



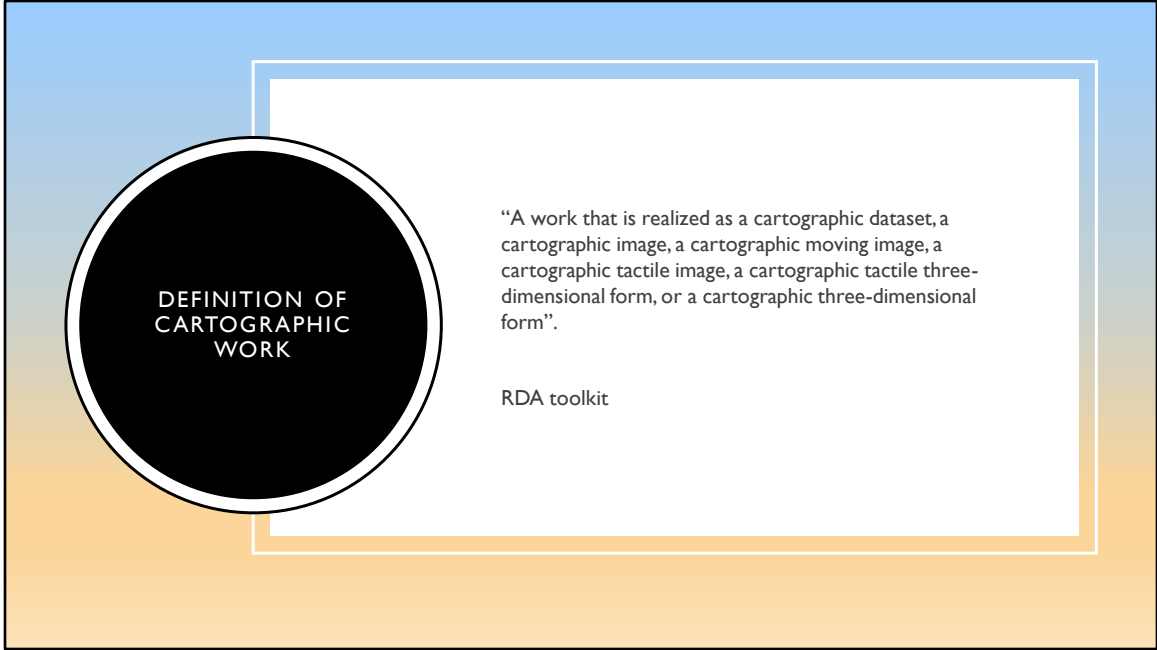
WHERE'S WALDO? CATALOGING MAPS

Online with the CMC
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CMC CATALOGER – IHLS
November 11, 2021



AGENDA

- Definition of cartographic materials
- What are cartographic materials?
- Fixed field elements for cartographic materials
- Specific MARC tags for cartographic materials
- A look at Billerbeck City Map



This is the definition of Cartographic work from the RDA toolkit.

WHAT ARE CARTOGRAPHIC MATERIALS?

“Any material representing the whole or part of the earth or any celestial body at any scale. Cartographic materials include two-and three-dimensional maps and plans (including maps of imaginary places); aeronautical, navigational, and celestial charts; atlases; globes; block diagrams; sections; aerial photographs with a cartographic purpose; bird's-eye views (map views), etc.”

AACR2



In AACR2 the definition of cartographic materials gives us a broad description of cartographic material, allowing for imaginary places and broader description of the categories of cartographic materials. The Library of Congress' scope for cataloging cartographic materials: Spatial data presented graphically in the form of maps, atlases, globes, and three-dimensional maps and terrain models. And the definition of cartography from Britannica: The art and science of graphically representing a geographical area, usually on a flat surface such as a map or chart. It may involve the superimposition of political, cultural, or other nongeographical divisions onto the representation of a geographical area.

MAP FORMAT- FIXED FIELD

Maps		Rec.stat	n	Entered	20211021	Replaced	20211021				
Type	e	ELvl		Size	d	Relf		Ctrl		Lang	
BLvl	m	Form		GPub		SpFm		MRec		City	
CrTp	a	Indx	0	Proj		DISI		Dates		.	
Desc											

We are going to first look at some of the different fixed field elements that are uniquely present in the map format. Specifically, Type (Type of Record), CrTp (Type of Cartographic Material), Proj (Projection), Relf (Relief), and SpFm (Special Format Characteristic).

