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ASSESSMENT SYSTEM FOR AIRCRAFT NOISE (ASAN) CITATION DATABASE

New Citation Review Procedures

Volume III of III Volumes

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December 1989

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Human Systems Division
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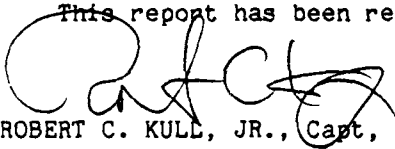
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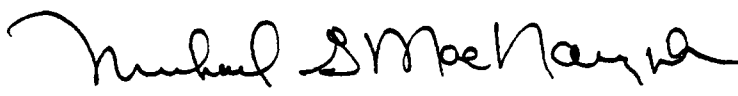
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This report has been reviewed and is approved for publication.



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FOR THE COMMANDER



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<p>The Assessment System for Aircraft Noise (ASAN) includes a database of several thousand references to the literature on the impact of noise and sonic booms on humans, animals and structures. Bibliographic data, abstracts and critical reviews of key documents can be retrieved.</p> <p>This report describes a systematic methodology for the selection and evaluation of new citations to be added to the database consistent with the procedures used in CITASAN.</p>					
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FOREWORD

This version of the ASAN Citation Database computer program was prepared by BBN Systems and Technologies Corporation in fulfillment of Subtask 13.9 of Task Order 0013, under the Noise and Sonic Boom Impact Technology (NSBIT) Program.

The NSBIT Program is conducted by the United States Air Force, Air Force Systems Command, Human Systems Division, under the former direction of Lt. Col. Geral Long, and under the current direction of Mr. Preston S. Hall, as acting Program Manager. The NSBIT Technical Manager is Mr. Lawrence S. Finegold. The BEN effort is conducted under the direction of Mr. B. Andrew Kugler.



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The ASAN Citation Database system was developed by Mr. Nicolaas Reddingius of BBN Systems and Technologies Corporation. The citation review procedures presented in this volume were developed by Mr. B. Andrew Kugler of BBN and Mr. Lawrence S. Finegold from the NSBIT Advanced Development Program Office. These procedures represent a modification of the original version and are designed for use with this release of the ASAN Citation Database. The authors would like to acknowledge the contributions of the following people to the contents of this program.

The human effects database was compiled and summarized by Ms. Barbara Nicholson, Ms. Elizabeth Lantos and Mr. David Barber of BBN Systems and Technologies Corporation. The animal effects database was compiled and summarized by Ms. Ann E. Bowles of SWRI/Hubbs Marine Research Center and Mr. Douglas Gladwin from the U.S. Fish and Wildlife Service. Ms. Bowles and Dr. Frank Awbrey (SWRI/HMRC) were responsible for conducting and coordinating the critical reviews in the animal effects database. The structural effects database was compiled by Mr. Jerold M. Haber and Mr. Vijay Koppam of NTS Engineering. Mr. Haber coordinated the critical reviews in the structural effects database.

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1.0 - INTRODUCTION

The Assessment System for Aircraft Noise Citation Database (CITASAN) is a computer-based system designed to retrieve references about the effects of noise on humans, animals and structures. One of the important features of CITASAN is the ability for users to add new citations to the database. This volume discusses the philosophy behind the development of CITASAN and describes the steps necessary to accomplish this process.

The objective of this report is to provide the user of CITASAN with a systematic method for the selection and evaluation of new citations to be added to the database consistent with the methodology used in the existing database. Since all of the existing citations are in the English language and to a large degree represent the experience of the United States, users in other countries may want to add their country's publications or references in languages other than English, as appropriate.

The actual procedures for the operation of CITASAN, both for database inquiry and update, are discussed in Volumes I and II of the "Assessment System for Aircraft Noise Citation Database", which are manuals provided to each user with this program. References to these documents will be made throughout this report.

2.0 - GENERAL PROCESS FOR ADDING NEW CITATIONS

Figure 1 shows a block diagram of the procedure recommended for adding new citations to the database. Each of the steps outlined in this figure are discussed below in further detail.

Step 1: Select and Obtain Citation

The first step requires that a hardcopy of the selected citation be obtained. This will ensure that all the necessary information required to properly execute the review process is available.

Step 2: Check if Citation is in CITASAN

The objective of this step is to avoid duplicity of entry by checking if the new citation to be added is already in the citation database. The recommended method is to use the "Inquiry Mode" of CITASAN, as described in Volume I of the User's Manual.

