translation source information not available".

| <u>SGML Tag Name</u> | <u>SGML Tag</u> |
|----------------------|-----------------|
| Translation Note     | <TN>            |

**SGML Examples:** <TN>Translation of 'Mizu no shichiryō supekutoru no tokui genshō' from Shitsuryō Bunseki, v. 19(3) p. 150-157, (1971)</TN>

<TN>Translated from Wiadomości Botaniczne, v. 13(2), (1969)</TN>

<TN>Translated from Russian</TN>

<TN>Translation source information not available</TN>

### 3. LANGUAGE (CODE)

**Description:** This field is used for the standardized two-letter code(s) for the language(s) in that the publication is written or published. One to five codes may be assigned. Multiples are separated by a semicolon and a space. The standardized language codes are given in Appendix 2, 'Language Names and Codes'. (Do not enter the language text in this field.)

|                                         |                         |
|-----------------------------------------|-------------------------|
| <u>SGML Tag Name</u><br>Language (Code) | <u>SGML Tag</u><br><LA> |
|-----------------------------------------|-------------------------|

**SGML Examples:** <LA>EN</LA>  
<LA>EN; FR; SV</LA>

### 4. NOTES

**Description:** This field is used for supplementary information that is not entered elsewhere in the record. It is a free form field.

|                               |                         |
|-------------------------------|-------------------------|
| <u>SGML Tag Name</u><br>Notes | <u>SGML Tag</u><br><DN> |
|-------------------------------|-------------------------|

**SGML Examples:** <DN>Contains several maps in annex</DN>  
<DN>Includes one 3.5" diskette</DN>

### 5. ACADEMIC DEGREE

**Description:** This field is used for the designation of the academic dissertation and the academic degree for that the publication was prepared. Enter the academic dissertation, a space, and then the academic degree enclosed in parentheses and abbreviated according to national conventions.

|                                         |                         |
|-----------------------------------------|-------------------------|
| <u>SGML Tag Name</u><br>Academic Degree | <u>SGML Tag</u><br><TH> |
|-----------------------------------------|-------------------------|

**SGML Example:** <TH>Thesis (Ph.D.)</TH>.

### 6. US DOE PROJECT/NONPROJECT

**Description:** This field indicates whether or not the publication results from a DOE-sponsored project. Enter a P if the publication results from DOE-sponsored research. Do not enter a code if the publication does not result from research sponsored by DOE.

For conference proceedings or other conference-related publications, enter a P if DOE sponsored or cosponsored the conference.

|                                                   |                         |
|---------------------------------------------------|-------------------------|
| <u>SGML Tag Name</u><br>US DOE PROJECT/NONPROJECT | <u>SGML Tag</u><br><PS> |
|---------------------------------------------------|-------------------------|

**SGML Example:** <PS>P</PS>

## 7. COUNTRY OF ORIGIN

**Description:** This is the 2-letter code identifying the country or international organization where the research was performed. These codes are listed in Appendix 3, 'Country and International Organization Names and Codes'.

**SGML Tag Name**

Country of Origin

**SGML Tag**

<CO>

**SGML Example:** <CO>US</CO>

## 8. COUNTRY OF PUBLICATION

**Description:** This is the 2-letter code identifying the country where the publication was published or the international organization that published it. These codes are listed in Appendix 3, 'Country and International Organization Names and Codes.'

**SGML Tag Name**

Country of Publication

**SGML Tag**

<CP>

**SGML Example:** <CP>US</CP>

## 9. CORPORATE ENTRY CODE

**Description:** This is the standardized seven-digit code assigned to the performing organization. The code may be entered here instead of the text being entered in Part III.B. Enter the code without any spaces. Multiples are separated with semicolons only. For information on corporate entry codes, refer to ETDE/Pub--3(Rev. 1), *International Energy: Research Organizations 1988-92*, and its supplements.

**SGML Tag Name**

Corporate Code

**SGML Tag**

<CC>

**SGML Examples:** <CC>9520932</CC>

<CC>9520932;9528993</CC>



## Guidelines for Preparing and Transmitting the DOE F 1332.15 - Working Copy

### Section 4. Transmitting a completed DOE F1332.15 to OSTI

#### TABLE OF CONTENTS

Part A. Transmittal of paper form

Part B. Transmittal of WWW form: Sending Bibliographic Data to OSTI via the WWW

A. Instructions for using the DOE F 1332.15 WWW form (No special releasing official code needed)

B. Instructions for using the DOE F 1332.15 WWW form review function (Releasing code required)

Part C. Submission of an SGML-formatted file

C.1. File format for an SGML-formatted DOE F 1332.15 file

C.1.a. Document Type Definition for DOE F 1332.15

C.1.b. Sample SGML-Tagged Records

C.2. Procedures for transmitting an SGML-formatted file

Part D. Transmittal of Comma Delimited ASCII file

D.1. File format for a Comma Delimited ASCII file for DOE F 1332.15

D.2. Procedures for transmitting a Comma Delimited ASCII file

This section covers procedures for transmitting a completed DOE F 1332.15 as a paper form, as an SGML or Comma Delimited ASCII file sent over the Internet or via diskettes or compact discs, or through the input form on the WWW.

**NOTE:** Information products containing sensitive, proprietary, or other information for that access is restricted by statute or regulation shall not be transmitted via open systems networks (e.g., the Internet) unless authorization and/or encryption has been coordinated with OSTI in advance. Information included in the accompanying DOE F 1332.15 form should be publicly releasable (no classified, sensitive, proprietary, or other limited access information).

OSTI must have both the DOE F 1332.15 and the full text in hand to begin processing the full text. To facilitate processing, when submitting paper versions of both the form and the information product, send them as a single package. When electronic versions of both the form and the information product are submitted, they may be submitted as separate files but should be transmitted at the same time. When an electronic form and a paper full text are sent, the paper full text should be sent at the same time as the electronic form is sent in order to minimize the amount of time between receipt of the form and the full text.

The DOE F 1332.15 must always include either the Information Product Filename (Part I.A.9.) for the full text when the full text is sent via the Internet or another computer medium or indicate that the full text will be transmitted as paper or audiovisual material (Part I.C.3. or I.C.4.).

**NOTE:** When the full text is provided in an electronic format, it is **essential** that the Information Product Filename be included in **both** the DOE F 1332.15 and the full text. OSTI uses the Information Product Filename to match the DOE F 1332.15 with the full text.

#### FILE NAMING CONVENTIONS

When sending the DOE F 1332.15 electronically, use the following file naming conventions.

- A. For a compressed file that has either multiple DOE F 1332.15 forms in it or that contains a DOE F 1332.15 and a full text document together:

**ORGFC.NNN**, where

**ORG** is a three letter acronym assigned by OSTI to the site or organization sending the files

**F** is a one-letter designation for the file format of the enclosed full text document or the collection of DOE F 1332.15 forms (see list below)

**C** is a one-letter designation for the compression format (see list below)

**NNN** is a sequential number for the day of the transfer

#### **File Format Designations**

**A** = PDF

**P** = Postscript

**I** = TIFF Group 4

**H** = HTML

**S** = SGML

**C** = ASCII

#### **Compression Designations**

**Z** = PKZIP (DOS)

**T** = TAR (Unix)

**Examples:** **SRSSZ.001** (Savannah River, SGML file, compressed with PKZIP, first file sent on any particular day)

**WHCAT.005** (Westinghouse Hanford, a PDF full text file and a DOE F 1332.15 file in some format, compressed with TAR, the fifth shipment of the day)

- B. For the 1332.15 information, either sent inside a compressed wrapper or sent as a single entity:

**NYMMDDF.NN**, where the first "N" signifies a single-digit number or alpha character assigned to a site or submitter, YYMMDD signifies the date shipped (960525, for example), and the F signifies file format of the 1332.15 information. Only two letters are provided for the file format of a 1332.15 file: **M** signifies "metadata in SGML" and **O** signifies "metadata in Comma Delimited ASCII." The numerical extension signifies that a record is the first or the second or the third, etc. sent on that particular date.

#### **Examples:**

**4960615M.02** (PETC, sent June 15, 1996, one or more of SGML-format 1332.15s, second 1332.15 submission of this date)

**7960615O.03** (LLNL, sent June 15, 1996, one or more of ASCII-format 1332.15s, third 1332.15 submission of this date)

## Part A. Transmittal of paper form

OSTI will convert the incoming paper forms to electronic versions via scanning. Therefore, if submitting paper copy, input should be typed or printed, not handwritten. Use forms received from OSTI or **white** paper copies of the DOE F 1332.15 dated 2/96 or later.

When paper versions of the DOE F 1332.15 and the full text are sent to OSTI, use the following addresses:

### For Mail:

U.S. Department of Energy  
Office of Scientific and Technical  
Information (OSTI)  
P.O. Box 62  
Oak Ridge, TN 37831-0062

### For Shipments:

U.S. Department of Energy  
Office of Scientific and Technical  
Information (OSTI)  
175 Oak Ridge Turnpike  
Oak Ridge, TN 37830

The same addresses should be used when submitting the form on computer media and when submitting the full text in paper, as audiovisual material, or as computer media.

## **Part B. Transmittal of WWW form: Sending Bibliographic Data to OSTI via the WWW**

The DOE F 1332.15 WWW input form was developed as a convenient way for sites to send OSTI the required bibliographic information needed to announce the availability of STI to the DOE community. The WWW form emulates the paper version of the DOE F 1332.15 by providing a user-friendly WWW form that is easy to fill out and submit to OSTI electronically.

The WWW form allows for simultaneous access to the WWW form from multiple sites and through the provision of a review function, allows the sites to control who approves the final version of the data before it is transmitted to OSTI. In this way, several individuals across the organization can enter the information, but only persons with a releasing code can release the information for transmittal to OSTI.

In order to use the DOE F 1332.15 WWW form, a site must register with OSTI to acquire a source of bibliographic input code (a 2-4 letter acronym for the site) and usernames and passwords for access to the electronic form. Once access has been granted, the following instructions provide the steps needed to submit the DOE F 1332.15 to OSTI via the WWW.

If you have any additional questions about the use of the WWW form, contact OSTI at (423) 576-1191.

### **A. Instructions for using the DOE F 1332.15 WWW form (No special releasing official code needed)**

The following instructions can be used for filling out the form. Note, however, that the form cannot be sent to OSTI unless the releasing official code is used (see Part B).

- 1.) OSTI must be contacted in order to gain initial access to the DOE F 1332.15 WWW form. Contact Kathy Waldrop (423) 576-1223 or [kathy.waldrop@cmail.osti.gov](mailto:kathy.waldrop@cmail.osti.gov).

**NOTE:** You may wish to create a bookmark for this address, so that you can easily pull up a blank form whenever one is needed.

- 2.) Type your username in the site field.
- 3.) Type your password in the password field.
- 4.) Enter the information. Refer to the instructions in Section 2 of this document on how to fill out the DOE F 1332.15 form.
- 5.) After entering all the information, scroll down to the end of the form and choose the **Submit Form Button** to submit the form. If you have left out any essential information, you will be prompted to return to the form (press the back arrow of your browser) and fill in that information and then submit the form again.
- 6.) If you have repetitive information in the form (e.g., contact name, releasing official, contract number, etc..) you can, after submitting a previous form successfully, reuse a previous form by choosing the **go back** button in your browser. Type over the non-repetitive information, skip the repetitive information, and then submit the form. In this way you can reduce the number of keystrokes needed to submit a form with much of the same information as the previous one.
- 7.) To start over with a new blank form, access the original address again:

<http://apollo.osti.gov/form1332/form1332.html>.

## B. Instructions for using the DOE F 1332.15 WWW form review function (Releasing code required)

The following instructions allow you to review the input to a form, make changes to it, and release it for submittal to OSTI.

- 1.) Access the form. (See instructions in Part B.A.1.)
- 2.) Type your site's username in the site field.
- 3.) Type your site's password in the password field.
- 4.) Choose the **Submit** button.
- 5.) If there are forms to review, you will see a listing of the current forms awaiting review. Choose a form to review by clicking on any of the underlined links. You will then see a copy of the submitted form. Review the form carefully and correct any errors or make any changes needed.
- 6.) To submit the form to OSTI, once you are satisfied with the content of the form, enter your approval code at the bottom of the form. Next, choose the **APPROVE** button and then choose the **Submit Decision** button. If there are more forms to be reviewed, you will see a list of the remaining forms.
- 7.) If you wish to delete the form for any reason, enter your approval code; choose the **DELETE** button and then choose the **Submit Decision** button. The form will be instantly deleted. If there are more forms to be reviewed, you will see a list of the remaining forms.
- 8.) If you wish to edit the information, enter your approval code; choose the **EDIT** button and then choose the **Submit Decision** button. You will see the original form again. Edit any information that is incorrect or add new information and then choose the **Submit Edits** button to submit the form. **Once you choose the Submit Edits button, your form is transmitted to OSTI.** You can then print out the final results for your records. Press the **Continue** button at the top of the page to continue reviewing the remaining forms.

## Part C. Submission of an SGML-formatted file

This part provides information necessary for transmitting to OSTI an encoded DOE F 1332.15 that conforms to International Standard ISO 8879, *Information Processing—Text and office systems—Standard Generalized Markup Language (SGML)*.

Part C.1. describes the file format. Included in this section are the DOE F 1332.15 Document Type Definition (DTD) and sample records. Refer to the procedures for selecting and entering SGML-tagged input in Section 3., '\*\*\*\*,' for instructions on how to enter and format the various data elements. Refer to Section 5, 'OSTI SGML Character Set,' for procedures on entering characters.

Part C.2. provides procedures for transmitting the file via FTP or on a computer medium such as a diskette or CD.

### C.1. File format for an SGML-formatted DOE F 1332.15 file

The tag **<OS133215>** must be entered *before* the first record in the file. After the last record, the tag **</OS133215>** must be entered (see sample records in the next section). The **<OS133215>** tag signals the fact that the file being transmitted is a DOE F 1332.15 bibliographic file. More than one record may be transmitted in a file.

The beginning of each record is signaled by the presence of the **<FORM>** tag, and the end of each record is indicated by **</FORM>**.

