Guidelines for Cataloging Cartographic Resources Using RDA

December 2020

Prepared by the
Map and Geospatial Information Round Table
Cataloging and Classification Committee’s
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These guidelines were developed to assist those involved with cataloging of cartographic resources to bring their cataloging in line with best practices employed by members of the cartographic cataloging community. This document is based on the experience of catalogers of cartographic resources, the best practices and policies of the Geography and Map Division of the Library of Congress, and the understanding of past practices. These practices will be changed and revised as *Resource Description and Access* is revised and builds on the work done by Susan Moore, Elizabeth Cox, Carolyn Kadri, and Iris Taylor. The guidelines are to be used for full-level bibliographic records.

**Leader #18 (Desc in OCLC)**

“Codes c and i both specify the use of ISBD as the basis for the descriptive cataloging, with code c indicating the omission of punctuation and code i indicating the inclusion of punctuation. If a bibliographic record indicates RDA cataloging in field 040 subfield $e, then the Desc will be c or i.” (from OCLC *Bibliographic Formats and Standards*, definition for Descriptive Cataloging Form fixed field)

Recommend using code “i” to indicate that ISBD punctuation is used within the record. However, if locally you choose to follow the PCC guidelines for minimally punctuated bibliographic records, use code “c”.

**007 field**

Include all necessary 007 fields that apply to cartographic resources. Be aware that there are individual 007 fields for different types of these resources, e.g., there is an 007 field with applicable codes for remote-sensing images, and a different one for globes.

**008 field**

#06

If supplying a 264 4 (copyright field), code as “t” and supply two dates in #07-#14, even if they are the same.

#07-#14

If supplying a range of dates record two dates (e.g., “1800” and “1899,” not “18--” or “18uu.”)

#22-#23

If there is an explicit projection statement on the map, record the two letter code for the name of the projection from OCLC’s approved list [https://www.oclc.org/bibformats/en/fixedfield/proj.html](https://www.oclc.org/bibformats/en/fixedfield/proj.html). If no projection is given, do not attempt to determine the projection and leave this area blank.
Also record the projection statement in English in the 255 $b, always spelling out the word “projection”.

034 field

If there are two or more scales reflecting two or more main maps, record each in a separate 034 field. If using “Scales differ” in the 255 field, use a single 034 field with Indicator value of zero (0) and no subfield “b”

Record geographic coordinate values in subfields d, e, f, and g. Record them using the decimal degree format. If using the Klokan Bounding Box tool to derive coordinates for a place add the $2 Source subfield and the term “bound” to reflect this source. If taking the coordinates directly from the map add the 500 note “Geographic coordinates taken from the map” or similar.

Example bounding box from Klokan, covering a large U.S. state:
¶d -116.05 ¶e -104.04 ¶f 049.00 ¶g 044.36 ¶2 bound

Example bounding box from Klokan, covering a small commercial district:
¶d -084.5246843650 ¶e -084.5092777564 ¶f 039.1196588923 ¶g 039.1060732186 ¶2 bound

In the rare case where a scale varies from its center to its outer edge and in which the two scales are given, use first indicator “3” and place each scale value in a separate $b subfield (this subfield is repeatable).

040 field

OCLC’s preferred order of subfields is $a $b $e $c

041 field

Record all languages present on the item in order of their predominance in the text. If no single language is predominant, record in English alphabetical order. 041 is not used if only one language is present. Any languages noted in MARC field 546 should also be recorded in 041.

043 field

Provide as many geographic area codes from the MARC Code List for Geographic Areas as necessary to cover the geographic headings or subdivisions in the subject headings. Several examples are listed in the OCLC documentation for field 043.

045 field

Record the date portrayed on the item, otherwise known as the situation date, if it differs from the date of publication. The date of publication is recorded in the 008 positions 007-14.
Date of situation can be recorded as a date or as a code with examples/code table given here.

