END
DATE
FILMED
11-80
DTIC
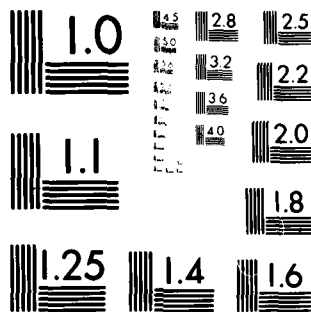
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Cataloging Procedures for the Library Management and Retrieval System (LMARS)

Elizabeth Redfield
Information Services Department

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Naval Underwater Systems Center
Newport, Rhode Island 02840

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PREFACE

These procedures were developed by
modifying and adapting existing NUSC cataloging
practices for consistent and practical
application to the Library Management and
Retrieval System (LMARS) computerized data base
used in the Technical Libraries at the Newport
and New London Laboratories of the Naval
Underwater Systems Center.

REVIEWED AND APPROVED: 17 September 1980

T. A. Galib
Head, Information Services Department

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REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER TD 5868	2. GOVT ACCESSION NO. AD-A090 742	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) CATALOGING PROCEDURES FOR THE LIBRARY MANAGEMENT AND RETRIEVAL SYSTEM (LMARS)		5. TYPE OF REPORT & PERIOD COVERED
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) Elizabeth Redfield		8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS Naval Underwater Systems Center Newport Laboratory Newport, Rhode Island 02840		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS		12. REPORT DATE 17 September 1980
		13. NUMBER OF PAGES 30
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) UNCLASSIFIED
		15a. DECLASSIFICATION / DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)

Approved for public release;
distribution unlimited.

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Library Management and Retrieval System/LMARS
Technical Library
Cataloging

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

The cataloging procedures for the Library Management and Retrieval System (LMARS) were developed to give Naval Underwater Systems Center (NUSC) Technical Library catalogers an efficient, coherent set of standards to use in entering records into the LMARS data base. The procedures were designed by modifying and adapting existing NUSC cataloging practices for consistent and practical application to the LMARS data

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20. ABSTRACT (Cont'd)

base used by the NUSC Technical Libraries at the Newport and New London
Laboratories.

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CATALOGING PROCEDURES FOR THE LIBRARY MANAGEMENT AND
RETRIEVAL SYSTEM (LMARS)

INTRODUCTION

The LMARS data base produces six separate computer catalog indexes
for use by the Naval Underwater Systems Center (NUSC) Technical Library
patrons: (1) Corporate Author, (2) Title, (3) NUSC Accession Number,
(4) Report Number, (5) Personal Author, and (6) Subject. LMARS also
produces the Subject Term Thesaurus and the Corporate Authority Header
List for use by NUSC Technical Library catalogers.

In order for these indexes to be most efficient, a standard,
coherent, and practical set of cataloging procedures must be used
consistently by all persons entering records into this data base.

The cataloger needs ready access to the following tools:
(1) Subject Term Thesaurus, (2) Corporate Author Header List, (3) Report
Number Authority List, (4) Standard Abbreviations List, (5) Catalog
Master Update (CMU) forms, (6) Catalog Master Update-Holdings forms,
and (7) Syllable Dividing Dictionary.

CATALOG MASTER UPDATE FORM

The CMU form is used to enter cataloging information about
library-held documents into the LMARS data base. The original CMU form
will be used first to provide information for keypunching cards for
entry into the data base; these CMU forms will then be used as the
library's Shelf List record of documents held. Any subsequent catalog-
ing modifications will be filed with the original record so a complete
and accurate record of the document's status will always be available.
Each library will keep a Shelf List collection; the original record
Shelf List is currently kept in notebooks in Newport, and a xeroxed
copy of the Shelf List is kept in New London.

Some of the fields on the CMU form are fixed fields and they
require a specific number of filled blanks; e.g., accession number,
record type, action, input date, corporate author, publication date,
DCC code, and first copy number field for appropriate library. Other
fields are variable and the number of blanks filled in will depend on
the information being recorded; e.g., classification, title, paging,
contract number, report number, personal author, subjects and notation.

1

Not all the fields provided must be used. Those that must be used on all initial cataloging records include accession number, record type, action, input data, classification, corporate author no. 1, publication date, unclassified titles (i.e., as much of lines 1, 2, and 3 as needed), paging, copy number for appropriate library, subject no. 1, subject no. 2, and subject no. 3 (i.e., a minimum of three subject headings; additional subjects can and should be added, depending on the document being cataloged). The optional fields (depending on the information available, not the cataloger's whim) include corporate author no. 2, corporate author no. 3, DCC code, the second and third copy number fields for each library, contract number, report number, personal authors (nos. 1 through 4), subjects (nos. 4 through 12), and notations 1 and 2.

Figure 1 shows the CMU form. (Note: The letters A through N in the left margin are not part of the standard form. They were added to serve as explanatory guides in these procedures.)

When preparing the CMU forms, the corporate author is written out in the upper right hand corner of the form. New initial CMU forms ("I") are arranged alphabetically by corporate author when they are sent for keypunching. (See instructions for organizing computer input sheets.) The accession number is added in the upper right hand corner on the top line outside of the spaces provided for entering field information.

CMU forms should be filled in using all capital letters. ("0" should be used to represent the numeral "zero", and "Ø" should be used to represent the letter "O" of the alphabet.

