

BULLETIN

ASSOCIATION des CARTOTHEQUES et ARCHIVES CARTOGRAPHIQUES
du CANADA



ASSOCIATION OF CANADIAN MAP LIBRARIES AND ARCHIVES

MEMBERSHIP in the Association of Canadian Map Libraries and Archives is open to both individuals and institutions having an interest in maps and the aims and objectives of the Association. Membership dues are for the calendar year and are as follows:

Full (Canadian map field).....	\$35.00
Associate (anyone interested).....	\$35.00
Institutional.	\$50.00

Members receive quarterly the **ACMLA Bulletin**, the official journal of the Association.

Officers of the Association for 1991/92 are:

President	Richard Pinnell	519/885-1211
	University Map & Design Library	ext. 3412
	University of Waterloo	
	Waterloo, Ont. N2L 3G1	
1st Vice-President	Cathy Moulder	416/525-9140
	Lloyd Reeds Map Library/UDC	ext. 4745
	McMaster University	
	Hamilton, Ont. L8S 4K1	
2nd Vice-President	Robert Grandmaitre	613/996-7618
	Cartographic and Audio-Visual	
	Archives Division	
	National Archives of Canada	
	395 Wellington Street	
	Ottawa, Ont. K1A 0N3	
Secretary	Colleen Beard	416/688-5550
	University Map Library	ext. 3468
	Room C306	
	Brock University	
	St. Catharines, Ont. L2S 3A1	
Treasurer	Pat McIntyre	613/996-7618
	Cartographic and Audio-Visual	
	Archives Division	
	National Archives of Canada	
	395 Wellington Street	
	Ottawa, Ont. K1A 0N3	
Past President	Cheryl Woods	519/661-3424
	Map Library	
	Department of Geography	
	University of Western Ontario	
	London, Ont. N6A 5C2	

ACMLA MAILING ADDRESS

Association of Canadian Map Libraries and Archives
c/o Cartographic and Audio-Visual Archives
National Archives of Canada
395 Wellington Street
Ottawa, Ont. K1A 0N3
Tel: 613/995-1077; FAX: 613/995-4451

Views expressed in the **Bulletin** are those of the contributors and do not necessarily reflect the views of the Association.

The Association of Canadian Map Libraries and Archives gratefully acknowledges the financial support given by the Social Sciences and Humanities Research Council of Canada.

ASSOCIATION DES CARTOTHEQUES ET ARCHIVES CARTOGRAPHIQUES DU CANADA

Peuvent devenir MEMBRES de l'Association des cartothèques et archives cartographiques du Canada tout individu et toute institution qui s'intéressent aux cartes ainsi qu'aux objectifs de l'Association. La cotisation annuelle est la suivante.

Membres actifs (cartothécaires canadiens à plein temps)	\$35.00
Membres associés (tous les intéressés)	\$35.00
Institutions.	\$50.00

Le **Bulletin**, journal officiel de l'Association, est publié trimestriellement.

Les MEMBRES DU BUREAU de l'Association, pour l'année 1991/92 sont:

Président	Richard Pinnell	519/885-1211
	University Map & Design Library	ext. 3412
	University of Waterloo	
	Waterloo, Ont. N2L 3G1	
1er Vice-Présidente	Cathy Moulder	416/525-9140
	Lloyd Reeds Map Library/UDC	ext. 4745
	McMaster University	
	Hamilton, Ont. L8S 4K1	
2e Vice-Président	Robert Grandmaitre	613/996-7618
	Division des archives cartographiques	
	et audio-visuelles	
	Archives nationales du Canada	
	395, rue Wellington	
	Ottawa, Ont. K1A 0N3	
Secrétaire	Colleen Beard	416/688-5550
	University Map Library	ext. 3468
	Room C306	
	Brock University	
	St. Catharines, Ont. L2S 3A1	
Trésorier	Patrick McIntyre	613/996-7618
	Division des archives cartographiques	
	et audio-visuelles	
	Archives nationales du Canada	
	395, rue Wellington	
	Ottawa, Ont. K1A 0N3	
Présidente sortant	Cheryl Woods	519/661-3424
	Map Library	
	Department of Geography	
	University of Western Ontario	
	London, Ont. N6A 5C2	

ACACC ADRESSE D'AFFAIRES

Association des cartothèques et archives du Canada
a/s Division des archives cartographiques et
audio-visuelles
Archives nationales du Canada
395, rue Wellington
Ottawa, Ont. K1A 0N3
Tel: 613/995-1077; FAX: 613/995-4451

Les opinions exprimées dans le **Bulletin** sont celles des collaborateurs et ne correspondent pas nécessairement à celles de l'Association.

L'Association des cartothèques et archives cartographiques du Canada remercie le conseil de recherches en sciences humaines du Canada pour son apport financier.

Bulletin Staff/Collaborateurs

EDITOR

Don Lemon
New Brunswick Museum
277 Douglas Ave.
Saint John, N.B. E2K 1E5
Tel:506/658-1842
FAX:506/658-1842

FEATURES

New Books and Atlases:

Colleen Beard
University Map Library, Room C306
Brock University
St. Catharines, Ontario L2S 3A1
Tel:416/688-5550,ext.3468
FAX:416/682-9020
e-mail: cbeard@spartan.ac.brocku.ca

Reviews:

Ron Whistance-Smith
W.C. Wonders Map Collection
University of Alberta
Edmonton, Alberta
Tel:403/492-4760
FAX:403/492-7033

Regional News:

Beverly Chen
Geological Survey of Canada
601 Booth St.
Ottawa, Ont.
Tel:613/995-4177
FAX:613/996-9990

CONTENTS/MATIERES

From the editors desk ii

ARTICLES

President's Report 1
Spatial Data, Map Libraries and
Archives/Gary North 3
The Map Librarian and NAD83/L.M. Sebert 14

FEATURES

New Books and Atlases/Colleen Beard 17
Reviews/Ron Whistance-Smith 20
The Atlas of the Crusades/ Bruce Robin
*Place Names of Alberta.[Volume II]. Mountains, Mountain
Parks, and Foothills/Carol Marley*
*Military Architecture, Cartography & the Representation of the
Early Modern European City; A Checklist of Treatises on For-
tification in the Newberry Library/Jeffrey S. Murray*
Canadian Hydrographic Service: Charts
released/cancelled 23
National Archives of Canada: Cartographic and Audio-Visual
Archives Division: Report 26
British Cartographic Society and International Cartographic
Association: Report/Alberta Auringer Wood 34
Comité de Liaison ACMLA-NAC Liaison Committee 39
The *BULLETIN* BOARD 40

From the editor's desk....

I would like to announce that Carol Marley has agreed to become Reviews Editor for the **ACMLA Bulletin** starting with Issue Number 83. I know she can count upon everyone's support when she looks for reviewers.

To assist the publication process I would appreciate if contributors would utilize the following **Guidelines for Contributors**: Whenever possible, contributions should be submitted in electronic format on a 5.25" (double density) disk IBM format; database format may be WordPerfect 5.0 or ASCII. Typewritten contributions are also acceptable.

Don Lemon
Editor

COVER: A detail of *Novae Franciae Accurata Delineatio*, by [Francesco Guiseppe Bressani], 1657. This map, attributed to the Jesuit Father Bressani and published in Italy in 1657, is reproduced at the same size as the only known original engraving, held by the Bibliothèque nationale (Paris), Département des cartes et plans, Rés.Ge DD 2987 B (8580). This facsimile has been published in Ottawa, May 1991, by the Organizing Committee of the 1991 Annual Conference of the Association of Canadian Map Libraries and Archives to mark the twenty-fifth anniversary of the Association, 1967-1992. Reproduction sponsored by Cartographic and Architectural Archives Division, National Archives of Canada, which hosted the first meeting of the Association in 1967. (ISBN 0-9695062-2-8)

COUVERTURE: Détail de la carte *Novae Franciae Accurata Delineatio*, par [Francesco Guiseppe Bressani], 1657. Cette carte attribuée au jésuite Bressani et publiée en Italie en 1657 est ici reproduite à la même grandeur que le seul exemplaire connu de la gravure originale conservé à la Bibliothèque nationale (Paris), Département des cartes et plans, Rés.Ge DD 2987 B (8580). Fac-similé publié en mai 1991 à Ottawa par le Comité du congrès annuel 1991 de l'Association des cartothèques et archives cartographiques du Canada en l'honneur du vingt-cinquième anniversaire de l'association (1967-1992). Reproduction commanditée par la Division des archives cartographiques et architecturales, Archives nationales du Canada, hôte de la première réunion de l'association en 1967. (ISBN 0-9695062-2-8)

PRESIDENT'S REPORT

We should all be very proud of the efforts of our SSHRC Grant Committee. In late December Barbara Znamirowski was notified that the committee's application to the Program of Aid and Attendance Grants to Scholarly Associations had been reviewed by SSHRC and that our Association would receive \$3,807 each year for three years beginning in 1992. The Council observed that ACMLA "is a very active and professional association" and "has a genuine research element in that it is active in the publication of historical maps." This grant has two components: an aid component to provide funds for administration and a travel component to cover the travel and subsistence costs of members attending annual general meetings. Those of you who anticipate difficulty raising the necessary funds to attend our conference in Calgary should apply to the Association this summer for a travel subsidy.

Gilles Langelier's death in November last year represents a tragic loss for his family, the National Archives of Canada, and our Association. By way of remembering Gilles, the Board decided to make a charitable donation on behalf of the Association; it was the family's wish that this money should go to the Institut du Cancer de Montréal (affiliated with the Université de Montréal). This donation will enable the institute to offer a bursary next year in Gilles' name to a student who demonstrates a strong interest and ability in cancer research.

The ACMLA-NAC Liaison Committee has been hard at work these past few months, under the able chairmanship of Yves Tessier. You may recall from my last report in the *Bulletin* that this committee has a mandate to dialogue with the National Archivist of Canada. In this issue you will find a communiqué from Yves providing information about the committee and its mandate and asking for suggestions from the membership; the members of this committee hope to meet with Dr. Wallot in the spring and to

discuss with him matters of mutual concern and interest. Please give some thought to Yves' call for input to the committee.

And speaking of committees, I would like to remind you that we are still lacking chairs for the Conference Manual Committee, the Map User Advisory Committee, and the newly created Continuing Education Committee. I do not wish to harp on the fact that much of the work of the Association is done by a very few but this is definitely the case. And it is a continuing source of frustration for the Board and for those members who wish for something better for our Association. Yes, we did receive top marks from SSHRC and yes, we do have some excellent publications to our credit and yes, we have been instrumental in bringing the reality of a national bibliography of maps many steps closer, but think what we could accomplish if we all participated. We shall probably have another year without elections for Board positions; in fact, as it now stands we may have no one willing to stand for president. I have served in this capacity for two years; it is time for me to step down and let someone else face the challenges of this position. Any taker? Enough said, at least in this issue.

Fair warning to all committee chairs, editors, and compilers; your annual reports should be received by the Board at least two weeks prior to the beginning of the Calgary conference; these reports will then be forwarded to the conference organizing committee for duplication and distribution to the conference delegates as part of the conference package. Deadline is therefore May 19.

Just a few more announcements which may interest you. In January, Stanley Ings decided to retire and we were left without an auditor. Happily, Lou Sebert has volunteered to replace Mr. Ings. Tim Ross tells me that he is still aiming to have the new edition of our map directory available for sale in late May, in time for the

conference. The Board has revised the Association's travel policy to take into account committee travel and travel for the purposes of representing the Association at meetings of non-ACMLA bodies (for example, at Canadian Cartographic Association conferences). We have also developed a funding formula for IFLA travel; this funding proposal will be presented for approval at the AGM in Calgary.

And finally, you may be interested to know that the next Board meeting is scheduled for April 10 in Waterloo. If you wish to bring a matter to the Board's attention, please contact me or any other member of the Executive before that date. Hope to see you all in Calgary!

Richard Pinnell
President, ACMLA

Gilles Langelier Scholarship

Gilles Langelier, a long-standing member of our association, died in Ottawa on 13 November 1991; he had worked for the National Archives of Canada since 1972. On behalf of the Association's members the Board decided to make a donation in his memory to the charity of his family's choice; originally this donation was to have gone to the Canadian Cancer Society but it was later decided to create a scholarship in Gilles's name. The scholarship will be administered by the Institute du Cancer de Montréal, an institute affiliated with the Université de Montréal. Gilles' brother Yves, an adjunct director of the institute, informs us by letter that the scholarship will be awarded to a worthy student who demonstrates a strong interest in cancer research.

Richard Pinnell
President, ACMLA

SPATIAL DATA, MAP LIBRARIES AND ARCHIVES¹

Gary W. North
United States Geological Survey
National Mapping Division

Introduction by Ed Dahl:

The name Gary North needs little introduction in the Canadian map curator community. We have read his articles in a variety of journals, whether he is reporting on "cartographic glasnost" in Russia or on developments at IFLA, and we have seen numerous reports of the many talks he has given. His is a household name in our vertical files. But many of us have not met him personally. When we decided to dedicate one day to the subject of what is happening and what we can expect in the field of spatial data, since it is of major concern to map librarians and archivists, there was little discussion in the program committee as to who should be invited to speak to us. So when I called Gary one of my first questions of course was whether he would be available today. "I'm certainly free he said -- it is the Memorial Day holiday in the USA." That was a stroke of luck for us since he was willing to pass up his holiday to present our opening address and a follow-up talk at the end of the day.

Gary is the Assistant Division Chief of the USGS National Mapping Division. His primary responsibility involves earth science information and data services. Gary was born in the state of New York and was educated there and in West Virginia. In the 1960's he served as a photo interpretation officer with the Strategic Air Command and worked with NASA's Remote Sensing Test Program in California. Since 1969 he has been at the USGS where he has held a number of important posts all related in some

way to cartographic information. He is a US Standing Committee member to the Geography and Map Section of IFLA where he chairs the Micro and Digital Cartography Working Group. In February 1989, with Hans van de Waal, he conducted a workshop in Jamaica on managing map and spatial data collections. The opportunity we will have during the next days to benefit from the Gary's insights make it a real pleasure for us to welcome him as our keynote speaker.

* * * * *

I have grown to have a great appreciation for archivists and map librarians over the years and I think having been educated as a historian first and then moving into the world of spatial data, I will, in my second life, no doubt be an archivist or map librarian. As you celebrate your 25th anniversary it reminds me of the fact that 20 years ago I gave my first address outside the United States, at a conference here in Ottawa, and a little less than 10 years ago, met with the international map librarians for the first time when IFLA met in Montreal.

As a keynote speaker, one has an opportunity to set the stage for a conference and I will attempt to do that this morning. I would like to challenge you a bit and maybe even be a little controversial about what I think some of us see coming in the world of spatial data and what map librarians and archivists may have to do in the years ahead. I will of course try to be brief -- that is certainly important in a keynote address. It reminds me of

1 Presented at 1991 ACMLA Conference, Ottawa.

a rural newspaper in the State of Arkansas where there was a young reporter just starting out and his editor told him that he should always keep his copy short and stick to the basic facts. So they sent him out on his first story to cover an accident that had occurred in a downtown building. He covered the event and here is what he wrote: "Sam White looked up the elevator shaft to see if the car was coming down. It was. Age 42." Well, I guess I am being asked to look up that elevator shaft and predict the future and talk about spatial data and I hope the car doesn't come down during the course of the address.