*Example:* (for a map of the Battle of Hastings published in 2015)

045 0 $b d1066

*If using the time period code:*

045 0 $a o6o6

*Example:* (for a map of urban development of the city of New York from 1625 to 1988, published in 1990)

045 2 $b d1625 $b d1988

*If using the time period code:*

045 2 $a u2x8

*Example:* (for a set of maps of Cheshire County, New Hampshire originally published in 1753-1816, facsimile published in 1983)

045 2 $b d1753 $b d1816

*If using the time period code:*

045 2 $a v4w1

**050 field**

If constructing a Library of Congress call number, follow the instructions in Chapter 1 of the Library of Congress' *Cartographic Resources Manual*, published in 2016 in *Cataloger’s Desktop*. Generally, the call number should align as closely as possible with the first listed subject heading.

**052 field**

Provide as many Library of Congress geographic classification codes as necessary to align with the geographic headings and/or subdivisions in the subject headings. These codes are derived from G3180-9980 of the Library of Congress *G Classification schedule*, often in combination with the geographic Cutter tables for G3180-9980. Note that the codes for *atlases* are derived from the classification schedule for *maps*. If providing an LC call number in MARC field 050, the first 052 should generally align with that call number (which in turn should align with the first listed subject heading). Several examples are provided in *OCLC's 052 documentation*. 
**1XX field**

RDA allows corporate bodies to be used as primary access points, in those cases where a creator of a cartographic work has responsibility beyond publication or distribution (RDA 19.2.1.1.1 f). Add the appropriate relationship designator in subfield “e” when easily determined (the most common one for cartographic resources will be “cartographer”, though “author” might be used for an atlas depending on how much text there is or if the person or body is explicitly designated as such; the list of designators for 1XX fields is at Appendix I.2.1. If you are a BIBCO participant a relationship designator is required for primary access points).

Additionally, the LC-PCC PS for Appendix I.1 instructs catalogers to refer to the [PCC Training Manual for Applying Relationship Designators in Bibliographic Records](#) for current guidelines on using relationship designators. Per Guideline 2 of that manual, terms from other registered vocabularies (such as MARC relator terms) may be used. Per Guideline 4 of that manual, an RDA element name may be used as a relationship designator (e.g., "creator" (RDA 19.2) or "publisher" (RDA 21.3)) if it will most appropriately express the relationship.

**Examples:**

100 1  $a Smith, Gerald, $e cartographer

110 2  $a Rand McNally and Company, $e cartographer, $e publisher

130 and 240 (uniform title) fields (for atlases)

If the title changes between revisions/editions of an atlas, record the first known title as the uniform title. Field 130 and field 240 should never appear together in the same record.

**130 and 240 (uniform title) fields as unique authorized access points for sheet maps**

LC-PCC PS for 6.27.1.9 (a policy statement for RDA 6.27.1.9) instructs catalogers to make additions to authorized access points (AAPs), in either field 130 or 240, wherever necessary to break conflicts among different works that would otherwise have the same authorized access point. Per RDA 6.27, the AAP for a work consists either of the creator AAP + the preferred title of the work, or the preferred title alone (in cases where a creator AAP is not present).

Map catalogers generally have not applied LC-PCC PS for 6.27.1.9 to records for individual sheet maps. Map catalogers are free to continue this practice.

Some map catalogers (or their employers) may choose to apply LC-PCC PS for 6.27.1.9 to sheet maps. Among other benefits, ensuring that different works have correspondingly different AAPs will aid in preventing descriptions of unique works from being erroneously merged in Linked Data environments. However, catalogers should bear in mind that the application of the WEMI model to cartographic resources has not yet been fully resolved.
The following instructions and examples are provided for the benefit of catalogers choosing to apply LC-PCC PS for 6.27.1.9 when cataloging sheet maps:

When a conflict is found, make additions to the authorized access point of the resource being cataloged, in field 130 or 240, as appropriate, to differentiate the resource being cataloged from other works that would otherwise have the same authorized access point. Follow the instructions at LC-PCC PS for 6.27.1.9 in determining which additions should be made. Additional examples are available at RDA 6.27.1.9.

Examples:

*Existing record in database:*

110 2_ AAA (Organization : U.S.), cartographer.
245 10 Michigan / $c AAA.
264 _1 Heathrow, FL : $b AAA, $c [2014]

*Being cataloged:*

110 2_ AAA (Organization : U.S.), cartographer.
240 10 Michigan (2018)
245 10 Michigan / $c AAA.
264 _1 Heathrow, FL : $b AAA, $c [2018]

*Existing record in database:*

245 00 City of Westland : $b [Michigan] / $c Westland Chamber of Commerce.

