

Repetition of Information in OCLC MARC Formats:
Implications for Library Automation Systems

by

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ABSTRACT

Repetition of Information in OCLC MARC Formats: Implications for Library Automation Systems

Advances in technology have made larger and yet less expensive computer memory available to libraries. Also, the increased speed of processing has made access to any element of a huge data base possible in a fraction of a second. In spite of less cost for memory storage and high speed technology, there is always room for more efficiency in dealing with an ever increasing gigantic bibliographic data base.

OCLC (Online Computer Library Center) is the oldest and largest bibliographic network in the United States. Many libraries use OCLC bibliographic records for their library automated systems. OCLC MARC (Machine-Readable Cataloging) formats, with few exceptions, follow the Library of Congress MARC formats for communication of bibliographic information in machine-readable form. However, examination of the structure of MARC formats and the contents for various types of materials, such as books, serials, etc., indicates that the data recorded in certain parts of the MARC structure are repeated. The adjustment in the OCLC display and/or print programs could result in reduction of average bibliographic record length and hence a saving in memory storage cost. The saving of memory, by avoiding duplication, could be very helpful to libraries with a limited storage capacity. It also could potentially decrease response time because the average length of bibliographic records would decrease.

This paper compares information in the fixed field and variable fields and attempts to demonstrate some areas of OCLC MARC formats where more intelligent computer programs could be developed that would reduce the average time to input a record and reduce the size of the MARC records without any loss of information. It also points out certain areas where coded information is already used by the OCLC print program.

Introduction

Revolutionary advances in the computer and electronics industry have made many things possible which were perceived to be only a dream a decade ago. The ever increasing number of information sources and the demand for timely processing of information have been major factors of encouragement towards putting traditional means of information processing behind and seeking innovative ways to fulfill the same responsibilities. The incredible advances in application of computer technology to library operation might allow libraries to use robots for automated storage and retrieval of documents.[1]

Application of computer technology to libraries and information centers may be the most important step toward bringing technology into libraries and may be the best one ever brought to the library world. Libraries, as other social institutions, have benefited from technological innovations. Advances in computer technology, among other things, have made larger and yet less expensive computer memory available to libraries. Microcomputer technology has made it possible to have enough memory size for certain applications. A few decades ago only mainframes could afford to have sizeable memory. For instance, "the IBM PC/AT can accomodate 8 meg[abytes]."[2] Libraries of different kinds now are using various types of computers for a variety of applications.

Also, the increased speed of processing has made access to any element of a huge data base possible in a fraction of a second. Without computer speed it would take hours to retrieve the same citations that can be retrieved in search sessions in a few seconds using available programs such as Prosearch. In spite of less cost for memory storage and high speed technology, there is always room for more efficiency in dealing with an ever increasing gigantic bibliographic data base.

Bibliographic networks are mostly concerned about avoiding duplications of bibliographic records in the system. For instance, while OCLC has general guidelines for inputting a new record into the system to prevent entering duplicate bibliographic records[3], it appears to be less concerned about duplication of information in the same record. Examination of the structure of OCLC MARC formats and the contents for various types of materials, such as books, serials, etc., indicates that the data recorded in certain parts of the MARC structure are repeated. The purpose of this paper is to show that in all MARC communication formats certain information is repeated while the same data is already recorded somewhere else in the record.

An OCLC Bibliographic Record in Books Format Showing Areas
of Information Duplications

Screen 1 of 2

NO HOLDINGS IN TXI - FOR HOLDINGS ENTER dh DEPRESS DISPLAY RECD SEND

OCLC: 16129548 Rec stat: p Entrd: 870619 Used: 871203

Type: a Bib lvl: m Govt pub: Lang: eng Source: Illus: a

Repr: Enc lvl: Conf pub: J Ctry: dcu Dat tp: s M/F/B: 00

Indx: 1 Mod rec: Festschr: 0 Cont: b

Descl: a Int lvl: Dates: 1987,

- 1 010 87-42807
- 2 040 DLC lc DLC
- 3 020 0309037824 : lc \$34.95
- 4 020 0309037441 (pbk.) : lc \$19.95
- 5 043 n-us---
- 6 050 0 HD6351.2.U5 lb T43 1987
- 7 082 0 331.1270973 12 19
- 8 049 TXIM lc 14043451
- 9 090 lb

10 245 00 Technology and employment : lb innovation and growth in the U.S. economy / lc Panel on Technology and Employment, Committee on Science, Engineering, and Public Policy (of the) National Academy of Sciences, National Academy of Engineering (and) Institute of Medicine ; Richard M. Cyert and David C. Mowery, editors.