#### C.1.a. DOCUMENT TYPE DEFINITION FOR DOE F 1332.15

```
<!-- ***** -->
<!-- -->
<!-- OSTI FORM 1332.15 DTD -->
<!-- Revised 2/24/97 -->
<!-- -->
<!-- ***** -->
<!DOCTYPE OS133215 [
<!-- Entities -->
<!-- Any ISO standard entities can be used for special characters --> (Refer to Section 5 for instructions
on formatting of special characters.)
<!ENTITY % text "(#PCDATA)*">

<!-- Basic structures of the form. Indicates order of elements -->

<!ENTITY % partonea "(ostibrcd?,bs?,rn?, sr?, cn?, tlm?, spc?, brcd?, projid?, cncr?, dc?,
infprdfn?)">

<!ENTITY % partoneb "((bibrpt?,bibcnf?,bibsoft?,biboth?))" >
<!ENTITY % partonec "(ntsbosti?,sbmtosti?)" >
<!ENTITY % partoned "(contact?)" >
<!ENTITY % parttwoa "(annrecmd?)" >
<!ENTITY % parttwob "(patclr?,reloffcl?)" >
<!ENTITY % partthree "(authrm*,cs?,pbd?,pb?,ab?,subjterm?,biboptwo?)">
<!ENTITY % bibpart "(trn?,tn?,la?,dn?,th?,ps?,co?,cp?,cc?)">

<!-- Form Elements -->

<!ELEMENT OS133215 -- (form+) >
```

<!ELEMENT form -- (%partonea,%partoneb,%partonec,%partoned,%parttwoa,  
%parttwob,%partthree,%bibpart) >

<!--=====-->  
<!-- ELEMENTS MIN CONTENT (EXCEPTIONS) -->

<!ELEMENT ostibracd -- (#PCDATA) --Barcode -->  
<!ELEMENT bs -- (#PCDATA) --550 Source of Bibliographic Input -->  
<!ELEMENT rn -- (#PCDATA) --150 Primary Report Number -->  
<!ELEMENT sr -- (#PCDATA) --210 Secondary Report Number -->  
<!ELEMENT cn -- (#PCDATA) --240 Contract Number (DOE) -->  
<!ELEMENT tlm -- (%text) --110 Primary Title (M) -->  
<!ELEMENT spc -- (#PCDATA) --080 Sponsoring Organization Acronym -->  
<!ELEMENT bracd -- (#PCDATA) --243 B&R code(s) -->  
<!ELEMENT projid -- (#PCDATA) --Project ID -->  
<!ELEMENT ncr -- (#PCDATA) --671 CRADA Number -->  
<!ELEMENT dc -- (#PCDATA) --510 Distribution Category -->  
<!ELEMENT infprdfrn -- (#PCDATA) --690 Information Product Filename -->  
<!ELEMENT bibrpt -- (dt?,rpttype?,rptdtcov?)>  
<!ELEMENT bibcnf -- (dt?,li?,rpttype?,cte?,cl?,cd?,cnfspns?)>  
<!ELEMENT bibsoft -- (dt?) --020 Type of Record -->  
<!ELEMENT biboth -- (dt?,other?) -- 020 Bibliographic Information/Other-->  
<!ELEMENT dt -- (#PCDATA) --020 Type of Record -->  
<!ELEMENT li -- (#PCDATA) --040 Literary Indicator -->  
<!ELEMENT rpttype -- (%text, other?) --376 Report Type -->  
<!ELEMENT other -- (#PCDATA) -- other -->  
<!ELEMENT rptdtcov -- (#PCDATA) --690 Report Date Covered -->  
<!ELEMENT cte -- (%text) --450 Conference Title (English) -->  
<!ELEMENT cl -- (%text) --460 Conference Location -->  
<!ELEMENT cd -- (#PCDATA) --470 Conference Dates -->  
<!ELEMENT cnfspns -- (%text) --690 Conference Sponsors -->  
<!ELEMENT ntsbosti -- (elecaddr?,filedesc?,sgmlbrav?)>  
<!ELEMENT sbmtosti -- (cpysbmt?, sgmlbrav?, (transelc?|transcm?|  
transav?|transppr?), ipfrmnt?) --Items submitted  
to OSTI -->  
<!ELEMENT elecaddr -- (#PCDATA) --439 Network File Location -->  
<!ELEMENT filedesc -- (#PCDATA,other?) --766 File Format -->  
<!ELEMENT sgmlbrav -- (%text) --690 Bib Availability -->  
<!ELEMENT cpysbmt -- (uncl?,std?,clas?,classtd?,repro?,other?) --016 Copies Submitted  
-->  
<!ELEMENT (uncl,std,clas,classtd,repro) -- (#PCDATA)>  
<!ELEMENT transelc -- (filedesc?) -- 766 File Format -->  
<!ELEMENT transcm -- (qntypmed?, machcomp?, opsyst?, filedesc?)>  
<!ELEMENT transav -- (qntypmed?, machcomp?, sound?, color?, plygtime?) --770, 764,  
780, 774, 776-->  
<!ELEMENT qntypmed -- (#PCDATA) --770 quantity/type of material(s) -->  
<!ELEMENT machcomp -- (%text) --764 hardware needed to access data -->  
<!ELEMENT (sound, color, plygtime) -- (#PCDATA)>  
<!ELEMENT ipfrmnt -- (%text) --690 Information Product Format Note -->  
<!ELEMENT opsyst -- (#PCDATA) --768 opsyst, 766 fformed -->  
<!ELEMENT transppr -- (#PCDATA)>  
<!ELEMENT contact -- (ctpersnm?, ctpositn?, ctphone?, ctorgname?,  
ctemail?) --782 Contact Name-->

```

<!ELEMENT ctpersnm    - - (%text) --Contact Name -->
<!ELEMENT ctpositn   - - (%text) --Contact Position -->
<!ELEMENT ctphone    - - (#PCDATA) --Contact phone number -->
<!ELEMENT ctorgrname - - (%text) --Contact organization -->
<!ELEMENT ctemail    - - (#PCDATA) --Contact email address -->
<!ELEMENT annrecmd   - - (annun!?,annuso?, annclas?,annopn?,
                        anncopy?,annucni?,anneci?, annpat?,
                        anntrns?, annsbir?, annstr?, annprop?,
                        anncrda?, annouo?, annspcl?, annother?)>
<!ELEMENT annreldt   - - (#PCDATA) --657 Announcement Release Date -->
<!ELEMENT annnote    - - (%text) --690 Announcement Comment -->
<!ELEMENT (annsbir,annstr,anncrda) - - (annreldt)>
<!ELEMENT (anncopy,annspcl,annother) - - (annnote)>
<!ELEMENT annopn     - - (bibopn)>
<!ELEMENT bibopn     - - (othavail?,opnfocd?,declst?,decltd?)>
<!ELEMENT othavail   - - (opnaccno?,locopn?)>
<!ELEMENT opnaccno   - - (#PCDATA) --Accession Number -->
<!ELEMENT locopn     - - (%text) --location of document -->
<!ELEMENT opnfocd    - - (%text) --Field Office Acronym -->
<!ELEMENT declst     - - (#PCDATA) --440 Declassification Status -->
<!ELEMENT decltd     - - (#PCDATA) --440 Declassification Date -->
<!ELEMENT (annun!,annuso,annclas,annucni,anneci,annpat,anntrns,annprop,annouo) - - (#PCDATA)>
<!ELEMENT patclr     - - (patclrst?, patsubdt?)>
<!ELEMENT reloffc    - - (persname?, reldate?, phone?, email?)>
<!ELEMENT patclrst   - - (%text) --690 Patent Clearance -->
<!ELEMENT patsubdt   - - (#PCDATA) --690 Patent Date Submitted -->
<!ELEMENT persname   - - (%text) -- Release officials name -->
<!ELEMENT reldate    - - (#PCDATA) -- Release date -->
<!ELEMENT phone      - - (#PCDATA) -- Release officials phone# -->
<!ELEMENT email      - - (#PCDATA) -- Release officials email address -->
<!--

```

The repeatable element authrm contains two elements: "au" and "affil".

```

-->
<!ELEMENT authrm     - - (au*,affil*) --072 Personal Author (Monographic)/Affiliation -->
<!ELEMENT au         - - (#PCDATA) -- Personal Author -->
<!ELEMENT affil      - - (#PCDATA) -- Personal Author Affiliation -->
<!ELEMENT cs         - - (#PCDATA) --711 Corporate Entry Text-->
<!ELEMENT pbd        - - (#PCDATA) --370 Publication Date-->
<!ELEMENT pb         - - (#PCDATA) --390 Pages-->
<!ELEMENT ab         - - (%text) -- 950 Abstract -->
<!ELEMENT subjterm   - - (#PCDATA) -- 801 Subject Terms-->
<!ELEMENT biboptwo   - - (dtopn?, opndocct?, addrsto?)>
<!ELEMENT dtopn      - - (#PCDATA) -- OpenNet Document Type-->
<!ELEMENT opndocct   - - (#PCDATA) -- OpenNet Document Categories-->
<!ELEMENT addrsto    - - (#PCDATA) -- OpenNet Adressee-->
<!-- ***** -->
<!-- -->
<!-- bibpart -->
<!-- Additional metadata elements not included on -->
<!-- DOE Form 1332.15 Hardcopy version -->
<!-- -->
<!-- ***** -->
<!ELEMENT trn - - (#PCDATA) -- 1 Reference Number -->

```

<IELEMENT tn - - (#PCDATA) --410 Translation Note -->  
 <IELEMENT la - - (#PCDATA) --421 Language (Code) -->  
 <IELEMENT dn - - (%text) --440 Notes -->  
 <IELEMENT th - - (%text) --490 Academic Degree -->  
 <IELEMENT ps - - (#PCDATA) --520 US DOE Project/Nonproject -->  
 <IELEMENT co - - (#PCDATA) --560 Country of Intellectual Origin -->  
 <IELEMENT cp - - (#PCDATA) --570 Country of Publication -->  
 <IELEMENT cc - - (#PCDATA) --700 Corporate Entry (CODE) -->  
 ]>

### **C.1.b. SAMPLE SGML-TAGGED RECORDS**

<OS133215>  
 <FORM>  
 <BS>BHI</BS>  
 <RN>BHI--00187-Rev. 1</RN>  
 <CN>AC06-93RL12367</CN>  
 <TLM>Engineering Evaluation Conceptual Plan for the 200-UP-1 Groundwater Operable Unit  
 Interim Remedial Measure</TLM>  
 <SPC>DOE/EM</SPC>  
 <DC>UC-630</DC>  
 <INFPRDFN>BHI960612.ZIP</INFPRDFN>  
 <BIBRPT><DT>R</DT><RPTTYPE>T</RPTTYPE><RPTDTCOV>03/00/96</RPTDTCOV></BIBRPT>  
 <SBMTOSTI><CPYSBMT><UNCL>2</UNCL></CPYSBMT></SBMTOSTI>  
 <CONTACT><CTPERSNM>G. C. Henckel III</CTPERSNM><CTPOSITN>Technical  
 editor</CTPOSITN><CTORGNAME>Bechtel Hanford Inc.</CTORGNAME><CTPHONE>(509)  
 372-9381</CTPHONE><CTEMAIL>  
 george\_c\_henckel@rl.gov</CTEMAIL></CONTACT>  
 <ANNRECMD><ANNUNL></ANNUNL></ANNRECMD>  
 <PATCLR><PATCLRST>Not Required</PATCLRST></PATCLR>  
 <RELOFFCL><PERSNAME>G. C. Henckel  
 III</PERSNAME><RELDATE>06/12/1996</RELDATE><PHONE>(509)372-9381</PHONE><EMAIL>ge  
 orge\_c\_henckel@rl.gov</EMAIL></RELOFFCL>  
 <AUTHRM><AU>Henckel, G.C. III</AU></AUTHRM>  
 <CS>Bechtel Hanford, Inc., Richland, WA (US)</CS>  
 <PBD>03/00/1996</PBD>  
 <PB>62 p.</PB>  
 <AB>This report presents an engineering evaluation and conceptual plan for an interim remedial  
 measure (IRM) to address a uranium and technetium-99 groundwater plume in the 200-UP-1  
 Groundwater Operable Unit located in the 200 West Area of the Hanford Site. This report  
 provides information regarding the need for an IRM and its potential achievable objectives and  
 goals. The report also evaluates alternatives to contain elevated concentrations of uranium and  
 technetium-99 and to obtain information necessary to develop final remedial actions for the  
 operable unit.</AB>  
 <SUBJTERM>200-UP-1; GROUNDWATER ; OPERABLE UNIT; 242-A EVAPORATOR; INTERIM  
 REMEDIAL MEASURE </SUBJTERM>  
 <TRN>96000041</TRN>  
 <LA>EN</LA>  
 <CO>US</CO>  
 <CP>US</CP>  
 </FORM>

<FORM>  
 <BS>BHI</BS>  
 <RN>BHI--00230</RN>  
 <CN>AC06-93RL12367</CN>  
 <TLM>Geologic Field Inspection of the Sedimentary Sequence at the Environmental  
 Restoration Disposal Facility</TLM>  
 <SPC>DOE/EM</SPC>  
 <DC>UC-630</DC>  
 <INFPRDFN>BHI960612.ZIP</INFPRDFN>  
 <BIBRPT><DT>R</DT><RPTTYPE>T</RPTTYPE><RPTDTCOV>04/00/96</RPTDTCOV></BIBRPT>  
 <SBMTOSTI><CPYSBMT><UNCL>2</UNCL></CPYSBMT></SBMTOSTI>  
 <CONTACT><CTPERSONM>K. R. Fecht</CTPERSONM><CTPOSITN>Technical  
 editor</CTPOSITN><CTORGNAME>Bechtel Hanford Inc.</CTORGNAME><CTPHONE>  
 (509) 372-9356</CTPHONE><CTEMAIL>karl\_r\_fecht@rl.gov</CTEMAIL></CONTACT>  
 <ANNRECMD><ANNUNL></ANNUNL></ANNRECMD>  
 <PATCLR><PATCLRST>Not Required </PATCLRST></PATCLR>  
 <REOFFCL><PERSONAME>K. R. Fecht</PERSONAME><PHONE>(509)372-9356</PHONE>  
 <EMAIL>karl\_r\_fecht@rl.gov</EMAIL></REOFFCL>  
 <AUTHRM><AU>Fecht, K.R.</AU></AUTHRM>  
 <PBD>04/15/1996</PBD>  
 <PB>39 p.</PB>  
 <AB>The sedimentary sequence in the Environmental Restoration Disposal Facility (ERDF)  
 excavation was examined during construction (1) to document the geologic features identified  
 using site characterization, and (2) to determine if additional engineering measures to this base  
 design would be required. Periodic field inspections were made of vertical exposures created by  
 the trench sidewalls in the final excavation. This report presents the results of the field  
 inspections of the sedimentary sequence at the ERDF.</AB>  
 <SUBJTERM>ENVIRONMENTAL RESTORATION DISPOSAL FACILITY; EXCAVATION; SITE  
 CHARACTERIZATION</SUBJTERM>  
 <TRN>96T000042</TRN>  
 <LA>EN</LA>  
 <CO>US</CO>  
 <CP>US</CP>  
 <CC>9534010</CC>  
 </FORM>  
 <FORM>  
 <BS>BHI</BS>  
 <RN>BHI--00395</RN>  
 <CN>AC06-93RL12367</CN>  
 <TLM>Design, Operations, and Maintenance of the Soil Vapor Extraction Systems for the  
 200 West Area Carbon Tetrachloride Expedited Response Action</TLM>  
 <SPC>DOE/EM</SPC>  
 <DC>UC-630</DC>  
 <INFPRDFN>BHI960612.ZIP</INFPRDFN>  
 <BIBRPT><DT>R</DT><RPTTYPE>T</RPTTYPE?<RPTDTCOV>05/00/96</RPTDTCOV></BIBRPT>  
 <SBMTOSTI><CPYSBMT><UNCL>2</UNCL></CPYSBMT></SBMTOSTI>  
 <CONTACT><CTPERSONM>R. K. Tranbarger</CTPERSONM><CTPOSITN>project  
 head</CTPOSITN><CTORGNAME>Bechtel Hanford Inc.</CTORGNAME><CTPHONE>  
 (509)372-9298</CTPHONE><CTEMAIL>rhett\_k\_tranbarger@rl.gov</CTEMAIL></CONTACT>  
 <ANNRECMD><ANNUNL><ANNUL></ANNRECMD>  
 <PATCLR><PATCLRST>Not Required</PATCLRST></PATCLR>  
 <REOFFCL><PERSONAME>R. K. Tranbarger</PERSONAME><PHONE>(509)372-9298</PHONE>  
 <EMAIL>rhett\_k\_tranbarger@rl.gov</EMAIL></REOFFCL>  
 <AUTHRM><AU>Tranbarger, R.K.</AU></AUTHRM>