TYPE: TYPE OF RECORD

Type is the code used to define the characteristics and components of the record. This field is necessary to differentiate records created for various types of content and material; it also determines the appropriateness and validity of certain data elements in the record. The codes in Type and BLvL (Bibliographic level) characterize the material you are cataloging.

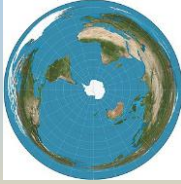
Maps will be coded e for the format name: Maps, Cartographic material. If you have a manuscript of cartographic material, you would code this with an f.

CRTP: TYPE OF CARTOGRAPHIC MATERIAL

- ±a Single map
- ±b Map series – number of related but physically separate and bibliographically distinct cartographic units intended by the producers or issuing body to form a single group. Do not use for atlas series.
- ±c Map serial – issued in successive parts, usually having numbering, that has no predetermined conclusion.
- ±d Globe
- ±e Atlas
- ±f Separate supplement to another work – the other work does not have to be cartographic material.
- ±g Bound as part of another work - the other work does not have to be cartographic material.
- ±u Unknown
- ±z Other

Type of cartographic material is coded for the cartographic item that is being described, most commonly are single map and atlas; however, you may be cataloging an actual globe, a map series or even a map serial. There are other options, so make sure you code this fixed field properly for the item in hand.

PROJ: PROJECTION

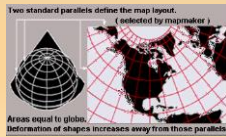


wikipedia

If a map specifies a type of projection, enter the two-character code in Proj and the projection statement in [field 255](#) subfield †b. If a map does not specify a projection, leave Proj coded blank.

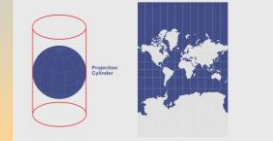
Types of projections include:

- Azimuthal
- Cylindrical
- Conic
- Other projections



wikipedia

For the various components of these types please refer to [Bibliographic Formats and Standards](#) (BFAS)



GISGeography

Projection is a method or system used to represent the surface of the earth or of a celestial sphere on a plane in an expression. There are four categories of projection with sub categories to choose from. Azimuthal is an angular measurement in a spherical coordinate system. Cylindrical projection is any of numerous map projections of the terrestrial sphere on the surface of a cylinder that is then unrolled as a plane. Conic is used to refer to any projection in which meridians are mapped to equally spaced lines radiating out from the apex and circles of latitude (parallels) are mapped to circular arcs centered on the apex.

RELF: RELIEF

Up to four one-character alphabetic codes that indicate the relief type specified on the item. Some maps have several types of relief. If more than one code, enter them left-justified in order of their importance.

blank	No relief shown
±a	Contours
±b	Shading
±c	Gradient and bathymetric tints
±d	Hachures
±e	Bathymetry, soundings
±f	Form lines
±g	Spot heights
±i	Pictorially
±j	Land forms
±k	Bathymetry, isolines
±m	Rock drawings
±z	Other

Relief is the variations in the elevation of the ground surface, also, features of height above a plain or reference datum. On a relief map, relief is depicted by hachures or shading, or, more accurately, by contours or by spot elevations or both.

<https://www.caliper.com › glossary › what-is-a-relief-map>

SPFM: SPECIAL FORMAT CHARACTERISTICS

Enter one or two, one character codes in order of importance

- blank No specified special format characteristics. Item is a regular printed map
- ±e Manuscript, item is drawn or fashioned by hand
- ±j Picture card, post card
- ±k Calendar, also functions as a calendar
- ±l Puzzle
- ±n Game, may be used or is part of a game
- ±o Wall map
- ±p Playing cards
- ±r Loose-leaf, consists of separate leaves intended to reside in a binder or case, meant to be updated
- ±z Other, no other code is appropriate

The special format characteristics are self-explanatory, and certainly demonstrate some interesting ways to present maps.

VARIABLE
FIELDS UNIQUE
TO
CARTOGRAPHIC
MATERIALS

007		#b #d #e #f #g #h
034	■	a
052		#b
255		#b #c
334		
340		

The variable fields that are unique to maps are the 007 specifically for maps, the 034 for coded cartographic mathematical data, 052 for geographic classification, 255 for the statement of cartographic mathematical data, 334 for mode of issuance, and 340 for physical medium. Of course, there are also specific 33X fields that pertain to cartographic materials.