After selecting the major topic area, a check is conducted by searching CITASAN for the author(s) name(s) using the "title/author" search option. All publications written by the selected author will be retrieved by CITASAN. Using the review capabilities in CITASAN, check if the particular citation is already included in CITASAN.

If the citation is already included, then the entry process is complete, as shown in Figure 1. If the new citation is not in CITASAN, the procedures in the subsequent steps should be followed.

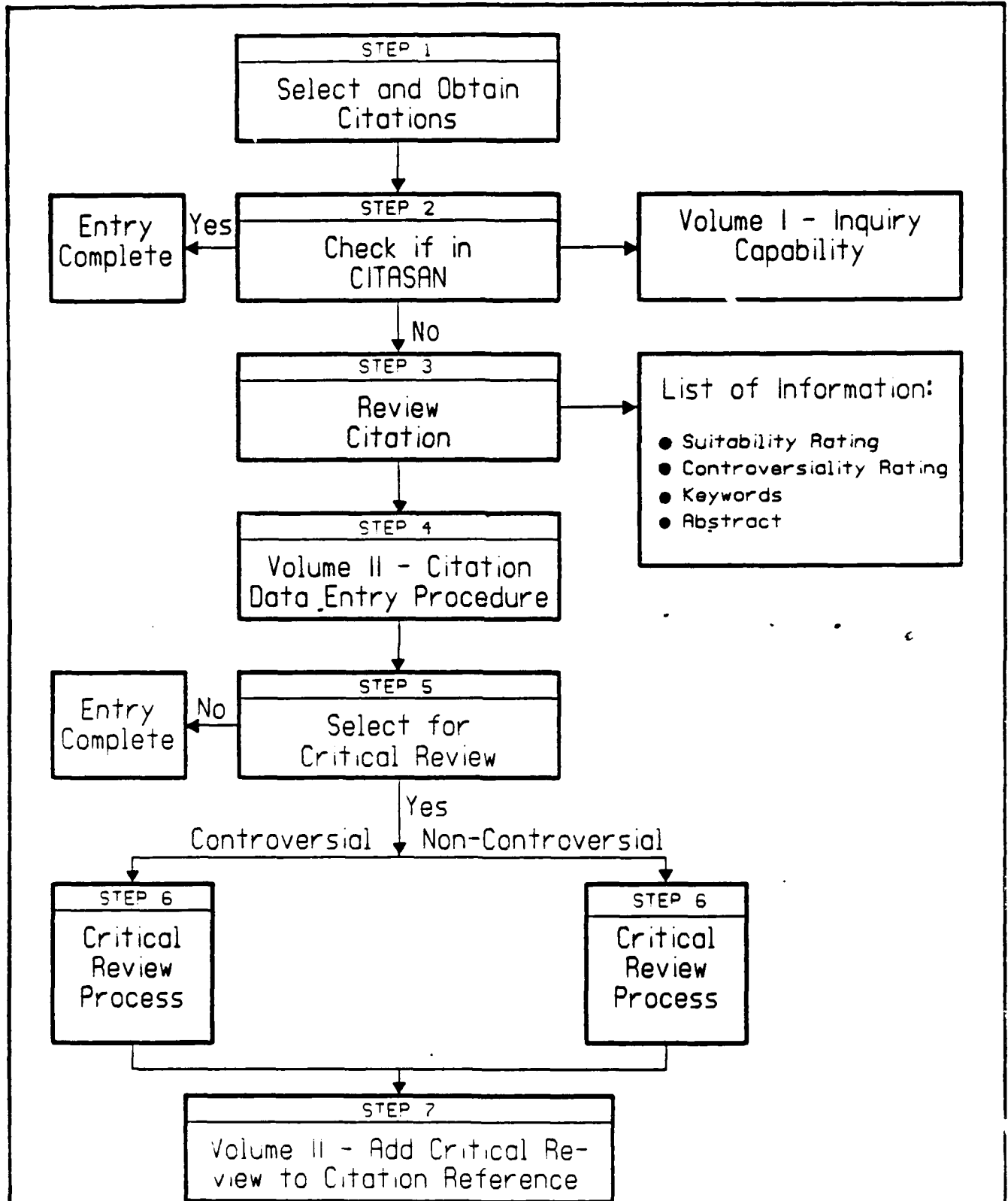


FIGURE 1. BLOCK DIAGRAM OF THE GENERAL PROCESS FOR ADDING NEW CITATIONS TO CITASAN

Note that in some cases, it may be desirable to duplicate the citation entry because it appears in a different journal and/or in a different language from the one in CITASAN. For example, it may be that a citation which had been originally written in German and published in a German journal is subsequently translated into English. If CITASAN is used in Germany where the German reference is most readily available then a duplication of the entry may be warranted. The decision for entering duplicate citations should be made by the user.