Screen 2 of 2

- 11 260 0 Washington, D.C. : lb National Academy Press, lc 1987.
- 12 300 xiii, 225 : lb 11. ; lc 23 cm.
- 13 504 Bibliography: p. 174-208.
- 14 500 Includes index.
- 15 650 0 Labor supply :x United States :x Effect of technological innovations on :x Congresses.
- 16 651 0 United States :x Full employment policies :x Congresses.
- 17 651 0 United States :x Economic conditions :y 1981- :x Congresses.
- 18 700 10 Cyert, Richard Michael, 1d 1921-
- 19 700 10 Mowery, David C.
- 20 710 20 Committee on Science, Engineering, and Public Policy (U.S.). lb Panel on Technology and Employment.

MARC Communication Formats

The essential component of machine-readable cataloging is MARC (Machine-Readable Cataloging) format.[4] Library of Congress developed MARC bibliographic communication formats in machine-readable forms. The pilot project started in 1968 and by 1969 it was known as MARC II. It "provided the means for sharing bibliographic data in machine-readable form and the impetus for library networking." [5] Since the mid-1970s the MARC Communication formats have been known as LC-MARC formats and since the early 1980's they have been called USMARC formats.

The first field of a MARC bibliographic record is a fixed field that carries information in coded form. It is called fixed field because the length of the field does not vary. The fixed field is composed of a number of elements, each containing a separate piece of coded information describing the work cataloged. The structure of any bibliographic record in a MARC format consists of three elements:

(1) The "Leader" which is always twenty-four characters indicating length of the record, record status, type of record, and bibliographic level.

(2) "Record directory" which refers to a series of twelve-character fixed length entries, each having three parts: tag, length, and starting position. The last directory is followed by a field terminator.

(3) "Variable fields" consist of cataloging information. Variable fields vary in length depending on the record being described. Each variable field has two indicators, a series of two-character subfield codes, each subfield followed by data or cataloging information, and a field terminator at the end of the last subfield.

OCLC (Online Computer Library Center) is the oldest and largest bibliographic network. [6] Many libraries use OCLC bibliographic records for their library automated systems. OCLC MARC formats, with few exceptions, follow the Library of Congress MARC formats for communication of bibliographic information in machine-readable form.

Library of Congress has developed MARC formats for various types of materials. OCLC also has some additional formats for various types of library materials. The following table compares LC-MARC formats with those of OCLC:

Table 1

Comparison of LC-MARC and OCLC MARC Formats
for Various Types of Library Materials

LC-MARC Format	OCLC MARC Formats
(1) Books	(1) Books
(2) Serials	(2) Serials
(3) Visual Materials	(3) Audiovisual Media
(4) Archives and Manuscript Control	(4) Archives and Manuscript Control
(5) Maps	(5) Maps
(6) Music	(6) Scores
	(7) Sound Recordings
(7) Machine-Readable Data Files	(8) Machine-Readable Data Files

Users in general and librarians in particular are more concerned about retrieving what they need and less concerned about where and how the pieces of information are stored. The repeated information could be printed on catalog cards or displayed on terminals without any loss of information by developing some intelligent programs that, based on information entered in certain fields, the computer programs could provide information for parts of other fields when such information is already known. This practice is already implemented by OCLC in a very limited scope. For instance, the OCLC print program supplies a frequency note based on the code in the "Frequ" value whenever a serials bibliographic record has no "310" field. Furthermore, OCLC has a catalog card profile for printing cards for each library.[7] Based on information listed in each library's profile, certain information automatically would be printed on catalog cards whenever the appropriate codes are used at the time of producing catalog cards. For example, the word "Oversize", "Reference", etc. could be printed on the top of the call number of materials in a given format.