*Being cataloged:*

130 0_ City of Westland (Map : 2017)
245 10 City of Westland : $b [Michigan].
264 1_ [Michigan?] : $b [publisher not identified], $c [2017]

245 field $a & $b

Transcribe wording and punctuation exactly and explain any errors in a note (see RDA 2.3.2.4). Trace the corrected title in a 246 field (RDA 2.3.6). Generally use “sentence case” in accordance with RDA Appendix A.4 (Beta RDA: Titles of manifestations). Use brackets for data taken from outside the resource. Supply the geographic location in brackets in $b if it is not present (or is insufficiently precise) in the title proper or other title information (RDA 2.4.3.6) (Beta RDA: 35.42.95.16). Title or other title information can be taken anywhere from the resource or its accompanying material.

*Example of error in title:*

245 10 $a Complete road atlas of Tucson
246 1 $i: Corrected title: $a Complete road atlas of Tucson
Examples of bracketed additions to titles that lack a geographic area:

245 10 $a Ward and precinct map : $b [Chicago, Illinois]
245 10 $a Springfield visitor map : $b with 2014 calendar of events : [Springfield, Ohio]

If no title is present, devise a title [in brackets] that includes the name (or other indication) of the geographic area covered and the subject portrayed, if there is one. (RDA 2.3.2.11.2)

Examples of devised titles that include both topic and place:

245 10 $a [Map showing proposed dredging project in the Fox River at Green Bay, Wisconsin].
245 10 $a [Cadastral map showing a street grid in an unidentified location in the United States].

245 field $c

Transcribe any honorific titles, institutional affiliations, identifying places, etc. associated with personal names.

Generally record all names given in one or more statements of responsibility. Bracket data taken from outside the resource.

246 field

Record variant titles as needed, including corrected titles. Variant titles can come from differences in the title proper in the 245$a including the ability to read the title proper in a different manner or because of typography, a title found in a different location on the resource or its accompanying material, or a different kind of title such as a running title found within an atlas.

250 field

Transcribe an edition statement using abbreviations only if they are present in that form on the resource (RDA 2.5.1.4). For cartographic resources, statements of revision or correction qualify as an edition.

OCLC encourages catalogers to include supplied edition statements [in brackets], as needed to distinguish among similar records that might otherwise be confused. This helps prevent records from being inappropriately merged by OCLC’s automated processes. (See OCLC’s “Cataloging Maps Defensively” presentation [linked here].)

Examples of two maps with same title by same creator:

110 1 $a United States. $b Central Intelligence Agency.
245 10 $a Philippines.

110 1 $a United States. $b Central Intelligence Agency.
245 10 $a Philippines.
250 $a [Shaded relief edition].

255 field $a

Start any statement of scale with the word “Scale” with the exception of when you must use the supplied statement “Not drawn to scale”.

Record “approximately” for those determined from bar scales by the use of a natural scale indicator or similar tool or otherwise estimated based on a statement to that effect on the map (scale statement on map reads: Scale approximately 1:XX,XXX or similar). Do not use brackets.

Always convert verbal scale statements to a representative fraction, without using brackets. (That is, follow the second alternative given in RDA 7.25.1.3). The calculated scale is followed by a full stop, then a representation of the verbal scale statement on the map, not necessarily transcribed. (See 7.25.5.3, “Additional scale information.”) Only use the approved abbreviations given in RDA Appendix B7, for instance:

- abbreviate inch to in.
- never abbreviate “miles” to “mi.” even when abbreviated on the map
- “km” is a symbol, not an abbreviation, and does not include a period

Example of results from a natural scale indicator:

255 Scale approximately 1:3,500,000

Example of “additional scale information“:

255 Scale approximately 1:63,360. 1 in. = about 1 mile ; $b polyconic projection.

Example of conversion of a verbal scale:

255 Scale 1:253,440. 1 in. = 4 miles
   (Statement on map says “1 inch to 4 mi.”)

If there is not a scale on the resource, use the phrase “Scale not given”. If not drawn to scale, use the phrase “Not drawn to scale”. (RDA 7.25.3.3)

There are times when a phrase must be used as a scale statement:

