A. INTRODUCTION, CHARGE, METHODOLOGY

Action to date. CC:DA accepted the report of the Task Force on Specific Characteristics presented on Monday, January 15, 2001. The report was an oral report accompanied by a typed report with handwritten updates from the Task Force meeting on Saturday, January 13, 2001. It was accepted that the Task Force revise the report and prepare draft rule change proposals based on Task Force recommendations. Although results of further survey research would prove useful, there is not additional time to undertake follow-up qualitative or quantitative survey research.

Who we are. The Task Force on Specific Characteristics of Electronic Resources was appointed in July, 2000 by CC:DA. Active members are: Brad Eden, University of Nevada Las Vegas; Greta de Groat, Stanford; Laurel Jizba, Portland State University (Chair); Gene Kinnaly, Library of Congress; Jimmie Lundgren, University of Florida; Nan Myers, Wichita State University; and Ann Sandberg-Fox, Cataloging Consultant & Trainer. Collectively, we are practicing electronic resources catalogers or supervisors/trainers in electronic resources cataloging. Almost all of us
have given public presentations on electronic resources cataloging and/or published on the topic of electronic resources cataloging.

**The charge.** The Task Force on Specific Characteristics of Electronic Resources is charged with examining and if necessary, proposing changes to the Anglo-American Cataloguing Rules for expressing specific characteristics for electronic resources, including rules for type and extent of resource (area 3), physical description (area 5), and related notes (area 7). Particular attention shall be paid to remote resources.

The Task Force shall consider areas 3, 5, and 7 of chapter 9, the roles of these areas in other chapters of AACR, and other areas of description if necessary.

The Task Force shall consult with the broader cataloging community to:

a. learn what is needed to identify and describe specific characteristics of electronic resources

b. ascertain how areas 3, 5, and 7 are being applied and used by catalogers of electronic resources

c. examine and test alternatives to current practices

An interim report shall be presented to CC:DA at the 2001 Midwinter Meeting in Washington, D.C. The final report of the Task Force shall be presented at the 2001 Annual Conference in San Francisco and shall be sent to the Chair of CC:DA no later than June 1, 2001.

**Methodology:** three surveys were conducted of (a) the electronic resources cataloging community, (b) the Task Force (to evaluate the community response), and (c) of electronic resources cataloging librarians attending the Task Force’s midwinter meeting.

**External, international cataloging community survey.** We began work in August. By devoting many hours over the next couple of months we developed, conducted and analyzed an external Web-based survey of the cataloging community. We thank John Attig for getting our survey instrument on the ALA/ALCTS/CC:DA Web site in a timely manner. The Web-based survey ran for two weeks: October 19th to November 3rd. All incoming survey responses were viewed by Task Force members via our reflector software (reflector arranged for by Nan Myers). Many thanks are due to everyone who responded to the survey. On November 9th, Jimmie Lundgren provided preliminary numerical tallies and calculations on an Excel spreadsheet, and kept track of comments. We very much appreciate her many hours of timely, detailed work. The rest of the members then divided the large task of analyzing and summarizing the hundreds of comments.

**Internal Task Force member evaluation survey.** Subsequent to the community survey, we developed an internal Task Force survey questionnaire to evaluate the combined numerical and comment summaries from the community survey. The Task Force survey voting occurred the first week of December. By mid-December the internal Task Force survey was completed.

**Midwinter meeting/focus group.** In the January 13th Task Force meeting we collected another set of votes and comments from 19 or so electronic resources catalogers present at the meeting. This was our midwinter focus group. Those catalogers present were from academic libraries.
except for one public librarian and one corporate librarian. Only one participant had previously participated in the external community survey.

**Demographics for participants in the external cataloging community survey.** The cataloging community survey results consisted of 181 responses. 75% identified themselves as librarians cataloging “lots” or “some” electronic resources. 10% were administrators. The remainders were other staff who catalog electronic resources. Approximately 158 or 86% came from within the U.S. From outside the U.S., at least 13% (23) were sent in (perhaps more; hard to tell from URLs). At least 6% (13) came from Canada. Other countries represented included the U.K., Australia, New Zealand, Germany, Czech Republic, Egypt, and Sweden. 72% were from academic libraries, 13% from special libraries and 11% from governmental libraries.

**About the community survey statistical analysis.** These measures of central tendency and standard deviation were used in analyzing the numerical results from the external survey:

- **Average:** a simple average (not strictly applicable in a scientific sense since fractional responses were not permitted, but a still a useful summary for understanding response).
- **Mode:** the answer given more than any other answer.
- **Median:** the answer with half the other answers above and half below.
- **Standard deviation:** interesting as a reflection of the relative extent to which our respondents disagreed or agreed with one another on each question. Small numbers near zero indicate group agreement. Larger numbers as standard deviations mean that there is less uniformity of opinion.
- **Percent of respondents:** the percent of respondents choosing each response proved a very useful statistical tool for examining and discussing the opinions revealed in the survey.

**B. FINDINGS AND RECOMMENDATIONS**

The following conclusions result from responses of three focused groups of electronic resources catalogers. The three groups are:

- The internal Task Force member evaluative survey (written responses)
- The external cataloging international community survey (written responses)
- The Task Force midwinter meeting of Saturday, January 13th (oral responses)

**FILE CHARACTERISTICS—AREA 3**

**B.1. Eliminate area 3—area 3 is NOT useful.**

The Task Force found in a unanimous vote of its members upon examination of community survey results, that existing rules for area 3 (data/programs/data & programs) “file characteristics” are NOT useful for library staff or for patrons. On this basis, the Task Force recommends that area 3 be eliminated altogether.