Step 3: Review of the New Citation

Once the new citation has been selected for entry, the following citation review should be accomplished. In addition to the standard bibliographic data which will be needed in the citation entry process, Table 1 lists the information that should be developed by the reviewer:

A. Suitability Rating: The suitability rating of each citation is intended to describe how relevant the citation is to the environmental impact assessment process. The rating scale is divided into four categories, as defined below:

- 1 Based on the review of the paper, the publication is directly applicable to environmental impact analysis goals and is suitable for inclusion in the database.
- 2 Based on the review of the paper, the publication may be directly applicable to environmental impact analysis goals, and is suitable for inclusion in

the database.

- 3 Based on the review of the paper the publication is indirectly related to environmental impact analysis goals, but is still suitable for inclusion in the database.
- 4 Based on the review of the paper, the publication is not relevant to environmental impact analysis goals and is not suitable for inclusion in the database.

Publications with suitability ratings of 1, 2, and 3 will continue through the review process. Publications with a suitability rating of 4 can be discarded.

B. Controversiality Rating: The controversiality rating of each citation is intended to describe the actual or potential controversy surrounding the publication. The ratings are defined in terms of three categories:

- 1 Based on the review of the paper, the entry is highly controversial because of its research approach, methodology, or stated conclusions (eg., "noise kills"). Most researchers would take an opposing position to the given research topic results.
- 2 Based on the review of the paper, some elements of the publication are controversial because of research approach, methodology or research results.

- 3 Based on the review of the paper, the publication is noncontroversial.

It is the experience of the United States that most of the entries in the citation database are noncontroversial.

C. **Keywords:** The citation database contains information on three main subjects:

- a. Human effects
- b. Structural effects
- c. Animal effects

Each subject contains a number of keywords that describe the type of noise sources considered and the type of effects studied. Table 1 contains a listing of these keywords. When reviewing the paper, the applicable keywords to each impact area should be identified for subsequent inclusion in the citation database.

Table 1 - List of Keywords

Noise Type Fields:

Sonic Boom
Blast
Seismic
Aircraft
Traffic
Terrain Effects
Wind Noise
Other Noise

Human Impact Fields:

Human Annoyance
Human Physical Health
Human Psychological Health
Human Performance
Human Speech
Human Sleep

Structure Impact Fields:

Windows
Interior Walls
Exterior Walls
Wall Connections
Delicate Contents
Contents (not delicate)
Archaeological Sites
Historical Sites
Other Unconventional
Avalanche
Landslide
Material Mechanical Properties
Cumulative Effects

Animal Impact Fields:

Species Classification
Domestication
Survival
Reproduction
Age/Sex Composition
Response to Disturbance
Social Behavior
Migration
Feeding
Maintenance
Predator-Avoidance
Physical Health (General)
Traumatic Incidents
Audition
Stress
Growth
Predator-Prey Interactions
Habitat Use
Distribution
Abundance

D. **Abstract:** The abstract entry in the database represents the abstract contained in the citation, if available. If not available, an abstract of approximately 250 words should be prepared by the reviewer. (Note that abstracts of more than 250 words will be accepted by CITASAN.)

Step 4: Citation Data Entry Procedure

The citation data entry procedure is described fully in Volume II of the CITASAN manual. A discussion of new citation entries starts on page 9 of the manual and takes the user through the steps necessary to complete all entries. Example screens are provided in Appendix A of this report. Descriptions of the data entry fields in each screen are provided in Appendix B .

Briefly, the first screen is used to enter the title of the citation, the author's name and the document type. Based on the document type selected, the subsequent screens will contain entry data information on technical reports, books or journal articles.

These screens are followed by the "primary effects screen", which permits the user to check (with the letter "T") the previously selected keywords. Note that the keywords can include selections from all the effects categories (humans, structures and animals). For example, the article may deal with sonic boom and its effects on human annoyance, human health, and structures.

