

Cartographic Materials



**RESOURCE DESCRIPTION AND ACCESS: A
COBEC WORKSHOP PRECONFERENCE
FEBRUARY 3, 2014**

**GUY FROST
gfrost@valdosta.edu
VALDOSTA STATE UNIVERSITY**

Resources to Consult



- **Cartographic Materials: A Manual for Interpretation for AACR2, 2002 Revision. 2nd ed. Published in 2003. ISBN: 1856045161**
 - Provides guidelines on determining useful information like scale, relief, coordintates, etc.
- **PCC RDA BIBCO Standard Record (BSR) Metadata Application Profile**
 - Provides the standard core requirements for cataloging cartographic material

Online Resources

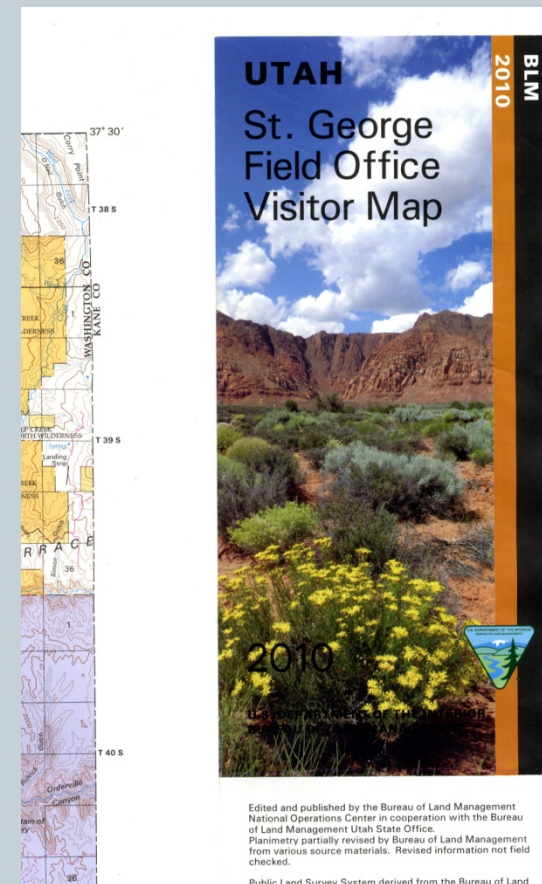


- Many maps produced by agencies in Belize use the North American Datum of 1927 (Clarke 1866) (NAD27) coordinate system (fields 034, 255, 342). To convert to the Sexagesimal system (degrees, minutes, seconds), use the following site:
<http://www.rcn.montana.edu/resources/tools/coordinates.aspx?nav=11>
- Other background information: <http://earth-info.nga.mil/GandG/coordsys/onlinedatum/CountryNorthAmericaTable.html>
- UTM zones <http://www.jaworski.ca/utmzones.htm>

245 – Titles



- Maps are either folded, stored flat, or digital
- Follow instructions at 2.2.2.2 for recording title
 - Preferred source is the title on the sheet
 - Title on folded maps may come from two places, panel title (shown to the right) or anywhere else on the sheet



Devised Titles (RDA 2.3.2.11.2)



- Devise a title for cartographic materials if:
 - There is no title on the work
 - A title cannot be determined from other sources
- When constructing the title, always include the area covered (e.g., Belize), and the subject (e.g., roads, vegetation, etc.)

For example: If you were cataloging a lunar globe

Edition (250) and Publication Statements (264)



- No difference
- Consider adding any distribution statements if deemed important

300 – Physical Description (carrier)



- Extent (\$a): PCC – Always record extent (RDA 3.4.2)
- Other Physical Characteristics (\$b) (RDA 7.17)
- Dimensions (\$c) (RDA 3.5.2)
 - Folded (RDA 3.5.2.6)
- Accompanying material
 - PCC - record in \$e or repeat the 300

300 Extent



- RDA 3.4.2
 - Give number of units and appropriate term from the list provided in the instructions
 - 300;___; \$a 1 map
 - 300;___; \$a 7 wall charts
- RDA 3.4.2.3 – More than one map per sheet
 - 300;___; \$a 6 maps on 1 sheet
- RDA 3.4.2.4 – More than one sheet per map
 - 300;___; \$a 1 map on 2 sheets

Atlases RDA 3.4.2.5 (e.g., 300;___; \$a 1 atlas (xvii, 37 pages, 74 leaves of plates))

300 \$b - Color(RDA 7.17.1.3)



- Illustrative materials is the same as for other print materials (e.g., optional)
 - RDA 7.17 – Color aspects
 - 300;___; \$a 1 map : \$b color