007 PHYSICAL DESCRIPTION FIXED FIELD (MAP) R

007 is required. It displays the characteristics of a cartographic material other than a globe. Use for all maps, including atlases, but do not use for map microforms (use 007 for microforms) and do not use for globes (use 007 for globes)

1st indicator is undefined (blank)

2nd indicator is undefined (blank)

±a Category of material – Map

±b Specific material designation (Atlas, Diagram, Map, Profile, Model, Remote-sensing image, Section, Unspecified, View Other)

±c Color

±e Physical medium (Paper, Wood, Stone, Metal, Synthetic, Skin, Textile, Plastic, Glass, Vinyl, Vellum, Plaster, Flexible, Non-flexible, Unknown, Leather, Parchment, Other photographic material, Other)

±f Type of reproduction (Facsimile, Not applicable, Unknown, Other)

±g Production/reproduction details (Photocopy blueline print, Photocopy, Pre-production, Film, Unknown, Other)

±h Positive/negative aspect (Positive, Negative, Mixed, Not applicable)

007 __ a ±b j ±d c ±e a ±f n ±g z ±h n

The 007 is a required field in cataloging cartographic materials, and of course, it has its own unique subfields for the category of material which would be a for Map. You would need to ascertain the specific material designation, color, the physical medium, the type of reproduction, and the production or reproduction details, as well as the positive/negative aspect if applicable.

034 CODED CARTOGRAPHIC MATHEMATICAL DATA (R)

Cartographic mathematical data, including scale, projection, and/or coordinates

1st indicator

- 0 Scale indeterminable/No scale recorded
- 1 Single scale – a single horizontal scale
- 3 Range of scale – a range of scales. Use only if the scale varies on a single map

2nd indicator

- blank Not applicable – the type of ring is not applicable
- 0 Outer ring – the closed non-intersecting boundary of the area covered
- 1 Exclusion ring – the closed non-intersecting of the area within the excluded G-polygon outer ring

The MARC tag 034 has indicators to consider based on the scale and the type of ring if applicable. The 034 is based on information recorded in MARC tag 255 and can be generated using the OCLC (Online Computer Library Center) macro for 034. This macro can be found in the main toolbar under Tools->Macros->Manage->Generate034.

034 CODED CARTOGRAPHIC
MATHEMATICAL DATA (R)
SUBFIELDS*

- ±a Category of scale (NR) – type of scale of item. Use even when the 1st indicator value is 0
- ±b Constant ratio linear horizontal scale (R) – denominator of the representative fraction of the horizontal scale.
The larger scale (smaller number) is generally given first.
- ±c Constant ratio linear vertical scale (R) – denominator of the representative fraction for the vertical scale of relief models and other three-dimensional items. Give larger scale first.
- ±d Coordinates-westernmost longitude (NR)
- ±e Coordinates-easternmost longitude (NR)
- ±f Coordinates-northernmost latitude (NR)
- ±g Coordinates-southernmost latitude (NR)

034 0_ ±a a

034 1_ ±a a ±b 25000

034 1_ ±a a ±b 150000 ±d W1 I01500 ±e W1090000 ±f N0393000 ±g N0380730

*most common subfields are included

Once again, based on information in MARC tag 255, the category of scale will always be recorded in subfield a. The linear horizontal and vertical scales should be recorded in subfields b and c if applicable, as well as the coordinates if available. The coordinates will display the longitude and latitudes in subfields d-g.

052 GEOGRAPHIC CLASSIFICATION (R)

A geographic classification code that represents the geographic area, and, if applicable, the geographic subarea and populated place name. The code provides more precise geographic access than the codes contained in field 043. Use separate 052 for each geographic area code and any related subarea.

If using Library of Congress Classification refer to [Library of Congress Classification—Class G](#) for geographic area code and [Geographic Cutter Numbers](#) for the cutter.

±a Geographic classification area code (NR)

±b Geographic classification subarea code (NR)

052 __ ±a 4341

052 __ ±a 4343 ±b G7

MARC tag 052 is the geographic classification code. To find the appropriate code you will need to consult the Library of Congress Classification, Class G and the Geographic Cutter Numbers. The classification code is recorded in subfield a and the cutter in subfield b.

