May 1994

Uplink

A newsletter for the National Institute for Computer-Assisted Reporting

Uplink update

We're forging ahead at the National Institute for Computer-Assisted Reporting as equipment, data and requests for seminars pour in.

In this expanded issue we will report on new developments at the institute that include the upgrading our data library, plans for the optional computer-assisted day at the national IRE conference in St. Louis in June and our increasing number of on-the-road seminars.

This issue also has an overview of how to store all that data that some of you are accumulating, a tech tip from our academic adviser Richard Mullins and two looks at probing banking practices.

In the past few weeks, we've received a number of excellent CAR-inspired stories. Please send us your articles or videos as soon as they appear so we can put them in our resource center and use them at our seminars and conferences.

And if you have any CAR-related questions or suggestions, call us at (314)882-0684 or e-mail us at jourjbh@muccmail.missouri.edu.

Inside

New advanced seminars planned

Road shows launched

By Jennifer LaFleur
NICAR Training Director

NICAR has taken its show on the road. In addition to its week-long seminars held at the University of Missouri, NICAR is offering on-site training for news organizations throughout the country.

NICAR kicked off its traveling program in the great white north with one-day training programs for the Alaska Press Club, the Juneau Press Club and the *Anchorage Daily News* in April. We've also conducted training overviews for a regional conference in La Crosse, Wisconsin, and the *Kansas City Star*.

Our next stops include Los Angeles, San Francisco and Sacramento with more penciled on our calendar, including appearances in Philadelphia, Nashville, Atlanta, and Evansville.

The on-site training ranges from a basic overview on computer-assisted reporting to hands-on training for a variety of software, including databases, spreadsheets, and statistics. The program can be tailored to your specific training needs. The cost of the program depends on its complexity and whether we provide hands-on training. Smaller news organizations or associations may pool resources to bring a seminar to their area.

For those of you in warmer climates, please consider having NICAR visit November through March as we are not yet used to Missouri winters.

For more information about our on-site training programs, call NICAR training director, Jennifer LaFleur at (314) 882-0684.

Data library and analysis

With the arrival of two number-crunching computers, new storage devices, and a CD writer, NICAR is ready to do data analysis and serious slicing and dicing of data for news organizations, large and small.

For a small fee, we can download data from a nine-track tape, carve out just the information you need, and send it to you on diskettes. We also can help with data analysis and technical problems. At the same time, we already are collecting data and increasing the catalog of information we have. Give us a call if you think we may have the data you need. If we don't, we may be able to acquire it inexpensively and get you the information quickly.

Advanced seminars

NICAR is starting to develop advanced seminars. We are hoping to offer one in early August and are considering covering how to use statistics for news stories, mapping, advanced cleaning of data, and some basic programming. Please let us kno what you think is needed for such a course.

Coming Events

June 16-19
IRE National Conference
St. Louis, Missouri
August 14-19
NICAR Training Seminar
Columbia, Missouri
October 6-9
IRE Computer-Assisted Reporting Conference
San Jose, California

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NICAR.
NICAR is a joint effort of Investigative Reporters and Editors and the University of Missouri School of Journalism with the mission of bringing the journalism industry into the 21st Century. NICAR services include hands-on newsroom training seminars in computer-assisted reporting, special academic and advanced training at Missouri, data analysis and advice.
NICAR is supported by a grant from The Freedom Forum intended to help the institute deliver its services nationwide to news organizations and associations.

Making sense of it all

Data only part of HMDA story

By Seth Hamblin
NICAR Staff

Reporters across the country are turning up the heat on banks with computer-assisted stories that show a much higher loan-denial rate for minorities than caucasians. But the tale told by Home Mortgage Disclosure Act data isn't as clear as black and white, reporters say, and bankers are claiming it's more a matter of green.

In St. Louis, a Jan. 10, 1993, HMDA analysis by George Landau of the Post-Dispatch, who used SPSS statistical software, found that blacks were being rejected for home-purchase loans 2.5 times more often than whites. In Detroit, Dan Gillmor of the Free Press reported in a Jan. 17 story that the loan denial ratio was 2.1 to 1.

And figures for the entire country show only a slightly lower lending gap.

The analysis is so important and so easy to do, Gillmor said, that it should be attempted every year in every community.

"The banks know the stories are being done every year, and they're definitely making more of an effort towards minorities," he said. Due to media attention and stronger home mortgage regulations, Detroit lenders are now reviewing denials of minority applicants, hiring minority loan officers and opening offices in black neighborhoods, Gillmor said.