Spatial data products are indeed pieces of information and information represents knowledge. In 1597 Sir Francis Bacon said: "knowledge is power." In 1964, President Lyndon Johnson was quoted as saying: "the gathering of knowledge is the supreme achievement of man." And going back to another president of the United States in 1786, Thomas Jefferson said: "I think by far the most important bill in our whole code is that for the diffusion of knowledge among people. No other sure foundation can be devised for the preservation of freedom and happiness." And so, if we have knowledge, and you folks collect that knowledge as your principal task, then the diffusion of that knowledge is indeed one of the most important things you can do. And this is a very easy job as evidenced by a letter received some years ago at the Library of Congress in Washington. The letter simply said: "Please send me the Library of Congress. Enclosed is 25 cents." Well, as we all know, it takes a little more than that to dispense the information and knowledge we hold.

Today I am going to talk about spatial data. Spatial data are geographically referenced features that are described by geographic positions and attributes in analog or digital form. This is a very basic and simple definition of the products that we all deal with. In the States we have begun to focus a great deal of attention, at the Federal Government level, on this world of spatial data. For several years we have had a

committee called the Federal Interagency Digital Cartographic Coordinating Committee handling Federal spatial data activities. In November of last year that activity was readdressed and a new document has been generated -- one that will have important long-term significance to those of us in the spatial data business. In the executive branch of our Government we have a series of management circulars, and the one regarding spatial data (Circular A-16) deals with federal geographic data and the establishment of a Federal Geographic Data Network. The various agencies that deal with the environment and earth sciences have combined to take a look at organizing how we are going to deal with spatial data.

The objectives of this Circular are:

- To provide guidance and promote the cooperation and coordination among federal, state, and local government agencies and the private sector for the collection, production, and sharing of spatial data. (The definition of spatial data that I read earlier is the definition that is incorporated in this Circular).
- To encourage the development and implementation of standards, exchange formats, specifications, procedures and guidelines.
- To promote the development, maintenance and management of distributed digital spatial databases, that are national in scope, and promote technology development, transfer, and exchange.
- To promote the interaction with other existing coordinating mechanisms interested in the generation, collection, use, and transfer of spatial data.

- To publish periodic technical and management articles and reports.

The United States National Archives is an original member of this particular group. A couple of years ago a team of agencies met with the Archives to suggest what they need to do to modernize their operations. I will address the concerns of both archives and map libraries this morning.

At the request of the National Archives a working group was formed recently to bring together about 50 experts to address the issues of electronic records and to make recommendations as to what is going to have to be done in the future. The specific objectives of the group were to: 1) identify the issues; 2) describe opportunities, methodologies and projects; and 3) determine priorities for projects that will contribute to the better management of archival information in electronic form. I should add that John McDonald of the National Archives of Canada was a member of this group, coordinated one of the working sessions, and made significant contributions on behalf of your institution.

I will run through the issues that have been identified as things that need in-depth research to find the best solutions. In other words the answers are not there now. This afternoon I will cover some of the technical developments that will, I hope, lead to some of the answers in these areas. Here are the 10 issues that the Archives is going to have to deal with.

1. What functions and data are required to manage electronic records in order to meet the requirements and user needs, and do the data requirements and functions vary for different types of automated applications? The U.S. National Archives identified over 1,900 current databases that could possibly be acquired by the Archives. They determined that 900 of them are worthy of retaining but they probably have funds to begin working on only about 450 of them.

Some years from now, however, we may ask about the other 1,000 but I'm sure we're all facing similar problems. An interesting note is that the Archives has recently delivered a directive that says please do not submit, for archival retention, any electronic information on CD-ROM or optical disk. Government and private agencies, however, are proceeding very quickly to move entire databases onto these media and so you know something has to happen soon in the archival community to start dealing with those products.

2. What are the technical, conceptual and economic implications of capturing and retaining data, descriptive information, and textual information in electronic form from a variety of applications?

3. How can software dependent objects be retained for future use? -- a very basic and simple question for archivists. Fifty years from now, will there be any machines capable of running today's magnetic tapes, CD-ROMs or floppy disks? And will the software programs still be supported in any way?

4. How can data dictionaries, information resource directories, and other metadata systems be used to support electronic records management requirements?

5. Have archival requirements been addressed in major system projects? They are usually not considered as databases are built and it is something we began to address in yesterday's workshop. We need to identify how we begin to do this and especially how we include documentation in these systems.

6. What policies best address archival concerns for the identification, retention, conservation, and disposition of electronic records?

7. What functions and activities should be present in archival electronic records programs and how should they be evaluated?

8. What incentives can contribute to creator and user support for electronic records management concerns?

9. What barriers have prevented archivists from implementing archival electronic records programs?

10. What do archivists need to know themselves about electronic records?

These are the 10 issues that have been identified for funding in hopes that our Archives can quickly come up with answers to these problems. The report coming out of this conference is in draft form and will be released shortly. I think it is going to be a good summary and something you would be interested in seeing.

This summer, from July 9-13, the United States will hold the Second White House Conference on Libraries and Information Services. The first one was held 10 years ago. It is being funded by the Congress and a great deal of activity has gone on in each State during caucuses and conventions to bring to the nation's capital the issues confronting today's libraries. I happen to have been elected as a delegate to that conference.

Last week we held an international symposium to take a look at the international aspects of information and what

recommendations this group might come up with. Since I was coming to your conference I thought I would bring along some of the comments from the last week's speakers to set the stage for what is happening in the world of information.

One of our first speakers was Dr. Toni Carbo Bearman, the Dean of the Library School at the University of Pittsburgh. She pointed to the fact that libraries not only are changing, but must change. She defines the library of the future as a place that will become a single point of access to multiple data sets in various formats. And then

she quoted the saying that I am sure you've all heard - "libraries are dead, long live the libraries." If that is a true statement, and I'm sure some of you would challenge it, the library, as we have known it, is dead. And unless they and you become something else, then they and you are not going to succeed.

Ms Bearman went on to say that one must look at society to determine in what direction we are going. And it is said that we are moving to images. Thus, we are very quickly moving to the world of spatial data. Also, we are developing a move-and-click society of kids. There will be no bibliographic searching for today's generation. They will simply move the mouse and click. They're going to click their way through databases in order to find the information they are seeking.

English will probably not be the only language that the systems are based on. In Canada, you are of course way ahead of the United States in terms of dealing with a bilingual society. I think Americans are going to be quite surprised, if demographic projections are correct, and by the year 2000, one third of all Americans will have Spanish as their first language. It is coming very fast and we probably are not dealing with it very well.

The second speaker, Gary Roe from the Turner News Network, was probably the most provocative speaker who addressed us last week. He said there is a revolution in information and interestingly enough it is being led by children. From the time they started with electronic games, kids have been mastering a computer and mouse so quickly that they fully expect that only a screen is going to teach them and provide them answers to what they are interested in. The differences between adults of our age and kids of today is greater than it ever was. The gap is so great that kids think things are old if they have been around since they were born. This is a far cry from the way we work with materials and documents in a historic or archival sense.

Mr. Roe spoke about filming a two-year-old girl who cannot speak very well in terms of vocabulary, but is 80 percent proficient with a Macintosh computer. She just draws the cursor down and clicks to create files, then trashes files and can sit there answering questions and prompts and simply uses the computer. And so it is here, it's not just coming.

He spoke about how today, for less than \$1,000, you can install the necessary equipment, in your library, to downlink all the world's weather from either the Soviet, American, or European satellites. That could provide you with the opportunity to select any place on the Earth and simply print out a weather map for your patron of Nairobi, or New Delhi, or Moscow, or where ever.

Mr. Roe also noted that we are leaving the millennium of the book and moving to images. The buzzword for the future is multimedia, something that you are going to see this morning. The next speaker and I were discussing the fact that I am using slides, after which he will use viewgraphs, a computer image projected through an overhead projector, and finally a video tape. I think the only thing we don't have available to show you is a movie and either a video disk or a CD-ROM. With these presentations you are indeed dealing with multimedia.

Companies such as Apple are making dramatic progress in bringing sound, images, and text together. ABC News, for example, has formed a new division that is dealing with nothing but the process of creating packaged information in multimedia form. They've done a show on the Civil War, one on the Middle East, and one on AIDS. You simply sit down and search through all the text related to the subjects since they've digitized every book, article, or encyclopedia reference to the topics. You can string together combinations of terms or facts to find your information. If the text included a recorded speech given by Ed Dahl and you had that on the video disc you simply push the button and you

can hear and see him speak. If you look up the word for elephant in the encyclopedia and you want to hear what an elephant sounds like, you push the button and the trumpeting sound is there as part of the encyclopedia entry. On the Civil War disc you can bring up period photographs or maps since they have all been digitized. In fact you can even enhance them and zoom in and out on them. You can switch back and forth from one medium to the other without ever leaving your seat and have this entire wealth of information at your fingertips.

Today, because of desktop publishing, everyone is a publisher. It is creating a dramatic increase in publications but a lot of problems come with it. Certainly, from a documentation, retrieval, and archival standpoint, you know how difficult it is to track all of this new information.

The last speaker at the International Conference was Elizabeth Young from Comsat and she spoke about antennae and fiber optics. Those are the two factors that she felt are going to lead us into the future. She had with her a 4-inch antenna. Sixty-five airlines are negotiating to install them on their airplanes. While you are flying along you will have computer-mail and telephone service at each seat. So you will literally be able to fly away with your office in your lap and continue your work. This, however, has often been a time of relief for most of us. When the wheels leave the ground I think nobody can reach me now so I can just relax. Soon, however, your boss or secretary is going to be able to track you down.

Ms Young said that the policies of the future are going to have to be related to standards, connectivity, and freedom of information. I said she was the last speaker, but there was a gentleman who preceded her that worked for Dunn and Bradstreet and spoke about the economic aspects of what's happened in the information world. He discussed the Mrs. Field's Cookie Company -- some of her stores are in this country as well. I forget how many stores there are around the country but Mrs. Fields runs this

operation from her home in Park City, Utah, with a computer. Every product she uses is tagged with a universal product code and every time there is a transaction at each store it goes right into the computer real-time. She predicts how many cookies are going to be sold in every shop each day and the computer monitors the sales during the day to indicate whether they are on track or not. If they are selling more it will indicate that more supplies are needed and play that against the warehouse inventory to see whether they need more supplies. If they do, the order is automatically placed at that time.

Mrs. Fields recently took over a French pastry operation. There were something like 53 people managing 173 stores. Those 53 people are now 3 in the new system. Of course that leaves the question of what happened to those other 50 people who don't have jobs now. This is another aspect of these kinds of technologies that we have to take into consideration. It does show you, however, how more and more things are being run by computers.

I would next like to present a few issues for consideration today and tomorrow. I will speak about some of the things we all have to wrestle with. I'm not going to suggest that I have all the answers so you are going to have to find some of them yourself.

We are currently wrestling with a question of raw data versus published products. You know we have magnificent map collections in our archives. Maps were the products that people went into the field with and that is why we have tried to capture, retain, protect, and preserve them so other generations can see them. But today's worker is going into the field with data and small computers like those used with the global positioning satellites. These systems can instantly pinpoint where you are down to a few centimetres whether you're in a plane, on a boat, on a train, in a car or on the ground. And so I think we are going to have to start looking at keeping data and data sets and not the end

products. That is why we say that entire databases will end up in your libraries and archives. Now, immediately, you say we don't have any money, we can't buy the computers, and we don't have the current technology. Well, there's been a dramatic reduction in the price of these new systems and products.

A few years ago we were asked by the Federal Depository Program to consider providing the 100,000-scale digital maps of the United States to the 1,000 map libraries that we currently support. The data were resident on 9-track tapes and if we had had to duplicate these data, we estimated that it would have cost us more than \$20,000,000. It was outside the realm of possibility for us to consider regardless of our responsibility as a depository program provider. However, in less than 3 years, we can now compress that data and place it on CD-ROMs. We will start releasing the CD-ROMs for the State of Florida in a couple of weeks and each disc will cost only \$32. In about a year and a half we will have national coverage of 100,000-scale maps for our country on approximately 40 discs. The data will be in vector format which means that you can bring it up and you create whatever map you want for your patron. It is not a facsimile reproduction that we are putting on the disc but the data itself. And so, for a few hundred dollars, you can have national coverage and do whatever you want with the data within your own microcomputer environment. Consequently, I project that in the future there will be fewer published products. There are going to be fewer produced because we are going to be producing on-demand products carefully tailored to meet specific requests and they may not ever be produced for anyone else again. That also presents us with the problem of whether we should capture this information, in terms of documentation, and try to hold it when it may not ever be produced or needed again.

Another key issue is database structures versus bibliographic records. I have attended many conferences and sat in on workshops and listened

to people sit and argue about where the period or the colon should go in the record and under what authority should these things change. Meanwhile, the database people have moved right on down the road because, to them, it doesn't make any difference where the periods and colons are. You simply specify what you want when you display or print out the record. To the traditional cataloguer, who likes to see a certain arrangement, this may be a very difficult concept. One of the purposes of the workshop, and I hope a useful thought to interject here, is that you should challenge this concept and this is what Hans van de Waal said yesterday. It is time to get up off your chairs and challenge the people building these systems to make sure that the right documentation for cartographic materials and spatial data is included in the data fields so that we have an ability, in the future, to look back and make sure we know what this data was and where it came from. I believe there is a big challenge ahead for you in this area.

Another key issue is data formats and spatial data transfer standards. I'm going to discuss, in a minute or two, these topics and to prepare the stage for the next speaker. You are going to hear about electronic standards from both of us.

I think it goes without saying that, if we are moving into a multimedia world, we are going to have to deal with other non-traditional media. Optical data storage is here and it is a blessing to those of us in the information business and it's use is going to accelerate. Energy, Mines, and Resources (EMR) is funding a group in Victoria or Vancouver to produce an optical tape system that will store, if I'm not mistaken, something like 1500 CD-ROMs on one optical tape. Think of that -- the information equivalent of what's on 1500 CD-ROMs on one tape cartridge. This is a major development, here in Canada, that the world is watching very closely. And who knows where this is going to lead us in terms of the ability to compress and exchange data.

A couple of weeks ago we met with the president of a company who has built what he calls a cartographic engine. It's an electronic board about 10 x 6 inches. It's mostly a screen with a small keyboard and he claims he will compress all USGS's maps onto one disk that will be used in this system. It will be battery operated and you can carry it in your pocket. It will also have the Bureau of the Census' TIGER database, the nation's telephone numbers, and our street addresses. There are about 8 databases that will be on the system. You simply enter a place name and it zooms in through the maps to locate you, finds the street address for the person you are seeking, and displays their telephone number. All of this is done in the palm of your hand while you are standing outside their house. These devices will be here very soon.

Some of you may have heard the terminology "spatial data transfer standard" (SDTS). Several years ago, people began to look at what was happening in the video disk business. They said that one of the things that was wrong was that there weren't any standards. One company would go off with one format which would play on one player but you couldn't use it on another unit. However, as the audio CD-ROM was developed, both internal and format standards were developed and, consequently, CD-ROM products are interchangeable.

As we began to progress in the digital spatial data field, people said there had to be standards and exchange formats. Since it is early in the game, however, you don't want to curtail a company's ability to develop any one particular format. And so the concept was to develop something so that the data from a forestry agency could be passed through some sort of a system and translated so it could be used along with the geologic information from the Ministry of Geology. The idea was not to try to force everybody down one road but to allow data to move back and forth. This work has been going on for 8 years at both

national and international levels. It has involved academics, industry and government people.