The library cataloger assigns each new library document a unique 5- or 6-digit sequential accession number. The NUSC New London Laboratory Library uses odd numbers while the Newport Laboratory Library uses even numbers. The numbers in 1979 had only 5 digits (i.e., 90000's). When these numbers are used up, 6-digit numbers will be used. A zero should be added to the left of 5-digit accession numbers so that all six blanks will be used; e.g., 090000.

LINE A

ACCESSION NO.

(Must fill in all blanks)

Many NUSC-generated Technical Documents and Technical Reports are published with 4-digit report numbers. These four numbers are also used as the library's accession number; two zeroes should be added to the left in the accession number blanks (e.g., 005074). NUSC Technical Memorandums are published with 6-digit report numbers, composed of the year of publication plus four identifying numbers (e.g., 79-4056). These numbers are also used as the library's accession number for that document.

NAVAL UNDERWATER SYSTEMS CENTER
LIBRARY MANAGEMENT AND RETRIEVAL SYSTEM
(LMARS)
CATALOG MASTER UPDATE   USE RED INK FOR FILLING OUT ALL
CMU AND CMU-HOLDINGS FORMS

Figure 1. LMARS Catalog Master Update

A cataloging modification, subsequent to the entry of the initial record into the data base, cannot be made for accession numbers. If an error is found, the old number must be deleted and reentered in its correct form as an entirely new record.

RT (Record Type) (Must fill in)

The record type describes the type of document and the way the library will accession it. The three record types are M, V, and P, and are utilized as follows:

1. M is used for monographs. Only one document (and duplicate copies of it, each with different copy numbers) will use the assigned accession number.

2. V is used for documents issued in separate volumes, or a limited number of parts. There will be a specific number of volumes, or parts, in the set. Each volume or part of the set will use the same basic number with a holding number added onto the accession number to distinguish it from the other parts of the set (e.g., a document with three volumes would be accessioned as 90504-1, 90504-2, and 90504-3). Duplicates of each of these volumes are distinguished from each other with separate copy numbers.

3. P is used for documents issued in parts, when the parts will be issued indefinitely, on a continuing basis. The various parts are treated the same way as different volumes are treated on a V record, with dashed-on holding numbers.

All V and P record types must have at least one holding. This holding must be recorded on a separate form, the CMU-Holdings form. Figure 2 shows this holdings form. An explanation of cataloging procedures for this form begin on page 23.

For documents issued in parts, V is used (even if the library only owns some of the projected volumes) when it is reasonably certain that there will be some predetermined number of volumes. The letter p should be used for any ongoing series that has no predetermined number of volumes or which will continue to issue parts, either regularly or irregularly.

If the library has only one volume or part of a series of volumes and may not get more, it should be cataloged as a monograph. It can be changed later if the library acquires additional parts.

NAVAL UNDERWATER SYSTEMS CENTER
LIBRARY MANAGEMENT AND RETRIEVAL SYSTEM
(LMARS)
CATALOG MASTER UPDATE – HOLDINGS

Note: A Maximum of 39 Holding Input Sets Are Allowed per Accession

Figure 2.   LMARS Catalog Master Update - Holdings

Whenever a record entered into the data base as an M is changed
to a V or a P, the entire original record first must be deleted.
Record type is one of the fields that cannot be changed with a catalo-
ging modification. (See instructions under the Action section for
deleting a record.) After the necessary lines on the CMU form are
filled out to delete the record as an M, the entire record is reentered
as either a V or a P. This is done with a CMU form which records
the information basic to all of the documents in the set, and a CMU-
Holdings form which records unique information about each specific
holding.

[ACT]   (Action) (Must fill in)

The action code refers to the purpose of the cataloging sheet
information, or the action to be performed. These codes are as follows:

1. I indicates initial cataloging information – a new entry into
the system, or an old entry being treated in a new way. When a new
entry is put into the system, all required fields and all related
optional fields will be filled in.

2. M indicates modified cataloging information – a change, or a
modification, to an existing entry. When a record is modified, all of
the fields in Line A and all of the fields to be modified will be filled in.

3. D indicates deleted cataloging information – a request to
delete all or part of an existing record. When a record is deleted,
the fields on line A on the CMU form are the only fields to be filled
in. If a V or a P record is deleted, each of its associated hold-
ings must be deleted individually on a CMU-Holdings form by filling in
the accession number, record type, action and holdings fields for each
holding.

Most of the parts of an existing record can be changed with a
modified record entry. The accession number and the record type are
the only two areas that cannot be changed in this way. To change these
areas, the existing record must first be deleted, and then reentered
(as an I) with all of the associated information, including the change.

In order to delete all of the information in a field and leave
that field blank, an asterisk (*) should be entered in the first blank
space of the field. "Delete" should be written (in pencil) next to the
asterisk. An M should be used in the action field.

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To change existing information in a field, the new information should be entered in place of the old. New information will replace that which was in the field; e.g., if subject heading no. 4 is "ASW Standoff Weapon" (801564) and it should be changed to "ASW" (037830), the new number should be entered in subject heading space no. 4 on the CMU form. An M should be used in the action field.

If more than one action is to be taken on one record, the computer input will be done in the following order in each update batch: deletions before insertions before modifications. (Note: This allows a record to be deleted as an M and reinserted, under the same number, as either a V or a P).