<PBD>05/06/1996</PBD>

<PB>39 p.</PB>

<AB>The 200 West Area Carbon Tetrachloride Expedited Response Action is being conducted by the U.S. Department, the U.S. Environmental Protection Agency and the Washington State Department of Ecology as a provision included in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980. The EPA is the lead regulatory agency with support provided by Ecology as needed. An expedited response action allows expedited responses to be taken at waste sites where early remediation will abate imminent hazards or prevent significantly increased degradation that might occur if action were delayed until completion of a remedial investigation/feasibility study and record of decision. This ERA investigation was requested by the EPA and Ecology in 1990 based on the concern that carbon tetrachloride in the soils within the 200 West Area, specifically the 200-ZP-2 Operable Unit, was a source of contamination to the groundwater. The result of the investigation was to initiate remediation of the carbon tetrachloride-contaminated soils in 1992. Thus, the purpose of the ERA was, and is today, to reduce carbon tetrachloride migration toward the groundwater by implementing recommendations resulting from an engineering evaluation/cost analysis.</AB>

<SUBJTERM>200 WEST AREA; CARBON TETRACHLORIDE; EXPEDITED RESPONSE ACTION;  
SOIL VAPOR EXTRACTION; CARBON TETRACHLORIDE; 200-ZP-2 OPERABLE  
UNIT</SUBJTERM>

<TRN>96T000043</TRN>

<LA>EN</LA>

<CO>US</CO>

<CP>US</CP>

<CC>9534010</CC>

</FORM>

</OS133215>

## C.2. Procedures for transmitting an SGML-formatted file

### A. Via File Transfer Protocol (FTP)

**NOTE:** Contact OSTI at (423) 576-1191 to obtain an FTP address, assigned username and password for use in transmittal of files via FTP.

When a shipment is ready to send:

Log on to the Internet and type **ftp [address will be supplied by OSTI]**

Respond to request for name with **assigned username.**

Respond to request for password with **assigned password.**

You will receive, in return, an automated email from OSTI's Electronic Receipt System verifying that your shipment was received and is being processed. Should your files have problems at any point in OSTI's processing cycle, OSTI will notify you and work with you to resolve the problems.

### B. Via Mail or Shipment

Restricted information should be transmitted via mail or shipment:

#### For Mail:

U.S. Department of Energy  
Office of Scientific and Technical  
Information (OSTI)  
P.O. Box 62  
Oak Ridge, TN 37831-0062

#### For Shipments:

U.S. Department of Energy  
Office of Scientific and Technical  
Information (OSTI)  
175 Oak Ridge Turnpike  
Oak Ridge, TN 37830

## Part D. Transmittal of Comma Delimited ASCII file

Part D.1. describes the file format. Refer to the procedures for sending Comma Delimited ASCII input in Section 3 for instructions on how to enter and format the various data elements.

Part D.2. provides procedures for transmitting the file via FTP or on a computer medium such as a diskette or CD.

The comma delimited ASCII records will be converted to the SGML-tagged format before processing by OSTI. **You should consider using a tagged data format unless you plan to model your database to exactly match the DOE F 1332.15 data form's order of elements and zones.** By using a tagged data format you can avoid having to count commas to ensure that your data can be accepted by OSTI.

### D.1. File format for a Comma Delimited ASCII file for DOE F 1332.15

#### Purpose

Electronic document exchange must provide the capability to accept records from many different organizations. Typically, organizations do not necessarily use the same methodology to process and to store their electronic records. Many different software packages are used, both standard off-the-shelf and custom packages. Long-term storage is also accomplished in a variety of formats. The purpose of this specification is to describe an ASCII file format to be used in exporting electronic records from their long-term storage format into a single, consistent ASCII file format.

#### Methodology

To accommodate the plethora of record storage formats, it will be necessary to convert data to be transferred or transmitted electronically from its unique internal storage format to a standard ASCII format that is acceptable to standard translation software designed to convert the data to one or more of the accepted data transfer formats (e.g., SGML). This specification describes the standard ASCII format to be used in initially preparing data for electronic transfer.

#### Comma Delimited Format

By definition, a delimited file format describes a data file in that unique segments (or data fields) of a data record can be readily distinguished from other unique segments within the same data record through the use of one or more characters that define the beginning and the end of the unique data segment. For the purposes of DOE electronic data exchange operations, a specific format, known as a *Comma Delimited ASCII* format, is used.

The following parameters provide a basic definition of a comma delimited file:

- *All data fields identified within the defined data record structure must be represented within the comma delimited record format, whether they appear in the local database or not.* The translation software will expect all defined data fields to be accounted for within the delimited record structure.
- *Data fields must occur in the correct order within the comma delimited record.* Data fields are expected to appear in the delimited record in the order that they appear in Section 2 .
- Unique data fields are separated from one another by a trailing *comma* character (ASCII decimal code 44).
- Data contained in a data field are enclosed within *double quote* characters (ASCII decimal code 34).

- Data fields that contain no data must be included within the comma delimited record. Blank data fields are represented by a comma, beginning and ending quote characters, and a comma as follows: ,",,.
- Records are terminated within the comma delimited file by a *carriage return/line feed* combination (ASCII decimal codes 13 and 10, hex codes 0D and 0A). In most programming languages, the record terminator is identified as the *new line* operator (`\r` for the C language).

Data stored within an organization's data systems in a form other than ASCII character format (such as numeric, floating point, inverted format, etc) will have to be converted to standard ASCII character format. Standard ASCII character format implies that *only characters having an ASCII decimal value in the range of 32 to 126* should appear in the data contained within the ASCII file. Embedded control characters such as *bold, italic, etc. should not* be included in the data file.

A simple address record having the following fields to illustrate preparing records using the Comma Delimited ASCII format is provided.

First Name  
 Middle Initial  
 Last Name  
 Street Address  
 City  
 State  
 Zip Code

All data fields in the example record contain character format data, and are of variable length.

Using the previously defined example record format, a comma delimited file containing six address records would appear as follows. Each record in the file is terminated by a *new line (carriage return/line feed)* terminator.

```
"John","A","Doe","123 Some Street","Oak Ridge","TN","37830"
"Jane","","Doe","123 Some Street","Oak Ridge","TN","37830"
","","Doe","","Oak Ridge","TN","37830"
"Jonas","P","Doe","","Oak Ridge","TN","37830"
"Max","L","Doe","","",""
"" "" "" "" "" "" "" ""
, , , , , , , ,
```

The first data record in the example data set:

```
"John","A","Doe","123 Some Street","Oak Ridge","TN","37830"
```

contains data for every field and represents the following database record:

|                |                   |
|----------------|-------------------|
| First Name     | : John            |
| Middle Initial | : A               |
| Last Name      | : Doe             |
| Street Address | : 123 Some Street |
| City           | : Oak Ridge       |
| State          | : TN              |
| Zip Code       | : 37830           |

The second data record in the example data set:

"Jane", "", "Doe", "123 Some Street", "Oak Ridge", "TN", "37830"

is missing the Middle Initial data field, and represents the following database record:

|                |                   |
|----------------|-------------------|
| First Name     | : Jane            |
| Middle Initial | :                 |
| Last Name      | : Doe             |
| Street Address | : 123 Some Street |
| City           | : Oak Ridge       |
| State          | : TN              |
| Zip Code       | : 37830           |

The third data record in the example data set:

"", "", "Doe", "", "Oak Ridge", "TN", "37830"

is missing the First Name, Middle Initial, and Street Address data fields, and represents the following database record:

|                |             |
|----------------|-------------|
| First Name     | :           |
| Middle Initial | :           |
| Last Name      | : Doe       |
| Street Address | :           |
| City           | : Oak Ridge |
| State          | : TN        |
| Zip Code       | : 37830     |

The fourth data record in the example set:

"Jonas", "P", "Doe", "", "Oak Ridge", "TN", "37830"

is missing only the Street Address data element, and represents the following database record:

|                |             |
|----------------|-------------|
| First Name     | : Jonas     |
| Middle Initial | : P         |
| Last Name      | : Doe       |
| Street Address | :           |
| City           | : Oak Ridge |
| State          | : TN        |
| Zip Code       | : 37830     |

The fifth data record in the example data set:

"Max", "L", "Doe", "", "", "", ""

is missing the Street Address, City, State, and Zip Code data fields, and represents the following database record:

|                |       |
|----------------|-------|
| First Name     | : Max |
| Middle Initial | : L   |



You will receive, in return, an automated email from OSTI's electronic receipt system verifying that your shipment was received and is being processed. Should your files have problems at any point in OSTI's processing cycle, OSTI will notify you and work with you to resolve the problem.

B. Via Mail or Shipment

Restricted information should be transmitted via mail or shipment:

For Mail:

U.S. Department of Energy  
Office of Scientific and Technical  
Information (OSTI)  
P.O. Box 62  
Oak Ridge, TN 37831-0062

For Shipments:

U.S. Department of Energy  
Office of Scientific and Technical  
Information (OSTI)  
175 Oak Ridge Turnpike  
Oak Ridge, TN 37830

Guidelines for Preparing and Transmitting the DOE F 1332.15 - Working Copy

Section 5. The OSTI SGML Character Set for DOE F 1332.15 input

TABLE OF CONTENTS

- A. The standard, or physical, character set
  - 1. Usage
  - 2. Keyboards lacking standard characters
  - 3. Diacritical signs and accents
  - 4. Numerals
  - 5. Fractions
- B. The special, or logical, character set
  - 1. Entities for special characters
  - 2. Entities for string operations
    - 2.a. Superscripts and subscripts
      - 2.a.1. Representing single level superscripts and subscripts
        - 2.a.1.(a) Superscript or subscript following a term
        - 2.a.1.(b) Superscripts or subscripts preceding or within a term
        - 2.a.1.(c) Both superscript and subscript used for the same character in a term
      - 2.a.2. Representing multilevel superscripts and subscripts
        - 2.a.2.(a) Superscripted superscripts (two levels)
        - 2.a.2.(b) Subscripted subscripts (two levels)
        - 2.a.2.(c) Subscripted superscripts (two levels)
        - 2.a.2.(d) Superscripted subscripts (two levels)
        - 2.a.2.(e) Both multilevel superscripts and subscripts present (two levels)
    - 2.b. Boldface string operation
    - 2.c. Italic string operation
    - 2.d. Over bar string operation
    - 2.e. Underline string operation
  - 3. Character operations
    - 3.a. Left vector character operation
    - 3.b. Right vector character operation
    - 3.c. Bar character operation
  - 4. Diacriticals
    - Table 1. Greek characters, uppercase
    - Table 2. Greek characters, lowercase
    - Table 3. Greek characters, variants
    - Table 4. Subset for Limited Keyboard
    - Table 5. Arrows
    - Table 6. Business and Miscellaneous Characters
    - Table 7. Geometric Shapes
    - Table 8. Mathematical and Scientific Characters
    - Table 9. Relational Characters
    - Table 10. Set Relations
    - Table 11. Diacriticals

The OSTI SGML Character Set used for DOE F 1332.15 input was developed to standardize and simplify the representation of mathematical, scientific, and other special characters in files transmitted electronically via networks and computer media such as CDs and magnetic diskettes, in computerized bibliographic databases and authorities, and in publications produced from those databases and authorities. Although the character set can be used for full text, it does not fully support the extensive and complex composition that may be required for scientific formulas, mathematical equations, and other symbolic representations included in full text.

There are two components to the set: the standard, or physical, character set, and the special, or logical, character set.

### A. The standard, or physical, character set

The standard character set is composed of those characters that are entered directly into the record and that are found on most keyboards.

The standard character set includes:

|                       |                                                                |
|-----------------------|----------------------------------------------------------------|
| the Latin alphabet    | upper- and lowercase A-Z, a-z                                  |
| the Arabic numerals   | 0-9                                                            |
| the punctuation marks | , . ; : ' ( ) [ ] ? - `                                        |
| other symbols         | \$ % * + /   space < > = # " _ (i.e., underscore)<br>! @ & { } |

#### 1. Usage

All of the characters in the standard character set may be used in entering data in any field except as indicated below.

- { *left, or opening, brace*: This is a reserved character in the SGML character set. Use only as the beginning character when inputting special character entities. Use {l-brace} for other uses of the left brace.
- } *right, or closing, brace*: This is a reserved character in the SGML character set. Use only as the ending character when inputting special character entities. Use {r-brace} for other uses of the right brace.
- < *left angle bracket; less than*: This is a reserved character in the SGML character set. Use only as the beginning character when inputting SGML element names. Use {l-angle} for a left angle bracket. Use {lt} for 'less than'.
- > *right angle bracket; greater than*: This is a reserved character in the SGML character set. Use only as the ending character when inputting SGML element names. Use {r-angle} for a right angle bracket. Use {gt} for 'greater than'.
- & *ampersand*: This is a reserved character in the SGML character set. Use {ampersand} for other uses of the ampersand.
- ' *apostrophe or single closing quote*: Do not use as a prime. A prime should be input as {prime}. Two apostrophes may be entered without a space between them (") to represent double closing quotes.