However, banks say these numbers don't tell the whole story. They claim their decisions are based on wise banking practices, not discrimination. A higher percentage of black applicants are rejected because they have poorer credit histories, fewer assets and less job stability than white applicants, lenders say.

"We deny any overt discrimination," said a banker in Gillmor's story. "The data tell us there's a problem, but reasonable people disagree as to the extent and reason for the problem."

But Orange County Register reporter Ronald Campbell said banks are contradicting themselves when they deny claims of racism.

"They're saying, 'it's not as bad as you claim, but we'll do better next year,'" he said.

Campbell said that with affluent blacks and Hispanics getting turned down more often than poorer whites in Orange County, Calif., the numbers clearly point to lender discrimination. His Nov. 29, 1992, analysis showed that blacks and Hispanics with high incomes ($75,000 or greater) have denial rates of 26 and 27 percent, respectively, while whites with much lower incomes (under $30,000) have a denial rate of only 23 percent.

Although the database includes fields for an applicant's race and income as well as loan amount, lenders aren't required to fill in a field that gives a denial reason, and in many cases, don't. Because of this and other inconsistencies, reporters must recognize the limitations of the data, Gillmor said.

"What this data is good for is raising questions," he said. "It's not a smoking gun, but it gives community activists something to work with."

HMDA records are made available from the Federal Reserve every November and also can be acquired through NICAR. A nationwide database, HMDA is huge, with last year's data containing more than 12 million records from 9,072 lending institutions.

But HMDA can easily be whittled down to a smaller geographic area using fields for county code and census track numbers. From the 1992 data, Gillmor chose seven counties in the Detroit area with about 229,000 loan applications.

HMDA data isn't as clear as black and white. The bankers are claiming it's more a matter of green.

HMDA has two datasets, one with loan information and the other with a list of lenders and their ID codes. Gillmor used FoxPro for Windows to combine the two datasets and produce smaller more manageable subsets from the more than 30-megabyte database. He then imported the data into SPSS for windows in

order to use the program's more sophisticated cross-tabbing functions.

"It was really simple, but there are a couple of little tricks," Gillmor said. Numbers in the census tract field came through as six-digits without a decimal. Gillmor had to create a new field and divide by 100 in order to get an accurate tract number.

In his story, Campbell combined census tract and HMDA data using FoxPro to look for instances of redlining, the practice of drawing a line on a map around poor or minority areas and denying loans on property within the boundary.

Nowhere did Campbell find clear-cut instances of redlining, where banks denied lending entirely. However, he did find that 18 of the 21 census tracts with denial rates greater than 30 percent were in mostly Hispanic areas.

Campbell also ran into an unusually high denial ratio in a type of area he wasn't looking for. In ritzy Newport Beach, where houses had sold for $750,000 during a 1989 housing boom and two years later dropped in value by one-third, lenders refused a large number of home-purchase and refinancing loans. This could be a story in itself, Campbell suggested.

Looking at St. Louis records, Landau used a HMDA field that identified loan type to isolate a subset just for home-improvement loans. He found that in 14 of the city's 400 census tracts, more than half the black applicants were turned down. In only one of the tracts did the rejection rate for whites top 50 percent.

The numbers demonstrate that banks often refuse to lend money to renovate low- value property in minority areas, Landau said. This creates a viscous circle, where the neighborhoods that most need improvement dollars can't get them.

"It can have a devastating effect on a neighborhood," he said. "It's like cutting off life support."

HMDA records for home-improvement loans may also be a good place to jump into stories that don't center on race. Landau suggested doing a trend story detailing where the most new homes are being bought and where most restoration is being undertaken.

"You could use the data to see what neighborhoods are making a comeback," he said.

HMDA data pitfalls

While HMDA is in many ways a simple database, there are still many things to watch out for, said *Allentown Morning Call* reporter David Washburn. Here are a few of the suggestions he made for avoiding pitfalls:

- **Use an application that can generate crosstabs. Spreadsheets and database managers don't have enough power to create quality crosstabs for HMDA analysis.**

- **A field called "edit status" tells whether there is an error in the record, but it doesn't say where the error is. Records that are marked as having errors should be thrown out.**

- **Some of the records have N/A in the fields for race or income. These records must also be thrown out.**

- **Separate one-to-four family dwellings from multifamily and commercial property when generating percentages.**

- **When combining HMDA and census data, if your census records are broken down into blocks, you will have to spend some time adding them together into tracts in order to compare them with HMDA records.**

- **Look out for different banks with the same ID number. If two banks merge after the reporting period, they will be reported as one institution although they were separate entities at the time the data were generated.**

- **Double check your numbers with each bank. If their numbers are different, make sure they're breaking down the data the same way you are. For instance, if you're looking at just one-to-four family homes, make sure their numbers don't reflect multifamily dwellings as well.**

Pictures better than words

Mapping reveals data trends

By Ronald Campbell
Orange County Register

Databases are wonderful tools, but sometimes you've got to have a picture to tell the story. When *The Register* set out to document whether bankers were serving poor neighborhoods, the raw numbers told us they were. Intuition told us they weren't. A mapping program proved our intuition correct.