INPUT DATE
| | | | | ´|

(Must fill in)

The date the material is being cataloged is entered as the input date, even through the material will not actually be entered in to the system on that day.,

Each of these six blanks must be filled in, in this pattern: month, day, year (e.g., January 31, 1978 would be entered as 013178).

LINE B

CLASS
| |

(Must fill in at least first space on all I records)

The security classification assigned to the document being cataloged is entered in this field. The three major classes of documents in the library are Unclassified (U), Confidential (C), and Secret (S). Subsets of these classes are Unclassified No Foreign (UNF), Confidential No Foreign (CNF), Confidential Restricted Data (CRD), Secret No Foreign (SNF), Secret Restricted Data (SRD).

The only other allowable classifications are optional: Confidential and Unclassified (CU) and Secret and Confidential (SC) (i.e., combined on the same number). The highest classification for these combinations could be used instead. Other combinations do not seem to have been provided for in the original system design.

If a V or a P accession number has several security classifications representing different holdings, the highest security classification is entered. For example, if a V entry under 905321 is -1, Unclassified; -2, Confidential; -3, Unclassified, the classification field on the CMU would be C, for Confidential. The only other

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possibility for this combination would be CU, one of the two optional codes allowed for a combination of security classifications.

The LMARS 02 format generates a Corporate Author Header List that serves as the source book for the 5-digit numbers used in the corporate author field. Instead of writing in the corporate author, the cataloger enters the 5-digit number from this book in the corporate author field blanks. The LMARS system translates this number into the correct corporate author name when it creates the computer printouts used by the library patrons (e.g., 09636 Naval Underwater Systems Center, Newport, RI.)

CORPORATE AUTHOR-1

The Corporate Author Header List shows that the correct number to use for a document produced by NUSC, Newport, is 09636. This list is composed of an original master file of corporate authors and new corporate author additions entered by New London and Newport catalogers for documents whose corporate authors are not on the list.

The Corporate Author Update form is used to add these new authors. A series of consecutive 5-digit numbers has been set aside for New London and Newport catalogers to use when adding new corporate authors to the Corporate Author Header List. These numbers, and the correct form of the new corporate author (usually name and place) are entered on a Corporate Author Update form. (See figure 3.) This sheet has spaces for adding 11 new corporate authors (not to be confused with personal authors). This form should be sent to the keypunchers with any new CMU forms.

The Corporate Author Header List should be checked carefully before adding a new entry because sometimes the name may be there in a slightly different form than normally used, e.g., there are entries for U. S., for US, and for United States as part of the name. Each punctuation mark or space affects the filing placement. This proliferation of forms is inefficient and a regular program of editing should be practiced to eliminate duplicate authors with several different forms of entry. It is acceptable, however, to have the same author entered twice when there are two different geographical locations.

NAVAL UNDERWATER SYSTEMS CENTER
LIBRARY MANAGEMENT AND RETRIEVAL SYSTEM
(LMARS)
CORPORATE AUTHOR UPDATE

IND-NUSC 3070/11A(4-76)   DATE _____

CORPORATE AUTHOR CODE (5)	ACT. (1)	LINE (1)	CORPORATE AUTHOR NAMES (120)
		1	
		2	
		3	
		1	
		2	
		3	
		1	
		2	
		3	
		1	
		2	
		3	
		1	
		2	
		3	
		1	
		2	
		3	
		1	
		2	
		3	
		1	
		2	
		3	
		1	
		2	
		3	
		1	
		2	
		3	

Figure 3.   LMARS Corporate Author Update

When a new corporate author is added, the DDC(DTIC) Source Header List should be checked to see what form of the name is used there. The form found in that list should be used if it is consistent with these NUSC/LMARS guidelines. If the parent company and its division are being entered, they should be entered in the following form:

> Parent company name,
> Place.
> Division Name.

For example,

> Drexel University,
> Philadelphia, PA
> Department of Materials Engineering

It is not necessary to use all three available lines when entering a new corporate author. The place can follow the name if there is room on the first line for either some or all of it.

CORPORATE AUTHOR-2	CORPORATE AUTHOR-3

These are optional areas of the corporate author field. One or both can be used to indicate joint responsibility for a document.

PUBLICATION DATE

The date the document was published is entered in this field, in the same order as the input date: month, day, year (e.g., 051364 for a document published on May 13, 1964.

If the month and/or day is unknown, zeroes in the month and day spaces and only the last two digits of the year are entered (e.g., 000078 for a document published in 1978, month and day unknown).

If nothing is known about the date, the field should not be left blank (as the original LMARS rules instruct). Instead the letters "ND" should be entered in the first two spaces, to stand for "no date".

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If the record is a V or a P entry, and each holding has a different date, these dates should be entered on the separate CMU Holding form, and the letters VD (for various dates) should be entered in the first two spaces of the publication date field on the CMU form.

```
┌────┐
│ DCC │
├────┤
│    │
│ │  │
└────┘
```

Special data banks, within the LMARS data base, should be assigned a unique alphabetical code. This code will be used to search the system and to produce off-line bibliographies of all of the entries in that particular data base (e.g., the code assigned to the RAPLOC data base (part of the Trident collection) is SR).