The same idea could be expanded to create more information to help users. A saving of several bytes in a field may not seem to be significant by itself. However, when several fields in a record could be adjusted to eliminate duplication of information, and when dealing with a bibliographic data base of several million records, the insignificant saving of a single field would become a significant one for the total. Latest available statistics indicate that by October 1987 OCLC had 16,329,848 bibliographic records, each record with the average length of 544 characters.[8]

The adjustment in the OCLC display and/or print programs could result in reduction of average bibliographic record length and hence a saving in memory storage cost. The saving of memory, by avoiding duplication, could be very helpful to libraries with a limited storage capacity. It also could potentially decrease response time because the average length of bibliographic records would decrease.

I would like to start the discussion of the duplication of information in OCLC MARC communication formats by creating a table of certain combination possibilities for different record types of materials for various bibliographic levels. This will demonstrate to you that logically one can draw certain conclusions. Appendix A tabulates possible codes used for each bibliographic level as documented in various OCLC formats [9-16] and their updates as documented in various issues of OCLC's Technical Bulletins. With regard to possible combinations in Appendix A, the following repetitions could be noted. With these codes the computer can provide "General material designation" in subfield "h" of 24x fields. Also, it is possible to automatically supply the material format designations, i.e. "Kits", "Scores", etc., above the call number based on information in these fields.

Conference Publication: The code "1" is used both in Books and Serials formats to indicate that the work being cataloged contains proceedings, reports, or summaries of a conference, meeting, or symposium. As shown in examples 1-2 of Appendix B, whenever this code is present, the subdivision "Congresses" is added to LC Subject Headings in "6xx" fields. A modification in the print/display program could automatically add subfield "Congresses." to all records with "Bibliographic level=m" or subfields "Congresses" and "Periodicals." to records with "Bibliographic level=s". This would save someones time inputting these subdivisions, bring more uniformity in application of appropriate LC Subject Heading subdivisions, and reduce the average length of bibliographic records.

Content: The codes shown in Table 2 are used to identify the "Nature of Contents" in Book Format and the "Nature of Entire Work" and/or "Nature of Contents" in Serial Format. Whenever these codes are used certain phrases could appear in other parts of the record. For example, code "b=Bibliographies" in a monographic record may mean availability of "504" variable field indicating "Includes bibliographies" or a variation of this phrase. The code "r=Directories" representing the "Nature of Entire Work" in a serial record means presence of subfield "x=Directories" in "6xx" fields, representing LC Subject Headings. Table 2 summarizes the codes used for "Content" and appropriate information that can be added to other parts of the record.

Table 2

Suggested Program Modifications for Codes Representing the Contents of Records in Books and Serials Format

Codes Description	Book Format Modifications	Serials Format Modifications
a=Abstracts/summaries	6xx=SH--Abstracts.	6xx=SH--Abstracts --Periodicals.
b=Bibliographies	504=Includes Bibliographies.	6xx=SH--Bibliography --Periodicals.
c=Catalogs	6xx=SH--Catalogs.	6xx=SH--Catalogs --Periodicals.
d=Dictionaries	6xx=SH--Dictionaries.	
e=Encyclopedias	6xx=SH--Dictionaries.	
f=Handbooks	6xx=SH--Handbooks, Manuals, etc.	
i=Indexes	6xx=SH--Indexes.	6xx=SH--Indexes --Periodicals.
g=Legal articles	-	-
l=Legislation	6xx=SH--Legal Status, Laws, etc.	6xx=SH--Legal Status, Laws, etc. --Periodicals.
n=Survey of literature in the subject area	-	-
o=Book reviews	6xx=SH--Book reviews.	6xx=SH--Book reviews --Periodicals.
p=Programmed textbooks	6xx=SH--Programmed Instruction.	6xx=SH--Programmed --Instruction --Periodicals.
r=Directories	6xx=SH--Directories.	6xx=SH--Directories.
s=Statistics	6xx=SH--Statistics	6xx=SH--Statistics --Periodicals.
t=Technical reports	500=Technical report.	
v=Legal cases and case notes	6xx=SH--Cases.	6xx=SH--Cases --Periodicals.
w=Law reports and digests	6xx=SH--Digests	6xx=SH--Digests --Periodicals.
y=Yearbooks	Not used	Not Used

For monographs the subdivision biography could be used for names listed in the "600" fields whenever the code for "biography" is entered in the third character of "M/F/B" fixed field.