- Scale not given - no scale appears on the piece.
- Scales differ - the scale of a map set varies from sheet to sheet OR there are three or more main maps and the cataloger does not want to record individual 255/034 fields.
- Scale varies - the scale varies across a single map.
- Not drawn to scale - i.e., there is a statement explicit to this situation on the map, or it is overwhelmingly obvious that the map is not drawn to scale (some subway maps, bird’s eye views, etc.). If such a statement is given on the map, quote it in a 500 note.
• Scale not determined - MAGIRT supports the use of “Scale not determined” in cases where scale cannot be expressed as a representative fraction, typically because it is illegible or is expressed in unfamiliar units of measure not covered by conversion tables in standard reference sources. A note should be provided elsewhere in the record describing how the scale is displayed, or otherwise explaining why it cannot be expressed as a representative fraction.

255 field $b

When present, record a projection statement in English, spelling out the word “projection” (even if it is abbreviated on the map) (RDA 7.26). As noted earlier, supply the matching code in the Projection fixed field.

264 fields

Transcribe using separate fields for entities with different functions such as producers, publishers, printers, engravers, and similar. Copyright date is recorded in a separate field.

Example of a map with a publisher and copyright date:

```
264 1 $a Chicago : $b Rand McNally and Company, $c [2011]
264 4 $c ©2011
```

264 0 Producer field

For manuscript, or non-published, cartographic resources, “Record a production statement for a manifestation that is in an unpublished form … Transcribe a place of production and a producer's name as they appear on the source of information” (RDA 1.7). Record a date of production as it appears on the source of information” BUT for Non-self-describing manifestations: Supply places of production, producers’ names, and dates of production.“ (RDA 2.7.1.4)

264 1 Publisher field

If the publisher’s location is in multiple places, record each place given. (RDA 2.8.2.4). Use only abbreviations present on the item for place of publication or publisher name. Record both the local place name (city, town, etc.) and the name of the larger jurisdictions (state, province, etc., and/or country) if present on the source of information (RDA 2.8.2.3). Give a probable place of publication in lieu of giving “[Place of publication not identified]” (LC-PCC PS for 2.8.2.6).

If a publisher is not given, record “[publisher not identified]”. (RDA 2.8.4.7)
264 2 Distributor field

Transcribe only if no publisher or manufacturer statements are given, or if judged to be useful for resource discovery, identification, and selection.

264 3 Manufacturer field

Transcribe only if no publisher statement is given, or if judged to be useful for resource discovery, identification, and selection. Cartographic manufacturer entities include engravers, lithographers, printers and similar entities whose role was to create the physical manifestation.

264 fields $c

Always provide a date in the publisher field when present. Bracket the date if taken from an edition statement, copyright statement, or elsewhere. If a publication date(s) is/are unknown, use statements such as “[between 1920 and 1936]” or “[not after 1972]” or “[1966?]” (RDA 2.8.6.6).

264 4 copyright field

Per RDA 2.11.1.3, precede the date with the copyright symbol © unless the symbol is unavailable for use. Follow OCLC’s instructions and examples for MARC field 264_4: Use only subfield c, and do not end the field with a period.

Copyright statements may be transcribed in a note field if deemed important, in quotes if using MARC field 500, or without quotes if using MARC field 542.

Example:

264_4 $c ©1927

500 $a "Copyright 1927 by Jesse J.G. Wolff."

or

542 $f Copyright 1927 by Jesse J.G. Wolff.

300 field

No abbreviations for ‘color” (RDA 7.17), “pages”, “illustrations”, etc., see RDA 7.15. The symbol “cm” for centimeters is not an abbreviation, and is to be used without a period.

When cataloging an incomplete map set, or a set with an open-ended publication date, use the term “maps” in $a without a number or brackets. If the number of maps in a set is known, use that number along with “maps.”
Examples:

300  $a 1 map : $b color ; $c 30 x 42 cm, on sheet 35 x 60 cm, folded to 23 x 11 cm

300  $a 2 maps on 1 sheet : $b both sides, color ; $c 30 x 42 cm and 32 x 41 cm, sheet 38 x 44 cm, folded to 23 x 12 cm

300  $a 1 map ; $c 112 x 84 cm, folded in cover 14 x 9 cm

Generally use $e to describe accompanying materials, as described in LC-PCC PS for 3.1.4.
This subfield follows a “plus sign” (+) and includes a description of the accompanying material, including any physical description statements without further subfielding.