LINES C, D, and E   (Must fill in on I records)

LINE NO.	TITLE-1	
1 0																																											
15 17		56
LINE NO.	TITLE-2	
1 1																																											
15 17		56
LINE NO.	TITLE-3	
1 2																																											

The three lines allowed for title are composed of a total of 120 spaces, or 40 spaces per line. It is important for the cataloger to understand that the LMARS system alphabetizes these lines as if they were three separate fields, even though the purpose of these lines is to represent a single title. This system characteristic means that if identical titles are entered in different ways (i.e., with different abbreviations, word breaks or dashes and hyphenation), they will not necessarily file together in the title printout. Sometimes they may be separated from each other by three or four pages. For example, titles beginning "Analysis of Torpedo Mark 48 Proficiency Firings..." would be filed in four different places if they were entered into the system in these four different ways: (1) "Analysis of Torpedo Mk 48 Profi-...", (2) "Analysis of Torp Mk 48 Proficien-...", (3) "Analysis of Torpedo Mark 48 Pro-...", and (4) "Anal of Torp Mk 48 Prof-...". While this fact may not always create problems, since the majority of titles are usually distinct from one another, it does create multiple alphabets in the title printout for those titles that begin with identical words or phrases.

Computer sorting also treats "and", "&" and "+" in three different ways. The ampersand (&) should be used instead of the word "and", wherever it occurs in the title (or the rest of the record). The word "plus" should always be written out for the symbol "+".

Computer sorting also files two identical words in two different places if one pair of words is hyphenated and the other is not. For example, "Bottom bounce..." titles would first be followed by all titles beginning with those words and then continued with words beginning with any other letters of the alphabet, A to Z; then the computer would file any titles in which "bottom-bounce" was hyphenated in a new alphabet. This is logically indefensible and very likely to lead to loss of access for the user who expects the catalog to be alphabetized in the usual progression of A to Z. A space should be substituted for a hyphen in hyphenated words, and compound words should be separated by a space (e.g., "boom town", not "boom-town"). The only exceptions to this rule occur in instances where the hyphenated word is usually written as one word; e.g., "underwater", not "under water", when the title reads "under-water". This rule also does not apply to prefixes since most prefixes cannot stand alone as separate words. When prefixes are joined to words with dashes, the dashes should be eliminated and the word written as one word (for example, biplane). If a word must be divided by syllables at the end of a line, a dash should be used. The following rules apply:

1. Ellipses are used to indicate parts of a long title that are left out. If a title is too long to fit into the three title lines, it should not be continued in the notes section. Instead, the title should be filled in as much as possible, leaving space to use ellipsis marks (i.e., three periods) in the last line to show that some of the words are left out. Space should be left to enter the last word of the title. For example, "infrared emission of rocket plumes and their emitting species" would be entered in this way:

15 17	TITLE-3	56
LINE NO.		
1 2	INFRARED EMISSION OF ROCKET ... SPECIES	

Ellipsis marks can be entered between two words with no spaces preceding or following them, or with one space before and one space after, as in the above example.

2. Special punctuation marks that are part of the symbols or phrases that identify certain types of equipment, sonar, ships (for example, AN/BQQ5(), BQQ5(), M/V Seismic Explorer, etc) should not be eliminated. If these marks of punctuation are eliminated, the meaning of the symbol might be destroyed.

The documents entered into the system are classified as either Secret, Confidential, or Unclassified. The titles of those documents are classified separately. This classification usually follows the title itself on the title page of the document. Only unclassified titles can be entered into the LMARS system. The first four spaces in the title field must always contain the classification of the title, surrounded by parentheses and followed by an empty space. For example:

LINE NO.	TITLE - 1	
I 10	(U) AVAILABILITY OF TOPICAL HEAT PROTECTION-	

When the title is classified, either (C) or (S) should be entered in the first four spaces. No part of the title should be entered. The system will automatically print "Title is Classified". The empty space must be included after the parentheses which surround the title classification. If this space is left out, the title will not file in the correct alphabetical sequence.

Catalogers should familiarize themselves with the NUSC Technical Library Standard Abbreviations List. These abbreviations should always be used on every input line of the title whenever the words occur. No other abbreviations should be used without first consulting the principal cataloger in Newport to see if they should be added to the Standard List. If a word is abbreviated on the document (except for acronyms and initialisms), and that abbreviation is not on the NUSC list, it should be written out in full by the cataloger.

The articles "a", "an", and "the" should be eliminated when they occur at the beginning of a title. When they occur elsewhere in the title, they should not be deleted.

A standard word divider dictionary should be used to break words into syllables when they must be continued on the next line of the title. The last syllable before the division should be followed by a hyphen. (See the last example in the "TITLE 1" line.)

LINE F

```
+----------------------+
|     PAGING           |
+----------------------+        (Must fill in)
|  |  |  |  |  |  |     |
+----------------------+
```

    If the number of pages in a monograph is known, that number and the letter P should be entered leaving no spaces between, in this field: e.g., 20P. If the number of pages in a monograph is not known, or is too large to count, or if the document has sections with various paging, the letters VP (for various paging) should be entered in the first two spaces of this field.

    If the record is a V or a P entry, the number of volumes should be entered, if the set is complete. The abbreviation "VOLS", without a period and without any spaces between the number and the letters should be used. If the holdings are incomplete and/or will be added to in the future, the letters, VP should be entered.

	C Y	C Y	C Y	▨	C Y	C Y	C Y
N				L			

    This field is the only place on the CMU form where two different areas are intended for the two different libraries: N (the first three copy no. areas) indicates Newport-held copies; L (the second three copy no. areas) indicates New London-held copies.

