

BULLETIN

Issue 6

AN INFORMATION SOURCE FOR ALASKA'S MUSEUM COMMUNITY

Fall 1998

YEAR 2000: UNEXPECTED PROBLEMS FOR MUSEUMS

By
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Computer problems caused by errors when making the date change to January 1, 2000, may pose difficulties for museums in ways many of us might not suspect. Often referred to as "Y2K," the year 2000 problem has been increasingly in the news but is generally still regarded as a problem for programmers or technicians. Those most involved with the issue, however, will tell you that it is a management problem, that it will affect all of us in ways difficult to predict, and that we are running out of time to deal with it effectively.

The problem stems from the fact that many computer programs were written using two digits to represent the year in a date field. Thus 1999 is 99, and 2000 will be 00. A wide variety of functions may be affected if computers read 00 as a lesser value than 99. They may assume 00 is 1900, for instance, and perform calculations improperly or they may read it as an error and shut down.

Initially, it was thought this was primarily a software problem for main-frame computers, the big, sometimes older computers running large, complex operations for the government and big business. More recently there has been growing alarm over concerns with embedded microchips. These are the small, pre-programmed processors tucked away in a multitude of devices, from consumer electronics to intercontinental ballistic missiles. They are common in all areas of our infrastructure, including electric and water utilities, transportation systems and building systems such as heating, ventilating, air conditioning, and security systems. Of course, pre-programmed chips are found within computers themselves.

There are billions of these chips in use throughout the world. A relatively small percentage—but still a large number—of these chips will have a problem with the date rollover and may not perform properly. The problem is there is no way to know where all these chips are. Chips having a date function may be used in places you would not suspect, for purposes of counting or monitoring intervals, for instance. Apparently, to keep costs down, mass produced, multi-purpose chips may be used for

functions unrelated to dates, yet still be susceptible to Y2K problems. To make matters worse, even if you knew where these chips are, removing them or finding a Y2K compliant replacement might be impossible.

A primary area of concern for museums is in building systems such as climate control, fire suppression and intrusion alarms. They are considered susceptible because of time and date components and also because many of these systems are more than a few years old and are likely to be tied into computers that are not Y2K compliant. At least one major Alaska museum has already been told by its supplier that its building systems will have date rollover problems and should be upgraded.

Museums also need to be concerned with such things as telephone networks and voice mail, fax machines, copiers and elevators. You will also want assurances from your city that basic utilities will continue to operate.

Museums may also be susceptible to more easily identified problems with older desktop computers or with old or even new software. Databases may not sort properly, accounting records may have errors, etc. For instance, if you are running MS-DOS, or Windows 3 or earlier, you should definitely look into upgrades. Even newer versions of Microsoft products may need "patches." Luckily, most desktop software problems can be fixed by upgrading, although that won't correct the problem if your old PC has a non-compliant chip telling it the date. PCs with Pentium chips are probably okay. So are Macintoshes. But 386 and 486 model PCs may have problems and should be tested. (See page 2).

Since this is a situation that the world has never before faced, there is a tendency for us to be in denial, thinking that the problem is overblown, or that it has some connection to millennium fever or end-of-the-world fundamentalism. There's no connection. It's not an emotional or media generated issue, and the more one reads, the less likely it seems that it's overblown. Private industry is spending billions of

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dollars on these problems right now. The Museum of Modern Art, for instance, is demanding that all of its suppliers guarantee their products and services to be free from Y2K problems or they will terminate their contracts. While it's impossible to know in advance the full effects of the Y2K problem, its potential implications would seem to indicate we error on the side of caution.

So what do you do? Begin by finding out more about the problem. Your local city government should have a task force at work on this problem, and they may be able to give you some guidance. The Internet is a vast source of information on the topic. Some sites to begin with are listed below. Don't forget your local library as there are numerous books and magazine articles on the subject.

The next step is to plan how to deal with the problem and begin to take action. Even if you don't know much about computers you can deal with this issue.

- Make an inventory of any operations in your museum which may have a date sensitive problem. Note manufacturers and models of electronic equipment, computers and software programs.
- Prioritize the importance to your operation of each of these elements.
- Contact equipment vendors to insure that products are Y2K compliant. Get statements in writing from the manufacturers to that effect. If not compliant, you may need to upgrade or replace.
- Test your systems, even if you have been told they are compliant, to insure they will work. You should have a systematic test protocol and you should test for a variety of dates. Testing should be done by qualified personnel.

Lists of dates and methods for testing some computer chips can be found on the Internet, or contact Ken DeRoux at the Alaska State Museum at ken_deroux@educ.state.ak.us. Because of a variety of factors, there are other dates besides January 1, 2000 that can pose problems.

- Do contingency planning! This may be the most important element in this list. What will you do if equipment stops working? Are there manual work-around procedures? Are there outside links to your systems that could create a problem? What would you do if the electricity were off for an extended period, for instance? This might be an opportunity to revisit or revise your disaster preparedness plan.

- Backup your computers by copying information to discs. Make hard copies of critical information.

The sooner we get started on this the better.

Next year the pressure will increase and it will become harder and harder to get qualified assistance.

Some good Internet sites for further information are:

- Year 2000 Information Center at www.year2000.com
- Alaska Department of Administration at www.state.ak.us/local/akpages/ADMIN/info/yr2000.htm
- Year 2000 Information Center for the Cultural Community has information targeted for museums and non-profits, and links to major vendor web sites: www.ramanet.net
- There is an excellent discussion of embedded chips at: www.tmn.com/~frautsch/y2k2.html
- You can begin a preliminary check on building system vendors and products at: y2k.lmi.org/gsa/y2kproducts/search.htm.