To provide the mechanism for transferring data that I have been talking about, one has to define the objects and relationships of the objects to be transferred. The transfer model must ensure that the meanings of these objects and their relationships and attributes are preserved so that the agency that describes a house in one way has it come through the transfer standard still as a house even though the new host system may describe it in an entirely different way. Hans talked about this yesterday when he described how a photogrammetrist looks at a roof outline as the size of the house while the surveyor knows that the roof has a certain amount of overhang and that the size of the house really isn't the same size, or dimension, as the roof. It is a different perspective and you have to be able to make sure that these things cross over from one system to another.

The standard must also have the ability to transfer vector or raster data. I'll talk about this in the afternoon for those of you who may not be familiar with these terms and I'll show you some examples of both data types.

There is hope that these transfer standards will become an ISO standard and that all the information in the transfer specification can be identified and processed into your local system. The following slides describe what is involved. The first is a cartoon of the process and how it works. You have information in one system that goes through a translator and its supporting software, then through SDTS, and comes out the other end so that you can use it in your particular system. That's not much different from someone writing software translation programs to move data from one particular package to another. But you have to be able to carry quality factors in this process as you move your spatial features through some recognized transfer mechanism. It is recommended that because all the information is spatially oriented, that you have to be able to

handle latitudes and longitudes, the Universal Transverse Mercator system, State Plane Coordinates, or any other reference system. There may be some unspecified system that a particular organization has come up with to locate information, at the local level, and it has to have a pathway to get through this type of thing. The format should be able to handle such things as points and nodes, lines, arcs and curves, and rings and polygons, because this is the way the information is grouped. The transfer mechanism will also have to handle both raster and vector data.

This is the first attempt to standardize spatial terms and items in the electronic world. You have to start identifying entities and there are great arguments over entities and features. What we describe as a lake in one country may be described a little bit differently, believe it or not, in another. Things have to be related hierarchically, then you have to consider symbology and how you are going to output this information. In regard to cartographic terms, for example, you have to know what a gap is. The computers are going to have know what you mean by a gap so that two unconnected lines will be picked up and carried through the transfer process. A spring may be defined as a place where water issues from the ground. Very often, however, it has to have another descriptive factor, like heat, attached to it because we have hot springs and the feature may be annotated on the cartographic product as a hot spring. Consequently you have to be able to search and find the feature on that basis. You are going to have to move the attributes, the descriptions of data, and their graphic representations, because that is what dictates the way we actually display features or the way we want it to be printed out.

The next speaker is going to cover another set of standards, or formats, called Vector Products File (VPF) so I'm not going to say very much about that format. It is somewhat different than what I've discussed with the SDTS and up until a couple of weeks ago the two have been in

conflict. The work going on with the Digital Chart of the World (DCW) involves the VPF format while we are working with a digital line graph under the SDTS concept. However, there are some place holders in the SDTS and we think we've found a win-win solution. We're developing what are called federal profiles. These are subsets of SDTS that cover specific agency approaches. The one that is going to come out first is for the Bureau of Census information that they call TIGER data. It will allow them to have a special subset of standards and information under SDTS and we think that since there is a place holder for a relational database, as well, that the VPF being used for the four-nation DCW will be able to be housed under this particular approach.

As far as timing goes, the SDTS has been released worldwide for comment and review and it is now in the hands of our National Institute for Standards and Technology (NIST). They are just completing a 90-day review period, then they will announce it as a national standard, and within one year it will be mandatory for our federal agencies to use this particular standard and all data that we will release will have to come out in this format. All of this activity is aimed at reducing costs, avoiding duplication of effort, allowing people access to a greater amount of data, and as I said, the use is scheduled to be mandatory.

I will close this address with a couple of policy issues. There is the question of public domain or copyrighted software in all the countries that I have been able to visit. We do have different copyright or patenting procedures in each country. In the United States the Federal government cannot copyright any kind of data and therefore any work that you do with databases is fully and openly accessible and you can't charge any special fees for it. Consequently, there are variations from country to country as to how we are going to exchange and sell spatial information.

We have a recent Supreme Court ruling regarding a telephone directory, where someone took somebody else's yellow pages, copied them, and resold them as their own. The court has ruled that this is legal because data cannot be copyrighted. The formats and the software program by which the data can be manipulated can be copyrighted and protected, but the information itself is a free and open commodity. Consequently, when you take and electronically scan cartographic products, add or subtract, or create a derivative product, you haven't violated anybody's copyright. And so, depending on the country, there is going to be a lot of discussion about how we use the software and data.

On-demand versus scheduled printing is another key policy issue. We foresee a decrease in scheduled printing of graphic products and a move to more on-demand products. It is already happening in our map production.

Verified data versus unverified data is another very important issue. You are going to have to have confidence in the reliability of the data that you're going to be dealing with. You've got to know the source of that data and whether or not it has been verified or not. We are involved in a controversy with our own Census Bureau right now. For the 1990 census that we just conducted, we digitized all the 1:100,000 scale maps from the USGS collection and provided that data to Census. The data, at that point, were verified since they came directly off the maps and therefore met national map accuracy standards. When the enumerators took their electronically produced maps into the field, they found new streets, roads, housing developments, etc. So they drew them on their maps with grease pencils or magic markers. When they came back to the office they put the maps on a digitizing table and added the new data. Now when you print out the new files and overlay them against the original files, guess what -- they don't match. Accurate cartographic procedures were not followed and so now there is a question as to how dirty the

database is and users are now having to come back to us for the original data. Being a production agency we are far behind in updating the maps so the Census data is more current. We plan to accelerate our revision program but these are the types of things that people are going to have to struggle with.

This situation brings up the policy question of accuracy versus completeness. Until recent times most users wanted the USGS accuracies. They wanted to build roads and do construction work based on our maps. Now most of our users are not concerned with accuracy and want complete up-to-date maps. It seems that it is more important that the new urban centers or new housing developments are on the maps rather than that they are accurately placed within a thousandth of an inch. Consequently, we are beginning to realize that we may have to change in order to produce more current information. We may have to give a little on some of our accuracy standards.

Retention of machines and software to run programs is another policy concern. Right now you may have to convert whole databases or rewrite software to run a new program and that can be very expensive. Will we be able to import, or transfer, the data to the next generation of machines? These new machines are faster, less expensive, and can do things more efficiently but how can you keep up with this technological rat race? You have to jump onto the merry-go-round at some point in time and grab one of those horses and you may grab one that is the tail end of the technology by the time you go through your procurement process. We have that problem in the low-bid world of Government procurements. By the time we get the machine, there are two more generations on the market.

The subject of scientific disciplines and bridging those disciplines is another policy issue. This topic creates problems for the classic disciplinarian. The use of spatial data easily jumps from economic and statistical data to

geographic data, and back to electronic information. The old "publish or perish rule" for the scientist and the engineer who protected their data sets until they had time to go through them, analyze them, and publish their results, is being threatened. Many people now have access to the basic data sets and they are going to do things with them. As we start releasing more and more raw data, rather than published end results and products, this problem is going to get worse.

There is another issue that represents a combination of both technical and policy issues and that is Government versus private sector production. Throughout the western world and certainly in the UK, Canada, Australia and the United States, we are all in a similar economic position. We simply may not be able to do everything in-house. It may be cheaper to do more contracting and have commercial production of some of the government's information. If that is the case, there are going to be conflicts and struggles. We see more partnerships coming both nationally and internationally where you are going to have to cooperate with other agencies in order to accomplish a task. You're going to have to strike agreements where someone does one part, you do another, and a third party takes care of the distribution and answering the questions. We are going to have to initiate more and more of these cooperative efforts and it's one of the things behind the Federal Geographic Data Committee (FGDC) that I spoke of earlier. There are now 13 major Federal Departments that are mandated to work together. This includes such agencies as: Census, Transportation, Agriculture, the Department of the Interior, National Archives, Library of Congress, NASA, the Defense Mapping Agency. The Office of Management and Budget, which issued the authorizing directive, controls all these agencies' budgets and unless the FGDC says that a particular organization can proceed down the road in GIS development, for example, they are not going to get their money.

A final policy concern is pricing. I have mentioned the price reductions that have been occurring as we move to CD-ROM. The basic pricing policy in our agency states that we cannot charge any developmental cost, or any production cost for any data that comes to you or to the public. The assumption is that we would have created the data regardless of whether a copy was to come to the libraries or not. And so we simply price for reproducing and distributing additional copies of those products. Any CD-ROM from our agency, for example, is going to be priced at \$32 whether it contains geophysical data, water resources data, or cartographic data. It also makes no difference whether it contains 100 megabytes or 600 megabytes of data. The last contract that our Government Printing Office let for CD-ROMs cost us \$1.75 a disc and when I see people charging \$800 for a CD-ROM, you can see what kind of markups are involved. If the disc comes from a company you can be assured that they are putting in their production costs, their staff hours, and all their overheads. But just to replicate the discs has gotten to be very inexpensive and this is why I think you can now get involved in inexpensive spatial data distribution.

In our information and archival world we use the word customer or patron to indicate who we are set up to serve. Today I think we should probably

pay more attention than ever to our end users. Why? Because the new electronic information has implications that are not yet fully understood. The ways in which digital spatial data can be packaged and used are not all known yet. The possible applications are being expanded every day. And the next step proceeds simultaneously not sequentially. That is finding out which of all the possible applications are economically feasible for any of us to deal with. I think the lesson for us the producers, the librarians, the archivists and the packagers of the data is to make those data as transferrable as possible and to maintain as much flexibility in our outlook toward the uses of this data. You may have heard of the latest rage in management theory. It is called Total Quality Management. The essence of this theory is that our actions cannot be guided by the needs and desires of our own organizations. What we do should be guided by the needs and desires of those we are set up to serve.

I began with a quote from Francis Bacon and I would like to close with another one from him. He said: "It is not what men eat, but what they digest that make them strong. Not what we gain but what we save that make us rich. Not what we read but what we remember that makes us learn." I believe Francis Bacon, if he were alive today, would probably be a leading spatial data archivist and a multimedia specialist, perhaps, as well.

Cartography 1992

A joint annual meeting of the Canadian Cartographic Association and l'Association Québécoise de Cartographie (Carto-Québec) will be held at McGill University in Montreal from June 2-6, 1992. The conference will explore the map reality of the 1990's.

ACMLA members who are unable to attend the Calgary ACMLA meeting might wish to attend the CCA conference. Registration fee is \$165 for CCA. The CCA is willing to arrange for a room to be made available for ACMLA members to hold an interest group meeting during the conference. If you have any questions please contact Louis Cardinal, National Archives of Canada, tel. (613) 996-7619.

THE MAP LIBRARIAN AND NAD83

L.M. Sebert

Some person using your map library may have noticed that the label on topographic maps, in the bottom margin, stating "North American Datum 1927" has been changed on some new maps to North American Datum 1983. If so, this person may ask, to use the modern phrase, "What is going down?"

This change of datum is quite significant from a geo-science point of view but it is quite insignificant from the point of view of most map users. Perhaps a short explanation is necessary to dispel alarm and concern.

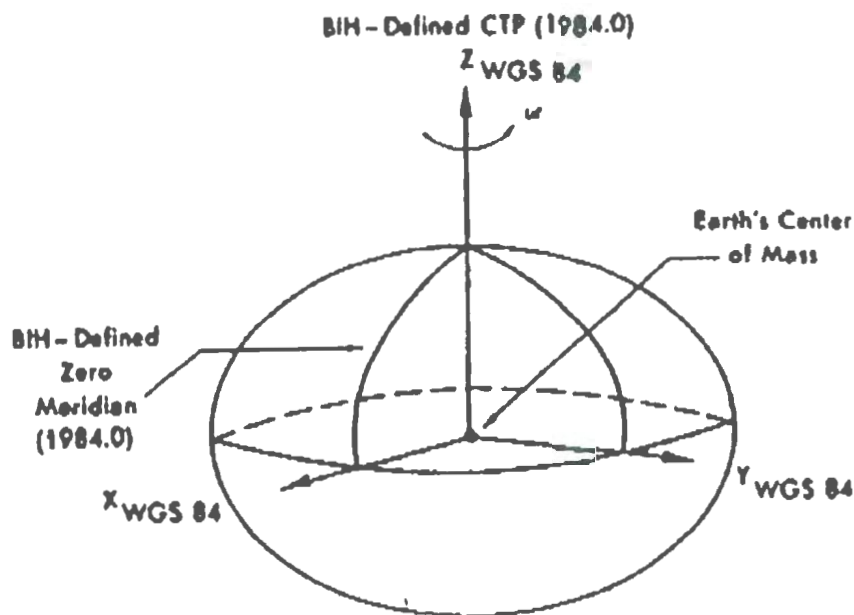
As most serious map users know, the topographic surveys made anywhere in the past in North America have been tied to a common starting point, and all have been calculated on a mathematical surface called an ellipsoid. The ellipsoid that has been used was calculated by Colonel A.R. Clarke, a geodesist in the British Army. In his ellipsoid of 1866 he used the results of surveys carried out in the United States. Consequently his 1866 ellipsoid fits the surface of the earth pretty well in the United States but it is not suitable for use in other parts of the world.

All surveys must have a point of beginning, and in 1927 when it was decided that North America needed a new coordinated survey that joined together a number of long and accurate surveys, the point of beginning chosen was a survey station called Meades Ranch in Kansas. This station was chosen because it is near the centre of continental United States and also because the force of gravity in that area pulls almost exactly straight down. This is a comparative rarity because in most localities heavy ore bodies or other dense material in the earth's crust pull the plumb-bob off very slightly away from the vertical. This is only noticeable in survey astronomy where the slight deflection of the

vertical makes astronomical latitudes and longitudes slightly different from the latitudes and longitudes obtained by measurement over the ground from Meades Ranch. (The deflection of the force of gravity means that the surveyor's theodolite, by which he is measuring the altitude of the stars, is not quite level and hence is measuring slightly erroneous vertical angles to the stars. This gives a slightly incorrect position for the place of observation.) But at Meades Ranch the astronomic and geodetic positions were very much the same even before NAD 1927. After the adoption of NAD 1927 they by definition were identical.

The new point of origin for NAD83, i.e., the "New Meades Ranch", is the centre of the earth. Today there is no thought of calculating an ellipsoid to fit one part of the earth; we live in global times and our new ellipsoid must fit the whole globe. Modern geodesy is conducted by using artificial satellites. Before the era of satellites it was impossible to tell exactly where the centre of gravity of the earth was. But the flight of the survey satellites is affected, you can even say controlled, by the centre of gravity of the earth. Hence for many reasons its location has been worked out very precisely.

A point of origin at the centre of the earth is all well and good, but reference points must be available on the surface of the earth. This has led to the formulation of the World Geodetic Reference System of 1984 (WGS84). This is an orthogonal (i.e., right angle) XYZ system starting with the earth's centre. The axis of rotation of the earth passes through the centre and emerges at the poles. At right angles to the axis is the plane of the equator. At right angles to the equatorial plane is the plane passing through both the earth's axis and the Greenwich Observatory is the plane of the zero-180°



World Geodetic System 1984.

The WGS 84 Coordinate System

Origin - Earth's center of mass.

Z-Axis - Parallel to the direction of the Conventional Terrestrial Pole (CTP) for polar motion, as defined by the Bureau International de L'Heure (BIH) on the basis of the coordinates adopted for the BIH stations.