For years my editor and I have speculated about the paucity of banks in Santa Ana, a heavily Hispanic city of 300,000. Orange County has hundreds of banks; in some neighborhoods they are clustered as thickly as gas stations once were. But not in Santa Ana.

We both thought a computer mapping program could help us document the pattern. But then we ran into a barrier, and it stopped us cold. The problem was data entry. It wouldn't be enough to locate all the branches in Santa Ana; to make a valid comparison, we had to find all the branches in neighboring cities. Finding the raw data was easy enough: The state banking and savings-and-loan asociations each printed annual directories. But some poor schmuck (most likely me) would have had to type all those names and addresses into a database. Then I (no alternatives this time) would have had to plot the branches on a computer map, a process known as geocoding.

The idea of geocoding several hundred banks was so terrifying that I stopped thinking about it for a year.

But late in 1993, banking writer Dawn Yoshitake discovered a database maintained by Sheshunoff Information Services. It also let us look beyond Orange County to examine statewide patterns. Finally, and maybe most importantly, it sidestepped geocoding.

Geocoding is a messy business. Most databases that I have used contain a cacophony of conflicting address styles. Is it "625 N Grand Ave" or "625 North Grand Avenue" or maybe "625 N. Grand Ave."? To the database user, it hardly matters. But in mapping software, the distinction between "N" and "North" or "Ave" and "Avenue" is a vital one; every address must match the internal style of the computer map. And since computer maps often omit valid addresses, even a correctly styled address may not geocode.

With Sheshunoff, I did not have to worry about geocoding. I could locate banks by their census tract or zip code.

My first step was to look for statistical patterns. I loaded the Sheshunoff database into FoxPro. After hand-eliminating hundreds of credit unions (listed only once in the database, regardless of the number of branches), I used FoxPro to count the number of bank branches in each of Orange County's 484 census tracts. Then I compared that with income data. I assigned each tract to an income range (low, low-moderate, upper-moderate and upper), based on that tract's median family income. Finally I compared the number of bank branches serving neighborhoods of a given income range with the number of people living in those tracts.

Surprise! It appeared that bankers were about as likely to set up shop in a lower-middle class barrio as in a glitzy neighborhood overrun with BMWs. The numbers in Orange County looked especially strange after I reviewed the statewide numbers. The statewide analysis, done by zipcode instead of census tract, showed that bankers avoided lower-middle-class areas.

Then I dumped the data into my mapping program, MapInfo, and the county pattern suddenly became clear. Bankers willingly put branches in poor or minority neighborhoods — but only if those neighborhoods bordered wealthier, whiter neighborhoods. When MapInfo shaded census tracts by the number of bank branches, the resulting map had a gaping hole in the middle. The hole corresponded with Orange County's largest and poorest barrio.

The map told a lot. Graphic artist Danny Sullivan found a way to make it tell even more. MapInfo census tables contain population and housing data; draw a line around several census tracts, and MapInfo will add the numbers together to produce statistics for the region. Danny joined the basic MapInfo table with a database table I had created, which included the median income, ethnicity and population for every census tract. Then he circled five areas on the county map. MapInfo calculated the average income (actually, the average of median family income for each tract in the selected area), as well as population and the number of bank branches for each of those areas.

Where to find banking info

Sheshunoff Information Services' Bancpen database includes geographic and financial summaries on every bank branch, every savings-and-loan, every credit union.

Fields include company name, branch number, street address, city, Zip code, county, state, Metropolitan Statistical Area (MSA) code number and census tract number. In addition, the database lists deposits (broken down between deposits by public agencies and deposits by individuals, partnerships and corporations) year by year for the past five years.

Sheshunoff sells the database on diskette for $595 per state. Tape versions go for $700. Orders for two or more states qualify for a 20-percent discount. The national database is sold for $5,000 on diskette or $5,500 on tape. To order, call (800) 456-2340.

Beginning and advanced skills highlighted

Computer conference set for Oct.6-9, 1994

By Jonathan Krim, *San Jose Mercury News*

The second annual national IRE conference devoted to computer-assisted journalism will be held in the heart of Silicon Valley this October.