Country of Publication or Production: Except for reproduced microforms, a three-character code in this fixed field represents the place of publication as determined by field "260". The list of the codes used for this subfield is given in OCLC-MARC Code Lists .[17] A program modification would help by eliminating the need to type country of publication for certain selected codes that may not be familiar to the users.

Dates and Type of Date: In all formats, including serials, which have two fields for the "Beginning date" and "Ending date" of publication, the same date is repeated as shown in the example section in fields "260" (all formats) and "360" (in serials). If the dates in the fixed field are the same as the ones in the variable fields, the program can automatically provide this information in the variable fields without a need to manually enter them.

Festschrift: For monographs coded to be festschriften, an appropriate note could be created to indicate so. The note could be combined with the "Language" code to create a note in the language of the text, or one could simply request to have the default note in the English language.

Geographic area code: The codes in field "043" in all formats are used to aid subject approach to a work through hierarchical breakdown of geographical and/or political entities. The codes are assigned based on the availability of subdivision "z" in variable fields "650" or availability of fields "651". A modified program could do the reverse, i.e. based on codes that are entered in field "043", the appropriate subdivision could be created for subject headings on a prearranged basis.

Illustrations: In Book format up to four codes from the codes listed in Table 3 are used to represent the nature of illustrations in the field "300" (physical description). The appropriate term(s) or acceptable abbreviation(s) from AACR2 Rules [18] could be generated by the program to convey the same message typed in subfield "b" in "300" field. The following are some suggested terms that could be created by the program:

Table 3

Suggested Corresponding Terms for Codes Entered
in "Illus" Field

Codes	Description	Suggested Action
a	Illustrations	Ill.
b	Maps	maps
c	Portraits	ports.
d	Charts	charts
f	Plates	plates
g	Music	music
h	Facsimiles	facsim.
i	Coats of arms	coats of arms
j	Genealogical tables	tables
k	Forms	forms
m	Phonodiscs, phonowire, etc.	-
o	Photographs	photos.
p	Illuminations	illuminations

Index: For Serials, Books, and Maps formats a fixed field is used to indicate the availability of an index. For each format a short note could be generated by the program to avoid repetition of the same information that basically conveys the same message as code "1" in this fixed field.

Language: This field contains a three-character code of the language of work. Variable field "041" (Languages) is used to indicate language(s) of the text, information about translation, and languages of summaries. In serials and AMC formats field "546" (Language note) is used to describe the same information. In other formats, the information may be entered in a "500" note. An intelligent program could provide sufficient information based on codes that are entered in "Language" and field "041".

Reproduction and Physical Medium designator: Library of Congress follows the principle of AACR1 in cataloging previously published microforms [19], i.e. descriptions of microforms are based on the original publications and reproduction aspects are entered in a note. The codes for both the Reproduction and the Physical Medium Designator fixed fields are listed in Table 4. The codes used in the subfields for Physical Description in Fixed Field--Microforms "007", and Photoreproduction Note (variable field "533") are listed in Table 5. The comparisons of codes listed in these two tables indicate that the information is duplicated to some extent:

Table 4

Physical Medium Designators and Reproduction Codes

Physical Medium Designator Codes	Reproduction Codes
a=Microfilm	a=Microfilm
b=Microfiche	b=Microfiche
c=Microopaque	c=Microopaque
d=Large print	d=Large print
e=Newspaper format	
f=Braille	f=Braille
g=Punched paper tape	g=Punched paper tape
h=Magnetic tape	h=Magnetic tape
t=Multimedia	t=Multimedia
z=Other	z=Other

General material designation(s) [subfield "h" in variable fields "240-247"] could be automatically assigned based on information in material "Type", "Bibliographic level", "Reproduction", and "Physical medium designator" codes. Therefore, with software modifications in the above mentioned fields as well as subfield "a" in field "007" this repeated information would not need to be input manually. Furthermore, the code for "Specific material designation" or to some extent the codes for the "Dimensions" subfield may be used to arrive logically at the same conclusion. In other words, when the code for the dimensions of a microfilm reel is available, it obviously has to be microform. The subfield "a" of the variable field "533" "Photoreproduction Note" identifies the "Type of reproduction". Clearly, this information is already available to the system. Alternatively, the codes in the fixed field could be expanded to enter the "Specific material designation" codes instead of the general ones. This would eliminate repetition of information in field "007". For libraries who classify their microform holdings, it is possible to modify the program to print/display the format of the material based on information available in the fixed field.