X-Axis - Intersection of the WGS 84 Reference Meridian Plane and the plane of the CTP's Equator, the Reference Meridian being parallel to the Zero Meridian defined by the BIH on the basis of the coordinates adopted for the BIH stations.

Y-Axis - Completes a right-handed, earth centered, earth fixed (ECEF) orthogonal coordinate system, measured in the plane of the CTP Equator, 90° East of the X-Axis.

Figure 1

meridians. These planes give us the new WGS84, as shown in Figure 1.

The new reference system must be used on a world-fitting ellipsoid so one was calculated in 1980 and adopted by the International Association of Geodesy. Compared with Colonel Clarke's ellipsoid the earth is now 69 metres smaller from pole to pole and 168 metres larger in equatorial diameter. Not really much of a change. The ellipsoid is called GRS80.

Inevitably with a change in datum and ellipsoid there will be a change in the positions (i.e., the latitudes and longitudes) of points. Fortunately these changes are small. They range from about 120 metres westerly on the east coast and approximately 100 metres northerly in the Arctic Islands. These are nothing to worry about unless one is interested in the very precise positions of points. On maps the relative positions of points remain unchanged. On scales larger than 1:50,000 there may be some slight difficulty in

making a map-edge match if you are attempting to join a NAD27 map to a NAD83 map. Eventually of course all maps will use the 83 datum.

The final question, is this change really necessary? The short answer is "yes". We are in a time when the finding of accurate positions on earth is being done by reading signals from survey satellites. The days of triangulation chains, and other methods of long distance ground measurements are over. Geophysical work, the heart of modern prospecting, demands accurate positions on a global reference system as well as the precise measurement of gravity, earth magnetism and other earthy phenomena. The new datums, and precise measurements from them, are essential.

COMITE DES PRIX ET MERITES

Le comité des prix et mérites invite les membres de l'ACACC à soumettre la candidature du membre qui, à leur avis, est admissible au Prix d'excellence. Selon les règles du concours, l'heureux(se) élu(e) sera toute personne dont le nom a été retenu en vertu de sa participation considérable au développement de la profession qu'est celle du carto-thécaire. Sa contribution peut se quantifier de différentes façons: activités particulières ou générales, participation soutenue au sein de l'Association en tant que membre du comité d'administration, président ou membre d'autres comités. Bien que ce concours s'adresse surtout et avant tout aux adhérents de l'Association, les non-membres dont le dossier s'apparente à celui des membres réguliers de l'ACACC auront droit à une nomination analogue. Date d'échéance du concours: 1er mars 1993.

Veuillez faire parvenir vos suggestions de candidats à Alberta Wood, Présidente, Comité des prix et mérites, ACACC, Bibliothèque Elizabeth II, Université Memorial, St-John's, Terre-Neuve A1B 3Y1

NEW BOOKS AND ATLASES

Colleen Beard

Advances in Cartography. J.C. Muller (ed). UK: Elsevier, 1991. 252 p. \$94 US. ISBN 1-85166-603-6

Allmaps Streetfinder: Greater Toronto. Markham, Ont.: Allmaps Canada Ltd., c1989/90. 219 p.

Atlas de la Ville et de l'Île de Montreal. [Facsimile atlas of H.W.Hopkins 1879 edition]. Cote-Saint-Luc, Que.: Editions Elysee, [1991]. 33 p. \$45

Atlas of British Overseas Expansion. Edited by A.N. Porter. London: Routledge, 1991. 279 p. £50. ISBN 0-415-01918-4

Atlas of South America. Moshe Brawer. NY: Simon & Schuster, 1991. \$65.00. ISBN 0-13-050643-7

Atlas of the World with Geographical Boundaries Showing Oceans, Continents and Tectonic Plates in their Entirety. Athelstan Spilhaus. Philadelphia: American Philosoph. Soc., 1991. 92 p. ISBN 0-87169-196-5

Atlas of World Economy. Michael Freeman. London: Routledge, 1991. 167 p. ISBN 0-415-02496-X

Basic Cartography for Students and Technicians Exercise Manual. R.W. Anson and F.J. Ormeling Jr. (ed). UK: Elsevier, 1991. 288 p. \$46 US. ISBN 1-85166-590-0

The City-Atlas of Jacob van Deventer. Netherlands: ROBAS Publishers. 300 loose-leaf maps and text. Hfl. 4700 [approx. US \$2385] and if order before July 1st, 1992 Hfl. 3990 [approx. US \$ 2025]. Forthcoming December 1992. (ROBAS Publishers, Antwoordnummer 2108, 1120 VP Landsmeer, Netherlands).

Cultural Atlas of France. John Ardagh and Colin Jones. New York: Facts on File, 1991. 240 p. Hardbound. \$55 ISBN 0-8160-2619-X

De Oudste Gedrkte Kaarten Van Europa/ The Oldest Printed Maps of Europe. Netherlands: Canaletto - Alphen a/d Rijn. 150 p. Hfl.95,-. ISBN 90-6469-652-7. (Canaletto-Alphen a/d Rijn, Postbus 68, Netherlands).

Der neue grosse Shell-Atlas: Deutschland, Europa. Ostfildern: Mair, 1991/92. ISBN 3-87504-299-9

Early Maps of South-East Asia. 2nd ed. R.T. Fell. Oxford: Oxford University Press, 1991. ISBN 0-19-588972-X

The Economist Atlas. Rev. ed. London: Business Books in association with The Economist Books Ltd., 1991. ISBN 0-7126-4933-6

Fontes Cartographic Orteliani. Peter H. Meurer. Weinheim, Germany: VCH, 1991. 358 p. DM 228,-. ISBN 3-527-17727-2 (VCH, Postfach 10 11 61, W-6940 Weinheim, Germany).

The Gaia Atlas of Future Worlds. Norman Myers. NY: Anchor Books, Doubleday, 1990. 191 p. \$19.95 Cdn. ISBN 0-385-26606-571595

The Great Dinosaur Atlas. Markham: McClelland & Stewart, 1991. \$19.95. ISBN 0-7710-3225-0

Gulf Coast Pipeline Atlas. Tulsa, OK: Pennwell Books, 1992. Pre-publication price \$155.00 US & Canada. \$196.00 Export. Forthcoming.

Illustrated Maps of Scotland [from Blaeu's Atlas Novus of the 17th Century]. Jeffrey Stone. [Facsimile maps with text]. London: Studio Editions, 1991. ISBN 1-85170-813-8

Images of the Earth on Three Early Italian Woodcuts: Candidates for the Earliest Printed Maps in the West. Gerald R. Danzer. Smith Centre Occasional Publication No. 5. Chicago: The Hermon Dunlap Smith Center for the History of Cartography at the Newberry Library, 1991. \$8.00 + \$1.50/order [postage & handling].

International Geographic Atlas. Chicago: Rand McNally, 1991. 272 p. Cloth. \$27.95. ISBN 0-528-83440-1

Inventory of World Topographic Mapping. Compiled by Rolf Bohme. Volume 2 (South America, Central America and Africa). UK: Elsevier, 1991. 548 p. \$238 US. ISBN 1-85166-661-3

Irish Historic Towns Atlas No. 4: Kells. Edited by J.H. Andrews and Anngret Simms. Dublin: Royal Irish Academy, 1990. IRL 18.00. ISBN 0-901714-84-4

Kalaallit Nunaat Greenland Atlas. Edited by C. Berthelsen. [Copenhagen], 1990. DM 174 ISBN 87-585-0702-7. Distributed through: GeoCentre.

Kingdom of Saudi Arabia: Atlas of Satellite Graphics Maps. Jeddah, 1991. 33 maps. Hardcover. NGL 850,00. Distributed through: Rudolf Muller International Booksellers

L'atlas urbain de Rimouski. Rimouski: Universite du Quebec a Rimouski, 1991. \$35.00. Distributed through: Module de geographie, a/s Yves Michaud, Universite du Quebec a Rimouski, 300, allée des Ursulines, Rimouski, Quebec G5L 3A1

La carte de Cassini: L'extraordinaire aventure de la carte de France. Monique Pelletier. Paris: Presses de l'école Nationale des Ponts et Chaussées, 1990. 264 p. 345 F. ISBN 2-85978-143-9

MacMillan School Atlas. 3rd ed. Ronald C. Daly. Agincourt, Ont.: Gage Educational Publishing, 1991. 144 p. Cloth. \$19.95. ISBN 0-7715-8269-2

Map Generalization: Making Rules for Knowledge Representation. Edited by B.P. Battenfield and R.B. McMaster. Harlow, Essex: Longman Scientific and Technical, 1991. ISBN 0-582-08062-2

Map Making in the Tower of London: Ordnance Survey's Early Years. [exhibition catalogue] Yolande Hodson. £1.50. ISBN 0319002691. Distributed through: London Map Centre, 22-24 Caxton Street, London SW1HOQU England.

Maps of the Pimeria: Early Cartography of the Southeast from the University of Arizona Library Map Collection. [exhibition catalogue] Jack D. Mount. (In Pimeria. vol.23, no.2/3, Dec. 1991 issue).

Medieval Maps. Paul D.A. Harvey. Toronto: University of Toronto Press, 1991. \$40 Cdn. ISBN 0-8020-2806-3

1992 Mobil Highway Atlas: United States, Canada & Mexico. San Jose, CA: H.M. Gousha, 1992. 96 p. \$6.95 Cdn. ISBN 0-13-591132-X

Monumenta Cartographica Neerlandica III: Two Wall-Maps of the World by Blaeu: 1619 and 1645/46. [Facsimile maps with text] G. Schilder. Netherlands: Canaletto - Alphen a/d Rijn, 1990. ISBN 90-6469-651-9

The Moscow Street Atlas. V. & J. Louis. Wellingborough, Northants: Collets Holdings, 1991. ISBN 0-569-09258-2

Multipurpose Cadastre: Terms and Definitions. K.J. Dueker and D. Kjerne. Falls Church, VA: American Society for Photogrammetry and Remote Sensing: American Congress on Surveying and Mapping, c1989. \$5.00. Order #G428. Distributed through: ACSM, 5410 Grosvenor Lane, Suite 100, Bethesda, MD 20814, U.S.A.

NBC News: Rand McNally World Atlas & Almanac. Rand McNally, 1992. 192 p. \$14.95 Cdn. ISBN 0-528-83506-8

National Geographic's Guide to the National Parks of the United States. Washington, D.C.: National Geographic Society, 1989. 432 p. \$29.95 US. ISBN 0-87044-808-0

The New State of War and Peace: An International Atlas. Michael Kidron and Don Smith. NY: Simon & Schuster, 1991. 127 p. \$20.95 Cdn. ISBN 0-671-70103-7

Ordnance Survey in Ireland: an Illustrated Record. Dublin: Ordnance Survey of Ireland, 1992. 104 p.

Ordnance Survey: Map Makers to Britain Since 1791. Tim and Elaine Owen. Southampton: OS, 1992. £14.95

Philip's Atlas of the World. London: George Philip Ltd., 1991. ISBN 0-540-05632-4

Philip's Great World Atlas. London: George Philip Ltd., 1991. ISBN 0-540-05631-6

The Picture Atlas of the World. Markham: McClelland & Stewart, 1991. \$19.95. ISBN 0-7710-7030-6

Rand McNally Carolinas Road Atlas and Recreation Directory. Chicago: Rand McNally, 1990. 112 p. \$14.95 US.

The Samuel Thornton Sea Atlas. [microfiche reproduction] U.S.: MicroColor International & New York Public Library, 1991. 172 plates on 21 colour microfiche. \$450 US. Distributed through: MicroColor International, 85 Godwin Avenue, Midland Park, NJ 07432

The Scot and His Maps. Margaret Wilkes. Motherwell: Scottish Library Association, 1991. ISSN 0-900649-81-X

South East Asia Atlas 1991. Tulsa, OK: Pennwell Books, 1991. 45 p. \$550.00 US & Canada. \$770.00 Export.

Suriname Planatlas. National Planning Office of Suriname with technical assistance of the Organization of American States. 1988. 25 maps. Spiral bound. NGL 145,00. Distributed through: Rudolf Muller International Booksellers.

Von der Quelle zur Karte. Herausgegeben von Wolfgang Rollig. Weinheim, Germany: VCH, 1991. 286 p. DM 98 ISBN 3-527-17027-8

REVIEWS

Ron Whistance-Smith

THE ATLAS OF THE CRUSADES, Jonathan Riley-Smith, ed. New York; Oxford: Facts on File, 1991. (192 p.) ISBN 0-8160-2186-4.

A professor of history at the University of London, Jonathan Riley-Smith's interest in the Crusades spans a quarter century of publications. In his latest effort he draws upon the contributions of some seventeen British scholars whose expertise he characterises in the list of contributors as "Crusading to the East," "Crusading in Europe", "The Military Orders," "The Latin East and Seapower," and "Muslims and Monguls." With their assistance, and the cartographic support of Swanston Graphics of Derby, England, he ambitiously packs into a mere two hundred pages several centuries of history and the three distinct geographic areas of Europe, the Mediterranean, and the Middle East.

Jonathan Riley-Smith takes a broader than usual view of crusading by defining it, as did medieval churchmen, as "just war," any war sanctioned by God and the Holy See to defend Christianity against the Infidel, the Heretic, or the Pagan. In this way the reader encounters, alongside the maps on the military campaigns to Palestine of the twelfth and thirteenth centuries, maps on the campaigns which took place against the Muslims of the Iberian peninsula from the eight to the fifteenth centuries, those against the non-Christian Baltic peoples during the thirteenth century, those against non-conformist Christians such as the Hussites and Lollards of the fourteenth and fifteenth centuries, and those against the Ottoman Turks from the fourteenth to the eighteenth centuries. The only crusade Riley-Smith omits is the one initiated in 1492 by Christopher Columbus.

The maps are abundant and well-executed. Thematically they cover a wide range, from the

traditional campaign routes, city plans and Crusader states, to the more analytic topics such as recruiting and fundraising areas, trade routes and embargoes, landownership, rural land use in Palestine, and even intellectual history ("Critics of Crusading, 1150-1291"). And so that the reader can take the view of either the European crusader looking to the Holy Land or the Muslim looking back towards Christian Europe, a number of maps are oriented non-traditionally.

Almost all of the maps contain lines of longitude and latitude, The cartographic symbols are easy to understand and the colours have been chosen for clarity as well as appeal. In short, Malcolm Swanston of Swanston Graphics provides the same high calibre, computer-generated graphics as he has for A New State of War and Peace: An International Atlas, (New York: Simon & Schuster, 1991) and for the Times Atlas of World History, (London: Times Books, 1989). But be prepared to find no explanation of either scale or projection, which is perhaps not too surprising for an atlas of small-scale, thematic maps.

Other attractions to this atlas are its brief but up-to-date bibliography, its glossary of terms, its detailed chronological table, its charts of the political structures of the Catholic Church and the Mamluk armies, and its frequent illustrations and photographs which add a great deal of flavour to the entire work. Priced at \$40.00 (US), it is sure to be a welcome addition to any library.

Bruce Robin
University of Ottawa

PLACE NAMES OF ALBERTA. [VOLUME II]. MOUNTAINS, MOUNTAIN PARKS, AND FOOTHILLS, Aphrodite Karamitsanis, ed. [Calgary] : Alberta Culture and Multiculturalism : Friends of Geographical

Names of Alberta Society : University of Calgary Press, c1991. (292 p.) : ill. ISBN 0-919813-73-9 (vol. I); ISBN 0-919813-91-7 (set).