300 \$c Dimensions (RDA 3.5.2)



- RDA 3.5.2.2

- Give the measurements of the face of the map, etc., measured within the neat line (not the entire sheet)

300;__; \$a 1 map ; \$c 25 x 35 cm

- RDA 3.5.2.4

- Maps in two or more segments designed to fit together (even if on a single sheet), give total for the map

300;__; \$a 1 map on 9 sheets ; \$c 264 x 375 cm, on sheets 25 x 35 cm

- RDA 3.5.2.6 – Folded maps with panel

300;__; \$a 1 map ; \$c 9 × 20 cm, on sheet 40 × 60 cm, folded to 21 × 10 cm

340 - Layout



- **Layout (RDA 3.11)**
 - LC/PCC Core for cartographic materials
 - Used when content is on both sides of a map
 - Prescriptive terms found in RDA

340;__; \$k both sides \$2 rda

Scale (034 and 255)

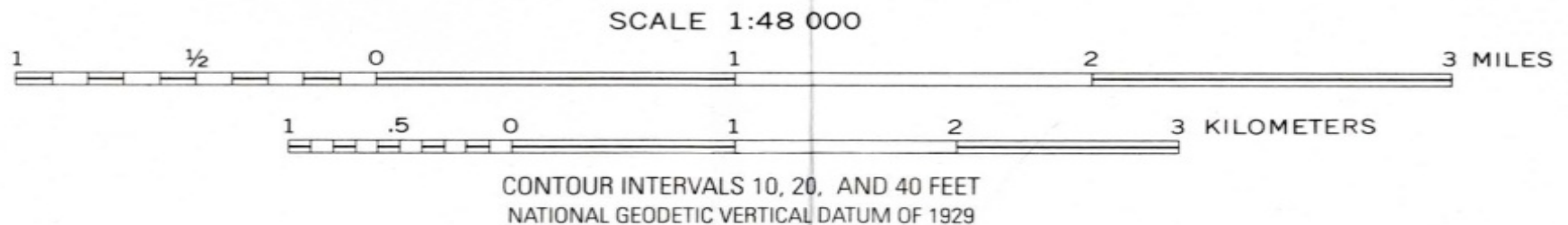
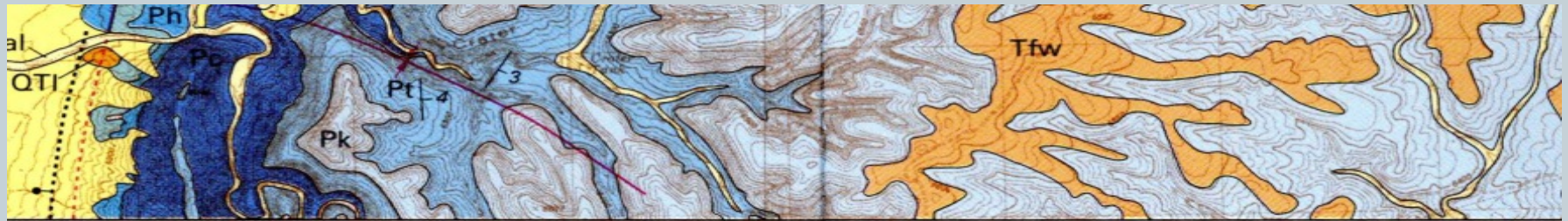


- PCC Core (RDA 7.25)
 - Scale; Horizontal Scale (7.25.3); Vertical Scale (7.25.4); Projection (7.25.5)
 - Vertical and Horizontal Scales are recorded as: Hemisphere-Degrees-Minutes-Seconds
 - Do not use superscript O, apostrophe, and quotation marks in the 255; instead use: degree, *miagki snak*, and *iverdy znak*
- 034;1_; \$a a \$b 48000 \$d W1132230 \$e W1124500 \$f N0355230 \$g N0353000
- 255;__; \$a Scale 1:48,000 \$c (W 113°22'30"-- W 112°45'00"/N 35°52'30"--N 35°30'00")

Scale: Constant Ratio (034 \$b ; 255 \$a)

- Usually record as: Scale #:###,###

034;1_ ; \$a a \$b 48000 ; 255;__ ; \$a Scale 1:48,000



Determining scale with Miles



- See B.2B.1 of the *Cartographic Materials* manual

- 1 mile = 63,360 inches

as shown by bar graph, 4 inches = 2 miles of Earth

$$4:(2 \times 63,360)$$

or

$$1: \frac{2 \times 63,360}{4} \quad 1: \frac{126,720}{4}$$

4

4

or

$$1:31,680$$

Determining Scale with Kilometers



- See B.2B.4 of the *Cartographic Materials* manual

- 1 kilometer contains 100,000 centimeters

10 cm on map represents 5 km of Earth

$$10:5 \times 100,000$$

or

$$1: \frac{5 \times 100,000}{10}$$

10

or

$$1:50,000$$

Scale Cannot be Determined



- If the resource lacks vital information in determining scale (e.g., a digital map that does not tell you the distance used on the bar graph) (RDA 7.25.1.3), record the 255 as:

255;__; \$a Scale not given.