255 CARTOGRAPHIC MATHEMATICAL DATA (R)

Mathematical data associated with cartographic material, including a statement of scale, statement of projection, and/or statement of bounding coordinates. Field 034 for cartographic mathematical data corresponds with 255

±a Statement of scale (NR) – Entire scale statement including any equivalency statements

±b Statement of projection (NR)

±c Statement of coordinates (NR) – Coordinates recorded in order: westernmost longitude, easternmost longitude, northernmost latitude, southernmost latitude. Record degree, minutes, seconds. Enclosed in parentheses. Longitude and latitude are separated by a slash

255 __ ±a Scale not given.

255 __ ±a Scales differ.

255 __ ±a Scale varies.

255 __ ±a Scale approximately 1:215,000.

255 __ ±a Scale approximately 1:188,000 ±c (W 119°54'56"--W 119°01'43"/N 38°11'42"--N 37°28'17").

The 255 is basically a statement of the scale found on your map. I have listed several possibilities. Based on what you record in the 255 the MARC tag 034 (coded form versus written statement) is generated.

334 MODE OF ISSUANCE (R)

A categorization reflecting whether a manifestation is issued in one or more units.

Mode of issuance of the manifestation being described.

334 __ ±a single unit ±2 rdami

334 __ ±a multiple unit ±2 rdami

MARC tag 334 was added to MARC 21 (**M**achine-**R**eadable **C**ataloging) in June of 2021 and OCLC implemented it September 2021. Both indicators are undefined, and at this point only subfield a is used indicating whether you have a single unit or a multiple unit.

340 PHYSICAL MEDIUM (R)

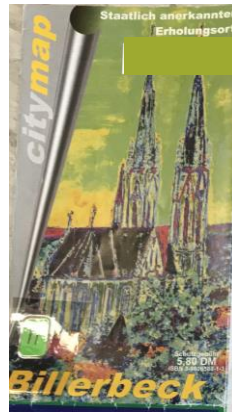
Physical description for an item that requires technical equipment for its use, and/or more granular description information of an item's material properties. Coded physical information is contained in 007, 008, and 300.

- ±a Material base and configuration (R)
- ±b Dimensions (R)
- ±e Support (R)
- ±g Color content (R)
- ±k Layout (R)
- ±p Illustrative content (R)


340 ±a paper ±2 rdamat
340 ±b 60 x 87 cm, folded to 20 x 11 cm.
340 ±e paper ±2 rdamat
340 ±g color
340 ±k double sided ±2 rdalay
340 ±p maps

Although the 340 is used in other formats, it is a relatively new tag and just updated last December. The MARC tag 340 contains information found in other MARC tags such as the 007, 008, and 300.

BILLERBECK
CITY MAP



We will look at a folded map, Billerbeck City Map. This map is for the city of Billerbeck in Germany. Billerbeck is in the North Rhine, Westphalia area of Germany and the map is in German.



 1999

Title: Billerbeck city map.
 Format: Map, Printed Cartographic Material, Cartographic Material
 Edition: 1999 edition.
 Scale: not given.
 Publisher, Date: Coesfeld-Lette (Germany) ; Wirtschaft Werbung Design, [1999]
 Description: 1 map : color ; 60 x 87 cm, folded to 20 x 11 cm
 paper
 60 x 87 cm, folded to 20 x 11 cm.
 paper
 color
 double sided
 maps
 Summary: City map of Billerbeck, Germany and the surrounding area.
 Language: Map in German.
 Subjects: Roads - Germany - Billerbeck (North Rhine-Westphalia) - Maps.
 Billerbeck (North Rhine-Westphalia, Germany) - Maps.
 Genre: Road maps.
 Maps.
 Notes: Cover title.
 ISBN: 3980658813
 9783980658812
 Other Number: 1022851753
 Control Number: 3867713