    Copy numbers are primarily used as an inventory device to identify the number of copies of a document each library owns, and to keep them in the proper order on the shelves.

    Newport and New London libraries should assign copy numbers in numerical sequence to all multiple copies of documents received. This means that if New London has two copies of No. 95601, they should be identified as Cy No. 1 and Cy No. 2. If Newport also has one copy of No. 95601, it should be identified as Cy No. 1 (or the synonymous term, "File") and the words "Newport copy" should be added to the document and the charge cards. The CMU form will look like this:

	C Y	C Y	C Y	▨	C Y	C Y	C Y
N	0 0 1			L	0 0 1	0 0 2	

By adding either "Newport copy" or "New London copy" to copies of
documents originally cataloged in the other library, the documents can
be easily identified if they are sent back and forth for loan purposes.
Since the copy fields are divided, showing a Newport area and a New
London area, there should be no confusion about each library having a
001 copy.

Secret documents are frequently assigned a separate copy number at
their point of origin. It is important to record this information for
purposes of Secret Inventory control. This means that the procedures
for recording Secret copy numbers is slightly different than procedures
for other documents. If a Secret document has a special copy number,
that number should be entered on the CMU form instead of the sequential
number (001, 002 etc.); however, the regular sequential copy number
should be used on the Desk and Borrower's Cards and on the document folder.
The special Secret copy number should be put in parentheses below the
regular copy number. For example:

	CY	CY	CY	
N	0 1 1 3			

CMU Form

TR: S2876/78		
SOURCE Office of CNO	ACCESSION NO.	
	95330	
TITLE Navy R D T & E	FILE NO.	
Budget MINIMIPS.FY80	COPY NO.	
v.p. 22 Sep 1978.	File(#13)	
	SECRET GR.	

Desk and Borrower's Card

The only exception to the rules for assigning copy numbers
involves microfiche copies of a document. The copy number fields serve
primarily to indicate the number of hard copies (paper copies) the
library owns; however, if the library does not own any hard copies of a
document, but does have one or more microfiche copies, the numbers 001
should be entered in the first copy number field only. It is not
necessary to enter a separate copy number on the CMU form for duplicate
microfiche copies of the same document. It is also not necessary to
enter a separate, and additional, copy number for microfiche copies
when the library owns at least one hard copy of the document. If the
library owns two hard copies and one microfiche copy the following
would apply:

	CY		CY		CY		
N	0 0 1		0 0 2				

It should be noted that the cataloger does not enter an additional copy number for the microfiche copy.

However, if the library owns only the microfiche copy (or several microfiche copies:

	CY		CY		CY		
L	0 0 1						

It should be noted that only one copy number is entered, regardless of the number of duplicate copies of microfiche that the library owns.

    All three spaces in a copy number field must be filled in. Zeroes should be added to the left of the number, if necessary. (Since the original copy of the CMU, or input sheet, is kept in Newport as a Shelf List, all references to "original CMU, or shelf list" in these procedures refer to either the Newport Shelf List (the original CMU form), or the New London copy of that Shelf List.)

LINE G

CONTRACT NUMBER

    If the government contract number is available, it can be entered in this field. This is not a sortable field, so the form used when entering the information is not of great importance. The best procedure would be to copy contract numbers exactly as they appear on the documents.

LINE H

LINE NO.	REPORT NO. -1 (30)	REPORT NO. -2 (30)
4 0		

This field has spaces for entering two different report numbers.
If a document has a source-assigned report number, it should always be
entered on the CMU form. The report number is a frequently referred to
access point and it is used to produce the Report Number printout. The
only time a report number is not entered on the CMU form is when the
record is a P or a V, there is not one unique report number asso-
ciated with the entire report and/or each holding has a different
report number (or varies because of added information).

If the library owns a microfiche copy of a document, and this
microfiche copy also has its own report number (assigned by the
originator of the microfiche), that number should be entered in the
second report number space (or in the first space if there was no
report number assigned by the corporate source of the document).

LINE NO.	REPORT NO. -1 (30)	REPORT NO. -2 (30)
4 0	NUSC-TD-4567	AD-A01 7-631

The most important consideration in entering report numbers is
that consistent form of entry be used. Each report number should be
preceded by a word, or letters, that identify the corporate source.
Some report numbers provide these letters, but many do not. Since some
companies have similar initials or names, and some reports provide
nothing but the number itself, it is necessary for the cataloger to
consult the Report Number Authority List for the proper form for each
corporate report number. For example, if two different forms are used
for the same company, the various reports that it puts out will
probably not file together and access to some reports will be lost.

All punctuation and spaces found in report numbers should be
changed to dashes, for consistent sorting. If there are any variations
in this usage, they will be shown in the Report Number Authority List.
Each variation in use of symbols and punctuation affects the order in
which the entries appear in the printout.

When entering a report number, terms like no. and document should
be left out, and words like Technical Memo should be changed to letters
(TM). The authority list should be consulted for correct abbreviations
for these generic terms and for usages that may be peculiar to a
particular company.