\$29.95 (pbk).

Available from the University of Calgary Press, 2500 University Drive N.W., Calgary, Alberta, Canada T2N 1N4.

This is the first of four volumes scheduled for publication in this new series. The volumes yet to be issued are: vol. II. Southern, vol. III. Central, and vol. IV. Northern.

This attractive paperback volume appears to be sturdily bound. The entries are printed in three vertical columns per page and are easy to scan and read. Black and white photographs illustrating various physical features are scattered through the text and are clearly printed; coloured photographs are collected in an appendix at the back. Many of these are reproductions of early photographs.

Each entry consists of six categories of information i) the name (underlined) and the generic, ii) sheet number and sheet title of the topographic map on which the feature is portrayed, iii) where applicable the legal description (section, range, township, meridian), iv) latitude and longitude to the nearest minute, v) distance to nearest populated community, and v) available descriptive or historical information.

An eight-page introduction outlines the history of exploration and surveying which contributed so much to the naming of the places in this region. The descriptive/historical information follows on from this and is a valuable addition to the more traditional gazetteer information. In most instances, the source of the name as well as dates and any former names are listed. If the source is unknown, this too is mentioned. Unfortunately, the policy of including origin information only once leads to a loss of information in some cases. For instance, under Banff National Park there is a reference to "see Banff". However, there is no information about

the park in the entry under the town, not even the dates of its establishment. In contrast, the information for Jasper National Park is split between the entry for the park and that of the town of Jasper. Information relating to dates of establishment, former names, etc., would be better collocated under the name of the feature (in this case the park) while still referring to another entry for details concerning the origin of the name. One minor point, in a few cases the reference is misleading; for example, there is a reference (p. 167) to "see Mount Mitchell" whereas the actual entry is under "Mitchell, Mount". Another minor point is that the captions for the two maps (p. xxiv and xxv) are reversed.

This series will certainly be a valued addition to reference collections and is a must for any library or map collection. The varied information on people, places and events in the notes make it rather fun to browse through. Who would think that "Childear Mountain" does not refer to a child's ear but is rather a contraction of Child and Year referring to the International Year of the Child in 1979?

Velma Parker
National Archives of Canada

MILITARY ARCHITECTURE, CARTOGRAPHY & THE REPRESENTATION OF THE EARLY MODERN EUROPEAN CITY: A CHECKLIST OF TREATISES ON FORTIFICATION IN THE NEWBERRY LIBRARY, Martha D. Pollak. Chicago : Newberry Library, 1991. (119 p.) : ill. ISBN 0-911028-45-5

\$15 US (\$1.50 postage and handling).

Available from: Hermon Dunlap Smith Center for the History of Cartography, The Newberry Library, 60 W. Walton st., Chicago, IL, 60610, U.S.A.

In November 1991, the Newberry Library in Chicago organized the Tenth Kenneth Nebenzahl, Jr., Lectures in the History of Cartography, entitled: "Profiling the City: Six

Studies in Urban Cartography". The lectures were accompanied by an exhibition of the library's extensive collection of sixteenth- and seventeenth-century treatises on military architecture. These treatises were the basis of significant intellectual discourse throughout much of the Renaissance and Baroque periods. In their day, they even constituted the foundation of a general definition of social order through the quest for the form of the ideal city. Unfortunately, despite their profound influence on the formation of Europe's early cities, treatises on military architecture are seldom consulted by modern-day scholars. In an effort to help make these remarkable documents better known to researchers, the Newberry Library has published this catalogue.

Compiled by Martha Pollak of the University of Illinois at Chicago, the published catalogue has two main components. The first part is a twenty-five-page essay that discusses the influence of the treatises on urban planning; their production, circulation and readership; their common artistic, intellectual and philosophical characteristics; and their contribution to the emerging architectural, engineering, and military professions. All-in-all, the essay is well researched and well documented and readily conveys the significance of these documents for understanding early European urban life.

The second part of the catalogue is a checklist of the 73 treatises featured in the exhibition, all of which are held by the Newberry Library. The entries are arranged alphabetically by author, with full bibliographic description, together with a listing of other institutions known to hold

copies of individual volumes. Each entry also includes a one-page commentary that explains the importance of the treatise and its subject matter. Often the commentary also includes information on the background of the author, especially as it pertains to fortifications architecture, city planning, etc. "...[I]n the hope of giving readers some idea of the nature of each work, and so enticing some of them to undertake research in this generally neglected body of publication" (pg. ix), each entry also includes an example of at least one of the treatise's plates.

Of course, the catalogue is by no means a definitive statement on the role of military treatises in Renaissance architecture, but then it does not make such pretensions. It is, however, an excellent introduction to the subject, providing readers with sources that can be used to examine the topic in greater depth on their own. For this reason, the catalogue will make a good addition to any reference library. It is attractively packaged and is properly priced for dissemination to the widest possible readership. The catalogue meets its objectives admirably.

Jeffrey S. Murray
National Archives of Canada

CANADIAN HYDROGRAPHIC SERVICE

Charts Released Report from 1-Sept-1991 to 29-Feb-1992

Order of Information: Chart; Release date; Title; Edition date

3417; 25-Nov-1991; Esquimalt Harbour and Approaches/et Approches; 29-Nov-1991

3473; 1-Oct-1991; Active Pass, Porlier Pass and/et Montague Harbour; 20-Sept-1991

3598; 4-Nov-1991; Cape Scott to Cape Calvert; 11-Oct-1991

L/C 3603; 4-Nov-1991; Ucluelet Inlet to/à Nootka Sound; 1-Nov-1991

3785; 8-Oct-1991; Namu Harbour to Dryad Point; 4-Oct-1991

3811; 4-Nov-1991; Harbours in Queen Charlotte Islands; 27-Sept-1991

4279; 10-Sept-1991; Bras D'Or Lake; 13-Sept-1991

4308; 10-Oct-1991; St. Peters Bay to Strait of Canso; 27-Sept-1991

L/C 4520; 22-Oct-1991; Orange Bay to Cape Bonavista; 11-Oct-1991

6201; 15-Nov-1991; Lake of the Woods; 22-Nov-1991

M-328; 29-Oct-1991; Canadian Tide and Current Tables, vol. I - Atlantic Coast and Bay of Fundy; 1-Jan-1992

M-329; 29-Oct-1991; Canadian Tide and Current Tables, vol. II - Gulf of St. Lawrence; 1-Jan-1992

M-330; 29-Oct-1991; Canadian Tide and Current Tables, vol. III - St. Lawrence and Saguenay Rivers; 1-Jan-1992

M-331; 29-Oct-1991; Canadian Tide and Current Tables, vol. IV - Arctic and Hudson Bay; 1-Jan-1992

M-332; 29-Oct-1991; Canadian Tide and Current Tables, vol. V - Juan de Fuca Strait and Strait of Georgia; 1-Jan-1992

M-333; 29-Oct-1991; Canadian Tide and Current Tables, vol. VI - Barkley Sound and Discovery Passage to Dixon Entrance; 1-Jan-1992

M-334; 29-Oct-1991; Canadian Tide and Current Tables, vol. I - IV (Atlantic Coast); 1-Jan-1992

M-335; 29-Oct-1992; Canadian Tide and Current Tables, vol. V - VI (Pacific Coast); 1-Jan-1992

PL-77; 24-Oct-1991; Index to Charts/Index des cartes - Sailing Directions/Instructions nautiques - Great Lakes/Grands Lacs - volume II - Seventh edition/Septième édition; 1-Jan-1992

PL-82; 24-Oct-1991; Index to Charts/Index des cartes - Sailing Directions/Instructions nautiques - Gulf of St. Lawrence/Golfe du Saint-Laurent - First edition/Première édition (see also/voir aussi PL-169 & PL-170)

1220; 20-Dec-1991; Baie des Sept-Iles; 27-Dec-1991

L/C 1221; 17-Feb-1992; Pointe de Moisie à/to Ile du Grand Caouis; 27-Dec-1991

2042; 27-Feb-1992; Welland Canal - St. Catharines to/à Port Colborne; 7-Feb-1992

2048; 20-Dec-1991; Port Credit; 11-Oct-1991

2226; 13-Jan-1992; Parry Sound Harbour;
22-Nov-1991

L/C 4002; 27-Feb-1992; Golfe du Saint
Laurent/Gulf of St. Lawrence; 27-Dec-1992

L/C 4020; 17-Feb-1992; Strait of Belle Isle;
27-Dec-1991

L/C 4021; 16-Jan-1992; Point Amour à/to Cape
Whittle et/and Cape St. George; 27-Dec-1991

L/C 4022; 27-Feb-1992; Cabot Strait and
Approaches, Scatarie Island to Anticosti Island;
27-Dec-1991

L/C 4024; 16-Jan-1992; Baie des Chaleurs aux/to
Iles de la Madeline; 27-Dec-1991

L/C 4025; 16-Jan-1992; Cape Whittle à/to
Harve-Saint-Pierre et/and Ile d'Anticosti;
27-Dec-1991

L/C 4026; 23-Dec-1991; Harve-Saint-Pierre
et/and Cap des Rosiers à/to Pointe des Monts;
27-Dec-1991

L/C 4237; 20-Dec-1991; Approaches
to/Approches au Halifax Harbour; 20-Dec-1991

4531; 17-Dec-1991; Carmanville to Bacalhao
Island and Fogo; 6-Dec-1991

L/C 4731; 17-Feb-1992; Strait of Belle Isle to
Domino Run; 27-Dec-1991

5622; 17-Feb-1992; Chesterfield Inlet - Centre
Island to Farther Hope Point; 27-Dec-1991

5623; 17-Dec-1991; Chesterfield Inlet - Farther
Hope Point to/à Terror Point; 8-Nov-1991

CAT-1; 2-Jan-1992; Atlantic Coast/Côte
Atlantique; 1-Jan-1992

CAT-2; 2-Jan-1992; Pacific Coast/Côte
Pacifique; 1-Jan-1992

CAT-3; 6-Jan-1992; Central Canada/Canada
Centrale; 1-Jan-1992

CAT-3-C; 6-Jan-1992; Catalogue of Nautical
Charts and Related Publications/Catalogue des
cartes marines et des publications connexes -
Central Canada/Canada Centrale; 1-Jan-1992

PL-160; 27-Jan-1992; Binder for Sailing
Directions Gulf & River St. Lawrence/Cartable
pour instructions nautiques Golfe et Fleuve
Saint-Laurent; 1-Jan-1992

PL-161; 27-Jan-1992; Sailing Directions -
General Information of the Atlantic Coast;
1-Jan-1992

PL-162; 27-Jan-1992; Instructions nautiques -
Renseignements généraux côte d'Atlantique;
1-Jan-1992

PL-163; 6-Jan-1992; Sailing Directions - Cap
Rouge to Montréal; 1-Jan-1992

PL-164; 6-Jan-1992; Instructions nautiques -
Cap rouge a Montréal; 1-Jan-1992

PL-165; 27-Jan-1992; Sailing Directions - Ile
Verte to Québec; 1-Jan-1992

PL-166; 27-Jan-1992; Instructions nautiques - Ile
Verte a Québec; 1-Jan-1992

Cancelled Charts from 1-Sept-1991 to 29-Feb-1992

Order of Information: Chart; Title; Reason for Cancellation

MCR-701[CAN]; Magnetic Declination Chart
1985.0/Carte déclinaison magnétique 1985.0;
Rel 141/91 (effective 06/11/91)

C-16[CAN]; Les Mechins; Rel 124/91 (effective
25/09/91)

ACMLA HONOURS AWARD

The Awards Committee invites nominations for the ACMLA Honours Award. According to the guidelines for the award, the nominee should be a person who has made an outstanding contribution in the field of map librarianship. The contribution may either be for a specific activity or for general services and contributions such as continued membership in the Association with active participation either as an executive officer, committee chairperson, or committee member. Normally membership in ACMLA is a prerequisite, however that does not preclude considering outstanding non-members.

ACMLA PAPER AWARD

The Awards Committee invites nominations for the ACMLA PAPER AWARD. To be nominated for the Paper Award, which carries a \$200.00 monetary prize, a feature article by one or more authors consisting of at least three pages in length, must have appeared in an issue of the ACMLA Bulletin published after the last annual conference. We are looking for articles that make a solid contribution to map librarianship, including cartobibliographies. Originality, uniqueness of subject matter and depth of research will be taken into consideration.

Nominations close on March 1, 1993

Please send your nominations to: Alberta Wood, Chairperson, Awards Committee, ACMLA,
Queen Elizabeth II Library, Memorial University, St. John's, Newfoundland A1B 3Y1

NATIONAL ARCHIVES OF CANADA/ARCHIVES NATIONALES DU CANADA

Cartographic and Audio-Visual Archives Division/Division des archives cartographiques et audiovisuelles

Section submitted by Louis Cardinal/Section préparée par Louis Cardinal

HIGHLIGHTS FROM THE CARTOGRAPHIC AND AUDIO-VISUAL ARCHIVES DIVISION'S ANNUAL REPORT 1991-92

Acquisition: Staff in the section actively participated in both the development of the Branch acquisition strategy for private and government records and the development and implementation of the Government Wide Plan, Multi Year Disposition Plans, etc. for government records.

On the government side, acquisitions included the currently published federal maps, both series and monographic, and government cartographic, architectural and engineering records. In the private sector early and modern monographic maps and atlases were acquired, as well as series and architectural collections.

Conservation: A new three-year contract was established for the program of 105mm microfilming (both black and white and in colour).

Control: Preparation for the first edition of Carto-Canadiana was carried out. The bibliography will become available soon.

Preliminary work for the control of the CN-Grand Trunk Pacific plans and drawings located in Winnipeg was completed. researchers can now gain access to the collection. Considerable work remains to fully describe this large collection.

The Ontario Genealogical Society/National Archives of Canada 1871 Census indexing project was continued. During the year, a request for proposal was initiated to complete work

associated with this project. The project was completed and the OGS is now in the process of having the indexes for the remaining counties published. A project to place all of the data associated with the OGS/NA 1871 Census project on CD-ROM has been initiated between the Public Programs Branch and the Geomatics Program. The logistics off the project will be worked out during the next fiscal year.

The migration of the data on the main-frame to an in-house micro-application is being completed under the auspices of the control project.

Staff continued to comment on the various draft chapters of Rules for Archival Description. V. Parker has been named a member of the Cartographic Records chapter working group which will commence work in April 1992. V. Parker has also begun work on proposals for the revision of rule, etc. in Cartographic materials: a manual of interpretation for AACR2.

Awareness: Staff wrote entries for the Treasures of the National Archives of Canada publication to be published as a co-publication prior to the International Council on Archives conference in Montreal in September 1992.

The publication of our finding aid World War 1 Maps, planned for early 1992, has been postponed to another year by the Public Programs Branch due to resources shortages.

N.B. Copies of the annual report will be available at the ACMLA annual conference in Calgary. Copies can also be obtained by writing to the division.

DISPOSITION OF FEDERAL GOVERNMENT RECORDS: CHANGING TIMES

The Cartographic and Architectural Sector of the Cartographic and Audio-Visual Archives Division has never acquired the archival cartographic record of the federal government in a systematic fashion. We have acquired almost all of our records from government departments when an operational unit wanted to dispose of maps and plans that they were no longer using and which were taking up valuable equipment and storage space. This does not, in any way, imply that we were not acquiring many government records. Since 1976, when this sector began organizing our government archival record into Record Groups, we have accessioned slightly more than 430,000 such items and even before that our acquisitions were significant. In 1970, for example, we acquired 5,200 manuscript maps, plans and technical drawings from federal government sources. Nor do I wish to convey the idea that we know little about maps collections in government departments, both at headquarters and in the regions. The National Archives has also dealt with slightly more than 100 disposition schedules involving maps, plans and technical drawings. However, it is imperative for future research that our Sector knows much more about the cartographic record in the federal government and to arrange for its systematic transfer to archival storage.