The exception to this is the animal area, which if selected will result in the presentation of a special screen called the "animal entry screen". This screen allows for the entry of the keywords selected and for the identification of the taxonomic number of the animals described in the citation.

Finally, the "status screen" allows for the entry of a number of attributes of the article including the suitability and controversiality ratings. Volume II of CITASAN manual discusses this process in some detail.

Volume II of the CITASAN manual also describes the procedure to be followed when adding text blocks, such as the abstract. The utility program called IMPMEMO should be used for this purpose as well as for other entries which will be discussed below.

Step 5: Select Citations for Critical Review

The objective of this step is to decide if a particular citation should include a critical review in CITASAN. The purpose of a critical review is to provide users with a technical assessment of information contained in the citation. In the U.S. application, this critical review represents the official U.S. Air Force opinion of the paper. The goal is to provide environmental planners and other interested parties with an understanding on the pros and cons of the contents of the publication.

Critical reviews should be performed by experts in the field who have a good understanding not only of the technology being discussed but also of the research field in general. The critical reviews should not only analyze the results of the paper, but also present these results in the context of what is known about the general research topic. With these requirements, selection of papers for critical review should be done carefully because of the high costs associated with this process. As a guideline, CITASAN contains critical reviews, in most cases, for only suitability one (1) rated entries. The exceptions to this

are controversial publications (with controversiality ratings of one). These will always be critically reviewed regardless of their suitability rating.

As shown in Figure 1, if the citation is not selected for critical review, the entry process into CITASAN is complete. If the citation has been selected for critical review, then the steps should be followed.

Step 6: Critical Review Process

The critical review process will vary depending on if the citation is controversial or noncontroversial, as indicated in Figure 1. The only difference between the review process for these two categories is the number of reviewers involved. Noncontroversial papers are reviewed by a single individual. Controversial articles are independently reviewed by three individuals to provide a broader opinion base.

For the purpose of CITASAN, critical reviews are normally one to two pages in length, although longer reviews are acceptable when necessary.

Step 7: Add Critical Review to Citation Reference

The objective of this step is to add the results of the critical review to the citation listing previously completed. As was the case with the Abstract, this process utilizes the IMPMEMO utility program described on page 18 of Volume II in the CITASAN manual. Note that all three controversial paper reviews are entered independently. The addition of the critical review(s) to the previously entered citation information completes the entry process.

APPENDIX A

Examples of Citation Database Entry Screens

Number	Title
2001	Study of metabolic response variation to an acoustic aggression.

Document type: Technical Report (3)

Seq.	Number	Name of Author
1	615	Vassout, P.
2	616	Devriere, F.

Char Mode: Replace Page 1

Count: 1

Figure A-1. Example of Title/Author Screen

Entry: 2001

Technical Report

Study of metabolic response variation to an acoustic aggression.

Work Performed by: Institut Franco-Allemand de Recherches

Report Number: ISL-R-120/75

Year Published: 1975

Work Sponsored by:

Contract No:

Number of references: UNKN

Language of Article: French

Language of Abstract: English

The following information can also be supplied if appropriate:

Publisher:

City:

Country:

State:

(USA Only)

Char Mode: Replace Page 1

Count: 1

Figure A-2. Example of Report Screen

Information about the book entitled:

2174 Effects of noise on wildlife.

Publisher: Academic Press
City: New York
Country: USA

State: NY (USA Only)

Language: English Year published: 1978 Number of references:

Char Mode: Replace Page 1

Count: 1

Figure A-3. Example of Book Screen

Updating Citation

5000 Dose-response relationships for traffic noise and annoyance.

Appearing in Journal:

Archives of Environmental Health

Volume: 41 Year: 1986 Issue: 1 Pages: 7-10

Number of References: UNKN

Language of the article: English

Language of abstract: English

Hit <HELP> to see a list of the primary journals
Char Mode: Replace Page 1

Count: 1

Figure A-4. Example of Journal Screen

2001 Study of metabolic response variation to an acoustic aggress

Sonic Boom: T	Blast Noise:	Aircraft Noise:	Seismic Effects:
Traffic:	Wind Noise:	Terrain Effects:	Other Noise:
Field Exp't:	Lab Exp't: T	Review Article:	Prop./Theor. Arg.
Humans: F	Annoyance:	Performance:	Physical Health:
	Psychology:	Sleep:	Speech:
Structures: F	Archeology:	Avalanches:	Delicate Contents:
	Content Other:	Cumulative Effects:	Historical Sites:
	Landslides:	Mechanical Prop.:	Windows:
	Wall Connections:	Walls Exterior:	Walls Interior:
		Other Unconventional:	
Animals: T			
Modeling: F			