Examples of report numbers as they appear on the document, and as they are changed for entry on the CMU form are as follows:

Document	CMU Form
Technical Memo No. 77-2034 (Put out by NUSC)	NUSC-TM-77-2034
Report No. 2506 (Put out by Bolt, Beranek & Newman)	BBN-R-2506
Technical Memorandum File No. TM 76-80 (Put out by Penn. State University's Applied Research Lab)	APL-PSU-TM-76-80
E-8000 (Put out by NASA's Lewis Research Center)	LRC-E-8000
L-10967 (Put out by NASA's Langley Research Center)	LRC-L-10967
NSWC/WOL/MP-77-31 (Put out by Naval Surface Weapons Center)	NSWC/WOL/MP-77-31 (Peculiar to this cor- porate author, a slash is left between letters.
USL Rpt No 22 (Put out by Naval Underwater Sound Lab)	USL-R-22

NOTE: The letters used do not include an "N", as would be expected.

LINES I and J

PERSONAL AUTHOR - 1	PERSONAL AUTHOR - 2
17	35
PERSONAL AUTHOR - 3	PERSONAL AUTHOR - 4

This field provides spaces for up to four personal authors. This form should be used when entering each author: last name and initial (or initials) (i.e., no punctuation). For example, John J. Smith would be entered as follows:

PERSONAL AUTHOR - 1
S M I T H J J

Some documents have more than one personal author. NUSC policy for entering personal authors calls for entering all NUSC authors, up to three authors for Naval Laboratory documents and up to two authors for all other documents.

LINES K and L

LINE NO.	SUBJECT-1	SUBJECT-2	SUBJECT-3	SUBJECT-4	SUBJECT-5	SUBJECT-6	
6 0							
15	17	23	29	35	41	47	52
LINE NO.	SUBJECT-7	SUBJECT-8	SUBJECT-9	SUBJECT-10	SUBJECT-11	SUBJECT-12	
6 1							

This field provides spaces for entering 12 different subjects to give subject searching access to all documents in the LMARS data base. Each document should have a minimum of three subject terms assigned to it. Each subject term is represented on the CMU form by a six-digit code which is found in the Subject Term Thesaurus. Each cataloger should have ready access to a copy of this thesaurus.

It is important for the cataloger to give careful thought to assigning subject terms. Specific terms are sometimes associated with documents in certain subject areas, even though that specific term may not be found in the document itself (e.g., accession no. 98172 is titled "SIAM ECM Analysis"). One of the subject headings assigned to it is SUBAD #454380, which is an acronym for Submarine Air Defense. Although this term is not mentioned in the document, the subject area of the document is important to people working in the SUBAD program.

As a general rule of thumb (not necessarily a rigid rule), it is usually helpful to have at least one larger, general term which describes the overall subject matter, and then two or more specific terms. In this way, searchers can combine general and specific terms if they are trying to build a broad bibliography for someone who is not searching for a specific document or documents.

The subject term used in Area 1 must always be an existing term, taken from either the Subject Term Thesaurus or the recently added term list (those which have already been put into the system). A cataloger cannot enter a new term in Subject Area 1 or the entire record will be rejected. New codes can be entered in the other subject areas, provided the new term is sent in on the Thesaurus Update sheet in either the same batch as the CMU form which contains the new term, or in an earlier batch. (See figure 4.)

Before creating a new subject term, the cataloger should first check through the accumulated Thesaurus Update sheets for terms created in the past 3-6 weeks that have not yet appeared in the Subject Term Thesaurus. This will help avoid duplication. To create a new term, the word, or words should be added, on one line only, to the Thesaurus Update sheet for the day, or week. The new number should be used on the CMU form (but not in the first position). If the concept is best expressed with an acronym or an initialism, a "Use" reference should be made from the words not used, using the 900000 number for the Use reference. The word "For" should be used in the reference to be used. This serves as a cross reference if both terms ever need to be deleted. For example,

950866　　Improved Standard Hdwr Cabinet USE ISHC

803994　　ISHC FOR Improved Standard Hdwr Cabinet

It is important to use the same spelling and abbreviations in both forms and include all on one line of the update sheet. The 900000 numbers are never used on the cataloging sheets. These are only used for creating "Use" references for the Subject Term Thesaurus (i.e., instructions for the cataloger or data base searcher to "see" another term instead).

NAVAL UNDERWATER SYSTEMS CENTER
LIBRARY MANAGEMENT AND RETRIEVAL SYSTEM
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THESAURUS UPDATE   DATE_____

IND-NUSC 5070/11(4-76)

SUBJECT TERM CODE (6)	ACTION (1)	SUBJECT TERM DESCRIPTION (42)

Figure 4.   LMARS Thesaurus Update

21

A subject term can be deleted from a holding in two different ways. To replace one term with another, a modification record should be prepared and the six-digit code for the new term should be inserted in the same subject area space that now holds the term to be deleted. The new term will override the old one. To delete a term altogether, a modification record should be prepared and an asterisk(*) should be entered in the subject area space that now holds the term to be deleted. This asterisk tells the computer operator to delete all information in that area. Any subject terms that follow a deleted term will automatically be moved to the left to fill in the blank area.

LINES M and N

LINE NO.	NOTATION-1	
8 0		
15	17	56

LINE NO.	NOTATION-2	
8 1		
15	17	56

The two lines in this field are used for adding miscellaneous information. This is not a sortable field. This field should be used for pertinent information about distribution limitations. Statements about specific limitations for each document should not be added. Instead this general statement: "Note distribution limitations" should be used. The more specific information can be found on the document itself.

This field is used to show that the document being cataloged or modified supersedes an earlier edition; e.g., "Supersedes 1/30/78 ed."; or "Supersedes OP 4211 dtd 2/79".