The National Archives is determined to embark on a new approach for the disposition of government records and we met in the Spring of 1990 to formulate the process. The process is managed by the Government Records Branch through the Chairman of the Records Disposition Coordinating Committee and Records Analysts. Archivists from the Historical Resources Branch, who are responsible for the archival appraisal, work with them. The key element in the process is the Multi-Year Disposition Plan, developed with each Federal Department to fix a time frame to produce records submissions, to complete the archival

appraisal and to set the terms and conditions for the transfer of the records to archival storage. Before each Multi-Year Disposition Plan could be established, the National Archives had to finalize a Government Wide Plan. It was obvious that we could not tackle all 161 government agencies and institutions at once with our limited resources. It is reasonable to expect, however, that we not approach government agencies that have few records with archival potential. We had to prioritize the departments and by March 31st 1992, we plan to have signed Multi-Year Disposition Plans with 24 departments. The remaining Departments will follow in the next four years. The National Archives of Canada Act, passed in 1987, enabled us to embark on this ambitious program. We can now actively assist Departments in managing their records and ensure that the archival record is preserved. One of the two fundamental elements in the change is that the National Archives will concentrate on departments that have the highest percentage of archival records, rather than having to authorize records submissions for huge quantities of records with marginal archival potential that the departments want to dispose of or place in Records Centre storage. Secondly, the records submissions will tend to be comprehensive for a given program and will cover all media of record in offices across Canada. In the past we have tended to be more interested in textual records generated in Ottawa.

We know the cartographic record is found in abundance in the departments of Energy, Mines & Resources, National Defence, Indian & Northern Affairs and Fisheries & Oceans and we expect to sign Multi-Year Disposition Plans before the end of March 1992. It will be interesting to see how effective the resulting multi-media records submissions are in identifying maps and plans in these departments and in arranging their transfer to archival storage in the National Archives. I will keep you posted on these developments, and on what develops for

the other departmental records, in the future issues of the Bulletin

Brian Hallet

CARTO-CANADIANA

After years of anticipation and planning, the first issue of Carto-Canadiana will be available soon. The coverage, 1981-1990, is for federal government cartographic publications catalogued by the Cartographic and Architectural Sector, Cartographic and Audio-Visual Archives Division, National Archives of Canada.

The microfiche format consists of three sections: the geographical index (which alone carries the full bibliographic record), the author/title index, and the French and English subject indexes.

The geographical index is arranged by the call numbers used. The revisions for the map section

English

Canada

Wetlands. Distribution -
Maps

Wetlands. Canada

Distribution - Maps

Distribution. Wetlands.

Canada

-Maps

Next year, the 1991 to 1992 production will be added and the fiche will be cumulated to include the 1981-1992 materials. Future plans anticipate a wider selection of Canadian materials, and it is hoped that other map collections will be then cooperate in the publication.

Information about Carto-Canadian may be obtained from the Cartographic and Architectural Sector, Cartographic and

have been published by LC but not those for the atlas section.

French items are catalogued in French, English items in English and bilingual English/French items in both languages. Access points are provided in both English and French for all items regardless of language. If the form of a name exists in both languages, both forms are added. There is a problem, however, in that the catalogue support system has a suppression mechanism which we are unable to override. For example, if a personal name has slight differences in the English and French forms, such as "fl.1977" and "epoque 1977", both will not appear. The one not in the language of cataloguing will likely be suppressed.

Subject access is provided for all items in both languages. The system used is PRECIS, a thesaurally based system where the subject strings are permuted. For a map showing the distribution of wetlands in Canada, the strings would be as follows:

French

Canada

Terres humides.

Distribution - Cartes

Terres humides. Canada

Distribution - Cartes

Distribution. Terres humides.

Canada

- Cartes

Audio-Visual Archives Division, National Archives of Canada, Ottawa, Ontario, Canada K1A 0N3. Telephone: (613) 996-7611

Velma Parker

DUPLICATES AND REDISTRIBUTION

The Division was authorized in November to do overtime work to enable it to examine and sort a very large volume of cartographic material

received from Canadian maps collections in recent years. The work is carried out at the Renfrew facility where for the first time in memory space is available for processing these holdings. Recently, the Division had undertaken to reassess its position as to its role as clearing house and redistributor of duplicates sent by other map archives and libraries. The overstretched divisional resources no longer permit us to ever hope to process such a volume of documentation. There is a need to be much more selective now than in the past. The Division will consult with the ACMLA institutional members before a new policy on duplicates and redistribution is formulated.

WALL MAPS

The Division has approximately 300 wall maps dated circa 1900-1950 available for redistribution. They consist primarily of historical school maps produced in France, the United States, and Great Britain. Included are maps published by Jean Brunhes, Librairie Hatier, Denoyer-Geppert ("World History Series"), and George Phillip & Son, etc. The maps are attached to heavy and cumbersome metal rods which were used to hang them to the wall. If these maps are of interest to your institution, please contact Bruce Weedmark at (613) 996-7620 prior to June 30, 1992. The shipping costs would have to be absorbed by the institution.

XIIth INTERNATIONAL CONGRESS ON ARCHIVES*

The XIIth International Congress on Archives will take place in Montreal from September 6 to 11, 1992. The Congress theme is "The profession of the archivist in the information age." The following are a few of the questions that will be dealt with:

- Are archivists adequately prepared to fulfil their duties as specialists in the theory, principles and practices

pertaining to the management of recorded information?

- Have other professional groups adopted principles, techniques or methods that could help archivists improve their practices or better serve the public?
- How can the profession ensure that its knowledge and skills evolved at a rate that will enable it to continue serving the public?

Dr. Jean-Pierre Wallot, National Archivist of Canada, is President of the Organizing Committee. During the Congress, Dr. Wallot will be installed as the new President of the International Council on Archives for a four-year term.

For information please contact: XIIth International Congress on Archives, c/o Coplanor Congr Inc, 511 Place d'Armes, Room 600, Montreal, Quebec, H2Y 2W7. Tel.: (514) 848-1133; Fax: (514) 288-6469

*Compiled in part from the official Congress program

FAITS SAILLANTS DU RAPPORT ANNUEL 1991-1992 DE LA DIVISION DES ARCHIVES CARTOGRAPHIQUE ET AUDIOVISUELLES

Acquisition: Le personnel a activement participé au développement de la stratégie départementale de l'acquisition des documents publics et privés, et au développement et la mise en oeuvre du programme pan-gouvernemental et des plans pluriannuels en vue de l'acquisition planifiée des archives du gouvernement.

Les acquisitions du secteur public comprenaient les cartes et atlas actuels produits par le gouvernement, ainsi que les archives ministérielles de cartographie, d'architecture et

d'ingénierie. Du côté du secteur privé, les acquisitions touchaient les cartes et atlas anciens et récents, des séries, de même que des fonds d'architecture.

Conservation: Un nouveau contrat de trois ans a été mis en place pour continuer le microfilmage, en noir et blanc et aussi en couleur, sur pellicule de 105mm.

Contrôle: La préparation de la première édition de Carto Canadiana est terminée. La bibliographie sera bientôt disponible.

Le travail préliminaire de contrôle du fonds CN-Grand Trunk Pacific est aussi terminé, et les chercheurs peuvent maintenant le consulter. La description détaillée du fonds reste cependant à faire.

Durant l'année une demande de soumission a été lancée pour terminer le projet conjoint Ontario Genealogical Society/Archives nationales du Canada pour l'indexation du recensement de 1871. Le projet est maintenant terminé, et l'OGS fera bientôt publier les index des comtés qui ne l'ont pas encore été. L'idée de mettre toutes les données du projet OGN/AN - Recensement 1871 sur disque optique numérique a été abordée par la direction des programmes publics et le programme de géomatique. Elle sera développée durant le prochain exercice.

Les données du projet, d'abord sur gros ordinateur, sont en train d'être transférées sur micro ordinateur.

Le personnel a présenté des commentaires sur différents chapitres des Règles pour la description des documents d'archives. V.Parker a été nommée membre du groupe responsable du chapitre sur les documents cartographiques. Le travail commencera en avril 1992. V.Parker a aussi préparé des propositions pour la révision des règles de Cartographic materials: a manual of interpretation for AACR 2.

Sensibilisation: Le personnel a écrit plusieurs textes pour la publication Les Trésors des Archives nationales du Canada, une co-publication qui paraîtra avant le congrès du conseil international des archives, à Montréal, en septembre 1992.

En raison de manque de ressources, la direction des programmes publics a décidé de retarder la publication de l'instrument de recherche Cartes de la première guerre mondiale qui devait avoir lieu avant la fin du présent exercice.

NOTA le rapport annuel sera disponible au congrès de l'association à Calgary. On peut aussi en obtenir un exemplaire en en faisant la demande auprès de la division.

LES ARCHIVES DU GOUVERNEMENT: LE NOUVEL AGE

Le secteur cartographique et architectural de la division des archives cartographiques et audiovisuelles n'a jamais acquis de façon systématique les archives cartographiques du gouvernement. Presque toujours nous acquérons les documents dont les bureaux créateurs voulaient se défaire pour besoin d'espace et d'équipement. Cela ne veut pas dire que nous acquérons peu de documents. Au contraire, depuis 1976, quand le secteur a entrepris de classer ces documents selon la classification des fonds gouvernementaux, nous avons enregistré plus de 430,000 articles, et, antérieurement, nos acquisitions étaient aussi importantes. Ainsi, en 1970 recevions-nous 5,700 cartes, plans et dessins manuscrits de source gouvernementale.

Je ne voudrais pas vous laisser croire que nous connaissons peu le domaine des documents gouvernementaux. Nos dossiers sont remplis de données sur les fonds cartographiques logés dans les bureaux du gouvernement à Ottawa et en région. Les Archives nationales au fil des ans ont aussi signé plus de cent demandes de disposition de documents gouvernementaux. Cela dit, il est

nécessaire que le secteur encore mieux la quantité de documents cartographiques disponibles dans les bureaux, et fasse le nécessaire pour leur versement systématique aux Archives.

Une situation semblable prévalait dans les autres divisions des Archives, chacune fonctionnant indépendamment les unes des autres.

Les Archives nationales désiraient changer l'approche touchant la disposition des archives du gouvernement, pour avoir une stratégie plus globale en planifiée. Au printemps 1990 un groupe s'est réuni pour mettre sur pied un programme approprié. Ce programme est géré par la Direction des documents gouvernementaux en la personne du président du comité de la disposition des documents gouvernementaux, et les analystes de document. Ils travaillent de concert avec les archivistes de la Direction des ressources historiques qui ont la responsabilité de l'évaluation des documents. L'élément essentiel du programme est le plan de disposition pluriannuel élaboré avec chacune des administrations fédérales. Le plan indique la séquence de traitement des principaux programmes de l'organisme ou du ministère, le type de traitement choisi pour chacun des programmes, et des échéanciers pour la production de demandes de disposition au sein des institutions, et leur examen et approbation par les Archives. Avant que les plans individuels par administration soient établis il a fallu instituer une approche pan-gouvernementale car il est bien évident que nos ressources limitées ne permettent à aucune de nos divisions de s'occuper tout d'un coup des 161 administrations fédérales. Même à long terme, nous ne pourrions peut-être pas nous occuper des administrations qui ont peu de documents de valeur historique. Les administrations ont été classées par priorité. Le 31 mars 1992, un plan pluriannuel aura été signé avec vingt-quatre prochaines années.

Cet ambitieux programme a été rendu possible par la Loi les Archives nationales du Canada de

1987. Les Archives peuvent maintenant participer à la gestion des documents des administrations, et faire en sorte que les documents de valeur soient identifiés et préservés. Deux changements fondamentaux sont intervenus. D'abord, les Archives dictent maintenant leurs priorités, et concentrent leurs efforts sur les administrations possédant le plus de documents importants à longue durée, plutôt que de consacrer du temps à des versements d'un intérêt marginal.

En deuxième lieu, les plans englobent tous les genres de documents, et où qu'ils soient conservés au Canada. L'ancien système s'intéressait surtout aux documents écrits conservés à Ottawa.

Nous savons que les documents cartographiques se retrouvent surtout parmi les dossiers des ministères de l'Énergie, des Mines, et des Ressources; de la Défense nationale; des Affaires indiennes et du Nord, et des Pêches et Océans. Un plan pluriannuel sera sans doute en place avec chacun de ces ministères d'ici le 31 mars. Il sera intéressant de voir jusqu'à quel point les demandes de disposition couvrant tous les supports d'archives de ces ministères seront efficaces, et permettront aux Archives nationales du Canada d'acquiescer les cartes et plans des administrations fédérales.

J'utiliserai le Bulletin pour vous tenir au courant de la situation, et de ce qui arrivera dans d'autres ministères.

Brian Hallett

CARTO-CANADIANA

La première édition de la bibliographie cartographique nationale, Carto-Canadiana, sera disponible bientôt, après des années d'attente et de planification. Elle contiendra les publications cartographiques 1981-1991 du gouvernement fédéral cataloguées par le Secteur cartographique et architectural, Division des

archives cartographiques et audiovisuelles, Archives nationales du Canada.

La publication sur microfiche comporte trois sections: l'index géographique (le seul élément qui contienne les notices bibliographiques au complet); l'index auteurs/titres; l'index-matières en français et en anglais.

La cote (LC "G") est l'élément de base de l'index géographique. Les classes utilisées sont celles des sections des cartes et atlas canadiens révisées conjointement avec la Library of Congress (LC) en 1983. Les révisions de la section des atlas ne l'ont pas été.

Les documents en français sont catalogués en français, ceux en anglais le sont en anglais, et les documents bilingues français/anglais le sont dans

Anglais

Canada

Wetlands. Distribution -
Maps

Wetlands. Canada

Distribution - Maps

Distribution. Wetlands.

Canada

-Maps

L'an prochain s'ajouteront les cartes 1991 et 1992, et la microfiche sera cumulative pour la période 1981-1992. Plus tard, la publication comprendra un plus large éventail des documents cartographiques canadiens. D'autres institutions participeront sans doute à la publication.

Pour tout renseignement au sujet de Carto-Canadiana, veuillez communiquer avec le Secteur cartographique et architectural, Division des archives cartographiques et audiovisuelles, Archives nationales du Canada, Ottawa, Ontario, K1A 0N3. Tél.: (613) 996-7611.

les deux langues. Il y a des points d'entrée en anglais et en français, quelle que soit la langue du document. Si un nom est différent dans les deux langues, les deux sont indexés. Un problème est créé du fait que le programme d'aide au catalogage possède un mécanisme d'annulation auquel on ne peut rien. Par exemple, si un nom de personne comporte de petites différences dans ses formes anglaise et française, telles "fl.1977", et "époque 1977", une seule apparaîtra, et ce sera celle de la langue de catalogage.

L'accès par sujet est donné dans les deux langues. PRECIS est le système utilisé pour bâtir les chaînes de vedettes. PRECIS s'appuie sur un thésaurus dans lequel les chaînes sont permutées. Dans le cas d'une carte montrant la distribution des terres humides du Canada, les chaînes seraient les suivantes:

Français

Canada

Terres humides.