The external survey of the cataloging community conducted by the Task Force indicated that 52% of the survey respondents did not find the existing area 3 useful for library staff or patrons. 19% were in strong disagreement with use of area 3. 16% had no opinion. We received 38 written responses, and 75% of those comments were negative with regard to
the usefulness of area 3. Reasons for finding area 3 not useful are: lack of utility, redundancy with other parts of the description, the addition of delay to cataloging time without adding significant value. Fully 60% or 107 of those responding to this issue indicated that area 3 is not indexed in MARC catalogs.

The midwinter focus group also agreed in a vote to eliminate area 3.

**B.2. Relocate area 3 information to area 7 for REMOTE resources.**

In its analysis of community survey results, the Task Force agreed with the combined responses to several questions that best alternative location for file characteristics details, and for other elements like sound, colour, is in the notes area, area 7. Specifically, we suggest looking at rules 9.7B1 and 9.7B8, reworking by editing and combining them (MARC 516 field of a bibliographic record). At the midwinter Task Force meeting, the members and the audience present again confirmed that relocating area 3 information to area 7, for REMOTE resources only, was fine. Task Force arguments for using area 7 are:

1. The survey respondents were very divided on this issue. They indicated that we should stick to the practice of leaving out area 5 (MARC 300 field) for remote resources because it is now an established practice that seems to work.

2. Area 7, notes, avoids confusion for users and catalogers. There is little to be gained by changing current practice but much to be lost by confusing those catalogers who only occasionally work with Internet resources. Any readily available physical details regarding remote files (sound, color, or other ill.) should be put in the note area if appropriate (including characteristics like “remote sensing”).

3. It is not productive for catalogers to have to spend time consulting dictionaries and the like to include this information due to resources awaiting cataloging.

4. Area 7 does not have an obvious use for recording information on direct access files as direct access files are distinguished by being stored on and contained in physical carriers that are inserted into the file drives of a computer. Thus they are "tangible" (unlike remote access files) and lend themselves naturally to a physical description.

5. Many integrated library systems have a label for the MARC 300 field that says: "Physical description", largely to accommodate tangible materials. Using it would be nonsense for remotely accessed resources. By contrast, tangible, direct electronic resources do have a physical carrier that we can describe. It seems best to use the physical description (MARC 300 field) to be consistent with other kinds of physical items whose extent is known.

The cataloging community survey showed that 49% of respondents say the current “short list” of terms in area 3 are not needed anywhere in the description. A smaller plurality said that the ISBD (ER) list of terms has some slight value for use in notes.
Also, the Task Force queried the community about use of the subject genre field (MARC 655) as an alternative location; it was considered very acceptable by a large plurality (43%) of survey respondents (although this is not a majority).

B.3. Reject the option of relocating area 3 information to area 5 for REMOTE resources (the area 5 option).

Although the community survey results could be construed to read that the community was divided on the issue, a large percentage (less than a majority) would agree to relocating area 3 information for REMOTE resources into area 5, this was rejected by the Task Force internal survey and in its midwinter meeting as impractical and unnecessary.

Since community survey respondents (a) rejected all but 3 proposed terms for “routine” description of extent, and (b) also rejected description of sound for “typical” remote resources, the Task Force recommend that no use of the following generic type of description should ever be encouraged, implicitly or explicitly, in area 5 (MARC 300):

1 Internet resource : sd., col.

The historical use of area 5 for similar data was rejected by the Task Force and by its midwinter focus group—(i.e., that since the area 3 information was originally located in area 5, it should be put back into area 5).

For REMOTE resources, merging of “intellectual content characteristics” and “content characteristics” was rejected, largely due to content instability, but also due to greater difficulty in examining a remote resource. However, this treatment might have some limited potential for DIRECT resources. Further intellectual content description in area 7 is always possible for all electronic resources.

Rejected draft example for REMOTE resources:
Area 5 (MARC 300)
  10 satellite maps in 10 files : sd., col.
Area 7—9.7B1 (MARC 516)
  Visual and infrared satellite maps for North Dakota with colorized legends and audio description.

Survey comments also indicated that rejecting the area 5 option for REMOTE resources supports the concept of multiple version description.

B.4. Reject “scrambled” option (a) to relocate some area 3 information to area 5 for REMOTE resources (i.e., sound, color, other illustrations), even as an option to be used sparingly, and (b) to relocate other area 3 information to area 7 (i.e., no. of remote files, exceptional intellectual content characteristics).
The Task Force rejected this option for the same reasons as given in B.3, namely (a) that there is no acceptable term for REMOTE resource extent, and (b) illustrative characteristics are unwanted and unnecessary in area 5.

In helping to think about the simplicity and complexity inherent in this option, and its rejection, one (unnamed) expert on Electronic Archival Description (EAD) discussed the following information with the Task Force chair (paraphrasing):

For any standard, there is a concern that a descriptive field built around describing what is physically sitting in front of you will (gracefully) change—into an apparatus describing the intellectual, changing the original purpose of the physical field—this is not a good thing.

In terms of digital preservation, electronic resources are physical. People should probably get over the idea that an electronic resource is not physical. It is. Anyone who has to worry about digital preservation knows that a digital file is a physical resource that needs care and feeding. An address, as in a URL, is in fact the address of a physical file.

• A physical description would logically describe “it” as a database with N number of files (perhaps also indicating notation of the files). And then in the appropriate area 7 note, describe the intellectual content of the files.
• Other the other hand, if what you are trying to do is describe an electronic database and descriptive analyze the contents in detail at the same time, then it would seem that you are trying to do both a collection-level description and item-level descriptions at the same time. If this is what is going on, then I think you have an impasse. AACR/MARC cannot do it in one record. In AACR/MARC you would need multiple records to accomplish this. EAD on the other hand would work just fine.
• Keep it simple. For any standard, if a distinction does not serve a useful purpose (even if it can be made), then there is no reason to make it. Making it, in fact, adds to the burden of the describer, without benefit.