Example with accompanying material:

300  $a 1 map ; $c 92 x 80 cm + $e 1 volume (76 pages : color illustrations ; 28 cm)

336 field

For most cartographic resources (sheet maps and atlases), use:

336  $a cartographic image $b cri $2 rdacontent

Other cartographic options from the Term and Code List for RDA Content Types are:

336  $a cartographic dataset $b crd $2 rdacontent
336  $a cartographic moving image $b crm $2 rdacontent
336  $a cartographic tactile image $b cort $2 rdacontent
336  $a cartographic tactile three-dimensional form $b ctn $2 rdacontent
336  $a cartographic three-dimensional form $b crf $2 rdacontent

337 field

Add all appropriate 337 fields. Use “$a unmediated $b n $2 rdamedia” for sheet maps or similar cartographic resources that do not require equipment to view/use. See Term and Code List for RDA Media Types for the list of codes for $b.

338 field

Add all appropriate 338 fields. Use “$a sheet $b nb $2 rdacarrier” for sheet maps. For other types of cartographic resources use the appropriate term, such as “volume” for an atlas, and code. The list of codes for the $b can be found at Term and Code List for RDA Carrier Types

340 field (Physical medium)

This field accommodates structured descriptions of physical details in more granular detail than might be expected in field 300. MAGIRT recommends that catalogers consider using field 340
when cataloging rare or unusually formatted maps. If using the field, use terms from the RDA value vocabularies such as *RDA Material*, *RDA Production Method*, *RDA Colour Content*, *RDA Bibliographic Format*, *RDA Generation*, and *RDA Font Size* whenever possible, or terms from other controlled vocabularies as necessary. Terms from different sources should be recorded in separate 340 fields. OCLC’s documentation for field 340 provides numerous useful examples.

490 field

Transcribe series statements exactly, using only the abbreviations present on the item, including numbering.

500 fields

Cartographic resources often display unique categories of information about or accompanying the map, such as relief, that require specific notes to make users aware of their presence, as well as helping catalogers to determine matching bibliographic copy. The following types of information, *if present on the resource*, should always be brought out in the bibliographic record in the form of 500 general notes and in the order given:

Nature and scope of item (e.g., Shows... or, Also shows...)
Relief and/or Depth
Source of Title
Corrected Title Proper (if not added as a 246 variant title field)
Orientation of north
Unique mathematical data (e.g., prime meridian if other than Greenwich)
Unique numeric or alphanumeric codes (e.g., CIA map codes), always quote these

“Includes” note
  ● Typical order of information: Includes text [or a description that implies text like “tourist information”], notes, index to..., directory of..., list of..., table of..., location map [and/or other “special” ancillary maps], inset maps of..., ancillary maps of..., color illustrations, and advertisements.

“On verso” note
  ● Typically same order of information as “includes” note, ending with “on verso.”

*Lists of ancillary or inset maps may be provided within “includes” and/or “on verso” notes, or provided in a separate note for clarity.*

In addition, add notes to explain traced 700 and 710 names that were not transcribed in the 245 or 246 fields in order to provide context to those provided 7XX fields.

*For historical maps and atlases also include some or all of the following:*

Bibliographic references
From/Appears In
Accompanying material
505 field

If the presence of more than one map is specified in field 300$a (“2 maps on 1 sheet” or “18 maps,” for example), generally list them by title (or bracketed supplied title, as necessary) in field 505.

522 field

This note field is useful for providing additional detail about a map’s geographic coverage, particularly in cases where the coverage is not clearly indicated by the title, is not easily defined by a single name, covers small portions of multiple jurisdictions, etc.

546 field

List all languages present on the resource if not made clear in the title or if the title is misleading. For example if the title is in English and Russian but all the place names are in Russian. Be specific as to what elements (e.g., map text, notes, legend, index, etc.) are in which language or languages. Languages noted here must have parallel language codes listed in the 041 field.

6xx

Include at least one geographic subject access field where warranted (exceptions include world maps and maps of imaginary places). Include topical subject headings subdivided geographically as appropriate. Be aware that some topics can only be applied as subdivisions following a geographic subject access point, e.g., Japan $x Administrative and political divisions $v Maps.