Char Mode: Replace Page 1

Count: 1

Figure A-5. Example of Effects Screen

2001 Study of metabolic response variation to an acoustic aggressi

Taxon No: 0101100614000 Rats, typical
Rattus
Typical rats

Effects Discussed:

Abundance:	General Physical Health: T	Response to Disturbance:
Age/Sex Composition:	Growth:	Reproduction:
Audition:	Habitat Use:	Social Behavior:
Distribution:	Maintenance:	Stress:
Domestication: T	Migration:	Survival:
Feeding:	Predator Avoidance:	Traumatic Incidents:
	Predator-prey Interaction:	

Char Mode: Replace Page 1

Count: *2

Figure A-6. Example of Animal Effects Screen

2001

Study of metabolic response variation to an acoustic aggre

Status of Data Entry and Review

Entered by: AEB Comments in block: Revisions in:
Abstract: #2001.ABS Preliminary review by: AB Notes in block:

Suitability Rating: 1 Controversiality Rating: 3

Hardcopy Status: 9 Copyright Action Status: 1 Action Date:

Reviewer 1: Review 1 in block: Notes in block:
Reviewer 2: Review 2 in block: Notes in block:
Reviewer 3: Review 3 in block: Notes in block:

Char Mode: Replace Page 1

Count: 1

Figure A-7. Example of Status/Summary Screen

APPENDIX B

List and Description of Data Entry Fields

CITATION FIELD: DATE OF ENTRY

Field Type: Character
Field Name: ENTRY_DATE

The date of entry is entered in this field. The month, day and year are entered in two-digit numeric characters.

The database program automatically enters the date in this field when the data enterer logs on the computer.

Examples:

06/11/87	June 11, 1987
11/01/87	November 1, 1987

ERROR CHECK:

The date of entry is entered directly from the computer's internal clock/calendar. Therefore, manual data entry errors (such as reversed numbers and incorrect dates) are not possible. The probability of error is very low.

CITATION FIELD: ENTRY NUMBER

Field Type: Character
Field Name: ENTRY_NUM

The Entry Number is a numeric code that specifies the order of entry in the database system. The Entry Number is automatically assigned by the database program by means of consecutive number ordering.

The Entry Number is also posted on the upper right corner of the paper copy of the document.

Field Code	Definition
X	X represents the numeric code of entry.

Examples:

1	The first entry in the database system is assigned the Entry Number 1.
234	The 234th entry in the database system is assigned the Entry Number 234.
1025	The 1025th entry in the database system is assigned the entry number 1025.

(Commas and decimal places will not be inserted in the Entry Number.)

ERROR CHECK:

The entry number is assigned by the computer program.

CITATION FIELD: AUTHOR(S)

Field Type: Character
Field Name: AUTHOR

Authors are listed by their last name, first initial and middle initial. When there is more than one author, the order of entry follows the original authors' designation. If there is no designation, authors are listed in alphabetical order.

If the document was published under a corporate name (without individual authors), the performing organization is listed in both the "AUTHOR" and "PERFORMING ORGANIZATION" fields.

If an author's last name is more than 40 character spaces long, only the first 40 characters are entered.

For documents that have been edited and/or translated, the original author (if known) is listed first.

Examples:

Editor and Author Entry

Helmholtz, G. A.	(No special abbreviations are needed for original authors.)
Smith, J. (Ed.)	(The (Ed.) abbreviation indicates that the entry is an editor.)

CITATION FIELD: DATE OF PUBLICATION

Field Type: Character
Field Name: DATE_PUB

The Date of Publication is the year that the document was copyrighted. If the document is unpublished, it is the year that the document was produced.

If the date of publication is unknown, the data enterer types the code "9999" in this field and the database program will transform the numeric string to the abbreviation "UNKN".

Example:

1985 (This is the date of publication.)

ERROR CHECK:

Typographic errors involving alphabetic characters or implausible dates will not be accepted.

CITATION FIELD: PERFORMING ORGANIZATION

Field Type: Character
Field Name: PERFRM_ORG

The Performing Organization indicates any institutional involvement in the preparation of the document.