- *hyphen*: Do not use as a minus sign. Use {minus} for a minus sign. For an endash, enter either two hyphens without a space between them (--) or {endash}. For an emdash, enter either three hyphens without spaces (---) or {emdash}.
- . *period*: Do use for decimal point in numerals. Do not use for {center-dot}.
- ` *single opening quote*: Two single opening quotes may be entered without a space between them (``) to represent double opening quotes.
- | *vertical bar*: May also use {vert-bar}.
- \_ *underscore*: This character is reserved for use in the International Nuclear Information System (INIS) special character set. Use the ENTITY {underscore} for other uses of the underscore.
- " *double quotes*: This character represents both left and right double quotes. It is reserved for use in the International Nuclear Information System (INIS) special character set. Use two apostrophes for other uses..
- “ *double left, or opening, quotes*: This character is reserved for use in the International Nuclear Information System (INIS) special character set. Use two single opening quotes for other uses.
- ” *double right, or closing, quotes*: This character is reserved for use in the International Nuclear Information System (INIS) special character set. Use two apostrophes for other uses.
- # *number sign*: This character is reserved for use in the International Nuclear Information System (INIS) special character set. Use {number-sign} for other uses.
- ~ This character has been used ambiguously. Do not use it. Use the character operation {tilde} for ‘tilde’. Use {approximately} for ‘approximately’.

## 2. Keyboards lacking standard characters

Some keyboards do not have some of the symbols in the standard character set. Representations for these characters have been included in the special character set.

## 3. Diacritical signs and accents

Diacritical signs and accents for that an entity is not present in the SGML character set are omitted. See Section B.4. for additional information on entering diacriticals.

## 4. Numerals

Enter numerals using a decimal point (period, full stop) to separate the decimal part (that follows the decimal point) from the integer part (that precedes the decimal point). Enter commas to separate groups of digits of the integer part for legibility.

**Examples:** 2,300.359

15.0000587

1,532,944

[decimal point is not entered because no decimal part is entered]

## 5. Fractions

Enter fractions as the numerator, a slash, and the denominator.

**Example:**        1/2

### B. The special, or logical, character set

The special character set is composed of those characters that cannot be entered directly into the database record. Such characters include, for example, the Greek alphabet, superscripts and subscripts, and many symbols used for scientific and technical work. The SGML entities listed in Tables 1-11 should be used to represent these characters. Specific entities have also been established for some operations such as superscripting, subscripting, and some diacriticals. As noted in Part A, five characters from the standard or physical character set (#, \_, " , { , } ) are reserved for the purpose of representing the characters in special or logical character sets. If these characters are to be included as part of input, they must be represented as shown in the special or logical character set; e.g., # should be represented by {number\_sign} and " should be represented by {open\_quotes}.

A special character entity is composed of the reserved characters "{" and "}" enclosing the text as shown in the following tables.

The SGML special characters may be used only in the publication title, conference title, general notes, title augmentation, and abstract fields.

#### 1. Entities for special characters

Special characters for that standardized entities have been established include the Greek alphabet (both upper- and lowercase) and selected scientific symbols.

|                  |                           |                   |
|------------------|---------------------------|-------------------|
| <b>Examples:</b> | <u>source</u>             | <u>enter</u>      |
|                  | A (Greek uppercase Alpha) | <b>{Alpha}</b>    |
|                  | α (Greek lowercase alpha) | <b>{alpha}</b>    |
|                  | ∫ (the integral symbol)   | <b>{integral}</b> |

#### 2. Entities for string operations

String operations are used to act on one or more characters, e.g., to underline a publication title or subscript a group of characters. The entity is formatted as a left brace, the operation, a space, the character or characters to be acted upon, and a right brace.

##### 2.a. Superscripts and subscripts

Superscripts and subscripts are encoded using the entity **{sup}** for superscripts and **{sub}** for subscripts. The entity is formatted as a left brace, 'sup' or 'sub', a space, the standard character(s) and/or logical character(s) that are to be superscripted or subscripted, and a right brace.

##### 2.a.1. Representing single level superscripts and subscripts

###### 2.a.1.(a) Superscript or subscript following a term

When the superscript or subscript follows a term, enter the entity immediately after the character to that it applies. Do not separate the term and the entity with a space.

|                  |                      |                          |
|------------------|----------------------|--------------------------|
| <b>Examples:</b> | <u>source</u>        | <u>enter</u>             |
|                  | $X^2$                | <b>X{sup 2}</b>          |
|                  | $Y_2$                | <b>Y{sub 2}</b>          |
|                  | $gn^{13}$            | <b>gn{sup 13}</b>        |
|                  | $a^{b+c}$            | <b>a{sup b+c}</b>        |
|                  | $LD_{50}$            | <b>LD{sub 50}</b>        |
|                  | $B_{\text{max} = 1}$ | <b>B{sub max = 1}</b>    |
|                  | $\alpha^2$           | <b>{alpha}{sup 2}</b>    |
|                  | $x^\alpha$           | <b>x{sup {alpha}}</b>    |
|                  | $n_{\beta+1}$        | <b>n{sub {beta}+1}</b>   |
|                  | $n_{(\beta+1)}$      | <b>n{sub ({beta}+1)}</b> |

### 2.a.1.(b) Superscripts or subscripts preceding or within a term

The entities {sup} and {sub} can be used to code superscripts or subscripts attached to characters preceding or within a term.

|                  |                  |                          |
|------------------|------------------|--------------------------|
| <b>Examples:</b> | <u>source</u>    | <u>enter</u>             |
|                  | $X^4Y^2Z$        | <b>X{sup 4}Y{sup 2}Z</b> |
|                  | $H_2O$           | <b>H{sub 2}O</b>         |
|                  | $^{235}\text{U}$ | <b>{sup 235}U</b>        |
|                  | $R_\beta T$      | <b>R{sub {beta}}T</b>    |

### 2.a.1.(c) Both superscript and subscript used for the same character in a term

The entities {sup} and {sub} can precede and follow the same character. When both precede or both follow the character, the subscript is usually entered first.

|                  |                            |                                   |
|------------------|----------------------------|-----------------------------------|
| <b>Examples:</b> | <u>source</u>              | <u>enter</u>                      |
|                  | $^2\text{H}_2$             | <b>{sup 2}H{sub 2}</b>            |
|                  | $^4\text{O}_2$             | <b>{sub 4}O{sub 2}</b>            |
|                  | $^{40}_{20}\text{Ca}^{2+}$ | <b>{sub 20}{sup 40}Ca{sup 2+}</b> |

$$x_y^2 \qquad x\{\text{sub } y\}\{\text{sup } 2\}$$

$$\int_{\alpha}^{\beta} x^{\gamma-1} dx \qquad \{\text{integral}\}\{\text{sub}\{\alpha\}\}\{\text{sup}\{\beta\}\}x\{\text{sup}\{\gamma\}\}\{\text{minus}\}1\} dx$$

## 2.a.2. Representing multilevel superscripts and subscripts

Superscripts and subscripts may also have superscripts or subscripts. When more than one level is present, the entity appropriate for each level (in the sequence first level, second level, etc.) is entered before the symbol being superscripted or subscripted. Note that, although several levels of superscripts and subscripts may appear in the item being cataloged, only the first two levels are usually entered in the DOE F 1332.15 input.

### 2.a.2.(a) Superscripted superscripts (two levels)

Examples: source enter

$$a^{x^2} \qquad a\{\text{sup } x\{\text{sup } 2\}\}$$

$$2a^{x^{2+1}} \qquad 2a\{\text{sup } x\{\text{sup } 2+1\}\}$$

### 2.a.2.(b) Subscripted subscripts (two levels)

Examples: source enter

$$a_{x_2} \qquad a\{\text{sub } x\{\text{sub } 2\}\}$$

$$2a_{x_{2+1}} \qquad 2a\{\text{sub } x\{\text{sub } 2+1\}\}$$

### 2.a.2.(c) Subscripted superscripts (two levels)

Examples: source enter

$$a^{x_2} \qquad a\{\text{sup } x\{\text{sub } 2\}\}$$

### 2.a.2.(d) Superscripted subscripts (two levels)

Examples: source enter

$a_{x^2}$                       `a{sub x{sup 2}}`

$E_{3He}$                       `E{sub 3{sub He}}`

### 2.a.2.(e) Both multilevel superscripts and subscripts present (two levels)

When both a superscript and a subscript are present, the subscript is usually entered first.

**Example:**     source                      enter

$2a_{x^2}$                       `2a{sub x{sub 2}{sup 2}}`

$E_{n+1}^{\alpha^2-0.3}$                       `E{sub n+1}{sup {alpha}{sup 2}{minus}0.3}`

### 2.b. Boldface string operation

Use the entity **{bold}** to boldface one or more characters.

**Example:**     source                      enter

**A**                      `{bold A}`

**Solar energy**                      `{bold Solar energy}`

**$\gamma_{x=2}$**                       `{bold {gamma}{sub x+2}}`

### 2.c. Italic string operation

Use the entity **{ital}** to italicize one or more characters.

**Example:**     source                      enter

*A*                      `{ital A}`

*Solar energy*                      `{ital Solar energy}`

*$\gamma_{x=2}$*                       `{ital {gamma}{sub x+2}}`

$E_{n+1}^{\alpha^2-0.3}$                       `{ital E{sub n+1}{sup {alpha}{sup 2}{minus}0.3}}`

### 2.d. Over bar string operation

Use the entity **{ovr}** to provide a bar over two or more characters. (Use the character operation **{bar}** (part 3.C.) to provide a bar over one character.)

|                 |                     |                           |
|-----------------|---------------------|---------------------------|
| <b>Example:</b> | <u>source</u>       | <u>enter</u>              |
|                 | $\overline{AB}$     | <b>{ovr AB}</b>           |
|                 | <u>Solar energy</u> | <b>{ovr Solar energy}</b> |

### 2.e. Underline string operation

Use the entity **{und}** to underline one or more characters.

|                 |                     |                           |
|-----------------|---------------------|---------------------------|
| <b>Example:</b> | <u>source</u>       | <u>enter</u>              |
|                 | <u>A</u>            | <b>{und A}</b>            |
|                 | <u>Solar energy</u> | <b>{und Solar energy}</b> |

### 3. Character operations

Character operations affect only the character that follows the operation. These entities are entered as the left brace, the operation, a space, the character, and a right brace.

#### 3.a. Left vector character operation

Use the entity **{lvec}** to insert a left vector over one character.

|                 |                     |                 |
|-----------------|---------------------|-----------------|
| <b>Example:</b> | <u>source</u>       | <u>enter</u>    |
|                 | $\overleftarrow{A}$ | <b>{lvec A}</b> |

#### 3.b. Right vector character operation

Use the entity **{rvec}** to insert a right vector over one character.

|                 |                      |                 |
|-----------------|----------------------|-----------------|
| <b>Example:</b> | <u>source</u>        | <u>enter</u>    |
|                 | $\overrightarrow{A}$ | <b>{rvec A}</b> |

#### 3.c. Bar character operation

Use the entity **{bar }** to place a bar over one character.

|                 |               |                |
|-----------------|---------------|----------------|
| <b>Example:</b> | <u>source</u> | <u>enter</u>   |
|                 | $\bar{a}$     | <b>{bar a}</b> |
|                 | $\bar{e}$     | <b>{bar e}</b> |

### 4. Diacriticals

Following is a list of the diacriticals that are included in the OSTI SGML Character Set. Some accepted diacriticals are represented by a special character entity and others are represented by a character operation. Diacritical signs and accents for that an entity is not present in the SGML character set are omitted; enter only the letter itself.

| <b>Examples:</b> | <u>source</u>     | <u>enter</u> | <u>synonym</u>        |
|------------------|-------------------|--------------|-----------------------|
|                  | á                 | {acute a}    |                       |
|                  | ā                 | {bar a}      | macron                |
|                  | ă                 | {breve a}    |                       |
|                  | â                 | {cflx a}     | caret                 |
|                  | [graphics insert] | {dot a}      |                       |
|                  | à                 | {grave a}    |                       |
|                  | ǧ                 | {hacek g}    | inverted caret; caron |
|                  | ñ                 | {tilde n}    |                       |
|                  | ä                 | {uml a}      |                       |
|                  | æ                 | {ae}         |                       |
|                  | Æ                 | {AE}         |                       |
|                  | ø                 | {o}          |                       |
|                  | Ø                 | {O}          |                       |
|                  | œ                 | {oe}         |                       |
|                  | Œ                 | {OE}         |                       |
|                  | ß                 | {ss}         | sz                    |

Tables of SGML Special Characters

Table 1. Greek characters, uppercase

|   |          |         |               |
|---|----------|---------|---------------|
| A | <!ENTITY | Alpha   | "{Alpha}" >   |
|   | <!ENTITY | Beta    | "{Beta}" >    |
|   | <!ENTITY | Gamma   | "{Gamma}" >   |
|   | <!ENTITY | Delta   | "{Delta}" >   |
|   | <!ENTITY | Epsilon | "{Epsilon}" > |
|   | <!ENTITY | Zeta    | "{Zeta}" >    |
|   | <!ENTITY | Eta     | "{Eta}" >     |
|   | <!ENTITY | Theta   | "{Theta}" >   |
|   | <!ENTITY | Iota    | "{Iota}" >    |
|   | <!ENTITY | Kappa   | "{Kappa}" >   |
|   | <!ENTITY | Lambda  | "{Lambda}" >  |
|   | <!ENTITY | Mu      | "{Mu}" >      |
|   | <!ENTITY | Nu      | "{Nu}" >      |
|   | <!ENTITY | Xi      | "{Xi}" >      |
|   | <!ENTITY | Omicron | "{Omicron}" > |
|   | <!ENTITY | Pi      | "{Pi}" >      |
|   | <!ENTITY | Rho     | "{Rho}" >     |
|   | <!ENTITY | Sigma   | "{Sigma}" >   |
|   | <!ENTITY | Tau     | "{Tau}" >     |
|   | <!ENTITY | Upsilon | "{Upsilon}" > |
|   | <!ENTITY | Phi     | "{Phi}" >     |
|   | <!ENTITY | Chi     | "{Chi}" >     |
|   | <!ENTITY | Psi     | "{Psi}" >     |
|   | <!ENTITY | Omega   | "{Omega}" >   |

Table 2. Greek characters, lowercase

|   |          |         |               |
|---|----------|---------|---------------|
| α | <!ENTITY | alpha   | "{alpha}" >   |
| β | <!ENTITY | beta    | "{beta}" >    |
| γ | <!ENTITY | gamma   | "{gamma}" >   |
|   | <!ENTITY | delta   | "{delta}" >   |
|   | <!ENTITY | epsilon | "{epsilon}" > |
|   | <!ENTITY | zeta    | "{zeta}" >    |
|   | <!ENTITY | eta     | "{eta}" >     |
|   | <!ENTITY | theta   | "{theta}" >   |
|   | <!ENTITY | iota    | "{iota}" >    |
|   | <!ENTITY | kappa   | "{kappa}" >   |
|   | <!ENTITY | lambda  | "{lambda}" >  |
| μ | <!ENTITY | mu      | "{mu}" >      |
|   | <!ENTITY | nu      | "{nu}" >      |
|   | <!ENTITY | xi      | "{xi}" >      |
|   | <!ENTITY | omicron | "{omicron}" > |
|   | <!ENTITY | pi      | "{pi}" >      |
|   | <!ENTITY | rho     | "{rho}" >     |
|   | <!ENTITY | sigma   | "{sigma}" >   |
|   | <!ENTITY | tau     | "{tau}" >     |
|   | <!ENTITY | upsilon | "{upsilon}" > |
|   | <!ENTITY | phi     | "{phi}" >     |
|   | <!ENTITY | chi     | "{chi}" >     |

|          |       |             |
|----------|-------|-------------|
| <!ENTITY | psi   | "{psi}" >   |
| <!ENTITY | omega | "{omega}" > |

**NOTE:** Previous input instructions may have provided either a hyphen or an underscore as the connecting character. While this is still acceptable input, the underscore as provided in the following tables is preferred.