Notations about microfiche holdings are to be made in these lines. These following patterns are prefereed: w/m fiche or m/fiche only.

Declassification information should not be put in this field. (See "After-Cataloging Procedures" section for information in handling this.)

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CATALOG MASTER UPDATE - HOLDINGS

This form should accompany the Catalog Master Update form for all new V and P records. It should be noted that each Holdings form provides six sets of fields for entering six different holdings. Each set has four lines available for recording information about each holding. Each accession number can include up to 99 holdings. If a record has more than 99 holdings, a new accession number will have to be created. (See figure 2.) (Note: The letters "O" through "R" in the left, unused areas of the form are not part of the standard form. They were added to serve as explanatory guides in these procedures.)

Some of the fields on the CMU-Holdings form are fixed fields which require a specific number of filled blanks; e.g., Accession Number; Record Type; Action; and Holdings (the first four fields on Line 0). The Report Number field (the fifth field on Line 0) and the three lines for the Description field (lines P, Q & R on figure 2) are variable, depending on the information being recorded. All of the fixed fields and at least one line of the variable fields must be filled in for each holding. Since all holdings will not necessarily have report numbers, one of the three description field lines can be filled in instead.

LINE 0

ACCESSION NO.
| | | | | |

(Must fill in all blanks)

The Holdings form accession number will be the same number used on the associated CMU form. It must be filled in on each of the six holdings lines if six holdings are being entered (or on one line if only one holding is being entered).

REC.
7 TYPE

(Must fill in)

The two record types for Holdings form are related to the P and V record types for the CMU form: if the related entry on the CMU form is V, the record type on the Holdings forms should be X; if the related entry on the CMU form is P, the record type on the Holdings form should be Y.

ACT.
8

(Must fill in)

The action code refers to the purpose of the cataloging sheet information, or the action to be performed. These codes are as follows:

1. I indicates cataloging information - a new entry into the system, or an old entry being treated in a new way. When a new entry is put into the system, all required fields and all related optional fields should be filled in.

2. M indicates modified cataloging information - a change, or a modification, to an existing entry. When a record is modified, all of the fields in line 0 and all of the fields to be modified should be filled in.

3. D indicates deleted cataloging information - a request to delete all or part of an existing record. When a record is deleted, the fields on line 0, excluding the report number field, are the only fields to be filled in.

(Note: See page 6 in the section on CMU forms for additional information about modifying or deleting records.)

|HOLD.(2)|
|IS| (Must fill in)

The field is meant to identify a specific part of an accession number composed of multiple parts. The Holdings number will be added to the accession number on the document and the Desk and Borrower's Cards. Holdings can be entered into the base along with the CMU entry, and they can be added, with a modification record, later, as new holdings are acquired.

The Holdings number does not necessarily always correspond to the volume or part number of the set. For example, if a set is composed of Volume 1 and Volume 2, and Volume 1 is in two physical parts, each with different titles, then Volume 1, Part 1, would become Holding No. 1, and Volume 1, Part 2, would become Holding No. 2; Volume 2 would then become Holding No. 3. Similarly, if the library received Volumes 2 and 3 of a document, but did not own Volume 1, Volume 2 would become Holding No. 1 and Volume 3 would become Holding No. 2. If it were certain that the library would be getting Volume 1 soon, Volumes 2 and 3 could be assigned Holding Nos. 2 and 3, reserving Holding No. 1 for Volume 1; however, it is not good practice to do this unless the missing volume will definitely be acquired soon. Often the library only receives a later part of a multivolume set; leaving unassigned Holdings numbers would create confusion with the circulating documents. It would usually be assumed that if the library has Holding No. 3, that it also has Holding Nos. 1 and 2.

Holdings can be assigned out of order (i.e., not in numerical
sequence), but the computer print out will be in numerical order.
Duplicate holdings, inserted in error, will not be accepted (the latest
information will replace the existing information on an "M" Action
record; but it will be rejected if duplicate information is entered on
an "I" Action record).

Identical report numbers should not be entered on both the CMU
form and the CMU-Holdings form. Duplication will create unnecessary
double entries in the report number printout. The report number may be
repeated if part of it varies (e.g., if the CMU form has OP-4027, the
Holdings form may have OP-4027-Vol 1). Artificial differences should
not be created in order to repeat the same report number.

(See the instructions on page 17 in the CMU form section of these
procedures for entering report numbers. The same rules apply for
report numbers on the CMU-Holdings form.)

LINES P, Q, and R

This field is used for pertinent descriptive information about
each holding. Although it is not labeled on the Holdings form, it is
the descriptive field. The three lines that make up this field are not
sortable, so the order in which information is entered is not crucial;
however, for user convenience, it is preferable to use a consistent
pattern when entering information. For example, if an existing holding
gives the date on the first line and information about microfiche
copies and classification on the second line, that pattern is preferred
when entering subsequent holdings.

Descriptive information about each holding should include a unique
title (if one exists), the classification and the date (if either are
different from the CMU form), the volume or part number (if they are
not included as part of the report number) and a microfiche note if the
library owns a microfiche copy (w/m fiche or m/fiche only). Other
information that seems important can also be included. (Note: The CMU

form should have all information common to all parts of the accession number.) For example, if the library owns all of the parts in microfiche, then the notation field on the CMU form is the correct place to put that information, rather than repeating it on each holding. Figure 5 shows a completed CMU form.