Distribution - Cartes

Terres humides. Canada

Distribution - Cartes

Distribution. Terres humides.

Canada

- Cartes

Velma Parker

DOUBLES ET REDISTRIBUTION

En novembre, la division a reçu l'autorisation de travailler en temps supplémentaire pour lui permettre d'examiner et de trier une grande quantité de documents cartographiques que lui ont envoyés des institutions canadiennes depuis quelques années. Le travail se fait à l'édifice Renfrew où la division a enfin l'espace pour traiter ces documents. Un peu auparavant, la division avait entrepris de mettre à jour sa position quant à son rôle de plaque tournante des doubles que lui envoient les bibliothèques et

archives cartographiques du Canada. Les ressources limitées de la division ne lui permettent plus de jamais espérer traiter l'ensemble de cette masse de documents. Il est nécessaire d'être beaucoup plus sélectif qu'auparavant. La division consultera les institutions membres de l'Association avant d'arrêter sa politique finale à ce sujet.

CARTES MURALES

La division possède environ trois cents cartes murales de la période 1900-1950 qu'elle offre en redistribution. Il s'agit surtout de cartes historiques scolaires produites en France, aux Etats-Unis et en Grande-Bretagne. Ainsi, il y a des cartes publiées par Jean Brunhes, par le Librairie Hatier, par Denoyer-Geppert ("World History Series"), par George Philip & Son, etc. Ces cartes sont attachées à des barres de métal lourdes et encombrantes qui servent à les accrocher au mur. Si ces cartes présentent un intérêt pour votre institution, veuillez communiquer avec Bruce Weedmark au numéro (613) 996-7620 avant le 30 juin 1992. L'expédition se fera aux frais du preneur.

XIIE CONGRES INTERNATIONAL DES ARCHIVES*

Le XIIe Congrès international des Archives aura lieu à Montréal, du 6 au 11 septembre 1992. Le thème du congrès est "la profession d'archiviste à l'ère de l'information".

Parmi les questions abordées:

- A quel point les archivistes sont-ils bien préparés à assumer leurs fonctions de spécialistes en ce qui a trait à la théorie et aux pratiques de la gestion de l'information consignée?
- D'autres groupes professionnels ont-ils adopté des principes, des techniques ou des méthodes qui pourraient venir en aide aux archivistes, leur permettre de perfectionner leur science ou de mieux servir le public?
- Comment la profession peut-elle s'assurer que les connaissances et les aptitudes acquises évoluent à un rythme qui lui permet de continuer de servir le société?

Le président du comité organisateur est monsieur Jean-Pierre Wallot, l'Archiviste national du Canada. Pendant le congrès, monsieur Wallot entrera en fonction en tant que nouveau président du Conseil international des Archives, pour un mandat de quatre ans.

L'adresse du congrès est la suivante: XIIe Congrès international des Archives, a/s Coplanor Congrès Inc, 511, Place d'Armes, bureau 600, Montréal, Québec H2Y 2W7. Tél.: (514) 848-1133; Télécopie: (514) 288-6469.

*Tiré en partie du programme officiel du congrès

BRITISH CARTOGRAPHIC SOCIETY (BCS) AND INTERNATIONAL CARTOGRAPHIC ASSOCIATION (ICA)

Alberta Auringer Wood
Memorial University of Newfoundland

BCS, Southampton, England, 5-8 September 1991

This was the 28th annual technical symposium and included workshops of the Map Curators Group (MCG) and the Teachers Group in association with the Department of Geography, University of Southampton. I attended the MCG workshop and the BCS technical sessions. Dr. Andrew Tatham, Map Curator at Kings College, London, was the organizer for this workshop. He chaired it and gave an overview paper asking the questions:

- 1) How far have computers solved the map curators' problems?
- 2) Have they merely created new problems? and
- 3) What can you do if there is little prospect for change?

Regarding the first question he queried those present about their situation in 1981 and now. More than ten people indicated that in 1981 they were only using manual cataloguing methods and three indicated that they were planning on how to use automation; while in 1991 four or more were actively automating, two or more were experimenting with automation, three were planning for it, and four were still using manual means. The next speaker was Murray Parkin, Higher Mapping & Charting Officer, M.R.L.G., who spoke on "MODMAP: a practical experience of advancing from sheet cards to computers." This is a tremendous project to convert the cataloguing for a collection of about 900,000 maps, and an annual accession rate of ca. 20,000 items, from a 20 element manual system to a 69 element computer system. At the moment, 40 contract staff are working in two

shifts with eight regular staff who compute coordinates and generate series records. Mr. Parkin outlined the pitfalls, such as increased cataloguing time, and the advantages, such as data retrieval. Then Chris Perkins, Map Curator & Hon. Lecturer, Dept. of Geography, Univ. of Manchester and Philip Guest, Research Associate, John Rylands Univ. Library, Univ. of Manchester gave a presentation on "Cutting Corners in Automated Map Library Systems." They noted the problems with using MARC, and felt that a critical issue is cost, having found that half an hour was the average input time for a thematic map. The inventory of machine readable map cataloguing records was noted and 25 replies have been received from 60 forms sent out. They indicated that the advantages of using automated systems to catalogue spatial data outweighed the disadvantages. The final speaker of the afternoon was Dr. Tatham who discussed "A European View." This was an overview of automated map cataloguing systems in Europe based upon the biennial meeting of the Groupe des Cartothecaires of LIBER that he had attended in Paris in the autumn of 1990. Progress is being made at the University of Ghent (as a supplement), University of Oslo, in Switzerland, at Leiden and the Royal Library in the Netherlands, and in France (most impressive of the systems discussed, he felt).

In the evening there was the "Annual General Meeting" attended by about 25 people. The "workshop" session was reviewed and plans were made to hold the next one on the 10th and 11th of September 1992 in Aberdeen, Scotland. They are planning to do a revision of the "Directory of U.K. Map Collections" by next year under the leadership of Joan Chibnall. Nick Millea asked for items for "Cartographitti". It was noted that D.O.S does a listing of official mapping agencies.

The forthcoming map exhibit for ICA was noted as being of 35 countries with 40 plus countries having sent topographic maps.

The next morning, there was a tour of the Ordnance Survey (celebrating its 200th anniversary this year) focusing on its libraries. In the spacious and well laid out exhibit area of the headquarters building on Romsey Road we were given an introduction to the O.S. by Peter McMaster, the Director General. There are three directorates in the O.S. and five libraries altogether. We visited four of them: the Map Record Library, Cartographic Library, International Library and the Technical Library. The Map Record library is part of Procurement and Stores and is the reference collection of O.S. mapping, though it is incomplete due to the 1841 fire and the 1940 bombing. The Cartographic Library contains specimens of experimental mapping and map cover originals. The International Library used to be the Directorate of Overseas Surveys Library before that was integrated into the O.S. and has air photos and survey data as well as maps of mostly third world and Commonwealth countries. The Technical Library is mainly books (ca. 50,000) and periodicals (300 current) specializing in cartography, geodesy, computer science and related topics, but they also had some early maps. The 1940 bombing almost completely destroyed it, and it grew again with replacements from other agencies. At the end of the tour there was the opportunity to visit the Map Shop! This ended the MCG portion of the BCS program.

The BCS symposium began on Friday afternoon with a session on "Developments in Cartographic & Geographic Databases" with five presentations. These covered justifying a GIS to a client, GIS developments in the Ministry of Agriculture, Fisheries & Food, the GIS at the World Conservation Monitoring Centre (rain forests, ice shelves, species, and managed areas), electronic maps used by the Independent TV News (keep a record of maps done before, only use the Mercator projection), and a GIS using

ARC/INFO for a habitats survey in Kent county. The exhibits were opened after this with a welcoming reception.

On Saturday morning there were parallel sessions, one on "Reprography - Then, Now and ?" and the other on "Cartography and Education." I attended the latter session as my husband, Clifford H. Wood, spoke on "An Atlas for Newfoundland Schools." Other papers covered a "process approach" to geographical education, the mapping skills area in the new U.K. geography curriculum, and the Ordnance Survey and the education market. In the afternoon there was a "hands on" session with several GIS packages plus a technical session on the "Ordnance Survey Bicentenary 1791-1991." This was arranged in conjunction with the Charles Close Society and consisted of presentations on Robert Dawson, Sir Charles Arden-Close, "period" maps (such as Roman Britain) of the O.S., and the postwar Director Generals of the O.S. In the evening, there was a reception sponsored by the exhibitors, a banquet, and an awards ceremony which included a special award to Peter McMaster.

The symposium finished on Sunday with a field trip to Bucklers Hard & the New Forest or another "hands on" session in the morning and in the afternoon an illustrated preview of the British cartography to be included in the ICA exhibit. There were also closing remarks by the BCS President, Barbara Bond, and a Council meeting.

ICA, Bournemouth, England, 23 September - 1 October

The unofficial opening of the conference was the General Assembly on the 23rd at which the principal delegates of the member countries present (about 35-40) attended to association business. In the evening there was a reception sponsored by the government. The Minister responsible for the Ordnance Survey, Tony Baldry, was on hand to greet attendees along

with Peter McMaster (outgoing Director General of the Ordnance Survey), David Rhind (incoming Director General of the Ordnance Survey) and Christopher Board (Vice Chair of the Organizing Committee). As the reception was held in the map exhibit area this provided a nice preview.

The official opening occurred on Tuesday, September 24th, with welcoming remarks by Peter McMaster as Chair of the Organizing Committee; the Rt. Hon. Lord Digby, HM Lord Lieutenant of the County of Dorset (his grandfather was President of the Royal Geographical Society 100 years ago); Councillor Lionel Bennett, the Mayor of Bournemouth; Mrs. Barbara Bond, BCS President; and Professor Eric Brown, member of the Royal Society's International Committee. This was followed by a lengthy and scholarly opening address by D.R. Fraser Taylor, President of ICA. Prof. Taylor presented a congratulatory plaque on behalf of the ICA to Peter McMaster in commemoration of the bicentenary of the Ordnance Survey. Then there were greetings from international organizations and sister societies. At noon the technical exhibition which ran through Thursday was opened. In addition to having equipment and software vendors there were a number of map and book publishers present. At mid-afternoon, the mapping exhibitions were formally opened by the 10th Duke of Richmond whose ancestor, the 3d Duke, had been responsible for the establishment of the Ordnance Survey. He did a grand job, noting that he had had lots of experience with other types of openings. The exhibit hall was laid out extremely well in a circular pattern with spokes (like a wagon wheel). Around the inside of the outer ring were examples of topographic maps from about 40 countries. The main entrance led into a spoke containing the U.K. mapping exhibit at the center of which was a special Ordnance Survey Bicentennial display including early equipment, a copperplate, and a reproduction of a portrait of the 3d Duke of Richmond. About 35 countries had individual displays with the

Canadian display including a geologic map of Newfoundland and my inventory of R.A. (Peter) Skelton's papers. A separate annotated catalog of the exhibit was prepared largely by Mary Alice Lowenthal of the British Map Library. Tony Campbell, Map Librarian of the British Map Library, ably chaired the Mapping Exhibition Committee and was assisted by Karen Pearson Cook, Anne Taylor, Bob Parry, Peter Clark, Andrew Tatham, Mary Alice, and others whose names escape me now. There were also special displays of maps produced by seven international organizations including the World Bank and the UN, maps produced by students and work of the ICA Commission for Tactual Mapping and Low-vision Mapping. In the evening there was a reception sponsored by the city of Bournemouth and hosted by His Worship the Mayor.

The plenary and "forum" sessions began on Wednesday with a history of cartography session appropriately starting with a presentation on the Ordnance Survey by Peter McMaster. These sessions continued on Thursday, Saturday, Sunday and Monday. The plenary sessions were traditional paper presentations but the forum sessions were more than the normal poster sessions, as people had groups of chairs and slide projectors available, in addition to a 1.8 x 1.64 m display board. There were 19 plenary sessions with about 75 papers presented and 5 forum sessions with about 50 presenters. The range of topics was wide, falling into nine broad categories: history of cartography, education and training, map design, specialist mapping, three and four dimensional cartography, digital mapping and GIS techniques, digital mapping and GIS applications, spatial information: marketing and transfer, and national mapping agencies and institutions. The final paper was one by Bob Parry and Chris Perkins on "Measuring the state of world mapping" during which Mr. Parry noted that they are embarked on a second edition of their World Mapping Today. Nearly all the papers, plenary or forum, were published in Mapping the Nations: Proceedings edited by Krysia Rybaczuk and Michael

Blakemore which contains a nice "overview" in the beginning of Vol. 1 of the papers. The 2 volume set (ISBN 0-9518124-2-4) is available for £30 (I think, which is about \$60 Canadian) from Dr. T.A. Adams, Laser-Scan Ltd., Cambridge Science Park, Milton Road, Cambridge CB4 4FY, ENGLAND.

Along with the exhibits (technical and mapping) and the paper sessions there were also ICA Commission and Working Group meetings. I attended most of the meetings of the Task Force on Women in Cartography chaired by Dr. Eva Siekierska and part of the one on Cartographic Definitions chaired by Dr. Chris Board. The Task Force will now be a Working Group on Gender in Cartography and among other tasks will prepare a directory of women in cartography based upon respondents to their survey. Suggestions for new definitions of cartography and related terms were agreed upon. Both of these groups will have reports in the next ICA Newsletter, along with other information on the conference.

Thursday and Friday were also technical tour days, with no other events planned for Friday. Agencies visited were the Ordnance Survey, Hydrographic Office, School of Military Survey, Automobile Association, and the West Sussex Records Office. Cliff and I went on an additional tour that was organized by Chris Board. This took us to London to see two special exhibits. One was at the Royal Geographical Society and featured the Ordnance Survey one-inch map. It was fascinating and contained examples of experimental printings and one-of-a-kind pulls. While there, I also found a manuscript map done by Sir Wilfred Grenfell (while in London earlier in the month, I obtained a photocopy of the south sheet of 2 sheet Spanish map of Newfoundland of 1840). We were also treated to tours by Francis Herbert and Peter Clark and lunch. The other was the opening of the National Postal Museum exhibit on the ways maps were used by the post office. It included maps used (annotated, too) by them to determine delivery areas, routes, and

distances both old and new. There were also 2 "way wisers" or devices used to measure distances on foot. We were even given a demonstration of an automatic stamp cancelling machine made from plans originally drawn up in 1857. Also on display were materials relating to the four stamps issued to commemorate the 200th anniversary of the Ordnance Survey. Douglas Muir, curator of philately at the National Postal Museum, gave an introduction to the exhibit. It was a terrific, though long, day! There were a number of opportunities to go on tours in the local area. I went on ones that included the fantastic house called Kingston Lacy, the village and church of Wimborne Minster (where their "chained" library had closed just as we arrived, but I saw the one in the Hereford Cathedral earlier along with the famous Mappa Mundi), the village and huge parish church of Christchurch, and the village of Lymington. Kingston Lacy had a pair of Smith's globes from the "Regency" period, according to the guide.

In addition to the 2 receptions mentioned before, there were other social events. One was a Mozart concert by the City of London Symphonia conducted by Richard Hickox with Susan Milan as soloist. The other two were dinners - one a "royal" feast held in an old church now called "Court of King Arthur". It featured "lamb" and a singing "king" much amplified over loudspeakers above our heads, but the company was congenial! The other was a "gala" dinner at a fancy old hotel called the Highcliff. It was more traditional, except for the paper napkin draped on the wine cooler that caught fire from the adjacent candle. Cliff doused it in the wine bucket!