Example:

BBN Systems and Technologies Corporation

CITATION FIELD: SPONSORING ORGANIZATION

Field Type: Character
Field Name: SPONSR_ORG

The Sponsoring Organization is the source of funding for the entry.

Examples:

U.S. Air Force

National Endowment for Science and Education

CITATION FIELD: ARTICLE, BOOK, REPORT TITLE

Field Type: Character
Field Name: TITLE

The Title is the name of the document as designated by the original author.

(If an entry is a chapter of a book, the chapter title is entered in this field and the title of the book is entered in CITATION FIELD: JOURNAL TITLE. For entries of entire books, the title of the book is entered in this field.)

Abbreviations should not be used, except in the following circumstances:

1. The original author used abbreviations.
2. The Title is longer than 250 characters.

Examples:

Noise and Society. (Quotations and underlining will not be used.)

Human Annoyance. (For entries that are journal articles, only the title of the article is entered in this field. The title of the journal is entered in a different field.)

CITATION FIELD: JOURNAL TITLE

Field Type: Character
Field Name: JOURL_TITL

When the document type is a journal article, the title of the journal is entered in this field.

The database program has been designed to present seven common citation references on the computer screen for data entry selection. To enter one of the titles presented in this list, the data enterer types the corresponding number. The number "8" is selected to enter a unique journal title.

- 1 Journal of the Acoustical Society of America
- 2 Acustica
- 3 Human Factors
- 4 Journal of Sound and Vibration
- 5 Noise Control Engineering
- 6 Journal of Wildlife Management
- 7 American Institute of Aeronautics
and Astronautics Journal
- 8 Select to enter a new title

ERROR CHECK:

The most common journals used for citation reference can be entered with a single keystroke. This option reduces typographical errors and facilitates data entry.

CITATION FIELD: JOURNAL VOLUME NUMBER

Field Type: Character
Field Name: JOURL_VOL

When the entry is a journal article, the journal volume number (if known) is entered in this field.

CITATION FIELD: JOURNAL ISSUE NUMBER

Field Type: Character
Field Name: JRL_ISS_NO

When the entry is a journal article, the journal issue number (if known) is entered in this field.

(Usually, the original document will post the journal issue number in parenthesis following the journal volume number.)

CITATION FIELD: JOURNAL PAGE NUMBERS

Field Type: Character
Field Name: JOURL_PAGE

When the entry is a journal article, the page numbers of the article are recorded in this field.

The starting page of the article is separated from the ending page by a hyphen ("-").

Example:

123-126

The article begins on page 123 and ends on page 126.

CITATION FIELD: PUBLISHER NAME

Field Type: Character
Field Name: PUB_NAME

When the document is a book, the name of the publisher is recorded in this field.

CITATION FIELD: PUBLISHER CITY

Field Type: Character
Field Name: PUB_CITY

When the document is a book, the city location of the publisher is recorded in this field.

CITATION FIELD: PUBLISHER STATE

Field Type: Character
Field Name: PUB_STATE

When the document is a book, the state address of the publisher is recorded in this field.

CITATION FIELD: PUBLISHER COUNTRY

Field Type: Character
Field Name: PUB_CNTRY

When the document is a book, the country where the document was published is entered in this field.

ERROR CHECK:

The database program automatically displays "U.S.A." for this field. The data enterer has the option of changing the data in this field for foreign documents.

CITATION FIELD: GOVERNMENT CONTRACT NUMBER

Field Type: Character
Field Name: GOV_CNT_NO

When the entry is a government report, the government contract number is entered in this field.

CITATION FIELD: PERFORMING ORGANIZATION
REPORT NUMBER

Field Type: Character
Field Name: PO_RPT_NUM

When the document is a technical report, the report number assigned by the performing organization is entered in this field.

CITATION FIELD: ABSTRACT

Field Type: Memo
Field Name: ABSTRACT

This field contains an abstract or summary of the entry. Wherever possible, the abstract should be entered verbatim from the original author's text.

If the abstract is very lengthy (more than 250 words), abbreviations and some revision are recommended. If the abstract is not entered as exactly presented by the original author, the entry editor's initials should be included at the end of the abstract. If there are no editor initials at the end of the abstract, it is assumed that the abstract has been entered verbatim from the original author.

CITATION FIELD: ABSTRACT LANGUAGE

Field Type: Character
Field Name: ABSTRT_LAN

This field is used to identify the language of the abstract.

Additional information regarding the original document language is entered in the subsequent field.