Rejected draft example for REMOTE resources:
Area 5 (MARC 300)
\{no extent\} : sd., col.
Area 7—9.7B1 (MARC 516)
Visual and infrared satellite maps for North Dakota on 10 remote files

FILE SIZE

B.5. Move only some full and unique examples on file size from area 3 to area 7, notes, and eliminate all existing textual instruction regarding file size. Do not eliminate file size altogether, even thought it is of lesser descriptive importance.

Lesser relevance for file size. Both the community survey results and the Task Force agreed that file size is not equally as relevant as other elements, and is of marginal value (if it has any value at all) for library staff and patrons. However, the Task Force agrees
that it should remain in chapter 9. Both groups agreed that file size does not serve as a rough indicator of paging.

**Relationship of file size to types of resources.** Both the community survey results and the Task Force agreed that file size relates to various kinds of files differently. The community said file size relates to:

- 84 (46%) Any and all types of electronic resources
- 46 (25%) Data files alone
- 23 (13%) Multimedia files (files with sound, graphics, etc.)
- 22 (12%) Text files—electronic resources that may be read on screen like text
- 14 (8%) None of the above

Number of responses to this question: 189 (some chose more than once). Percentage is in relation to total number of persons responding (181) to this question.

**EXTENT for DIRECT RESOURCES**

**B.6.** Make specific optical terms like “1 CD-ROM” the normative rule. Change “computer optical disc” to be the optional rule. For optical technology, reject the current underlying philosophy in area 5 in favor of a more modern philosophy.

For direct resources, “Computer optical disc” (and the philosophy underlying its use) is NOT popular among practicing electronic resources catalogers. We recommend that the more specific optical terms like “1 CD-ROM” become the rule, and that “computer optical disc” become the option in AACR. Many comments from the community survey results, and all voting Task Force members, agreed that “computer optical disc” is NOT liked—it is NOT a very popular term, and too general. The Task Force agrees that we want to be able to say "1 CD-ROM" if that's what we have. We believe the newly proposed option to use the more specific term will very soon be the de facto term in use in North America, if not in all countries. We are in favor of consistency. We understand that such initialisms are not indigenous to Chapter 9, and that the current underlying traditional philosophy gives preference to a term for extent with long-term stability. The value of that philosophy has diminished. Rather, we would give preference to a current, relatively stable, commonly understood term that conveys meaning quickly in an age of rapid technological change. We note that initialisms also pertain to other chapters such as chapters as 6 (1 CD) and 7 (DVD), which needs to be investigated. For chapter 9, we recommend that the more specific optical terminology: “1 CD-ROM”, “1 Photo CD”, etc. instead become the rule—now, while the chapter is under substantial revision.

At the Saturday, January 13th Task Force meeting, the discussion was mainly to the effect that we were not content with having to use "computer optical disc" and wanted some alternative. The discussion included both the Task Force members who attended and the focused group of catalogers who participated in the meeting.
B.7. Blend content with carrier ONLY for DIRECT resources in area 5 and only using established terms from other chapters

The community survey results showed some preference for blending of content and carrier in two examples for DIRECT resources:
(a) “184 remote-sensing images (ca. 5 gb) on 10 computer optical discs”
and to a lesser degree for:
(b) “maps on computer optical discs”.
For example (a), above, the standard deviation was 0.98 (relatively close agreement) “agree but leaning to no opinion”. For example (b), the standard deviation was 1.11 (slightly lesser agreement) resulting in “no opinion, leaning slightly towards disagree”.

At the January 13th meeting, Task Force members agreed, only for DIRECT resources (1) to add proposed language limiting use of this blended option to terms within other chapters and (2) to add an example illustrating the blending of content with carrier in area 5, primarily because DIRECT resources have the stability necessary for this and because they are relatively easily examined. Only established terms from other chapters would be used. This could potentially impact not only chapter 9, but also introductory statements in several other chapters. Audience members at the meeting also accepted this approach.

B.8. Amend rules in areas 5 and 7 to reflect that complex accompanying materials for both DIRECT and REMOTE resources are best described in area 7.

The community survey results showed that per numerical responses and comments, when the area 5 (MARC 300 $e) gets longer and more complicated, support for using area 5 (MARC 300) to describe complex accompanying materials drops. Numerically, catalogers are split, although many voiced opinions that complex accompanying materials should be moved out of the 300 field and into the notes area 7 (500 fields) when practical.

At the January 13th Task Force meeting, members agreed we should take this opportunity to suggest a rule modification to place complex, lengthy accompanying materials in notes—area 7—when appropriate to do so. Audience members at the meeting also accepted this approach.

Tentative proposed draft example for REMOTE resources [see p. 20 for actual proposal]:

9.5E1. [Revised to add new sentence.] Give details of complex accompanying material for electronic resources in a note (see 9.7B11).
9.7B11 [Add new example.]
   Accompanied by 1 tutorial, 1 installation and performance guide, 1 AutoLISP programmer's reference, 1 IGES interface specifications, 1 addendum, 1 plastic template.
B.9. Amend AACR to show that if accompanying materials for DIRECT and REMOTE resources are also published separately, rules should reflect the making of added entries for them.

Task Force members agreed with survey commentary by respondents, that if accompanying materials are also published separately, then make added entries for accompanying materials ( manuals were mentioned).

B.10. Do not change rules in area 5 for description of simple, straight forward accompanying materials for both DIRECT and REMOTE resources.

Existing rules for simple, straight forward accompanying materials for DIRECT electronic resources have strong numerical support as seen in examples used in the external community survey and in follow-up Task Force surveys.