Table 3. Greek characters, variants

|          |             |                   |
|----------|-------------|-------------------|
| <!ENTITY | var-epsilon | "{var_epsilon}" > |
| <!ENTITY | var-theta   | "{var_theta}" >   |
| <!ENTITY | var-pi      | "{var_pi}" >      |
| <!ENTITY | var-sigma   | "{var_sigma}" >   |
| <!ENTITY | var-phi     | "{var_phi}" >     |

Table 4. Subset for Limited Keyboard

|    |          |                   |                         |
|----|----------|-------------------|-------------------------|
| *  | <!ENTITY | asterisk          | "{asterisk}" >          |
| <  | <!ENTITY | less than         | "{lt}" >                |
| >  | <!ENTITY | greater than      | "{gt}" >                |
| &  | <!ENTITY | ampersand         | "{ampersand}" >         |
| @  | <!ENTITY | at                | "{at}" >                |
| \$ | <!ENTITY | dollar-sign       | "{dollar_sign}" >       |
| =  | <!ENTITY | equals            | "{equals}" >            |
| !  | <!ENTITY | exclamation-point | "{exclamation_point}" > |
| %  | <!ENTITY | percent           | "{percent}" >           |
| +  | <!ENTITY | plus              | "{plus}" >              |

Table 5. Arrows

|   |          |                                 |                       |
|---|----------|---------------------------------|-----------------------|
| ⇌ | <!ENTITY | right-equilibrium               | "{r_equilibrium}" >   |
| ⇐ | <!ENTITY | left-equilibrium                | "{l_equilibrium}" >   |
| ⇄ | <!ENTITY | right-reversible                | "{r_reversible}" >    |
| ⇅ | <!ENTITY | left-reversible                 | "{l_reversible}" >    |
| ⇒ | <!ENTITY | implies                         | "{implies}" >         |
| ↑ | <!ENTITY | up-arrow                        | "{up_arrow}" >        |
| ↓ | <!ENTITY | down-arrow                      | "{down_arrow}" >      |
| ← | <!ENTITY | left-arrow                      | "{l_arrow}" >         |
| → | <!ENTITY | right-arrow                     | "{r_arrow}" >         |
| ⇐ | <!ENTITY | Left-arrow                      | "{L_arrow}" >         |
| ⇒ | <!ENTITY | Right-arrow                     | "{R_arrow}" >         |
| → | <!ENTITY | yields                          | "{yields}" >          |
| ⇓ | <!ENTITY | Down-arrow                      | "{Down_arrow}" >      |
| ⇐ | <!ENTITY | Left-arrow                      | "{L_arrow}" >         |
| ↵ | <!ENTITY | leftharpoondown                 | "{leftharpoondown}" > |
| ↶ | <!ENTITY | leftharpoonup                   | "{leftharpoonup}" >   |
| ↷ | <!ENTITY | leftrightharrow                 | "{leftrightharrow}" > |
| ⇨ | <!ENTITY | Leftrightharrow                 | "{Leftrightharrow}" > |
| ↠ | <!ENTITY | longleftarrow [graphics insert] | "{longleftarrow}" >   |
| ↞ | <!ENTITY | Longleftarrow [graphics insert] | "{Longleftarrow}" >   |
| ↗ | <!ENTITY | northeastarrow                  | "{nearrow}" >         |
| ↖ | <!ENTITY | northwestarrow                  | "{nwarrow}" >         |

|   |          |                   |                       |
|---|----------|-------------------|-----------------------|
| ↔ | <!ENTITY | rightleftharpoons | {rightleftharpoons} > |
| ↘ | <!ENTITY | rightharpoondown  | {rightharpoondown} >  |
| ↗ | <!ENTITY | rightharpoonup    | {rightharpoonup} >    |
| ↙ | <!ENTITY | southeastarrow    | {searrow} >           |
| ↘ | <!ENTITY | southwestarrow    | {swarrow} >           |
| ↑ | <!ENTITY | Up-arrow          | {Up_arrow} >          |
| ↓ | <!ENTITY | updownarrow       | {updownarrow} >       |

Table 6. Business and Miscellaneous Characters

|   |          |                     |                   |
|---|----------|---------------------|-------------------|
| # | <!ENTITY | number-sign         | {number_sign} >   |
| ★ | <!ENTITY | star                | {star} >          |
| † | <!ENTITY | dagger              | {dagger} >        |
| ‡ | <!ENTITY | double-dagger       | {double_dagger} > |
| ♠ | <!ENTITY | spadesuit           | {spadesuit} >     |
| ♥ | <!ENTITY | heartsuit           | {heartsuit} >     |
| { | <!ENTITY | left-brace          | {l_brace} >       |
| ‰ | <!ENTITY | per-thousand        | {per_thousand} >  |
| } | <!ENTITY | right-brace         | {r_brace} >       |
| \ | <!ENTITY | backslash           | {backslash} >     |
| ♣ | <!ENTITY | clubsuit            | {clubsuit} >      |
| ™ | <!ENTITY | trademark           | {trademark} >     |
| ¶ | <!ENTITY | paragraph           | {paragraph} >     |
| ® | <!ENTITY | registration-sign   | {reg_sign} >      |
| § | <!ENTITY | section             | {section} >       |
| £ | <!ENTITY | British-pounds      | {Brit_pounds} >   |
| © | <!ENTITY | copyright           | {copyright} >     |
| … | <!ENTITY | horizontal-ellipsis | {hor_ellipsis} >  |
| ♂ | <!ENTITY | male                | {male} >          |
| ♀ | <!ENTITY | female              | {female} >        |
| ¢ | <!ENTITY | cents               | {cents} >         |
| — | <!ENTITY | emdash              | {emdash} >        |
| - | <!ENTITY | endash              | {endash} >        |
| # | <!ENTITY | number-sign         | {number_sign} >   |
|   | <!ENTITY | vertical-bar        | {vert_bar} >      |
| ⋮ | <!ENTITY | vertical-ellipsis   | {vert_ellipsis} > |
| ∟ | <!ENTITY | right-angle         | {r_angle} >       |
| ∟ | <!ENTITY | left-angle          | {l_angle} >       |
| ' | <!ENTITY | close-quote         | {close_quote} >   |
| ” | <!ENTITY | close-quotes        | {close_quotes} >  |
| ‘ | <!ENTITY | open-quote          | {open_quote} >    |
| “ | <!ENTITY | open-quotes         | {open_quotes} >   |
| _ | <!ENTITY | underscore          | {underscore} >    |

Table 7. Geometric Shapes

|   |          |               |                   |
|---|----------|---------------|-------------------|
| • | <!ENTITY | small-bullet  | {sm_bullet} >     |
| ■ | <!ENTITY | square-bullet | {sq_bullet} >     |
| ▼ | <!ENTITY | triangledown  | {triangledown} >  |
| ◀ | <!ENTITY | triangleleft  | {triangleleft} >  |
| ▶ | <!ENTITY | triangleright | {triangleright} > |
| ◯ | <!ENTITY | bigcircle     | {bigcirc} >       |
| ○ | <!ENTITY | circle        | {circ} >          |

|   |          |                |                      |
|---|----------|----------------|----------------------|
| ⊖ | <!ENTITY | circle-minus   | "{circle_minus}" >   |
| ∅ | <!ENTITY | circle-slash   | "{circle_slash}" >   |
| ● | <!ENTITY | large-bullet   | "{lg_bullet}" >      |
| ◆ | <!ENTITY | diamond        | "{diamond}" >        |
| ⊗ | <!ENTITY | direct-product | "{direct_product}" > |
| ⊕ | <!ENTITY | direct-sum     | "{direct_sum}" >     |
| △ | <!ENTITY | triangle       | "{triangle}" >       |
| ≡ | <!ENTITY | identical-to   | "{identical_to}" >   |
| ⊙ | <!ENTITY | circle-dot     | "{circle_dot}" >     |
| ⊗ | <!ENTITY | circle-times   | "{circle_times}" >   |
| ⊕ | <!ENTITY | circle-plus    | "{circle_plus}" >    |
| □ | <!ENTITY | open-square    | "{open_square}" >    |
| □ | <!ENTITY | four-gradient  | "{four_gradient}" >  |
| □ | <!ENTITY | D'Alembertian  | "{D'Alembertian}" >  |

Table 8. Mathematical and Scientific Characters

|   |          |                                  |                          |
|---|----------|----------------------------------|--------------------------|
| ÷ | <!ENTITY | divided-by                       | "{divided_by}" >         |
| ℜ | <!ENTITY | Real                             | "{Re}" >                 |
| ⊤ | <!ENTITY | top                              | "{top}" >                |
| ℘ | <!ENTITY | weierp                           | "{wp}" >                 |
| ∇ | <!ENTITY | del                              | "{del}" >                |
| ℏ | <!ENTITY | Dirac-h                          | "{Dirac_h}" >            |
| - | <!ENTITY | bond                             | "{bond}" >               |
| - | <!ENTITY | single-bond                      | "{single_bond}" >        |
| = | <!ENTITY | double-bond                      | "{double_bond}" >        |
| ℑ | <!ENTITY | Imaginary                        | "{Im}" >                 |
| ∞ | <!ENTITY | infinity                         | "{infinity}" >           |
| - | <!ENTITY | minus                            | "{minus}" >              |
| ∇ | <!ENTITY | nabla                            | "{nabla}" >              |
| ∅ | <!ENTITY | null                             | "{null}" >               |
| ∂ | <!ENTITY | partial-derivative               | "{partial_derivative}" > |
| ≡ | <!ENTITY | triple-bond                      | "{triple_bond}" >        |
|   | <!ENTITY | quadruple-bond [graphics insert] | "{quadruple_bond}" >     |
| " | <!ENTITY | double-prime                     | "{double_prime}" >       |
| ℓ | <!ENTITY | ell                              | "{ell}" >                |
| ∃ | <!ENTITY | exists                           | "{exists}" >             |
| ∀ | <!ENTITY | forall                           | "{forall}" >             |
| ℏ | <!ENTITY | h-bar                            | "{h_bar}" >              |
| ∑ | <!ENTITY | summation                        | "{summation}" >          |
| ∴ | <!ENTITY | therefore                        | "{therefore}" >          |
| ∵ | <!ENTITY | because                          | "{because}" >            |
| ∠ | <!ENTITY | angle                            | "{angle}" >              |
| Å | <!ENTITY | angstrom                         | "{angstrom}" >           |
| Å | <!ENTITY | Angstrom                         | "{Angstrom}" >           |
| · | <!ENTITY | center-dot                       | "{center_dot}" >         |
| ∇ | <!ENTITY | gradient                         | "{gradient}" >           |
| ∇ | <!ENTITY | divergent                        | "{divergent}" >          |
| ° | <!ENTITY | degree                           | "{degree}" >             |
| ° | <!ENTITY | degrees                          | "{degrees}" >            |
| ± | <!ENTITY | plus-minus                       | "{plus_minus}" >         |
| ± | <!ENTITY | plus-minus                       | "{+-}" >                 |
| ∓ | <!ENTITY | minus-plus                       | "{minus_plus}" >         |
| ∓ | <!ENTITY | minus-plus                       | "{-+}" >                 |

|                |          |                                 |                        |
|----------------|----------|---------------------------------|------------------------|
| '              | <!ENTITY | prime                           | "{prime}" >            |
|                | <!ENTITY | product [graphics insert]       | "{product}" >          |
| ∞              | <!ENTITY | infinity                        | "{infinity}" >         |
| ∫              | <!ENTITY | integral                        | "{integral}" >         |
|                | <!ENTITY | line-integral [graphics insert] | "{line_integral}" >    |
| ∮              | <!ENTITY | contour-integral                | "{contour_integral}" > |
| √              | <!ENTITY | radical                         | "{radical}" >          |
| x              | <!ENTITY | times                           | "{times}" >            |
| T <sub>c</sub> | <!ENTITY | T <sub>c</sub>                  | "{Tc}" >               |
| μ              | <!ENTITY | micro                           | "{micro}" >            |
| !              | <!ENTITY | aleph                           | "{aleph}" >            |
| ħ              | <!ENTITY | dirac-h                         | "{Dirac_h}" >          |