The conference closed on Tuesday, Oct. 1, with a final General Assembly in the morning and a closing ceremony in the afternoon. Some highlights of the General Assembly were the admission of one new member country, Uganda; the re-election of Fraser Taylor (Canada) as President; the election of Jean-Philippe Grelot (France) as Secretary-Treasurer; the approval of

terms of reference and chairs for about ten or eleven commissions on working groups; and the election of seven Vice Presidents including Barbara Petchenik (U.S. and the first woman to serve on the ICA Executive), Tositomo Kanakubo (Japan), Mr. Miranda (Spain), Don Pearce (Australia), A. Papp-Vary (Hungary), Michael Wood (UK), and Edvard Bos (Netherlands). Barcelona was chosen as the site of the 1995 meeting. At the closing ceremony, the new Executive members were introduced and it was announced that Mr. Frommer (Germany) had been co-opted to serve for the Executive through the meeting in Cologne in 1993. Thanks were extended to outgoing

members of the Executive and to the Organizing Committee. Fraser Taylor made a few remarks as re-elected President. Peter McMaster presented map exhibit awards as announced by Chris Board (details will be in the ICA Newsletter). The ICA flag was presented to Ulrich Freitag, chief delegate of Germany, by Dr. Board, chief delegate of the U.K. This was followed by Rolf Harbeck, chair of the Organizing Committee for the 16th conference, inviting participants to Cologne in May 1993 (3-9, I think, and this is a change in date). The conference was then declared closed by ICA President Taylor.

DIGITAL DATA SURVEY

Enclosed with this issue of the ACMLA Bulletin is a survey concerning holdings of digital data, including mapping software programs, in library collections. Please ensure that this survey goes to the individual responsible for such cartographic materials, or if you do not have any digital items in your library, to the map librarian for answering. It is being done by the committee of representatives to the Congress of Cartographic Information Specialists Associations (ACMLA, ISCEM, SLA G&M, NEMO, ALA MAGRET, MOUG, NACIS, COSML, and WAML). If you are a Canadian library, please return your form to Alberta Auringer Wood at the address on the form, if you are in a U.S. library, please return the form to Diana Rivera whose address is also on the form, if you are in a library in another country and wish to respond, please send it to either one. U.S. libraries may receive a form via another mailing, returning one is sufficient. The handling of digital cartographic data in libraries is an important issue and your replies are important, as well. Please send them in right away! Thank you for your help!

COMITE DE LIAISON ACMLA-NAC LIAISON COMMITTEE

At the Association's 1991 Annual Conference, the members expressed a desire to establish an ongoing dialogue between the Association and the National Archives of Canada. This dialogue will focus on the relationship between the Association and the Archives and on questions of mutual interest.

The Board of Directors of the Association, at a meeting on November 1, 1991, created the *Comité de Liaison ACMLA-NAC Liaison Committee*, comprised of the following members:

Richard Pinnell, University of Waterloo
Yves Tessier, Université Laval, Chairperson
Grace Welch, University of Ottawa
Joan Winearls, University of Toronto

The mandate of the committee is to annually review relations between the Association and the National Archives and to identify questions or issues of mutual concern, especially those relating to the national role and leadership of the Archives in the area of map curatorship in Canada. The Liaison Committee will focus on these questions and present the Association's point of view at an annual meeting with the National Archivist of Canada, Dr. Jean-Pierre Wallot.

The Liaison Committee would like to receive, from the membership, suggestions for questions that should be raised at the annual meeting with the National Archivist. Please send your suggestions, preferably in writing, to any member of the committee.

Yves Tessier, Chairperson
ACMLA-NAC Liaison Committee

Lors de l'Assemblée générale annuelle de 1991 de notre Association, les membres ont exprimé le désir de voir s'établir un dialogue privilégié entre l'Association et les Archives nationales du Canada. Ce dialogue porterait sur les relations entre l'Association et les Archives et sur les questions d'intérêt commun.

A sa réunion du 1er novembre 1991, l'Exécutif de l'Association a créé le *Comité de liaison ACMLA-NAC Liaison Committee* composé des personnes suivantes:

Richard Pinnell, University of Waterloo
Yves Tessier, Université Laval, Président
Grace Welch, Université d'Ottawa
Joan Winearls, University of Toronto

Le mandat du Comité est de passer en revue annuellement les relations entre l'Association et les Archives nationales et d'identifier des questions d'intérêt ou de préoccupation communes, notamment celles ayant trait au rôle national et de leadership des Archives concernant l'organisation de la documentation cartographique au Canada. Le Comité de liaison se penchera sur ces questions et présentera le point de vue de l'Association lors d'une rencontre annuelle avec l'Archiviste national du Canada, monsieur Jean-Pierre Wallot.

Le Comité de liaison souhaiterait recevoir les suggestions des membres concernant les questions qui devraient être abordées à la rencontre annuelle avec l'Archiviste national. Vous êtes invité à transmettre vos suggestions, de préférence par écrit, à l'un ou l'autre des membres du Comité.

Yves Tessier, Président
Comité de liaison ACMLA-NAC

THE BULLETIN BOARD

INTERACTIVE VIDEODISC PROJECT / PROGRAMME DE MISE AU POINT D'UN VIDÉODISQUE INTERACTIF

The Department of Geography of the University of Wisconsin-Milwaukee will be receiving a grant from the U.S. Department of Education to develop an interactive Videodisc and Database on Geography and Mapping. The videodisc, which is scheduled for completion in 1993, will use images from the American Geographical Society Collection to illustrate the topic of mapping.

The videodisc is targeted for use in classrooms, libraries, and research centres with multiple applications for geography, cartography, history, social sciences, and education.

The core of the project is to create an interactive videodisc which illustrates the broad and diverse topic of mapping. In addition to thousands of still frame images of maps, charts, globes and photographs, the videodisc will contain linear video segments and animation which highlight and explain the processes involved in mapping and various map elements. The videodisc will be accompanied by an interactive database of the imagery. The technology, applicability, and potential for this media for map education and research will be evaluated.

For more information please contact Mr. Mark Warhus, Office for Map History, Golda Meir Library, University of Wisconsin-Milwaukee, P.O. Box 604, Milwaukee, Wisconsin U.S.A. 53201. tel.: (414) 229-4101; Fax: (414) 229-4380.

* * *

Le département de géographie de l'université du Wisconsin à Milwaukee recevra sous peu un don du ministère américain d'Éducation qui l'aidera à mettre au point un vidéodisque ainsi qu'une base de données interactifs portant sur la géographie et les relevés cartographiques. Le

vidéodisque, dont la complétion est prévue pour 1993, utilisera des images conservées à l'American Geographical Society afin d'illustrer le thème choisit, les relevés cartographiques.

Le vidéodisque a été conçu à l'intention des salles de classe, bibliothèques et centres de recherche. Il peut aussi servir dans différents contextes--géographie, histoire, sciences sociales et éducation.

Le but du projet consiste à développer un vidéodisque interactif qui servira à mettre en relief un thème aussi vaste et varié que les relevés cartographiques. En plus de nombreuses images de cartes, chartes, globes terrestres et photos, le vidéodisque renfermera des segments linéaires et des dessins qui souligneront et expliqueront les procédés que nécessitent les relevés ainsi que différents rudiments propres à la cartographie. Le vidéodisque sera accompagné d'une base de données interactive d'images. Bien sur, la technologie, la possibilité d'application et le potentiel de ce support en tant qu'outil pédagogique et de recherche seront étudiés avant leur mise en place.

Pour de plus amples renseignements, veuillez communiquer avec Mark Warhus, Office for Map History, Golda Meir Library, University of Wisconsin-Milwaukee, P.O. Box 604, Milwaukee, Wisconsin, U.S.A. 53201. tel.: (414) 229-4101; télécopieur: (414) 229-4380.

CANADIAN HYDROGRAPHIC SERVICE / SERVICE HYDROGRAPHIQUE DU CANADA

The Canadian Hydrographic Service started to produce their Charts Released Reports and Cancelled Charts listing in January, 1986. In the beginning these lists were only distributed to the Cartographic Sector, Cartographic and Audio-Visual Archives Division, National Archives of Canada. The Division encouraged CHS to submit the lists for publication in the

ACMLA Bulletin where it was first published in number 79, June 1991.

Although the previous lists are obsolete and of limited utility now, those interested may order photocopies of them by contacting: Francine Cadieux, Cartographic Collections Section, Cartographic and Architectural Sector, Cartographic and Audio-Visual Archives Division, National Archives of Canada, Ottawa, Ontario, Canada K1A 0N3. tel.: (613) 996-7640; fax: (613) 995-4451.

* * *

En janvier 1986, le Service hydrographique du Canada entamait la création de deux index soit Rapports publiés et Chartes annulées. Au début, ces index n'étaient distribués qu'au secteur de la cartographie, Division des Archives cartographiques et audio-visuelles, Archives nationales du Canada. En retour, cette dernière encourageait le Service hydrographique du Canada à publier les index mentionnés ci-haut au sein du Bulletin de l'ACACC. Résultat: le premier index paru pour la première fois au sein de l'exemplaire no 79 du mois de juin 1991. Aujourd'hui périmés, les index sont d'une utilité plutôt restreinte. Cependant, les intéressés peuvent s'en procurer des copies en communiquant avec Francine Cadieux à la section des collections cartographiques, secteur de la cartographie et de l'architecture, Division des archives cartographiques et audio-visuelles, Archives nationales du Canada, Ottawa, Ontario. K1A 0N3. tél.: (613) 996-7640; télécopieur: (613) 995-4451.

LIBRARY OF CONGRESS / BIBLIOTHEQUE DU CONGRES AMERICAIN

Ralph Ehrenberg was appointed chief of the Geography and Map Division of the Library of Congress on December 15, 1991. He succeeds John A. Wolter, who retired on August 2, 1991.

Mr. Ehrenberg has served as acting chief of the Geography and Map Division since March 1991, and as assistant chief since October 1979. The division, with a staff of 42 persons, is responsible for maintaining the Library's comprehensive collections of four million maps and charts, 52,000 atlases, and 7 million remote sensing images. It is the largest map library in the world.

* * *

Le 15 décembre dernier, Ralph Ehrenberg de la bibliothèque du congrès a été élu chef de la Division de la géographie et des cartes (Cartography and Map Division). Il succède dans ses fonctions à John A. Wolter qui a pris sa retraite le 2 août 1991. M. Ehrenberg occupait préalablement les postes de chef intérimaire à la Division de la géographie et des cartes depuis mars 1991 et de chef adjoint depuis octobre 1979. Les employés de cette Division, dont le nombre se chiffre à 42, ont la responsabilité d'entretenir et de développer les collections de la plus grande bibliothèque du monde comprenant quelque 4 millions de cartes et chartes diverses, 52 000 atlas et 7 millions d'images prises par satellites.

JACOB VAN DEVENTER CITY-ATLAS / L'ATLAS DES VILLES DE JACOB VAN DEVENTER

Robas Publishers, in collaboration with the Foundation for the Publication of Jacob van Deventer's Works and with support of the Prince Bernard Foundation, will publish a complete edition of the 16th town plans of the Spanish Netherlands of Jacob van Deventer. Information on the publication can be obtained from Robas BV, P.O. Box 90, 1120 AB Landsmeer, Netherlands.

* * *

Les éditions Robas, en collaboration avec la fondation pour la publication des oeuvres de Jacob van Deventer, publiera avec l'appui de la

fondation Prince Bernard, une édition intégrale de l'atlas Jacob van Deventer qui comprend en tout seize plans de villes des Pays Bas espagnols. On peut obtenir de plus amples renseignements en communiquant à l'adresse suivante: Robas BV, C.P. 90, 1120 AB Landsmeer, Pays Bas.

ISPRS/IGC INTERNATIONAL MAP EXHIBIT, 1992 / EXPOSITION INTERNATIONALE DE CARTES SIPTD/CIG, 1992.

The first International Society for Photogrammetry and Remote Sensing and International Geographic Congress (ISPRS/IGC) International Map Exhibit, to be held during the ISPRS/IGC Conference in Washington, D.C. in 1992 is an event jointly sponsored by the American Congress on Surveying and Mapping (ACSM), American Cartographic Association (ACA), ISPRS and IGC. The mission of this map exhibit is to promote interests in map design and to recognize significant advances in cartography worldwide.

The map exhibit will have two divisions: student (non-professional) and professional. Maps that have a completion date between September 1988 and the present are eligible. Digital maps produced for screens or mapping software are acceptable entries for the exhibition.

Information can be obtained from PohChin Lai, ACSM Map Design Committee, Department of Geodetic Science and Surveying, 1958 Neil

Avenue, The Ohio State University, Columbus, OH 43210-1247, U.S.A. tel.: (614) 292-6753.

* * *

La Société internationale de photogrammétrie et de télédétection/congrès international de géographie tiendra sa première exposition internationale de cartes au cours d'une conférence qui aura lieu cette année à Washington, D.C. Cet événement jouit de l'appui financier de l'American Congress on Surveying and Mapping (ACSM), de l'American Cartographic Association (ACA) et de la SIPTD/CIG. Le but de cette exposition consiste à susciter l'intérêt dans la conception de cartes et de promouvoir les développements cartographiques à l'échelle mondiale.

L'exposition comportera deux volets: étudiant (non professionnel) et professionnel. Les cartes complétées entre septembre 1988 et aujourd'hui par des membres de ces deux volets seront admissibles à l'exposition. Les cartes numériques créées spécialement pour les écrans ordinateur et les logiciels de cartographie sont admissibles également.

On peut se renseigner davantage en communiquant avec PohChin Lai, American Congress on Surveying and Mapping, Map Design Committee, Department of Geodetic Science and Surveying, 1956 Neil Avenue, The Ohio State University, Columbus, OH 43210-1247, U.S.A. tél.: (614)292-6753.

1992 ACMLA CONFERENCE

The Association of Canadian Map Libraries and Archives 1992 Annual Conference will take place this year from June 2-6, at the university of Calgary, Calgary, Alberta. Day one is filled with Committee meetings followed by an Ice Breaker at the University of Calgary's Faculty Club. The second day of the conference focuses on integrating spatial data into cartographic collections, choosing a geographic information system, evaluating spatial data, the Encyclopedia of Global change, and providing service in the 1990s. Sessions on the history of the Mundy Map Company, mapping the Canadian Rockies, visualization of information, the Historical Atlas of Railways in Alberta, on day three, are followed in the afternoon by the report from the National Archives and a tour of the Glenbow Museum Map Collection. Alberta's land resources information system GADS, producing the Banff-Canmore Tourism Map, and the joys and sorrows of map acquisitions work for map retailers are highlighted on day four, with the Annual General Meeting and banquet rounding out the day. The final day of the conference provides delegates with the opportunity to tour Alberta's famous Badlands and visit the fascinating and world-famous Royal Tyrrell Museum of Palaeontology.

Early registration fee (before April 15, 1992) is \$85.00 CDN. Registration fee after April 15 is \$100.00 CDN. Field trip and additional banquet tickets are \$25.00 CDN and \$30.00 CDN respectively.

For further information, please contact Helen Clarke, Conference Convenor, University of Calgary, Calgary, Alberta. Tel.: (403) 220-5969; Fax (403) 282-6837.