EXTENT for REMOTE RESOURCES

B.11. Retain rules that eliminate extent for REMOTE resources; they are useful.

Cataloging rules that eliminate extent for remote resources are useful as they now read. Both the community survey results and the Task Force agreed that for remote electronic resources (the rule that eliminates extent for remote resources), is useful for patrons and should be retained. AACR says: “Do not give a physical description for a computer file that is available only by remote access.” [AACR 9.5, footnote 3]. Analyzed statistical responses yielded a standard deviation of 1.19, with the largest number of respondents, 45% percent, agreeing, 17% having no opinion and 39% in weak disagreement. The aggregate mode was “agree”; the average was 2.9, meaning closest to no opinion but leaning towards agree.

B.12. Do not add text or examples blending both content and carrier concepts to area 5, for REMOTE resources only. There is no acceptable SMD for REMOTE resources.

A nearly acceptable term for remote extent was “l Internet resource”, but it was rejected by the Task Force. Community survey respondents neither agreed with, nor disagreed with, “1 Internet resource” (“no opinion” was the statistical result). No rule change is proposed to create an SMD for remote resources.

Active Task Force members agreed NOT to interpret the “no opinion” survey result, when asked if “1 Internet resource” was an acceptable term for remote extent, or in other words, to be the least objectionable term. The standard deviation on this question was 1.36. Likewise, all Task Force members said “let’s NOT” suggest a rule change to reflect using “1 Internet resource” in area 5 for remote resources.
Other proposed terms for extent were also rejected.

The community survey respondents did not like any of the other fourteen proposed terms for extent for remote resources.

Task Force members agreed with the negative results on this question. Namely, that these 14 terms are NOT good choices according to this survey. The terms are:

1. remote resource
2. remote resource (size unknown)
3. remote electronic resource
4. remote resource (remote)
5. Web resource
6. remote file
7. remote files (7 gb)
8. remote text (file size unknown)
9. remote text resource (5 electronic files)
10. remote multimedia file
11. remote multimedia file (size unknown)
12. remote multimedia e-resource (ca. 8 gb)
13. remote e-resource

The survey indicated MAJOR DISAGREEMENT regarding this proposed term:
1. remote e-resource: Disagree, but leaning slightly towards Strongly Disagree.

The Task Force agreed that three community survey examples blending both content and carrier concepts to area 5 for REMOTE resources are NOT potential examples to add to chapter 9.

The relative instability of remote resources, in contrast to the stability of direct resources, was a primary reason that led the Task Force to conclude not to blend content and carrier concepts for REMOTE resources. 5 of 6 Task Force members disagreed with the community survey results, indicating NO, we do not want to suggest rule changes that sanction of these terms within the rules for REMOTE resources.

In contrast, to the Task Force finding, community survey respondents voted yes, agreeing with three examples for remote extent that used these terms: (1) remote-sensing images, (2) sound files (3) motion picture. All of these represent departures from the current rules and do some mixing of content with carrier. Survey respondents agreed with the following terms for conveying remote extent:

1. remote-sensing images (ca. 4 gb)
2. sound files (45 min., 40 sec.; 5 min., 3 sec.)
3. motion picture (16 min.)

SOUND, COLOUR, OTHER ILLUSTRATIONS for REMOTE RESOURCES

B.13. Retain the absence of rules in area 5 about sound and colour. This is acceptable, preferred practice for REMOTE resources, and should continue.

All Task Force members agree that absence of rules about SOUND AND COLOUR and ILLUSTRATIONS in area 5 (per current rules) is OKAY.
In contrast, the community survey responses showed weak support for using Area 5 for colour and sound (55% agree or agree strongly), and weak disapproval of relying on notes in Area 7, in lieu of Area 5 for remote resources (only 37% agree or agree strongly for sound, 28% for colour). Numbers were well spread among the possible answers. The comments showed much ambivalence about this issue. There was a great deal of anxiety about the mutability of internet materials and that detailed descriptions of sound and color would soon become inaccurate and need maintenance. Many questioned the advisability or importance of including this information at all, citing the above reason, as well as the near universality of colour, the difficulty of determining sound on workstations lacking sound cards, and that it is unnecessary when the patron can just click on the URL and see the resource. Survey numbers showed slightly higher support for colour than sound in Area 3, while the comments would tend to indicate the opposite. Those approving of Area 5 for sound and color cited consistency with other formats and visibility to patrons. Information about sound and colour should be recorded in the same place, regardless of format, otherwise it complicates cataloging.

B.14. Retain the absence of specific rules in area 7 about sound and colour for REMOTE resources. This is acceptable practice for remote resources and should continue. Further, add a rule indicating that routine description of basic file, sound, and colour in area 7, notes, is unnecessary and unwanted for REMOTE resources.

In the Task Force meeting of January 13th, Task Force members agreed that it was unwise to change the practice of NOT describing sound and colour for REMOTE resources, except in significantly useful instances. To do so becomes make-work, with little resulting value to staff or patrons. Task Force members agree with community survey respondents that notes for basic file, sound, colour characteristics for routine titles are NOT wanted. Since using general notes to describe “file, sound and color characteristics” (MARC 500) came in last (least preferable as far as notes go) one possible conclusion is that the notes area of the record is NOT the place for BASIC “file, sound and color characteristics”. Unwanted example: Area 7 note (MARC 500): Sound, colour.

In the Task Force fall survey, six (6) Task Force members agreed that the Task Force should recommend continuing only to make notes about SOUND and COLOUR for remote resources. Five (5) Task Force members said DO NOT recommend inclusion of specifics for sound and colour in NOTES/area 7, and do not record this information in area 5.