Table 9. Relational Characters

|   |          |                                      |                       |
|---|----------|--------------------------------------|-----------------------|
|   | <!ENTITY | approx-greaterthan [graphics insert] | "{approx_gt}" >       |
| ~ | <!ENTITY | approximately                        | "{approximately}" >   |
|   | <!ENTITY | approx-lessthan [graphics insert]    | "{approx_lt}" >       |
| ∞ | <!ENTITY | asyp                                 | "{asyp}" >            |
| ≡ | <!ENTITY | congruent                            | "{congruent}" >       |
| ⊥ | <!ENTITY | dashv                                | "{dashv}" >           |
| ≐ | <!ENTITY | dotequal                             | "{doteq}" >           |
| ≐ | <!ENTITY | equivalent-to                        | "{equivalent_to}" >   |
| ∥ | <!ENTITY | parallel                             | "{parallel}" >        |
| ⊥ | <!ENTITY | perpendicular                        | "{perpendicular}" >   |
| ≈ | <!ENTITY | approx                               | "{approx}" >          |
| ~ | <!ENTITY | similar-to                           | "{similar_to}" >      |
| ≈ | <!ENTITY | approx-equal                         | "{approx_equal}" >    |
| ≠ | <!ENTITY | not equal                            | "{ne}" >              |
| ≤ | <!ENTITY | less than or equal to                | "{le}" >              |
| ≥ | <!ENTITY | greater than or equal                | "{ge}" >              |
| ≪ | <!ENTITY | much-less than                       | "{much_lt}" >         |
| ≫ | <!ENTITY | much-greater than                    | "{much_gt}" >         |
| ⋈ | <!ENTITY | not-lessthan                         | "{not_lt}" >          |
| ⋈ | <!ENTITY | not-greaterthan                      | "{not_gt}" >          |
| ∝ | <!ENTITY | proportional-to                      | "{proportional_to}" > |
| ⊃ | <!ENTITY | such-that                            | "{such_that}" >       |
| ⋈ | <!ENTITY | prec                                 | "{prec}" >            |
| ⋈ | <!ENTITY | preceq                               | "{preceq}" >          |
| ⋈ | <!ENTITY | succ                                 | "{succ}" >            |
| ⋈ | <!ENTITY | succeq                               | "{succeq}" >          |
| ⋈ | <!ENTITY | vdash                                | "{vdash}" >           |
| ⋈ | <!ENTITY | less than-or-greater than            | "{lt_or_gt}" >        |
| ⋈ | <!ENTITY | greater than-or-less than            | "{gt_or_lt}" >        |

Table 10. Set Relations

|   |          |              |                    |
|---|----------|--------------|--------------------|
| ⊂ | <!ENTITY | contained-in | "{contained_in}" > |
| ⊃ | <!ENTITY | contains     | "{contains}" >     |
| ∈ | <!ENTITY | element-of   | "{element_of}" >   |
| ∪ | <!ENTITY | union        | "{union}" >        |

|   |          |                   |                         |
|---|----------|-------------------|-------------------------|
| ∩ | <!ENTITY | intersection      | "{intersection}" >      |
| ⊆ | <!ENTITY | improper-subset   | "{improper_subset}" >   |
| ⊇ | <!ENTITY | improper-superset | "{improper_superset}" > |

Table 11. Diacriticals

|   |          |                         |               |
|---|----------|-------------------------|---------------|
| Æ | <!ENTITY | AE                      | "{AE}" >      |
| æ | <!ENTITY | ae                      | "{ae}" >      |
| ø | <!ENTITY | o                       | "{o}" >       |
| Ø | <!ENTITY | O                       | "{O}" >       |
| œ | <!ENTITY | oe                      | "{oe}" >      |
| Œ | <!ENTITY | OE                      | "{OE}" >      |
| ß | <!ENTITY | ss                      | "{ss}" >      |
| á | <!ENTITY | acute a                 | "{acute a}" > |
| ā | <!ENTITY | bar a                   | "{bar a}" >   |
| ă | <!ENTITY | breve a                 | "{breve a}" > |
| â | <!ENTITY | cflx a                  | "{cflx a}" >  |
|   | <!ENTITY | dot a [graphics insert] | "{dot a}" >   |
| à | <!ENTITY | grave a                 | "{grave a}" > |
| ǧ | <!ENTITY | hacek g                 | "{hacek g}" > |
| ñ | <!ENTITY | tilde n                 | "{tilde n}" > |
| ä | <!ENTITY | umlit a                 | "{umlit a}" > |



## Guidelines for Preparing and Transmitting the DOE F 1332.15 - Working Copy

### Appendix 1. Funding Office Codes

The funding office codes are used to represent the DOE Program Office or other organization providing support/sponsorship/funding for the work described in the scientific and technical information product.

|         |                                                                                      |
|---------|--------------------------------------------------------------------------------------|
| ACEEE   | American Council for an Energy-Efficient Economy                                     |
| ACHEMS  | American Chemical Society                                                            |
| AGA     | American Gas Association                                                             |
| AICHE   | American Institute of Chemical Engineers                                             |
| AID     | U.S. Agency for International Development                                            |
| AIP     | American Institute of Physics                                                        |
| AMPET   | American Petroleum Institute                                                         |
| ANS     | American Nuclear Society                                                             |
| ASHRAE  | American Society of Heating, Refrigeration and Air Conditioning Engineers            |
| ASME    | American Society of Mechanical Engineers                                             |
| AVHFOUN | Alexander von Humboldt Foundation                                                    |
| CAEC    | California Energy Commission                                                         |
| CANSERC | Natural Sciences and Engineering Research Council of Canada                          |
| CUNY    | City University of New York                                                          |
| DARPA   | Defense Advanced Research Project Agency                                             |
| DNA     | Defense Nuclear Agency                                                               |
| DOA     | U.S. Department of Agriculture                                                       |
| DOC     | U.S. Department of Commerce                                                          |
| DOD     | U.S. Department of Defense                                                           |
| DOE/AD  | U.S. DOE Office of Administration and Human Resource Management                      |
| DOE/AN  | U.S. DOE Office of Arms Control and Nonproliferation                                 |
| DOE/AO  | U.S. DOE Albuquerque Operations Office                                               |
| DOE/APA | U.S. DOE Alaska Power Administration                                                 |
| DOE/BPA | U.S. DOE Bonneville Power Administration                                             |
| DOE/BPO | U.S. DOE Bartlesville Project Office (National Petroleum Technology Office)          |
| DOE/BU  | U.S. DOE Office of Small and Disadvantaged Business Utilization                      |
| DOE/CE  | U.S. DOE Office of Conservation & Renewable Energy                                   |
| DOE/CGE | U.S. DOE Northeast Regional Center for Global Environmental Change                   |
| DOE/CI  | U.S. DOE Office of Congressional, Intergovernmental and International                |
| DOE/CO  | U.S. DOE Chicago Operations Office                                                   |
| DOE/CP  | U.S. DOE Assistant Secretary for Congressional, Public and Intergovernmental Affairs |
| DOE/CR  | U.S. DOE Financial Management and Controller                                         |
| DOE/DP  | U.S. DOE Office of Defense Programs                                                  |
| DOE/ED  | U.S. DOE Office of Economic Impact and Diversity                                     |
| DOE/EE  | U.S. DOE Office of Energy Efficiency & Renewable Energy                              |
| DOE/EH  | U.S. DOE Office of Environment Safety & Health                                       |
| DOE/EI  | U.S. DOE Energy Information Administration                                           |
| DOE/EM  | U.S. DOE Office of Environmental Restoration and Waste Management                    |
| DOE/EP  | U.S. DOE Office of Domestic and International Energy Policy                          |
| DOE/ER  | U.S. DOE Office of Energy Research                                                   |
| DOE/ET  | U.S. DOE Office of Science Education and Technical Information                       |
| DOE/FE  | U.S. DOE Office of Fossil Energy                                                     |
| DOE/FM  | U.S. DOE Office of the Associate Deputy Secretary for Field Management               |

|         |                                                                               |
|---------|-------------------------------------------------------------------------------|
| DOE/HR  | U.S. DOE Office of Human Resources and Administration                         |
| DOE/IE  | U.S. DOE Assistant Secretary for International Affairs and Energy Emergencies |
| DOE/IG  | U.S. DOE Office of Inspector General                                          |
| DOE/IN  | U.S. DOE Office of Intelligence                                               |
| DOE/IO  | U.S. DOE Idaho Operations Office                                              |
| DOE/IS  | U.S. DOE Office of Intelligence and National Security                         |
| DOE/LM  | U.S. DOE Office of Laboratory Management                                      |
| DOE/LPO | U.S. DOE Laramie Project Office                                               |
| DOE/MA  | U.S. DOE Office of Management & Administration                                |
| DOE/MD  | U.S. DOE Office of Fissile Materials Disposition                              |
| DOE/MET | U.S. DOE Morgantown Energy Technology Center                                  |
| DOE/MI  | U.S. DOE Office of Minority Economic Impact                                   |
| DOE/NE  | U.S. DOE Office of Nuclear Energy                                             |
| DOE/NN  | U.S. DOE Office of Nonproliferation and National Security                     |
| DOE/NO  | U.S. DOE Nevada Operations Office                                             |
| DOE/NP  | U.S. DOE Office of New Production Reactors                                    |
| DOE/NS  | U.S. DOE Office of Nuclear Safety                                             |
| DOE/NT  | U.S. DOE Office of Intelligence                                               |
| DOE/OE  | U.S. DOE Office of Emergency Planning and Operations                          |
| DOE/ORO | U.S. DOE Oak Ridge Operations Office                                          |
| DOE/PA  | U.S. DOE Office of Public and Consumer Affairs                                |
| DOE/PE  | U.S. DOE Office of Policy, Planning and Analysis                              |
| DOE/PET | U.S. DOE Pittsburgh Energy Technology Center                                  |
| DOE/PO  | U.S. DOE Office of Policy, Planning and Program Evaluation                    |
| DOE/PR  | U.S. DOE Office of Procurement, Assistance and Program Management             |
| DOE/RG  | U.S. DOE Economic Regulatory Administration                                   |
| DOE/RO  | U.S. DOE Richland Operations Office                                           |
| DOE/RW  | U.S. DOE Office of Civilian Radioactive Waste Management                      |
| DOE/S   | U.S. DOE Office of the Secretary                                              |
| DOE/SA  | U.S. DOE Office of Security Affairs                                           |
| DOE/SEP | U.S. DOE Southeastern Power Administration                                    |
| DOE/SFO | U.S. DOE San Francisco Operations Office                                      |
| DOE/SRO | U.S. DOE Savannah River Operations Office                                     |
| DOE/ST  | U.S. DOE Office of Science and Technology                                     |
| DOE/SWP | U.S. DOE Southwestern Power Administration                                    |
| DOE/TP  | U.S. DOE Office of the Deputy Under Secretary for Technology Partnerships     |
| DOE/WAP | U.S. DOE Western Area Power Administration                                    |
| DOED    | U.S. Department of Education                                                  |
| DOEIND  | U.S. DOE-Industry EM Consortium                                               |
| DOESPS  | U.S. DOE-SPSCoR-Alabama                                                       |
| DOHHS   | U.S. Department of Health and Human Services                                  |
| DOHUD   | U.S. Department of Housing and Urban Development                              |
| DOI     | U.S. Department of the Interior                                               |
| DOJ     | U.S. Department of Justice                                                    |
| DOL     | U.S. Department of Labor                                                      |
| DOS     | U.S. Department of State                                                      |
| DOT     | U.S. Department of Transportation                                             |
| DOTR    | U.S. Department of the Treasury                                               |
| DOVA    | U.S. Department of Veterans Affairs                                           |
| ENGFOUN | Engineering Foundation                                                        |
| EPA     | Environmental Protection Agency                                               |
| EPRI    | Electric Power Research Institute                                             |
| FEMA    | U.S. Federal Emergency Management Agency                                      |
| GAO     | U.S. General Accounting Office                                                |

|          |                                                              |
|----------|--------------------------------------------------------------|
| FERC     | Federal Energy Regulatory Commission                         |
| GRI      | Gas Research Institute                                       |
| GSA      | U.S. General Services Administration                         |
| IAEA     | International Atomic Energy Agency                           |
| IEEE     | Institute of Electrical and Electronics Engineers            |
| IGT      | Institute of Gas Technology                                  |
| IINFN    | Italian Istituto Nazionale di Fisica Nucleare                |
| ISF      | International Science Foundation                             |
| JAERI    | Japan Atomic Energy Research Institute                       |
| JAMESC   | Japan Ministry of Education, Science and Culture             |
| JPUSCRP  | Japan-US Cooperative Research Project on High Energy Physics |
| NAS      | National Academy of Sciences                                 |
| NASA     | National Aeronautics and Space Administration                |
| NATRC    | National Research Council                                    |
| NIEHS    | National Institute of Environmental Health Sciences          |
| NIGEC    | National Institute for Global Environmental Change           |
| NIGMS    | National Institute of General Medical Sciences               |
| NIH      | National Institutes of Health                                |
| NILECJ   | National Institute of Law Enforcement and Criminal Justice   |
| NIOSH    | National Institute for Occupational Safety and Health        |
| NIPER    | National Institute for Petroleum and Energy Research         |
| NIST     | National Institute of Standards and Technology               |
| NMIMT    | New Mexico Institute of Mining and Technology                |
| NRC      | Nuclear Regulatory Commission                                |
| NRC/ADM  | NRC Office of Administration                                 |
| NRC/AEOD | NRC Office for Analysis and Evaluation of Operational Data   |
| NRC/IRM  | NRC Office of Information Resources Management               |
| NRC/NMSS | NRC Office of Nuclear Material Safety and Safeguards         |
| NRC/NRR  | NRC Office of Nuclear Reactor Regulation                     |
| NRC/RES  | NRC Office of Nuclear Regulatory Research                    |
| NRC/RI   | NRC Region I                                                 |
| NRC/RII  | NRC Region II                                                |
| NRC/RIII | NRC Region III                                               |
| NRC/RIV  | NRC Region IV                                                |
| NRC/RV   | NRC Region V                                                 |
| NRCCA    | National Research Council of Canada                          |
| NSCROC   | National Science Council of Republic of China                |
| NSF      | National Science Foundation                                  |
| NYSEO    | New York State Energy Office                                 |
| NYSERDA  | New York State Energy Research and Development Authority     |
| RAWF     | Robert A. Welch Foundation                                   |
| ROCFOUN  | Rockefeller Foundation                                       |
| SLOAN    | A.P. Sloan Foundation                                        |
| TVA      | Tennessee Valley Authority                                   |
| UKAEA    | U.K. Atomic Energy Authority                                 |
| UKSERC   | U.K. Science and Engineering Research Council                |
| USA      | Department of the Army                                       |
| USGS     | U.S. Geological Survey                                       |
| USILBSF  | United States-Israel Binational Science Foundation           |

## Appendix 2. Language Names and Codes

The following language names and codes are taken from International Standard ISO 639:1988, Codes for the representation of names of languages.

|              |           |                  |    |
|--------------|-----------|------------------|----|
| Afrikaans    | AF        | Korean           | KO |
| Arabic       | AR        | Latvian, Lettish | LV |
| Armenian     | HY        | Lithuanian       | LT |
| Azerbaijani  | AZ        | Malay            | MS |
| Bulgarian    | BG        | Moldavian        | MO |
| Byelorussian | BE        | Mongolian        | MN |
| Chinese      | ZH        | Norwegian        | NO |
| Czech        | CS        | Persian          | FA |
| Danish       | DA        | Polish           | PL |
| Dutch        | NL        | Portuguese       | PT |
| English      | EN        | Romanian         | RO |
| Estonian     | ET        | Russian          | RU |
| Finnish      | FI        | Serbo-Croat      | SH |
| French       | FR        | Slovak           | SK |
| Georgian     | KA        | Slovenian        | SL |
| German       | DE        | Spanish          | ES |
| Greek        | <i>EL</i> | Swedish          | SV |
| Hebrew       | <i>IW</i> | Tajik            | TG |
| Hindi        | HI        | Thai             | TH |
| Hungarian    | HU        | Turkish          | TR |
| Indonesian   | IN        | Turkmen          | TK |
| Irish        | GA        | Ukrainian        | UK |
| Italian      | IT        | Uzbek            | UZ |
| Japanese     | JA        | Vietnamese       | VI |
| Kazakh       | KK        | Welsh            | CY |
| Kirghiz      | KY        |                  |    |

**Appendix 3. Country and International Organization Names and Codes**  
(June 1997 revision)

This Appendix includes the two-letter ISO country codes and the country names listed in ISO International Standard 3166:1993, Codes for the representation of names of countries, and the organizational codes and names used in the Energy Science and Technology Database (EDB).