Table 5

Duplicate Data Elements that are Subfield Codes in Field "007"

Subfield "a" (GMD)	Subfield "b" (SMD)	Subfield "d" (Polarity)	Subfield "e" (Dimensions)
h=Microform	a=Aperture card b=Microfilm cartridge c=Microfilm cassette d=Microfilm reel e=Microfiche g=Microopaque z=Other microform	a=Positive b=Negative m=Mixed polarity u=Unknown	a= 8 mm. d= 16 mm. f= 35 mm. g= 70 mm. h=105 mm. l=3 x 5 in. (8 x 13 cm.) m=4 x 6 in. (11 x 15 cm.) o=6 x 9 in. (16 x 23 cm.) p=3 1/4 x 7 3/8 in. (9 x 19 cm.)

Summary and Conclusions

Examination of the structure of MARC formats and the contents for various types of materials, such as books, serials, etc., indicates that the data recorded in certain parts of the MARC structure are repeated. This paper compares information in the fixed field against variable fields in OCLC MARC communication formats. It shows that intelligent computer softwares could be developed to reduce the average time of record input as well as the size of the MARC records without losing information. The adjustment in the OCLC display and/or print programs could result in the reduction of the average bibliographic record length and hence a saving in memory storage cost.

The concept may be employed by any library automated system using the MARC structure. This could be very helpful to libraries with a limited storage capacity. It also could potentially decrease response time because the average length of bibliographic records would decrease. Program modifications could feasibly obtain information from one part and duplicate it automatically in other parts. This paper suggests that more attention should be paid to future changes in OCLC software for the possible elimination of duplicate information. Also, considering possible restructure of MARC Communication formats, making them more

effective. Commercial library automated systems, and libraries who are in the process of automation, could adjust their program to save spaces in the memory. The above mentioned examples are just a few of what seem to be duplication of information. Experts of each format may be able to provide more detailed information regarding duplication of information.

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1986).

[14] Online Computer Library Center, Online Systems: Maps Format, 2nd ed. (Dublin, Ohio: OCLC, 1986).

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[16] Online Computer Library Center, Online Systems: Machine-readable Data Files Format, 2nd ed. (Dublin, Ohio: OCLC, 1986).

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[18] Anglo-American Cataloging Rules, 2nd ed. (Chicago: American Library Association, 1978).

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Appendix A

Codes used for Record Type and Bibliographic Level

Bibliographic Level Codes	OCLC MARC Format	Record Type Codes
a=Component Part, Monographic	Books AMC Scores Maps Maps AV Media Sound Recordings Sound Recordings AV Media MRDF AV Media AV Media	a=Language material, printed or microform b=Archival and manuscript control c=Music printed or microform d=Music, Manuscript e=Map, printed or microform f=Map, manuscript g=Projected media i=Sound recording, nonmusical j=Sound recording, musical k=Two dimensional nonprojected graphic representations m=Machine-readable data file o=Kits r=Three-dimensional artifacts and realia
b=Serial	Serials Maps	a=Language material, printed or microform e=Map, printed or microform f=Map, manuscript
b=Component Part Serial	MRDF	m=Machine-readable data file AMC

Continued on next page

Continues previous page

c=Collection	Books	a=Language material, printed or microform
	AMC	b=Archival and manuscript control
	Scores	c=Music printed or microform
	Maps	d=Music, Manuscript
	AV Media	e=Map, printed or microform
Sound Recordings		f=Map, manuscript
		g=Projected media
		i=Sound recording, nonmusical
		j=Sound recording, musical
	AV Media	k=Two dimensional nonprojected graphic representations
	MRDF	m=Machine-readable data file
	AV Media	o=Kits
	AV Media	r=Three-dimensional artifacts and realia

d=Subunit	AMC	b=Archival and manuscript control
	AV Media	g=Projected media
	AV Media	k=Two dimensional nonprojected graphic representations
	AV Media	o=Kits
	AV Media	r=Three-dimensional artifacts and realia