Most Survey respondents who disapproved of Area 5 did so while expressing support for Area 7. Currently 300 is not used for remote files, please let’s keep it that way, one said. Sound and color should only be noted on the bibliographic record if significant, which would mean a descriptive phrase, and therefore a note. The abbreviations in the 300 are not understood by patrons, while notes are in plain English. One respondent said that 300 did not display in the online system for serial materials. Some respondents simply quoted the current rule on omitting Area 5, while expressing their satisfaction with the status quo in their survey answers. Approval of Area 7 was generally based on the idea that details of sound and color could not be rendered
adequately in the cryptic abbreviations of Area 5, or that the respondent was happy with the current absence of Area 5 in records for remote resources.

Community survey respondents and Task Force members agreed that rules for remote resources should be changed to reflect that there is NO NEED TO ROUTINELY RECORD COLOUR OR SOUND. A large number of comments questioned whether this information should be included in the catalog record at all. Most web resources have colors, and computers have colour capacity so it is almost a moot point, and irrelevant in this day and age. It’s also relative, since computers have the ability to alter the colour scheme on their monitors. Several respondents noted the lack of sound cards on their cataloger workstation or public computers, so they can’t record if resource has sound. It’s difficult to determine if data files and databases have sound or color. It takes too much time to determine and code the type of sound or colour.

In contrast, community survey respondents who approved of Area 5 for sound and colour also thought it advisable to include specifics about sound and colour in notes. While generally feeling Area 5 should be used, details of system requirements for sound and colour should be noted in the 538 field. It’s not an either/or situation—If you want to search/retrieve on the data, 300 is better, but for resources that don’t quite fit the usual definitions for the 300 or for complex cases, a note for human reading may be appropriate. For example, the presence of animation, /movies/videos/ or live-feed Webcam content should be noted. If a resource always contained sound/colour, use the 300 but if it was added later, use the 5xx. The 300 is useful in its standardization, which would map better to metadata schemes than the more nonspecific note tags, useful as they may be for information too specialized for the 300. Redundancy is good.

NOTES — REMOTE

Among Survey respondents there were pluralities of opinions regarding notes for remote electronic resources. There was ambivalence, and very few, if any, overwhelming majorities of thought. Nevertheless, some very general trends have nearly emerged when at least a plurality of about 1/3 of the responses are examined, and in some cases more than 1/3.

B.15. Amend the rules to emphasize the importance of notes. At many times in chapter 9 notes may be required for significantly useful information, and not optional. At other times, when information is insignificant, notes should not be made just for the sake of consistency in the pattern of note making. For significantly useful information, notes become even more important in chapter 9 than they already are, given the elimination of area 3, the continued absence of an SMD for remote resources and the recommendation to move complex accompanying material description to the notes area.
B.16. **Do not recommend a preferred usage and order for notes, even though one was discovered.**  

Five Task Force members agreed with community survey respondents regarding the following preferred note usage and order. Respondents collectively indicated an average preferred order (which is not necessarily the precise overall preferred order) as follows:  

a. 538 system requirements notes (average placement 2.61—(standard deviation)  
b. 500 general notes for nature of item (average placement 3.2)  
c. 516 type of computer file or data note (average placement 3.248). Also, this is the place most preferred for file characteristics terms (54%), although placement in the 655 subject genre field was also considered very acceptable by a large plurality (43%).  
d. 520 summary note (average placement 3.81)  
e. 500 general note for physical characteristics (average placement 3.86)  
f. 500 general note for file characteristics (average placement 4.09)  

One Task Force member did not agree on grounds that the list is biased against the summary MARC 520 note because of the failure to provide adequate guidance, and therefore insight, on the potential for better use of the summary note in AACR.  

As to notes preferences, Task Force members agreed unanimously that widespread institutionalized AACR practice might be swaying opinion. 79% of the respondents were doing lots (35%) of electronic resources cataloging or some (54%), and administrators (10%) or others (3%) may be familiar enough with AACR to know that the “system requirements” comes first in chapter 2 and that the “nature of item” note comes first in chapter 1.  

More than one Task Force member believes that widespread institutionalized CONSER practice may be swaying community opinion towards use of the 516 note.  

B.17. **Add a rule indicating that specificity in notes is necessary whenever possible.**  

**Specific is better.** Community survey respondents indicated that specific notes are to be preferred over general notes. Specific notes (MARC tags: 538, 516, 520—i.e., system requirements, type of file or data, summary) are preferred for the specific elements of “file, sound and color characteristics” over general notes (MARC tag 500) when it is the case that these elements are not covered earlier in the description. As well, four of six Task Force members agreed with respondents that general notes are less useful. Survey respondents indicated that general notes (MARC tag 500) are not deemed as useful for the specific elements of “file, sound and color characteristics”, although they do allow for flexibility. Two Task Force members did not agree.  

B.18. **Amend the rules to show that the “nature of item note” should prevail over a general note.**  

**Nature of item note should prevail.** Five Task Force members agreed with community survey respondents regarding nature of item: that either a general note (MARC 500) or a
“type of computer file” note (MARC 516) should prevail. Regarding overall “nature of item”, respondents said a general note (MARC 500) is only marginally (.008 more in scoring) preferred over the type of computer file or data note (MARC 516). **Further, the Task Force concluded that the 516 should prevail.**

**B.19. Amend the rules to give better guidance in construction of summary notes.**

Task Force and focus group agree. In its meeting on January 13th, the Task Force discussed and approved the recommendation to enhance summary note guidance in chapter 9 and also in chapter 1. The focus group of 19 practicing electronic resources catalogers agreed.