Appendix 3.1., 'Countries Arranged by Name,' includes the country names and codes sorted by the names. Appendix 3.2., 'Country and International Organizations Arrange by Code,' includes both the country and international organization names and codes sorted by the codes.

Appendix 3.1. Countries Arranged by Name

|                                    |    |                                           |    |
|------------------------------------|----|-------------------------------------------|----|
| Afghanistan                        | AF | Czech Republic                            | CZ |
| Albania                            | AL | <i>Czechoslovakia</i>                     | CS |
| Algeria                            | DZ | <i>[Used until August 1993]</i>           |    |
| Andorra                            | AD | <i><u>Divided into</u> Czech Republic</i> |    |
| Angola                             | AO | <i>and Slovakia</i>                       |    |
| Antigua and Barbuda                | AG |                                           |    |
| Argentina                          | AR | Dahomey                                   |    |
| Armenia                            | AM | <u>See</u> Benin                          |    |
| Australia                          | AU | Democratic Kampuchea                      |    |
| Austria                            | AT | <u>See</u> Cambodia                       |    |
| Azerbaijan                         | AZ | Democratic People's Republic (D.P.R.)     |    |
|                                    |    | of Korea                                  |    |
| Bahamas                            | BS | <u>See</u> Korea, Democratic People's     |    |
| Bahrain                            | BH | Republic of                               |    |
| Bangladesh                         | BD | Democratic Yemen (YD)                     |    |
| Barbados                           | BB | <u>See</u> Yemen, Democratic              |    |
| Belarus                            | BY | Denmark                                   | DK |
| Belgium                            | BE | Djibouti                                  | DJ |
| Belize                             | BZ | Dominica                                  | DM |
| Benin                              | BJ | Dominican Republic                        | DO |
| Bermuda                            | BM |                                           |    |
| Bhutan                             | BT | Ecuador                                   | EC |
| Bolivia                            | BO | Egypt                                     | EG |
| Bosnia and Herzegovina             | BA | El Salvador                               | SV |
| Botswana                           | BW | Equatorial Guinea                         | GQ |
| Brazil                             | BR | Estonia                                   | EE |
| Brunei Darussalam                  | BN | Ethiopia                                  | ET |
| Bulgaria                           | BG |                                           |    |
| Burkina Faso                       | BF | Fiji FJ                                   |    |
| Burma (BU)                         |    | Finland                                   | FI |
| <u>Changed to</u> Myanmar          |    | France                                    | FR |
| Burundi                            | BI |                                           |    |
| Byelorussian SSR (BY)              |    | Gabon                                     | GA |
| <u>Changed to</u> Belarus          |    | Gambia                                    | GM |
|                                    |    | Georgia                                   | GE |
| Cambodia                           | KH | German Democratic Republic (DD)           |    |
| Cameroon                           | CM | <i>[Used until October 3, 1990]</i>       |    |
| Canada                             | CA | <u>Changed to</u> Germany                 |    |
| Cape Verde                         | CV | Germany                                   | DE |
| Central African Republic           | CF | Germany, Federal Republic of (DE)         |    |
| Chad                               | TD | <i>[Used until October 3, 1990]</i>       |    |
| Chile                              | CL | <u>Changed to</u> Germany                 |    |
| China                              | CN | Ghana                                     | GH |
| Colombia                           | CO | Greece                                    | GR |
| Comoros                            | KM | Grenada                                   | GD |
| Congo                              | CG | Guam                                      | GU |
| Costa Rica                         | CR | Guatemala                                 | GT |
| Cote d'Ivoire                      | CI | Guinea                                    | GN |
|                                    |    | Guinea-Bissau                             | GW |
|                                    |    | Guyana                                    | GY |
| Country unknown/Code not available | ZZ | Haiti                                     | HT |
| Croatia                            | HR | Holy See                                  |    |
| Cuba                               | CU | <u>See</u> Vatican City State, Holy See   |    |
| Cyprus                             | CY | Honduras                                  | HN |

Appendix 3.1. Countries Arranged by Name (cont.)

|                                           |    |                                  |    |
|-------------------------------------------|----|----------------------------------|----|
| Hong Kong                                 | HK | Mexico                           | MX |
| Hungary                                   | HU | Moldova, Republic of             | MD |
|                                           |    | Monaco                           | MC |
| Iceland                                   | IS | Mongolia                         | MN |
| India                                     | IN | Morocco                          | MA |
| Indonesia                                 | ID | Mozambique                       | MZ |
| Iran                                      |    | Myanmar                          | MM |
| <u>See</u> Iran, Islamic Republic of      |    |                                  |    |
| Iran, Islamic Republic of                 | IR | Namibia                          | NA |
| Iraq                                      | IQ | Nauru                            | NR |
| Ireland                                   | IE | Nepal                            | NP |
| Islamic Republic of Iran                  |    | Netherlands                      | NL |
| <u>See</u> Iran, Islamic Republic of      |    | New Zealand                      | NZ |
| Israel                                    | IL | Nicaragua                        | NI |
| Italy                                     | IT | Niger                            | NE |
| Ivory Coast                               |    | Nigeria                          | NG |
| <u>See</u> Cote d'Ivoire                  |    | Norway                           | NO |
|                                           |    |                                  |    |
| Jamaica                                   | JM | Oman                             | OM |
| Japan                                     | JP |                                  |    |
| Jordan                                    | JO | Pakistan                         | PK |
|                                           |    | Panama                           | PA |
| Kazakhstan                                | KZ | Papua New Guinea                 | PG |
| Kenya                                     | KE | Paraguay                         | PY |
| Kiribati                                  | KI | Peru                             | PE |
| Korea, Democratic People's<br>Republic of | KP | Philippines                      | PH |
| Korea, Republic of                        | KR | Poland                           | PL |
| Kuwait                                    | KW | Portugal                         | PT |
| Kyrgyzstan                                | KG | Puerto Rico                      | PR |
|                                           |    |                                  |    |
|                                           |    | Qatar                            | QA |
| Lao People's Democratic Republic          | LA |                                  |    |
| Latvia                                    | LV | Republic of Korea                |    |
| Lebanon                                   | LB | <u>See</u> Korea, Republic of    |    |
| Lesotho                                   | LS | Romania                          | RO |
|                                           |    | Russian Federation               | RU |
|                                           |    | Rwanda                           | RW |
|                                           |    |                                  |    |
| Liberia                                   | LR | Saint Lucia                      | LC |
| Libya                                     |    | Saint Vincent and the Grenadines | VC |
| <u>See</u> Libyan Arab Jamahiriya         |    | Samoa                            | WS |
| Libyan Arab Jamahiriya                    | LY | San Marino                       | SM |
| Liechtenstein                             | LI | Sao Tome and Principe            | ST |
| Lithuania                                 | LT | Saudi Arabia                     | SA |
| Luxembourg                                | LU | Senegal                          | SN |
|                                           |    | Seychelles                       | SC |
| Macedonia                                 | MK | Sierra Leone                     | SL |
| Madagascar                                | MG | Singapore                        | SG |
| Malawi                                    | MW | Slovak Republic                  |    |
| Malaysia                                  | MY | <u>See</u> Slovakia              |    |
| Maldives                                  | MV | Slovakia                         | SK |
| Mali                                      | ML | Slovenia                         | SI |
| Malta                                     | MT | Solomon Islands                  | SB |
| Mauritania                                | MR | Somalia                          | SO |
| Mauritius                                 | MU | South Africa                     | ZA |

Appendix 3.1. Countries Arranged by Name (cont.)

|                                                              |    |                                         |    |
|--------------------------------------------------------------|----|-----------------------------------------|----|
| Spain                                                        | ES | Vanuatu                                 | VU |
| Sri Lanka                                                    | LK | Vatican City State, Holy See            | VA |
| Sudan                                                        | SD | Venezuela                               | VE |
| Suriname                                                     | SR | Viet Nam                                | VN |
| Swaziland                                                    | SZ |                                         |    |
| Sweden                                                       | SE | Yemen                                   | YE |
| Switzerland                                                  | CH | <i>[Used from July 12, 1993]</i>        |    |
| Syria                                                        |    |                                         |    |
| <u>See</u> Syrian Arab Republic                              |    | Yemen (Yemen Arab Republic)             |    |
| Syrian Arab Republic                                         | SY | <u>Changed to</u> Yemen, Republic of    |    |
|                                                              |    | Yemen, Democratic                       |    |
| Taiwan, Province of China                                    | TW | <u>Changed to</u> Yemen, Republic of    |    |
| Tajikistan                                                   | TJ | Yemen, Republic of                      |    |
| Tanzania                                                     |    | <u>Changed to</u> Yemen                 |    |
| <u>See</u> Tanzania, United Republic of                      |    | Yugoslavia                              | YU |
| Tanzania, United Republic of                                 | TZ | <u>See also</u> Bosnia and Herzegovina; |    |
| Thailand                                                     | TH | Croatia; Slovenia; Macedonia            |    |
| The Czech and Slovak Federal Republic                        |    |                                         |    |
| <u>See</u> Czechoslovakia                                    |    | Zaire                                   | ZR |
| Togo                                                         | TG | Zambia                                  | ZM |
| Tonga                                                        | TO | Zimbabwe                                | ZW |
| Trinidad and Tobago                                          | TT |                                         |    |
| Tunisia                                                      | TN |                                         |    |
| Turkey                                                       | TR |                                         |    |
| Turkmenistan                                                 | TM |                                         |    |
| Tuvalu                                                       | TV |                                         |    |
|                                                              |    |                                         |    |
| Uganda                                                       | UG |                                         |    |
| UK (United Kingdom of Great Britain<br>and Northern Ireland) |    |                                         |    |
| <u>See</u> United Kingdom                                    |    |                                         |    |
| Ukraine                                                      | UA |                                         |    |
| Ukrainian SSR (UA)                                           |    |                                         |    |
| <u>Changed to</u> Ukraine                                    |    |                                         |    |
| United Arab Emirates                                         | AE |                                         |    |
| United Kingdom                                               | GB |                                         |    |
| United Republic of Tanzania                                  |    |                                         |    |
| <u>See</u> Tanzania, United Republic of                      |    |                                         |    |
| United States                                                | US |                                         |    |
| Upper Volta                                                  |    |                                         |    |
| <u>See</u> Burkina Faso                                      |    |                                         |    |
| Uruguay                                                      | UY |                                         |    |
| USA (United States of America)                               |    |                                         |    |
| <u>See</u> United States                                     |    |                                         |    |
| USSR (Union of Soviet Socialist<br>Republics) (SU)           |    |                                         |    |
| <i>[Used until December 1991]</i>                            |    |                                         |    |
| <u>Divided into</u> Armenia; Azerbaijan;                     |    |                                         |    |
| Belarus; Estonia; Georgia; Kazakhstan;                       |    |                                         |    |
| Kyrgyzstan; Latvia; Lithuania; Moldova,                      |    |                                         |    |
| Republic of; Russian Federation;                             |    |                                         |    |
| Tajikistan; Turkmenistan; Ukraine;                           |    |                                         |    |
| Uzbekistan                                                   |    |                                         |    |
| Uzbekistan                                                   | UZ |                                         |    |

Appendix 3.2. Country and International Organizations Arranged by Code

|    |                                                 |    |                                        |
|----|-------------------------------------------------|----|----------------------------------------|
| AA | International organizations<br>without location | DZ | Algeria                                |
| AD | Andorra                                         | EC | Ecuador                                |
| AE | United Arab Emirates                            | EE | Estonia                                |
| AF | Afghanistan                                     | EG | Egypt                                  |
| AG | Antigua and Barbuda                             | EP | European Patent Office                 |
| AL | Albania                                         | ES | Spain                                  |
| AM | Armenia                                         | ET | Ethiopia                               |
| AO | Angola                                          |    |                                        |
| AR | Argentina                                       | FI | Finland                                |
| AT | Austria                                         | FJ | Fiji                                   |
| AU | Australia                                       | FR | France                                 |
| AZ | Azerbaijan                                      |    |                                        |
|    |                                                 | GA | Gabon                                  |
| BA | Bosnia and Herzegovina                          | GB | United Kingdom                         |
| BB | Barbados                                        | GD | Grenada                                |
| BD | Bangladesh                                      | GE | Georgia                                |
| BE | Belgium                                         | GH | Ghana                                  |
| BF | Burkina Faso                                    | GM | Gambia                                 |
| BG | Bulgaria                                        | GN | Guinea                                 |
| BH | Bahrain                                         | GQ | Equatorial Guinea                      |
| BI | Burundi                                         | GR | Greece                                 |
| BJ | Benin                                           | GT | Guatemala                              |
| BM | Bermuda                                         | GU | Guam                                   |
| BN | Brunei Darussalam                               | GW | Guinea-Bissau                          |
| BO | Bolivia                                         | GY | Guyana                                 |
| BR | Brazil                                          |    |                                        |
| BS | Bahamas                                         | HK | Hong Kong                              |
| BT | Bhutan                                          | HN | Honduras                               |
| BW | Botswana                                        | HR | Croatia                                |
| BY | Belarus                                         | HT | Haiti                                  |
| BZ | Belize                                          | HU | Hungary                                |
|    |                                                 |    |                                        |
| CA | Canada                                          | ID | Indonesia                              |
| CF | Central African Republic                        | IE | Ireland                                |
| CG | Congo                                           | IL | Israel                                 |
| CH | Switzerland                                     | IN | India                                  |
| CI | Cote d'Ivoire                                   | IQ | Iraq                                   |
| CL | Chile                                           | IR | Iran, Islamic Republic of              |
| CM | Cameroon                                        | IS | Iceland                                |
| CN | China                                           | IT | Italy                                  |
| CO | Colombia                                        | JM | Jamaica                                |
| CR | Costa Rica                                      | JO | Jordan                                 |
| CU | Cuba                                            | JP | Japan                                  |
| CV | Cape Verde                                      |    |                                        |
| CY | Cyprus                                          | KE | Kenya                                  |
| CZ | Czech Republic                                  | KG | Kyrgyzstan                             |
|    |                                                 | KH | Cambodia                               |
|    |                                                 | KI | Kiribati                               |
|    |                                                 | KM | Comoros                                |
| DE | Germany                                         | KP | Korea, Democratic People's Republic of |
| DJ | Djibouti                                        | KR | Korea, Republic of                     |
| DK | Denmark                                         | KW | Kuwait                                 |
| DM | Dominica                                        | KZ | Kazakhstan                             |
| DO | Dominican Republic                              |    |                                        |