BILLERBECK CITY MAP ONLINE CATALOG VIEW



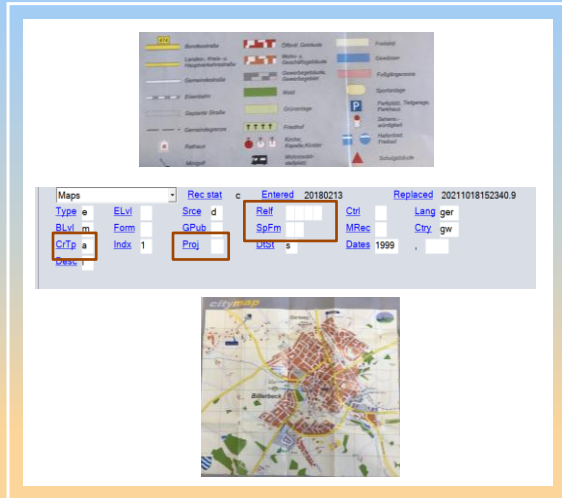
This is a view of the online cataloging record in Polaris. Notice that the information in MARC tag 340 displays under description. However, MARC tag 334 does not display in the online record since it hasn't been added to the tables.

CATALOGING VIEW FROM OCLC

007	a b	d c e a f n g z h n
020	3980658813	
020	9783980658812	
034	0	a
052	0	6362
245	0 0	Billerbeck city map.
250		1999 edition.
255		Scale not given.
264		1 Coesfeld-Lette (Germany) : #b Wirtschaft Werbung Design. #c [1999]
300		1 map : #b color ; #c 60 x 87 cm, folded to 20 x 11 cm
334		single unit #2 rdami
336		cartographic image #b on #2 rdacontent
337		unmediated #b n #2 rdamedia
338		sheet #b nb #2 rdacarrier
340		paper #2 rdamat
340		#b 60 x 87 cm, folded to 20 x 11 cm.
340		## paper #2 rdama
340		#g color
340		#k double sided #2 rdaflag
340		#p maps
588	0	Cover title.
546		Map in German.
520		City map of Billerbeck, Germany and the surrounding area.
650	0	Roads #z Germany #z Billerbeck (North Rhine-Westphalia) #v Maps.
651	0	Billerbeck (North Rhine-Westphalia, Germany) #v Maps.
655	7	Road maps. #z lcgft
655	7	Maps. #z lcgft

The OCLC record of our map displays all the codes for maps that we have talked about and the appropriate subfields. As you can see, the free-floating subdivision, Maps, is used with the appropriate subject headings. Also added are several genre/form headings, along with the more generic term Maps. There are 44 other possible terms for maps that describe specific types of maps such as Fire insurance maps, Pictorial maps, Upside-down maps, etc.

FIXED FIELD FOR CARTOGRAPHIC MATERIALS



These are the specific fixed field entries for our map, Billerbeck City Map. Our map did not specify a specific projection or relief, nor does it fit into any of the special format characteristic choices.

UNIQUE VARIABLE FIELDS FOR CARTOGRAPHIC MATERIALS



007		a #b j #d c #e a #f n #g z #h n
040		VICSF #b eng #e rda #c VICSF #d VICSF #d OCLCF #d VICSF
020		3980658813
020		9783980658812
034	0	a
052		6362
245	0 0	Billerbeck city map.
250		1999 edition.
255		Scale not given.
264	1	Coesfeld-Lete (Germany) : #b Wirtschaft Werbung Design, #c [1999]
300		1 map : #b color ; #c 60 x 87 cm, folded to 20 x 11 cm
334		single unit #2 rdami
336		cartographic image #b cri #2 rdacontent
337		unmediated #b n #2 rdamedia
338		sheet #b nb #2 rdacarrier
340		paper #2 rdamat
340		#b 60 x 87 cm, folded to 20 x 11 cm.
340		#e paper #2 rdama
340		#g color
340		#k double sided #2 rdalay
340		#p maps

The unique variable fields for our map display the 007 as a map in color, made of paper with the type of reproduction, not applicable, the production/reproduction as other and the positive/negative aspect as not applicable.

The MARC tag 034 is just coded for subfield a map since MARC tag 255 states that the scale is not given. This map is a single unit which is evident by the tag 334, and the multiple 340s display the characteristics of the material, size, color and the fact that it is a double-sided map.

RESOURCES



Bibliographic Formats and Standards

<https://www.oclc.org/bibformats/en.html>

Map Cataloging: The Basics – Amigos
Library Services

<https://www.amigos.org/>

MARC 21

<https://www.loc.gov/marc>

RDA Toolkit

<https://www.rdatoolkit.org/>

Wikipedia

<https://en.wikipedia.org>

Britannica

<https://www.britannica.com>

ON THE CALL TODAY

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