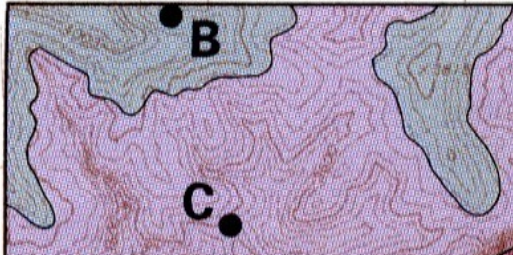
034;1_; ... \$d W1132230 \$e W1124500
\$f N0355230 \$g N0353000

**Longitude: \$d left most \$e
right most**

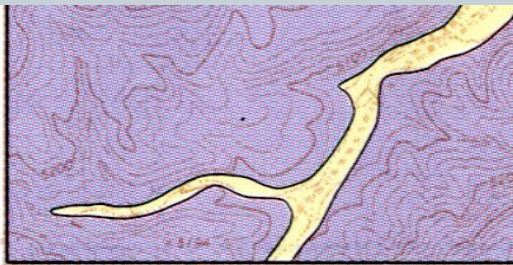
**Latitude: \$f top most \$g
bottom most**

science for a changing world

113°22' 30"
35°52'30"



35°30'
113°22' 30"



companies map

112°45'
35°52'30"



35°30'
113°07' 30"



Additional Considerations for Belize Maps (342)



- Many Belizean agencies maps have data that should be recorded in the 342 – Geospatial Reference Data
 - Maps that have *Transverse Mercator* as the projection should also have these recorded in the 342

(R below means = Required by MARC21)

- ✦ \$a Name (R) –
- ✦ \$b Coordinate Units
- ✦ \$q Ellipsoid name
- ✦ \$k Scale factor (R)
- ✦ \$g Longitude of central meridian or projection center (R)
- ✦ \$h Latitude of projection center or projection origin (R)
- ✦ \$p Zone identifier
- ✦ \$i False easting (R)
- ✦ \$j False northing (R)

342 continued



On map: Grid: UTM Zone 16N (\$p) drop the N
Projection: Transverse Mercator (\$a)
False easting: 500,000 eastings (\$i)
False northing: Nil northings (\$j) use 0.0
Central meridian: -87.000000 (\$g)
Scale factor: 0.999600 (\$k)
Latitude of origin: equator (\$h) use 0.0
Linear unit: Metre (\$b) – use meter
Datum: North American 1927 (\$a)

342 continued



- The previous example translations to the following in MARC

342;_5; \$a North American datum of 1927, transverse
Mercator \$b meters \$q Clarke 1866 \$k 0.9996 \$g -87.0 \$h
0.0 \$p 16 \$i 500,000 \$j 0.0

Maps with “central meridian ##° W) etc. are expressed two ways:

1. Zones to the east of the Prime Meridian are expressed as positive numbers
2. Zones to the west of the Prime Meridian are expressed as negative numbers (as show in \$g above)

Other Fields with No RDA Equivalents



- 006 – Additional Material Characteristics
- 007 – Physical Characteristics of the Item
- 008 – Fixed field
- 040/b – Language of Cataloging (eng for countries where English is the primary language)
- 041 – if Lang in 008 inadequate
- 043 – Geographic Area Code (ncbh---)
- 050 – Classification Number
- 052 – Geographic Classification
- 6XX – FRSAD currently not developed

006 for accompanying material



- Use the 006 field for accompanying materials (e.g., some maps have a booklet published with it)

006;__; \$a t (for the text)

007;__; \$a a \$b j \$d c \$e a \$f n \$g z \$h n (for the map)

300;__; \$a 1 map (on 2 sheets) : \$b color ; \$c 28 x 46, folded 8 ½ x 11.