**Summary notes are under-appreciated.** Six Task Force members agreed with comment from community survey respondents that summary notes are under-appreciated, or unappreciated, in relation to other standards like Dublin Core, etc. There seems to be a lack of appreciation of the specific yet flexible nature of the summary note (MARC 520). One potential reason is that it is de-emphasized in AACR and there are no detailed instructions for applying it. However, survey comments indicated that most audiovisual materials catalogers who also work with electronic resources do create summary notes, and understand their value to library staff and patrons alike. More summary note guidance is needed in **AACR.**

**B.20. Indirectly amend the rules to show that notes should be both simpler and more specific by: (a) eliminating area 3, (b) reducing instruction on file characteristics elements in the notes from the lengthy discussion currently found in area 3, and (c) making some notes more specific.**

On one hand, the Task Force found this somewhat difficult for recommend as a change to chapter 9, because much judgement is involved in this type of consideration and it would be difficult to write. **On the other hand, it can be construed that eliminating area 3 and emphasizing specificity in notes fulfills this desire for a simpler description with more specificity in area 7.**

**Community says notes should be simpler.** All Task Force members unanimously agreed with community survey respondents that notes should be made simpler. Survey respondents indicated that notes should be made simpler and not redundant. Judging from the comments, simplicity and lack of redundancy is wanted in notes. 13 comments representing over a fourth to a third of the respondents asked for simpler, shorter records with fewer notes, avoiding duplication within the record. (This was 34% of 38 comments on notes in the notes section and 28% of all comments on the questionnaire whether the comments came from (a) the notes comments or (b) the general comments section).

**Community members and four Task Force members said notes should be more specific.** Specificity in notes is wanted. Fewer respondents, about ¼ of the total survey respondents say that specific, unique note fields (a) for “further explanation/elaboration” and (b) for flexibility are wanted. This stated by 24% of 38 comments on notes (9 respondents).
C. DRAFT RULE CHANGE PROPOSALS FOR REVIEW

The following AACR draft rule change proposals for review are based on decisions made in the findings and recommendations portion of this report. Please review the following list in order to assist with orientation to the nature and order of the proposals in this draft. Refer to the findings and recommendations section as necessary. The designations B.1, B.2, etc. relate to earlier recommendations and findings in this report.

The rule change proposals are based on text found in 4JSC/Rule Revision /1/Consolidated /3 January 28, 2001. For the purposes of this draft, (a) deletions are struck-through (b) some deletions have been removed in order to see clearly the revised text and (c) new material is double underscored. The JSC preferred formal editorial rendering of proposals with all editorial components: current rule (unadorned), proposed revision (adorned with struck-through deletions and double underscored additions) is not being following in the interest of providing a cleaner draft document for review. Rules left out of this rule change proposal draft (because they are not relevant to this discussion) are indicated by an ellipsis in brackets [...].

List of change proposals referent to corresponding recommendations from this report:

C.1. Amend the rules in chapters 1 and 9 to give guidance in construction of summary notes. (Rev. 1.3A, 1.7B17, 9.7B17) [See B.19 for more information, and also “Reflections on Summarizing and Abstracting” in Journal of Internet Cataloging, Vol. 1(2) 1997, pp. 15-39.]

C.2. Eliminate area 3. [See B.1, B.3, B.4 and B.20 for more information]

C.3. Move area 3 information to area 7. [See B.2, B.3, B.4, B.5, B.11,B.12, B.20 for more information]

C.4. Reserve area 5 for direct resource descriptions only. (New: 9.5A2 and note that JSC had already eliminated footnote 2—this is in our draft just to visually reconfirm their decision). [See B.3, B.4, B.5, B.11. B.12, B.13, B.20 for more information]

C.5. So that the more specific note (MARC 516) prevails over a general note, and because it seems logical to do this at this point, merge rule 9.7B1 with 9.7B8, eliminating 9.7B8 in the process. We need not renumber remaining rules: cf. chapter 2, which has no rule 2.7B8. [See B.17, B18 for more information]

C.6. Make specific optical terminology, such as “1 CD-ROM” the normative rule in area 5, making the more general “computer optical disc” the optional rule. Revise 9.5B1; create new example at 9.5D1. [See B.6 for more information]

C.7. Add option to 9.5B to blend content with carrier for direct resources only. Create new rule 9.5B3. [See B.7 for more information]

C.8. Amend the rules to show that more specific rules like nature of item, etc. should prevail over general notes. (New text 9.7.B) [See B.17, B.18, B.20 for more information]
C.9. Amend area 7 rules to state there is no need to routinely record basic file, sound, colour, etc. characteristics for remote titles. Create new subrule 9.7Bl (d). [See B.13, B.14 for more information]

C.10. Amend rules in areas 5 and 7 to reflect describing complex accompanying materials in a note. (Recommended for AACR rather than requesting an LCRI.) Create new text in 9.5E1 and 9.5B11. [See B.8, B.10 for more information]

C.11. Recommendations for appendix and index not accounted for in this draft (if needed, as appropriate).

C.12. Recommendation to make added entries for separately published accompanying materials to electronic resources not accounted for in this draft.

CHAPTER 1
GENERAL RULES FOR DESCRIPTION

1.3. MATERIAL (OR TYPE OF PUBLICATION) SPECIFIC DETAILS AREA

1.3A. Precede this area by a full stop, space, dash, space.
This area is used in the description of cartographic materials (chapter 3), music (chapter 5), computer files (chapter 9), serial publications (chapter 12), and, in some circumstances, microforms (chapter 11). See those chapters for the contents of this area and its internal prescribed punctuation.

[...]

1.7. NOTE AREA

REVISED RULE

1.7B17. Summary. Give a brief, objective summary of the purpose and content of an item unless another part of the description provides enough information. With succinct, specific wording, bring out major concepts (may include scope of coverage or time period, audience, purpose, point of view, category of information, genre, importance, other key characteristics). Use phrases instead of sentences when possible. See 2.7B17, 4.7B17, 6.7B17, 7.7B17, 8.7B17, 9.7B17, 10.7B17, and 11.7B17.