MUSEUM LOAN NETWORK

The Museum Loan Network promotes the loan of art objects between museums. It also supports travel between institutions to survey and identify possible loans. For instance, the Inupiat Heritage Center in Barrow, working with the Arctic Studies Center, recently received a grant to explore loans of Inupiat material from the Smithsonian. The deadline for applications is December 4.

For further information contact:

Lori Gross

Museum Loan Network

MIT

265 Massachusetts Ave. N52-439

Cambridge, MA 02139-4307

Phone (617) 252-1888 Email: loanet@mit.edu

GRANT~ IN~AID AWARDS

Eleven Alaska museums recently received grant awards through the Alaska State Museum's Grant-in-Aid program. Also receiving a grant was Museums Alaska, the statewide professional museum association. A total of \$85,600 was distributed among the applicants. Twenty-one organizations applied for grants, for projects totaling \$153,469. Collection management and conservation led the list of concerns among the successful applications. Two of the grants awarded were to support Museum Assessment Program (MAP) surveys. Following is a list of grant awards:

Clausen Memorial Museum, Petersburg
MAP I Survey – \$2,000

Wasilla-Knik-Willow Creek Historical
Society (Dorothy Page Museum), Wasilla
MAP II Survey – \$2,000

University of Alaska Museum, Fairbanks
Stabilization and access improvements to doll and
human figure ethnological collections. –
\$9,954

Alutiiq Museum and Archaeological
Repository, Kodiak
Replication of a traditional Alutiiq ground squirrel
parka and video documentation. – \$8,693
Museums Alaska, Anchorage

Professional Development Conference in
conjunction with WMA meeting in Anchorage,
scholarships, and planning for 1999 conference. –
\$9,950

Pratt Museum, Homer
Upgrade from Classic Argus to Argus Open
Edition. – \$10,000

Cordova Historical Society, Cordova
Duplication and storage of silver nitrate based
photographic negatives. – \$3,400

City of Ketchikan Museum Dept., Ketchikan
Upgrade Native culture exhibits at Totem Heritage
Center and Tongass Historical Museum. – \$10,000

Eagle Historical Society and Museums, Eagle
Digitizing of photographic and archive collection. –
\$7,800

Anchorage Museum of History and Art,
Anchorage
"Normalize" and integrate museum collection and
archival databases. – \$7,900

Juneau-Douglas City Museum, Juneau
Long Range Planning Project: Phase 2. – \$7,680

Valdez Museum & Historical Archive, Valdez
Purchase computer for collection management and
establish workspace. – \$6,223

IMLS GRANT AWARDS

On September 11, The Institute of Museum
and Library Services, a Federal agency,
announced the award of nearly twenty million
dollars to the nation's museums. These awards
provide critical support for core museum operations,
help museums care for collections and assist with
assessments leading to improved professional
standards and practices within museums of all sizes.
Alaska museums receiving grants are:

Sheldon Museum & Cultural Center, Haines
\$60,439 for General Operating Support

Pratt Museum, Homer
\$90,390 for General Operating Support

Alaska State Museum, Juneau
\$49,528 for Conservation Project Support for steel
storage cabinets for the collection.

Three institutes received Museum Assessment
Program awards so far this year:

Resurrection Bay Historical Society Museum,
Seward
\$1,775

Anchorage Museum of History and Art
\$2,970

Sheldon Museum and Cultural Center, Haines
\$2,970

CORRECTION

Last issue's mention of conservation brochures
available over the Internet from the American
Institute for Conservation of Historic and Artistic

works (AIC) gave an incorrect web address. The
correct address is: <http://palimpsest.stanford.edu/aic/>

GRANTS

December 4, 1998 is the deadline for applications for the following grant programs:

CAP grants

Heritage Preservation, (formerly National Institute for the Conservation of Cultural Property), announces the availability of Conservation Assessment Program grants. CAP provides matching grants for surveys and assessments of museum collections and environmental conditions. Grants are non-competitive and are funded by the Institute of Museum and Library Services (IMLS), a federal agency. For further information contact:

CAP
Heritage Preservation
1730 K Street NW Suite 566
Washington, DC 20006-3836
Phone (202)634-1422
email: eblackburn@heritagepreservation.org

NAGPRA grants for museums

These are available to museums (and other agencies) that have possession of, or control over, Native American human remains or cultural items. Institutions must have previously submitted an inventory of holdings as required by NAGPRA, or received extensions. Grants are in two categories, Documentation (from \$5,000 to \$75,000) and Repatriation (up to \$15,000). Documentation includes a variety of projects that involve Native Americans working with museum staff on collections. Repatriation grants provide funds for the actual return of objects or remains. There is no deadline for Repatriation grants. For further information contact:

National Park Service
Archaeology & Ethnography Program (NC340)
1849 C Street NW
Washington, DC 20240

Museum Labels—Because of the urgent nature of this issue's article regarding the Year 2000 problem, the 2nd part of the series on making museum labels will be printed in the next issue of the *Bulletin*.

Alaska State Museums

Alaska State Museum
395 Whittier Street, Juneau AK 99801
Phone (907) 465-2901
Fax (907) 465-2976

Sheldon Jackson Museum

104 College Drive, Sitka AK 99835
Phone (907) 747-8981
Fax (907) 747-3004

Email ken_deroux@educ.state.ak.us

All staff have email—first initial, underscore, last name @educ.state.ak.us

On the World Wide Web:

www.edu.state.ak.us/lam/museum/home.html

Division of Libraries, Archives and Museums
Alaska State Department of Education

Alaska State Museums

395 Whittier Street
Juneau, AK 99801