Appendix 3.2. Country and International Organizations Arranged by Code (cont.)

|    |                                  |    |                                                                        |
|----|----------------------------------|----|------------------------------------------------------------------------|
| LA | Lao People's Democratic Republic | QA | Qatar                                                                  |
| LB | Lebanon                          | QS | INSPEC [Information Service in Physics, Electrotechnology and Control] |
| LC | Saint Lucia                      | QZ | INPADOC [International Patent Document Centre]                         |
| LI | Liechtenstein                    |    |                                                                        |
| LK | Sri Lanka                        |    |                                                                        |
| LR | Liberia                          |    |                                                                        |
| LS | Lesotho                          | RO | Romania                                                                |
| LT | Lithuania                        | RU | Russian Federation                                                     |
| LU | Luxembourg                       | RW | Rwanda                                                                 |
| LV | Latvia                           |    |                                                                        |
| LY | Libyan Arab Jamahiriya           | SA | Saudi Arabia                                                           |
|    |                                  | SB | Solomon Islands                                                        |
| MA | Morocco                          | SC | Seychelles                                                             |
| MC | Monaco                           | SD | Sudan                                                                  |
| MD | Moldova, Republic of             | SE | Sweden                                                                 |
| MG | Madagascar                       | SG | Singapore                                                              |
| MK | Macedonia                        | SI | Slovenia                                                               |
| ML | Mali                             | SK | Slovakia                                                               |
| MM | Myanmar                          | SL | Sierra Leone                                                           |
| MN | Mongolia                         | SM | San Marino                                                             |
| MR | Mauritania                       | SN | Senegal                                                                |
| MT | Malta                            | SO | Somalia                                                                |
| MU | Mauritius                        | SR | Suriname                                                               |
| MV | Maldives                         | ST | Sao Tome and Principe                                                  |
| MW | Malawi                           | SV | El Salvador                                                            |
| MX | Mexico                           | SY | Syrian Arab Republic                                                   |
| MY | Malaysia                         | SZ | Swaziland                                                              |
| MZ | Mozambique                       |    |                                                                        |
|    |                                  | TD | Chad                                                                   |
| NA | Namibia                          | TG | Togo                                                                   |
| NE | Niger                            | TH | Thailand                                                               |
| NG | Nigeria                          | TJ | Tajikistan                                                             |
| NI | Nicaragua                        | TM | Turkmenistan                                                           |
|    |                                  | TN | Tunisia                                                                |
|    |                                  | TO | Tonga                                                                  |
| NL | Netherlands                      | TR | Turkey                                                                 |
| NO | Norway                           | TT | Trinidad and Tobago                                                    |
| NP | Nepal                            | TV | Tuvalu                                                                 |
| NR | Nauru                            | TW | Taiwan, Province of China                                              |
| NZ | New Zealand                      | TZ | Tanzania, United Republic of                                           |
|    |                                  | UA | Ukraine                                                                |
| OM | Oman                             | UG | Uganda                                                                 |
|    |                                  | US | United States                                                          |
| PA | Panama                           | UY | Uruguay                                                                |
| PE | Peru                             | UZ | Uzbekistan                                                             |
| PG | Papua New Guinea                 |    |                                                                        |
| PH | Philippines                      | VA | Vatican City State, Holy See                                           |
| PK | Pakistan                         | VC | Saint Vincent and the Grenadines                                       |
| PL | Poland                           |    |                                                                        |
| PR | Puerto Rico                      | VE | Venezuela                                                              |
| PT | Portugal                         | VN | Viet Nam                                                               |
| PY | Paraguay                         | VU | Vanuatu                                                                |

### Appendix 3.2. Country and International Organizations Arranged by Code (cont.)

|    |                                                                |
|----|----------------------------------------------------------------|
| WO | WIPO [World Intellectual Property Organization]                |
| WS | Samoa                                                          |
| XA | IAEA [International Atomic Energy Agency]                      |
| XC | CERN [European Organization for Nuclear Research]              |
| XD | OECD [Organization for Economic Co-Operation and Development]  |
| XE | CEC [Commission of the European Communities]                   |
| XF | FAO [Food and Agricultural Organization of the United Nations] |
| XH | AAEA [Arab Atomic Energy Agency]                               |
| XI | IIASA [International Institute for Applied Systems Analysis]   |
| XJ | JINR [Joint Institute for Nuclear Research]                    |
| XK | WMO [World Meteorological Organization]                        |
| XN | NEA [Nuclear Energy Agency of the OECD]                        |
| XO | OAU [Organization of the African Unity]                        |
| XR | ICRP [International Commission on Radiological Protection]     |
| XS | ISO [International Organization for Standardization]           |
| XT | UNIDO [United Nations Industrial Development Organization]     |
| XU | UN [United Nations]                                            |
| XW | WHO [World Health Organization]                                |
| XX | WEC [World Energy Conference]                                  |
| XY | IEA [International Energy Agency]                              |
| XZ | ESA [European Space Agency]                                    |
| YE | Yemen                                                          |
| YU | Yugoslavia                                                     |
| ZA | South Africa                                                   |
| ZM | Zambia                                                         |
| ZR | Zaire                                                          |
| ZW | Zimbabwe                                                       |
| ZZ | Country unknown/Code not available                             |

#### Appendix 4. State and Province Codes

This Appendix includes state and province codes and names for Australia, Brazil, Canada, China, France, and the United States. Within each country listing, the codes are arranged alphabetically or numerically and are followed by the name.

##### Australia

|     |                              |     |                   |
|-----|------------------------------|-----|-------------------|
| ACT | Australian Capital Territory | SA  | South Australia   |
| NSW | New South Wales              | TAS | Tasmania          |
| NT  | Northern Territory           | VIC | Victoria          |
| QLD | Queensland                   | WA  | Western Australia |

##### Brazil

|    |                     |    |                     |
|----|---------------------|----|---------------------|
| AC | Acre                | PA | Para                |
| AL | Alagoas             | PB | Paraiba             |
| AM | Amazonas            | PE | Pernambuco          |
| AP | Amapa               | PI | Piaui               |
| BA | Bahia               | PR | Parana              |
| CE | Ceara               | RJ | Rio de Janeiro      |
| DF | Distrito Federal    | RN | Rio Grande do Norte |
| ES | Espirito Santo      | RO | Rondonia            |
| FN | Fernando de Noronha | RR | Roraima             |
| GO | Goias               | RS | Rio Grande do Sul   |
| MA | Maranhao            | SC | Santa Catarina      |
| MG | Minas Gerais        | SE | Sergipe             |
| MS | Mato Grosso do Sul  | SP | Sao Paulo           |
| MT | Mato Grosso         | TO | Tocantins           |

## Canada

|    |                  |    |                       |
|----|------------------|----|-----------------------|
| AB | Alberta          | NT | Northwest Territories |
| BC | British Columbia | ON | Ontario               |
| LB | Labrador         | PE | Prince Edward Island  |
| MB | Manitoba         | PQ | Quebec                |
| NB | New Brunswick    | SK | Saskatchewan          |
| NF | Newfoundland     | YT | Yukon Territory       |
| NS | Nova Scotia      |    |                       |

## China

|     |              |    |           |
|-----|--------------|----|-----------|
| AH  | Anhui        | LN | Liaoning  |
| BJ  | Beijing      | NM | Neimenggu |
| FJ  | Fujian       | NX | Ningxia   |
| GD  | Guangdong    | QH | Qinghai   |
| GS  | Gansu        | SC | Sichuan   |
| GX  | Guangxi      | SD | Shandong  |
| GZ  | Guizhou      | SH | Shanghai  |
| HB  | Hubei        | SN | Shaanxi   |
| HEB | Hebei        | SX | Shanxi    |
| HEN | Henan        | TJ | Tianjin   |
| HL  | Heilongjiang | TW | Taiwan    |
| HN  | Hunan        | XJ | Xinjiang  |
| JL  | Jilin        | XZ | Xizang    |
| JS  | Jiangsu      | YN | Yunnan    |
| JX  | Jiangxi      | ZJ | Zhejiang  |

## France

|    |                                       |    |                       |
|----|---------------------------------------|----|-----------------------|
| 01 | Ain                                   | 48 | Lozere                |
| 02 | Aisne                                 | 49 | Maine-et-Loire        |
| 03 | Allier                                | 50 | Manche                |
| 04 | Alpes-de-Haute-Provence               | 51 | Marne                 |
| 05 | Alpes (Hautes)                        | 52 | Marne (Haute)         |
| 06 | Alpes-Maritimes                       | 53 | Mayenne               |
| 07 | Ardeche                               | 54 | Meurthe-et-Moselle    |
| 08 | Ardennes                              | 55 | Meuse                 |
| 09 | Ariege                                | 56 | Morbihan              |
| 10 | Aube                                  | 57 | Moselle               |
| 11 | Aude                                  | 58 | Nievre                |
| 12 | Aveyron                               | 59 | Nord                  |
| 13 | Bouches-du-Rhone                      | 60 | Oise                  |
| 14 | Calvados                              | 61 | Orne                  |
| 15 | Cantal                                | 62 | Pas-de-Calais         |
| 16 | Charente                              | 63 | Puy-de-Dome           |
| 17 | Charente-Maritime                     | 64 | Pyrenees-Atlantiques  |
| 18 | Cher                                  | 65 | Pyrenees (Hautes)     |
| 19 | Correze                               | 66 | Pyrenees-Orientales   |
| 20 | Corse; Corse-du-Sud;<br>Corse-du-Nord | 67 | Rhin (Bas)            |
| 21 | Cote-d'Or                             | 68 | Rhin (Haut)           |
| 22 | Cotes-du-Nord                         | 69 | Rhone                 |
| 23 | Creuse                                | 70 | Saone (Haute)         |
| 24 | Dordogne                              | 71 | Saone-et-Loire        |
| 25 | Doubs                                 | 72 | Sarthe                |
| 26 | Drome                                 | 73 | Savoie                |
| 27 | Eure                                  | 74 | Savoie (Haute)        |
| 28 | Eure-et-Loir                          | 75 | Paris                 |
| 29 | Finistere                             | 76 | Seine-Maritime        |
| 30 | Gard                                  | 77 | Seine-et-Marne        |
| 31 | Garonne (Haute)                       | 78 | Yvelines              |
| 32 | Gers                                  | 79 | Sevres (Deux)         |
| 33 | Gironde                               | 80 | Somme                 |
| 34 | Herault                               | 81 | Tarn                  |
| 35 | Ille-et-Vilaine                       | 82 | Tarn-et-Garonne       |
| 36 | Indre                                 | 83 | Var                   |
| 37 | Indre-et-Loire                        | 84 | Vaucluse              |
| 38 | Isere                                 | 85 | Vendee                |
| 39 | Jura                                  | 86 | Vienne                |
| 40 | Landes                                | 87 | Vienne (Haute)        |
| 41 | Loir-et-Cher                          | 88 | Vosges                |
| 42 | Loire                                 | 90 | Territoire de Belfort |
| 43 | Loire (Haute)                         | 91 | Essonne               |
| 44 | Loire-Atlantique                      | 92 | Hauts-de-Seine        |
| 45 | Loiret                                | 93 | Seine-Saint-Denis     |
| 46 | Lot                                   | 94 | Val-de-Marne          |
| 47 | Lot-et-Garonne                        | 95 | Val-d'Oise            |

## France - Overseas Departments

971 Guadeloupe  
972 Martinique

973 Guyane  
974 Reunion (La)

## United States of America

|    |                                   |    |                          |
|----|-----------------------------------|----|--------------------------|
| AK | Alaska                            | MP | Northern Mariana Islands |
| AL | Alabama                           | MS | Mississippi              |
| AR | Arkansas                          | MT | Montana                  |
| AS | American Samoa                    | NC | North Carolina           |
| AZ | Arizona                           | ND | North Dakota             |
| CA | California                        | NE | Nebraska                 |
| CO | Colorado                          | NH | New Hampshire            |
| CT | Connecticut                       | NJ | New Jersey               |
| CZ | Canal Zone                        | NM | New Mexico               |
| DC | D.C. (District of Columbia)       | NV | Nevada                   |
| DE | Delaware                          | NY | New York                 |
| FL | Florida                           | OH | Ohio                     |
| FM | Federated States of<br>Micronesia | OK | Oklahoma                 |
| GA | Georgia                           | OR | Oregon                   |
| GU | Guam                              | PA | Pennsylvania             |
| HI | Hawaii                            | PR | Puerto Rico              |
| IA | Iowa                              | PW | Palau Island             |
| ID | Idaho                             | RI | Rhode Island             |
| IL | Illinois                          | SC | South Carolina           |
| IN | Indiana                           | SD | South Dakota             |
| KS | Kansas                            | TN | Tennessee                |
| KY | Kentucky                          | TX | Texas                    |
| LA | Louisiana                         | UT | Utah                     |
| MA | Massachusetts                     | VA | Virginia                 |
| MD | Maryland                          | VI | Virgin Islands           |
| ME | Maine                             | VT | Vermont                  |
| MH | Marshall Islands                  | WA | Washington               |
| MI | Michigan                          | WI | Wisconsin                |
| MN | Minnesota                         | WV | West Virginia            |
| MO | Missouri                          | WY | Wyoming                  |