CHAPTER 9
ELECTRONIC RESOURCES

Contents

[...]
9.3. TYPE AND EXTENT OF RESOURCE AREA

Contents:

9.3A. Preliminary rule
9.3B. Type and extent of resources

9.3A. Preliminary rule

9.3A1. Punctuation

For instructions on the use of spaces before and after prescribed punctuation, see 1.0C.

Precede this area by a full stop, space, dash, space.

Enclose each statement of extent in parentheses.

Precede a statement of the number of records, statements, etc., by a colon when that statement follows a statement of the number of files.

9.3B. Type and extent of resource

9.3B1. Type of resource. Indicate the type of electronic resource being catalogued. Use one of the following terms:

- electronic data
- electronic program(s)
- electronic data and program(s)

9.3B2. Extent of resource. If the information is readily available, give the number or approximate number of files, records, etc., that make up the extent and/or these other details. If the resource is in a compressed form, omit the statement of extent.

a) Data. Give the number or approximate number of records (use records) and/or bytes (give the term in either abbreviated or full form).

Electronic data (1 file : 350 records)

Electronic data (550 records)

Electronic data (1 file : 600 records, 240,000 bytes)

Electronic data (1 file : 2.5 gb)

Electronic data (1 file : 1.2 megabytes)

b) Programs. Give the number or approximate number of statements (use statements) and/or bytes (give the term in either abbreviated or full form).

Electronic program (1 file : 200 statements)

Electronic program (2150 statements)
c) Multipart files. Give the number or approximate number of records and/or bytes, or statements and/or bytes, in each part according to a) or b) above.

- Electronic data (3 files: 100, 460, 550 records)
- Electronic programs (2 files: 4300, 1250 bytes)
- Electronic data (2 files: ca. 330 records each)
- Electronic data (2 files: 800, 1250 records) and programs (3 files: 7260, 3490, 5076 bytes)
- Electronic data (2 files: 3.5, 2 megabytes)

If such numbering cannot be given succinctly, omit the information from this area. If desired, give it in a note (see 9.7B8).

[...]

9.5A. Preliminary rule

9.5A1. Punctuation

For instructions on the use of spaces before and after prescribed punctuation, see 1.0C.

- Precede this area by a full stop, space, dash, space or start a new paragraph.
- Precede other physical details by a colon.
- Precede dimensions by a semicolon.
- Precede each statement of accompanying material by a plus sign.
- Enclose physical details of accompanying material in parentheses.

NEW RULE

9.5A2. Scope

The physical description area is used in the description of direct access electronic resources only. Do not give a physical description for remote access electronic resources. For remote access electronic resources, record only significantly useful information about the extent, sound, color, other illustrative details and accompanying material in the note area. See 9.7B1c, 9.7B10, and 9.7B11.

9.5B. Extent of item (including specific material designation)

REVISED RULE

9.5B1. For direct access electronic resources, record the number of physical units of the carrier by giving the number of them in arabic numerals. For magnetic technology, use terminology from list one, and for optical technology, use conventional terminology from list two, as appropriate.
List 1 – Magnetic technology
  computer chip cartridge
  computer disk
  computer optical disc
  computer tape cartridge
  computer tape cassette
  computer tape reel

  1 computer disk
  2 computer tape cassettes
  1 computer tape reel
  1 computer optical disc

List 2 – Optical technology
  CD-ROM
  Optical card
  Photo-CD
  DVD

  1 CD-ROM
  1 Optical card
  Photo CDs
  1 DVD

When new physical carriers are developed for which none of these terms is appropriate, or sufficient give the specific name of the physical carrier as concisely as possible using conventional terminology.

Optionally, qualify terms by computer, if appropriate, to meet the needs of the cataloging agency.

  1 computer card
  1 computer optical card
  1 computer optical disc

DELETE OLD PROPOSED RULE

[Optionally, use conventional terminology... 1 DVD]

Optionally, specify the number or approximate number of files that make up the content (use file or files preceded by an arabic numeral) and/or the number or approximate number of records (use records), statements (use statements), or bytes (give the term in either abbreviated or full form). Enclose such additions in parentheses.
1 computer disk (3 files : 100, 460, 550 records)

1 CD-ROM (1 file : 240,000 bytes)

1 zip disk (96 mb)

Give a trade name or other similar specification in a note (see 9.7B1b).

**NEW RULE**

**9.5B2.** If the description is of a separately titled part of an item lacking a collective title (see 9.1G4), express the fractional extent in the form *on reel 2, on 3 of 5 disks, on 1 disk*, etc.

**NEW RULE**

**9.5B3.** Optionally, only for direct access resources, add only established terms from other appropriate chapters related to content.

- 184 remote sensing images (ca. 18 mb) on 1 CD-ROM
- maps on 3 CD-ROMs

**9.5D. Dimensions**

**9.5D1.** Give the dimensions of the physical carrier as instructed below.

a) Discs/Disks. Give the diameter of the disc or disk in inches, to the next ¼ inch up.

- 1 computer disk : Col. ; 5 ¼ in.

**NEW EXAMPLE**

- 1 CD-ROM : col. ; 4 ¾ in.

**DELETE EXAMPLE**

- 1 computer optical disc (CD-ROM) : col. ; 4 ¾ in.

[...]

**9.5E. Accompanying material**

**REVISED RULE**

**9.5E1.** Give the details of accompanying material as instructed in 1.5E.

For complex accompanying material, give details for direct or remote electronic resources, in a note (see 9.7.B11).