Continued on next page

Continues previous page

m=Monographs	Books	a=Language material, printed or microform
	AMC	b=Archival and manuscript control
m=Monographs or manuscripts	Scores	c=Music printed or microform
	Maps	d=Music, manuscript
	Sound Recordings	e=Map, printed or microform
		f=Map, manuscript
		i=Sound recording, nonmusical
		j=Sound recording, musical
	AV Media	k=Two dimensional nonprojected graphic representations
	MRDF	m=Machine-readable data file
	AV Media	o=Kits
	AV Media	r=Three-dimensional artifacts and realia

s=Serial	Serials	a=Language material, printed or microform
	MRDF	m=Machine-readable data file

Acknowledgement

The author very much appreciates Mrs. Milynn E. Tate's editorial suggestions and her comments while reading the drafts of this paper.

Appendix B Examples

Example 1

Screen 1 of 2

NO HOLDINGS IN TXI - FOR HOLDINGS ENTER dh DEPRESS DISPLAY RECD SEND

OCLC: 15514468 Rec stat: a Entrd: 870410 Used: 870603

Type: a Bib lvl: s Govt pub: Lang: eng Source: S/L ent: 0

Repr: Enc lvl: Conf pub: 1 Ctry: nyu Ser tp: Alphabt:

Indx: u Mod rec: Phys med: Cont: ^ Frequn: a Pub st: d

Desc: a Cum ind: u Titl pag: u ISDS: Regulr: r Dates: 1968-1970

- 1 010 87-654202
- 2 040 DLC lc DLC ld m/c
- 3 012 3 li 8706
- 4 042 lc
- 5 050 00 T57.62 lb .C64a
- 6 090 lb
- 7 049 TXIM
- 8 111 20 Conference on Applications of Simulation. lw cn
- 9 245 10 Conference on Applications of Simulation : lb [proceedings].
- 10 246 14 Digest of the ... Conference on Applications of Simulation
- 11 260 00 New York, N.Y. : lb Institute of Electrical and Electronics Engineers, lc [1968-
- 12 300 v. : lb ill. ; lc 28 cm.
- 13 310 Annual
- 14 362 0 2nd (Dec. 2-4, 1968)-

Screen 2 of 2

- 15 362 1 Ceased with 4th in 1970.
- 16 515 Proceedings of first not published?
- 17 580 Continued in 1971 by: Winter Simulation Conference. Winter Simulation Conference.
- 18 650 0 Digital computer simulation lx Congresses.
- 19 710 20 Institute of Electrical and Electronics Engineers. lw cn
- 20 785 10 Winter Simulation Conference. It Winter Simulation Conference lw (DLC) 87654181 lw (OCoLC)2723564
- 21 850 DLC
- 22 890 Conference on Applications of Simulation (Conference on Applications of Simulation)

Example 2

Screen 1 of 2

TXI - FOR OTHER HOLDINGS, ENTER dh DEPRESS DISPLAY RECD SEND

OCLC: 13525798 Rec stat: n Entrd: 860113 Used: 880114

Type: a Bib lvl: m Govt pub: Lang: eng Source: Illus: af

Repr: Enc lvl: Conf pub: 0 Ctry: stk Dat tp: s M/F/B: 10b

Indx: 1 Mod rec: Festschr: 0 Cont: b

Desc: a Int lvl: Dates: 1985,

1 010 86-103938

2 040 DLC lc DLC ld m/c

3 020 0707304245 : lc \$24.00

4 043 e-uk-st

5 050 0 DA784.3.M3 lb B83 1985

6 082 0 941.104/092/4 la B l2 19

7 090 lb

8 049 TXIM

9 100 10 Buchanan, Patricia Hill. lw cn

10 245 10 Margaret Tudor, Queen of Scots / lc Patricia Hill Buchanan.