Also include at least one cartographic genre/form access point. A list of cartographic Library of Congress Genre/Form Terms is provided as Appendix A of this document. (New terms are sometimes added. Consult Library of Congress Genre/Form Terms or Classification Web for the most current terms available.)

7XX creator/contributor fields

Although RDA allows for tracing without transcribing, continue to either transcribe or add a note for every tracing. Add relationship designators if easily determined (common ones for cartographic resources include dedicatee, dedicator, engraver, printer, lithographer, issuing body, sponsoring body, surveyor, writer of added commentary, writer of added text)

700-740 “added title” entries

Prefer author/title tracings whenever possible.
**752 Added Entry--Hierarchical Place Name**

Use of this field is a local policy decision. If using, the geographic name forms are typically based on 781 fields in authority records for MARC 151 records for geographic names in the Name Authority File or Library of Congress Subject Headings. Adjust the subfield designators per 752’s documentation, and include the country name if absent. OCLC's documentation offers several useful examples, including relator terms and source of term codes.

**Examples:**

752 United States $b New York (State) $d New York.
752 United States $b District of Columbia $d Washington.
752 Great Britain $b England $d London.

**76x-78x linking entry fields**

**Additional physical form:** Add links to an additional physical form entry when it is readily available. RDA offers different techniques for structured description of the related manifestation (such as with MARC field 776) or unstructured description of the related manifestation (such as a 500 note).

**Example of “reciprocal” 776 fields for online and print versions:**

776 08 $i Online version: $a District of Columbia. Board of Commissioners. $t Map of the city of Washington showing location of fatal cases of consumption for the year ended June 30, 1901. $d [Washington, D.C.] : [Government Printing Office], [1901] $w (OCoLC)1056177630

776 08 $i Print version: $a District of Columbia. Board of Commissioners. $t Map of the city of Washington showing location of fatal cases of consumption for the year ended June 30, 1901. $d [Washington, D.C.] : [Government Printing Office], [1901] $w (OCoLC)959731040
Maps detached from atlases or other resources: Where possible, use MARC fields 773/774 or 787 for structured description of these relationships (in addition to 700-740 fields as appropriate). See discussion in the 2018 Report of CCC Linking Fields Task Force.

Example of 787 fields for a map detached from a resource not held in physical form by the cataloging library (with unstructured description in field 500, and 730 tracings):

```
730 0 Reports of the Immigration Commission.
730 0 United States congressional serial set. $n 5677.
787 0 United States. Immigration Commission (1907-1910). $t Immigrants in industries (in twenty-five parts). $g Part 17, Copper mining and smelting
787 0 $t United States congressional serial set $w (OCoLC)3888071
```
Appendix: Cartographic Genre/Form Headings
(Source: Library of Congress Genre/Form Thesaurus)

Aerial photographs
Aerial views
Aeronautical charts
Armillary spheres
Astronautical charts
Astronomical models
Atlases
Bathymetric maps
Block diagrams
Bottle-charts
Cadastral maps
Cartographic materials
Cartographic materials for people with visual disabilities
Celestial charts
Celestial globes
Children's atlases
Children's maps
Comparative maps
Composite atlases
Digital maps
Digital elevation models
Early maps
Ephemerides
Ethnographic maps
Facsimiles
Fire insurance maps
Flow maps
Gazetteers
Geodatabases
Geographic information systems
Geological cross-sections
Geological maps
Geospatial data
Globes
Gores (Maps)
Gravity anomaly maps
Index maps
Linguistic atlases
Loran charts
Lunar globes
Manuscript maps
Mappae mundi
Maps
Mental maps
Meteorological charts
Military maps
Mine maps
Miniature maps
Nautical charts
Outline maps
Photogrammetric maps
Photomaps
Physical maps
Pictorial maps
Plotting charts
Portolan charts
Quadrangle maps
Raster data
Relief models
Remote-sensing images
Remote-sensing maps
Road maps
Statistical maps
Stick charts
Strip maps
Thematic maps
Topographic maps
Topological maps
Tourist maps
Upside-down maps
Vector data
Views
Wall maps
World atlases
World maps
Worm's-eye views
Zoning maps