[...]
REVISED RULE

9.7B. Notes

Prefer to make notes as specific as possible. When conditions apply and there is a choice, make the more specific nature and scope note, or the summary note, in preference to a general note. Make notes as set out in the following subrules and in the order given there. However, give a particular note first when it has been decided that note is of primary importance.

REVISED RULE – SUBRULE – at 9.7B8 d) (9.7B8 plus area 3 have been merged with 9.7Bl to become 9.7B8 d))

9.7B1. Nature and scope, system requirements, mode of access, and file characteristics

a) Nature and scope. Make notes on the nature or scope of the resource unless it is apparent from the rest of the description.

Game

Word processor

Combined time series analysis and graph plotting system

Spreadsheet, with word processing and graphic capabilities

b) System requirements. Make a note on the system requirements of the resource if the information is readily available. Begin the note with System requirements: Give the following characteristics in the order in which they are listed below. Precede each characteristic, other than the first, by a semicolon.

the make and model of the computer(s) on which the resource is designed to run
the amount of memory required
the name of the operating system
the software requirements (including the programming language)
the kind and characteristics of any required or recommended peripherals
the type of any required or recommended hardware modifications

System requirements: 48K RAM; Apple Disk II with controller; col. monitor (Resource requires colour monitor for display)

System requirements: IBM PC; 64K; colour card; 2 disk drives

System requirements: Apple II, II+, or IIe; 48K; DOS 3.3; Applesoft in ROM

System requirements: IBM PC or 100% compatible; 128K; DOS 1.1 to DOS 2.1
System requirements: RTI Series 500 CD-ROM DataDrive

System requirements: IBM PC AT or XT; CD-ROM player and drive

System requirements: 486/33MHz PC, Macintosh, or Power Macintosh; 8MB RAM; Windows 3.1 (or higher) or System 7.0.1 (or higher); Java-capable Web browser; VGA monitor *(May also be given as separate system requirement statements for each make and model of the computer)*

c) *Mode of access.* If a resource is available only by remote access, always specify the mode of access. Begin the note with *Mode of access:.*

- Mode of access: AUSINET
- Mode of access: Electronic mail using ARPA
- Mode of access: World Wide Web
- Mode of access: Internet via ftp

**NEW SUBRULE (was developed from 9.7B8 and one former area 3 example)**

d) *File characteristics.* Optionally, make notes on file characteristics if available. If considered important, can be given succinctly, and if readily available, include the number of records, statements, etc. that make up the content, giving file designation before the number of records, statements, etc. Number of records, statements, etc. may be approximated. For remote access resources, there is no need to routinely record basic file characteristics such as sound, colour, other illustrations or accompanying material. Only record such information for remote access resources if it is judged to be of particular significance.

**NEW EXAMPLE (one from former area 3)**

Computer data (2 files: 800, 1250 records) and programs (3 files: 7260, 3490, 5076 bytes)

**MOVED EXAMPLES (from deleted 9.7B8)**

Hierarchical file structure

Number of variables: 960

Number of routines: 102

File size: 520, 300, 280, 400, 320, 400, 500 records

File size varies

File size unknown
ASCII character set

Blocked BCDs, 40 records per block, 90 characters per record

[...]

DELETE RULE

9.7B8. File characteristics. Give important file characteristics that are not included in the file characteristics area.

[...]

REVISED RULE

9.7B10. Physical description. Make notes on important physical details that are not included in the physical description area, especially if these affect the use of the item. If the file is available only by remote access, give corresponding types of physical details (e.g., colour, sound) if they are readily available and considered significantly useful.

Stereo. sd.

Displays in red, yellow, and blue

Not copy-protected

DELETE TEXT OF 2nd SENTENCE; PUT FIRST SENTENCE LAST

9.7B11. Accompanying material. Make notes on the location of accompanying material if appropriate. Give details of accompanying material neither mentioned in the physical description area nor given a separate description. (see 1.5E).

REVISED RULE

9.7B11. Accompanying material. Give details of accompanying material for direct access or remote access electronic resources, including descriptions of complex accompanying material. Make notes on the location of accompanying material if appropriate.

Accompanied by a series of 5 programs in PL/, with assemble subroutines

Accompanied by documentation: 1980 census user’s guide. Pts. 1-2

Set accompanied by one teacher’s and parent’s guide, titled: Using primary sources / by James A. Peroco; and one user’s guide. A teacher’s guide accompanies each disc

NEW EXAMPLE

Accompanied by 1 tutorial, 1 installation and performance guide, 1 AutoLISP programmer’s reference, 1 IGES interface specifications, 1 addendum, 1 plastic template
REvised rule

9.7B17. Summary. Give a brief, objective summary of the purpose and content of an item unless another part of the description provides enough information. With succinct, specific wording, bring out major concepts (may include scope of coverage, time period, audience, purpose, point of view, category of information, genre, importance, key multimedia characteristics). Describe in general terms the nature of other bibliographic items that may be contained within a particular electronic resource (especially if specific contents may change). Describe user interaction (what may a user see, hear, or do), if applicable. Use phrases instead of sentences when possible. A summary note may substitute for other notes in the record (give pertinent information that would have been supplied in other notes).

Summary: Can be used to manipulate, weigh, and aggregate raw data in any manner desired. By assigning values to the coordinate locations of data points or data zones, the user may produce three types of map: contour, proximal, or conformant

Summary: Responses of New York City adults to Harris study questionnaire used during Apr. and May 1969

Summary: Eight versions of a video game for 1-2 players. To survive, players use laser cannons to destroy flying demons

Summary: A simulation of Operation Barbarossa, the German invasion of Russia during World War II

Summary: Utility program, featuring a screen saver with video clips from the TV show, wallpaper, and sound effects

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