Data entry in this field is the same as in the field for document language. The database program will present seven languages on the computer screen for data entry selection. To enter one of the languages presented in this list, the data enterer types the corresponding number. The number "8" is selected to when the abstract language is unknown. The number "9" is selected to enter a language that is not presented on the computerized list.

- 1 English
- 2 German
- 3 French
- 4 Italian
- 5 Russian
- 6 Chinese
- 7 Japanese
- 8 Document language is unknown
- 9 Select to enter a unique document language

CITATION FIELD: DOCUMENT LANGUAGE

Field Type: Character
Field Name: DOC_LANG

This field is used to identify the language of the document.

For documents that are printed in a foreign language but have an English abstract, the language of the original publication is entered in this field. (The language of the abstract is entered in the preceding field).

The database program has been designed to present seven languages on the computer screen for data entry selection. To enter one of the languages presented in this list, the data enterer types the corresponding number. The number "8" is selected to when the document language is unknown. The number "9" is selected to enter a language that is not presented on the computerized list.

- | | |
|---|--|
| 1 | English |
| 2 | German |
| 3 | French |
| 4 | Italian |
| 5 | Russian |
| 6 | Chinese |
| 7 | Japanese |
| 8 | Document language is unknown |
| 9 | Select to enter a unique document language |

CITATION FIELD: COPYRIGHT DATE

Field Type: Date
Field Name: CPY_DATE

This field is used to record the date that copyright permission has been processed.

Once copyright permission has been requested, the date of the request is entered in this field. When the copyright holder responds, this field is updated with the date of the response.

ERROR CHECK:

Only plausible numeric values are accepted in this field.

CITATION FIELD: COPYRIGHT STATUS

Field Type: Character
Field Name: COPYRIGHT

It will probably be necessary to obtain copyright releases for most of the entries in the database. Paper copies of the copyright releases will be tagged with the publication's unique entry number and filed in numeric order.

The following Entry Codes will be used to indicate current copyright status of the entry:

Field Code	Definition
1	No copyright permission is needed for the given entry.
2	A request for copyright permission has been processed. The copyright holder has not responded.
3	Copyright permission has been processed and granted.
9	No action has been taken regarding copyright permission.

CITATION FIELD: HARD COPY STATUS

Field Type: Character
Field Name: HARDCOPY

This field is used to indicate whether or not BBN has a paper copy of the entry.

The following codes will be presented on the data entry screen to indicate the status of paper copy acquisition:

Field Entry	Definition
1	A paper copy of the entry is needed.
2	A paper copy of the entry is not needed. (For example, the entry has a suitability rating of "4" and a paper copy is unnecessary.)
3	A paper copy of the document has been obtained and is on file.
4	Attempts have been made to acquire a paper copy of the entry. A paper copy is not available.

CITATION FIELD: NUMBER OF REFERENCES

Field Type: Character
Field Name: NO_REFRNCE

This field is used to indicate the number of references cited by the original author of the document.

If the entry is one portion of a larger collection (such as one chapter in a book), the number of references should only apply to the portion of the collection that is being used for the entry. As an example, if a chapter of a book is used for a citation index entry, the number of references entered in this field would include only those references related to that chapter and not to the entire book. (Usually each chapter of a book will have its own bibliography immediately following the chapter.)

The database program will accept only numeric values in this field. When the number of references is unknown or not available, the code "9999" should be entered in this field. The database program will transform this code into the character string "UNKN".

Examples:

Field Entry	Definition
37	The author has cited 37 references in the bibliography section of the document.
9999	The entry is one chapter of a book that did not list references for each chapter individually.

CITATION FIELD: DOCUMENT TYPE

Field Type: Character
Field Name: DOCTYPE

The Document Type refers to the type of publication of the entry.

Entries in this field are to be coded in the following manner:

1	Book
2	U.S. Government Report
3	Technical Report
4	Journal Article
5	ISO/ANSI Standard
6	Bibliographic listing
0	Presents listing for all possible citation fields

ERROR CHECK:

All of the above codes and definitions are presented on the computer for data selection. Once the data enterer has chosen the document type, the data entry program immediately requests verification of the selection and provides an opportunity for selection revision.

CITATION FIELD: DATA ENTERER COMMENTS

Field Type: Memo
Field Name: E_COMMENT

This field is used to record any miscellaneous information related to the entry that has not been recorded in any other fields.

Example:

Book is out of print.