300;__; \$a 1 booklet (10 pages) ; \$c 28 cm

336;__; \$a cartographic image \$2 rdacontent \$3 map

336;__; \$a text \$2 rdacontent \$3 text

337;__; \$a unmediated \$2 rdamedia \$3 map

337;__; \$a unmediated \$2 rdamedia \$3 text

338;__; \$a sheet \$2 rdacarrier \$3 map

338;__; \$a volume \$2 rdacarrier \$3 text

007 - Maps



- Required by the PCC
 - Category of Material (\$a)
 - Specific Material Designation (\$b)
 - Color (\$d)
 - Physical Medium (\$e)
 - Type of Reproduction (\$f)
 - Productivity/Reproduction Details (\$g)
 - Positive/Negative Aspect (\$h)

Typical color map:

700;__; \$a a \$b j \$d c \$e a \$f n \$g z \$h n

Typical Atlas in Color:

700;__; \$a a \$b d \$d c \$e a \$f n \$g z \$h n

Leader and 008



- **PCC Required**

- Type of Record (Type: e)
- Bibliographic Level (BLvL: m (if monographic))
- Type of Date/Publication Status (DtSt: various choices)
- Date 1 and Date 2 (Dates: ,)
- Place of Publication, Production, or Execution (Ctry:)
- Relief (Relf:) with a 500 descriptive note
- Projection (Proj:) with the 255
- Type of Cartographic Material (CrTp:)

Leader and 008 Cont.



- Government Publication: (GPub: f) (for Belize govt. pubs.)
- Form of Item (Form:) (blank of print maps)
- Index (Indx: 0 or 1)
- Special Format Characteristics (SpFm: various)
- Language (Lang:)
- Modified Record (MRec:) (if applicable)
- Cataloging Source (Srce: d) (unless you're PCC then c)

500 Notes



- Make notes

- Relief

- 500;___; \$a Relief shown in contours and spot heights.

- Indexes (e.g., to adjoining maps)

- Legends (if considered important)

RDA Suite of Simple Map



- 008 - Descriptive Cataloging Form (Desc: i)
- 040;__; \$a ... \$b eng \$e rda \$d ...
- 336;__; \$a cartographic image \$2 rdacontent
- 337;__; \$a unmediated \$2 rdamedia
- 338;__; \$a sheet \$2 rdacarrier

043 – Geographic Area Code



- Coded added when the subject content has or reflects geographic subject matter (for all resources not just maps)

043;__; \$a ncbh--- for Belize (and British Honduras)
used for

651;_0; \$a Belize

650;_0; \$a ... \$z Belize

650;_0; \$a ... \$z Belize \$z Belmopan.

610;20; \$a Turneffe Island Resort.

052 – Geographic Classification



- Typically constructed after Library of Congress Classification, but other schemes can be used
- Belize City

Classification Number for maps: G4824.B4

G is dropped

Cutter for city moved to \$b

052;__; \$a 4824 \$b B4

Other **Cities** (G4824) to be used for Maps:

Belmopan (.B44) Benque Viejo del Carmen (.B47)

Corozal (.C6) Monkey River (.M6) Orange Walk Town (.O7)

Punta Gorda (.P8) San Ignacio (.S24) San Jose Soccoths (.S25)

Stann Creek (.S7)

052 – Geographic Classification Cont.



- Districts (G4823)

Belize District (.B4) Cayo District (.C3)
Corozal (.C6) Orange Walk (.O7) Stann Creek
(.S7) Toledo (.T6)

- Regions (G4822)

Ambergris Cay (.A4) Belize River (.B4) Coasts
(.C6) Maya Mountains (.M3) Monkey River
[River] (.M55) Mountain Pine Ridge (.M6)
Pulltrouser Swamp (.P8)

- General (G4820); by Subject (G4821)

Subject Genre/Forms (655)



- Library of Congress Genre/Form Thesaurus (lcgft)

locate using:

<http://authorities.loc.gov/webvoy.htm>

Search for: Maps – Browse Narrower Terms

655;_7; \$a Digital maps \$2 lcgft

Subjects (6XX) other than 655



- If the work is “about” maps \$x
- If the work “is” a map or atlas \$v

650;_0; \$a Oil wells \$z Belize \$v Maps.

650;_0; \$a Roads \$z Belize \$z Dangriga \$v Maps.

651;_0; \$a Belize \$v Atlases.

Online Maps



- Some are born digital
 - Describe the map as above
 - Add 006 for the computer aspect
 - Add 008 **Form:** o for online
 - Adjust the 337-338 as appropriate
 - Scale may need to be recorded as
034;0_; \$d \$e \$f \$g
255;__; \$a Scale not given \$b ...
- Some are digitized versions of Print Maps
 - If original is known, add 776
 - Take data that cannot be determined from the original print version if possible