11 260 0 Edinburgh : lb Scottish Academic Press ; la [New York, N.Y. : lb

Distributed by Columbia University Press], lc 1985.

12 300 vii, 287 p., [8] leaves of plates : lb ill. (some col.) ; lc 23

cm.

13 504 Bibliography: p. [277]-279.

14 500 Includes index.

Screen 2 of 2

15 600 00 Margaret, lc Queen, consort of James IV, King of Scotland, ld
1489-1541. lw cn

16 651 0 Scotland lx Queens lx Biography.

17 651 0 Scotland lx History ly James IV, 1488-1513.

18 651 0 Scotland lx History ly James V, 1513-1542.

19 600 30 Tudor, House of.

Example 3

Screen 1 of 2

TXI - FOR OTHER HOLDINGS, ENTER dh DEPRESS DISPLAY RECD SEND

OCLC: 13525798 Rec stat: n Entrd: 860113 Used: 880114

Type: a Bib lvl: m Govt pub: Lang: eng Source: Illus: af

Repr: Enc lvl: Conf pub: 0 Ctry: stk Dat tp: s M/F/B: 10b

Indx: 1 Mod rec: Festschr: 0 Cont: b

Desc: a Int lvl: Dates: 1985,

1 010 86-10393B

2 040 DLC lc DLC ld m/c

3 020 0707304245 : lc \$24.00

4 043 e-uk-st

5 050 0 DA7B4.3.M3 lb B83 1985

6 082 0 941.104/092/4 la B 12 19

7 090 lb

8 049 TXIM

9 100 10 Buchanan, Patricia Hill. lw cn

10 245 10 Margaret Tudor, Queen of Scots / lc Patricia Hill Buchanan.

11 260 0 Edinburgh : lb Scottish Academic Press ; la [New York, N.Y. : lb

Distributed by Columbia University Press], lc 1985.

12 300 vii, 287 p., [8] leaves of plates : lb ill. (some col.) ; lc 23

cm.

13 504 Bibliography: p. [277]-279.

14 500 Includes index.

Screen 2 of 2

15 600 00 Margaret, lc Queen, consort of James IV, King of Scotland, ld
1489-1541. lw cn

16 651 0 Scotland lx Queens lx Biography.

17 651 0 Scotland lx History ly James IV, 1488-1513.

18 651 0 Scotland lx History ly James V, 1513-1542.

19 600 30 Tudor, House of.

Example 4

Screen 1 of 2

NO HOLDINGS IN TXI - FOR HOLDINGS ENTER dh DEPRESS DISPLAY RECD SEND
 OCLC: 9628252 Rec stat: n Entrd: 830621 Used: 870610
 Type: a Bib lvl: s Govt pub: Lang: eng Source: d S/L ent: 0
 Repr: b Enc lvl: I Conf pub: 0 Ctry: miu Ser tp: Alphabt: a
 Indx: u Mod rec: Phys med: Cont: ^ Frequn: u Pub st: c
 Desc: Cum ind: u Titl pag: u ISDS: Regulr: u Dates: 1979-9999

1 010
 2 040 IUL lc IUL
 3 007 h lb e lc r ld a le m lf u--- lg b lh u li u lj u
 4 090 TN1 lb .E5
 5 090 lb
 6 049 TXIM
 7 245 00 E & MJ. Engineering and mining journal.
 8 246 10 Engineering and mining journal
 9 260 00 [New York, lb McGraw-Hill]
 10 300 v. lb ill. lc 28 cm.
 11 310 Monthly
 12 362 0 v. 180- Jan. 1979-
 13 510 0 Engineering index monthly lx 0013-7960
 14 510 0 Chemical abstracts lx 0009-2258
 15 510 0 Engineering index annual lx 0360-8557

Screen 2 of 2

16 533 Microfiche: lb Ann Arbor, Mich., lc University Microfilms
 International, ld microfiches ; 10 x 15 cm.
 17 650 0 Engineering lx Periodicals.
 18 650 0 Mineral industries lx Periodicals.
 19 780 00 It E-MJ, Engineering and mining journal.
 20 850 InU
 21 936 Jan. 1981