CITATION FIELD: REVISION HISTORY

Field Type: Memo
Field Name: REVISION

Once an entry has been completed, it may be necessary eventually to make revisions. This field is used to record the revision history of the entry.

Revision entries are dated and initialed by the person who initiated the entry changes.

CITATION FIELD: FINAL DATA CHECK

Field Type: Logical
Field Name: FINAL_CHECK

This field is used to specify whether or not a comprehensive error check has been completed on all data entry fields for a given citation. Once the citation has been screened for typographical errors and completeness of data, the data enterer types a "Y" in this field.

CITATION FIELD: PRESCREENER INITIALS

Field Type: Character
Field Name: PSCR_INTL

This field is used to record the identification of the reviewer who assigns the initial suitability rating (Step 3 of the development procedure).

Enterer initials must be alphabetic characters (numbers may not be used) and may not exceed 3 character spaces. The prescreen reviewer's initials must be consistent for all entries.

CITATION FIELD: PRELIMINARY REVIEWER INITIALS

Field Type: Character
Field Name: PREV_INITL

This field is used to record the identification of the preliminary reviewer (the person who completes the screening process during Step 7 of the database development procedure).

Reviewer initials must be alphabetic characters (numbers may not be used) and may not exceed 3 character spaces. The reviewer's initials must be consistent for all entries.

CITATION FIELD: PRELIMINARY REVIEWER NOTES

Field Type: Memo
Field Name: PREV_NOTES

The preliminary reviewer's notes are recorded in this field. These notes will be used to facilitate final critiques and summaries of the database entries.

REVIEWER FIELD: REVIEWER #1 INITIALS
REVIEWER FIELD: REVIEWER #2 INITIALS
REVIEWER FIELD: REVIEWER #3 INITIALS

Field Type: Character
Field Name: REVIEWER_1
REVIEWER_2
REVIEWER_3

The reviewers for the given entry enter their initials in these fields.

REVIEWER FIELD: REVIEWER #1 NOTES
REVIEWER FIELD: REVIEWER #2 NOTES
REVIEWER FIELD: REVIEWER #3 NOTES

Field Type: Memo
Field Name: R1_NOTES
R2_NOTES
R3_NOTES

These fields are used for any additional notes that the reviewers wish to make regarding the given entry.

REVIEWER FIELD: REVIEWER #1 CRITIQUE
REVIEWER FIELD: REVIEWER #2 CRITIQUE
REVIEWER FIELD: REVIEWER #3 CRITIQUE

Field Type: Memo
Field Name: CRITQUE_R1
CRITQUE_R2
CRITQUE_R3

Critical analyses of the entry are included in these fields.
The critiques include any information that will help the reader
understand and analyze the entry.

Examples of Critique Topics:

Reliability and validity of the entry.

General comments regarding methodology, data analysis, etc.

REVIEWER FIELD: SUITABILITY RATING

Field Type: Numeric
Field Name: SUITABILITY

The Suitability Rating is a quantitative ranking of the reviewer's rating for the disposition of the entry.

The ranking does not describe the quality or scholarly merit of the entry. Rather, the reviewers will rate the given entry according to its suitability for inclusion in the database.

The rating will be based on a 4-point scale, with "1" representing an entry that is most suitable for inclusion in the database and "4" representing an entry that is not suitable for inclusion in the database.

Suitability Rating Guidelines

- 1 Based on the review of the paper, the publication is directly applicable to environmental impact analysis goals and is suitable for inclusion in the database.
- 2 Based on the review of the paper, the publication may be directly applicable to environmental impact analysis goals, and is suitable for inclusion in the database.
- 3 Based on the review of the paper, the publication is indirectly related to environmental impact analysis goals, but is still suitable for inclusion in the database.
- 4 Based on the review of the paper, the publication is not relevant to environmental impact analysis goals and is not suitable for inclusion in the database.

REVIEWER FIELD: CONTROVERSIALITY RATING

Field Type: Logical
Field Name: CONTROVRSL

BBN team experts will rate each entry according to its controversiality in the scientific community.

The following 3-point scale will be used to rate the entries:

- 1 Based on the review of the paper, the entry is highly controversial because of its research approach, methodology, or stated conclusions (eg., "noise kills"). Most researchers would take an opposing position to the given research topic results.
- 2 Based on the review of the paper, some elements of the publication are controversial because of research approach, methodology or research results.
- 3 Based on the review of the paper, the publication is noncontroversial.