AFTER-CATALOGING PROCEDURES

The following information (if available) should be entered in the upper left corner of the CMU form:

1. Declassification information for Secret and Confidential documents (e.g., "Declass 12/31/90").

2. The number of Secret microfiche copies the library owns. It is not necessary to record this information for Confidential or Unclassified titles.

3. The Secret Route Sheet Number (e.g., "S1256/79").

Microfiche are filed in two different places: either under the NUSC accession number (e.g., 90074), or under the issuing body identification number (e.g., AD-A042-310). This means that every microfiche the library owns should be represented in the circulation, or desk card file, by a manila card the same size as the desk cards, indicating where the microfiche is filed. If a microfiche with an AD number is filed under the NUSC accession number, the desk manila would read:

90074
W/M Fiche
(or M/Fiche Only)

However, if the same microfiche were filed under the AD number, the desk manila would read:

90074
W/M Fiche: AD-A042-310
(or M/Fiche Only: AD-A042-310)

The number the microfiche is filed under should also be put in the upper left corner of the microfiche jacket, and on the fiche itself.

The total number of Secret microfiche copies of a document owned by the library must be recorded, in ink, in the upper left, or middle, margin of the Shelf List. If a duplicate Secret microfiche is acquired, the number held on the Shelf List should be changed.

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CATALOG MASTER UPDATE

ACCESSION NO.	RT	ACT	INPUT DATE	
0 8 2 5 9 8	M	1	0 1 2 3 8 0	

7 8 9

LINE NO.	CLASS	CORPORATE AUTHOR-1	CORPORATE AUTHOR-2	CORPORATE AUTHOR-3	PUBLICATION DATE	DCC	
0 1	C	2 0 4 0 5			1 2 2 0 7 4		

15   17   21   26   31   36   42

LINE NO.	TITLE-1	
1 0	(U) SUBMARINE MATERIAL CERTIFICATION RE-	

15   17   56

LINE NO.	TITLE-2	
1 1	QUIREMENTS MANUAL FOR THE SUBMARINE	

15   17   56

LINE NO.	TITLE-3	
1 2	SAFETY PROGRAM	

15   17   56

LINE NO.	PAGING		CY	CY	CY		CY	CY	CY	
1 3	VP	N	0 0 1				L			

15   17   23 24   27   30   34 35   38   41

LINE NO.	CONTRACT NUMBER	
3 0		

15   17   56

LINE NO.	REPORT NO.-1(30)	REPORT NO.-2(30)
4 0	NAVSEA-0924-LP-062-0080	

15   17   37   47   52

LINE NO.	PERSONAL AUTHOR-1	PERSONAL AUTHOR-2	
5 0			

15   17   35   52

LINE NO.	PERSONAL AUTHOR-3	PERSONAL AUTHOR-4	
5 1			

15   17   35   52

LINE NO.	SUBJECT-1	SUBJECT-2	SUBJECT-3	SUBJECT-4	SUBJECT-5	SUBJECT-6	
6 0	9 9 5 2 5 0	6 0 3 5 5 8	0 0 7 9 0	4 5 5 6 6	4 5 5 2 5 0	8 1 2 5 5	

15   17   23   29   35   41   47   52

LINE NO.	SUBJECT-7	SUBJECT-8	SUBJECT-9	SUBJECT-10	SUBJECT-11	SUBJECT-12	
6 1	8 0 0 9 7 8						

15   17   23   29   35   41   47   52

LINE NO.	NOTATION-1	
8 0	U/CMG-L1 (MS(A)60)	

15   17   56

LINE NO.	NOTATION-2	
8 1		

15   17   56

Figure 5.   Sample Completed LMARS Catalog Master Update

The corporate author should be written out in the upper right hand corner of the CMU form. New I sheets are arranged alphabetically by corporate author when they are sent for keypunching.

The accession number should be added on the upper right corner of the CMU form, under the corporate author.

Each library should xerox three copies of all completed CMU forms before they are sent to be keypunched. One set of these copies is filed in a set of three temporary notebooks. Two of these notebooks hold initial input sheets in alphabetical order by corporate author. This provides for easy access if information is needed on a new document before it appears in the printout. The third notebook holds modifications and deletions arranged numerically by the accession number.

The second set of copies is filed in the Shelf List notebooks. This will provide the permanent record of the libraries' holdings. When the original CMU forms are returned from keypunching, they are sent to Newport, where the original Shelf List is kept, and filed in place of the xeroxed copy in the Shelf List.

The third set of copies is sent to the other library (i.e., Newport sends a set of its cataloging sheets to New London, and vice versa).

When the Update Report (Program No. 4) is received (approximately every 4 to 6 weeks), the principal cataloger in Newport compares it to the temporary CMU forms in the three temporary notebooks. All of the forms that appear in the printout can be discarded from the temporary notebooks. Ideally, everything entered in the previous month should appear in the new printout. However, there are often records that are never entered at all. Those entries that are over 6 weeks old and have still not appeared in the computer printout may have to be resubmitted. Decisions about resubmits, and/or corrections to errors indicated in the Error Report, which accompanies the Update Report, should be made by the principal cataloger who is responsible for quality control.

INITIAL DISTRIBUTION

Addressee	No. of Copies
NOSC (Library, Code 6565)	1
NAVWARCOL (Library, Technical Services (Code E111))	2
DDC, Alexandria	2