Whether your publication or broadcast outlet is just beginning to use computer-assisted techniques or is ready for more sophisticated approaches, this year's conference will have something for you.

Some of the top practitioners nationwide will serve as instructors, offering classroom training in which each participant will work at his or her own computer.

Conference participants will receive intensive, hands-on training in a variety of computer applications, including:

- Basic PC use, including DOS and Windows
- How to use various spreadsheet programs
- How to use relational database software to further manipulate information
- How to download government tapes
- How to use on-line services, including Internet
- How to map data
- How to use statistical analysis software

The conference, beginning Oct. 6 at 8 a.m. and ending at noon on Oct. 9, also will feature panel discussions on issues affecting computer-assisted journalism, such as legal matters, ethics, and using computers for beat reporting and quick-hit stories.

Building on the strengths of the computer-assisted conference in Raleigh, the planners intend to expand advanced parts of the program while keeping a basic track for those who are just learning these techniques.

"This conference will be a great opportunity to learn to use the most basic and necessary tools for reporting," said Brant Houston, IRE's new computer-journalism director.

"Reporters and editors can no longer afford to ignore this area. After all, most information we will seek is or will be in electronic form."

Hosted by the *San Jose Mercury News,* the conference will also feature displays of products for computer-assisted journalism and a special demonstration of Mercury Center, the *Mercury News'* on-line newspaper service. A luncheon banquet, included with registration, will feature an exciting keynote speaker.

The conference site, the Westin Hotel in Santa Clara, features many amenities, including free parking, courtesy transportation from the San Jose airport and light-rail access to and from downtown San Jose.

For those who want to bring their families, the hotel is one block from the Great America theme and amusement park and is close to activities in San Jose, San Francisco and the rest of the Bay area.

Special conference hotel rates are available, but registration will be limited. So, register now.

San Jose Registration

(First-come, first served. Limited registration)

Name _____

Affiliation _____

Address _____
❑ work ❑ home

City, State, Zip _____

Phone _____

Please check:

_____$150 for entire conference **(I am an IRE member.)**

_____$180 for entire conference **(I am not an IRE member, but I understand the fee includes the $30 membership cost.)**

_____$165 student fee for entire conference **(I am not an IRE member, but I understand the fee includes the $15 membership cost.)**

_____$180 for entire conference **(I am an IRE member but my membership will expire before the conference. Therefore, I would like to renew my membership at this time.)**

_____TOTAL

As much basic hands-on training as possible will be provided, but we cannot guarantee it to everyone. IRE limits overall registration to the conference.

Do you want hands-on training?
___ Yes ___ No

Make checks payable to IRE. Please mail to IRE/NICAR, University of Missouri School of Journalism, 100 Neff Hall, Columbia, Missouri 65211.

Hotel Registration

Westin Hotel, Santa Clara

- When you call, say you are an IRE participant. Call (800) 228-3000 or (408) 986-0700 to make your hotel reservation.
- Reservations made after Sept. 9 will be on a space-available basis, and rooms may cost more.
- **Hotel rate** is $89, single; $99 double and $109 triple.

The trouble with storing data . . .

By Drew Sullivan
NICAR Staff

It's always difficult to decide what to do with all that great government data you've worked so hard to collect. If only we all had a 500GB hard drive. But a storage plan can be devised using new technologies that make it possible to store data safely and efficiently while still providing quick access to the most needed data. This involves deciding between magnetic, optical, magneto-optical and chip-based storage media. What's best for your organization depends on what trade-offs you are willing to make between money, space and time.

Government agencies still store most data on 9-track tapes or 3480 tape carts. Tapes are inexpensive relative to their storage capacity (generally about 200 MB), but they can present some serious problems, especially for smaller news operations.

For example, tape are sensitive to temperature, magnetic fields and other environmental phenomena.

The tapes themselves are large and difficult to store. If you don't have money for a climate-controlled room or even a large, safe storage area, 9-tracks constitute an inefficient long-term storage option.

In addition to space considerations, retrieving data from tapes is time-consuming. Computers access tape-stored data "serially." If you envision your drive like a book, serial retrieval means the computer would have to read every page prior to the page you are interested in before it can access that data. Even with a good 9-track reader, you might have to wait 20 to 40 minutes to read the data you want.

Tapes also are prone to "read" errors. If the machine that wrote the data has misaligned heads, your tape machine might not read it. Everyone who has used a 9-track machine is familiar with the problem of the tape spinning back and forth over one damaged or poorly written spot.

A new form of tape cartridge on the market called the Digital Audio Tape (DAT) elimates many of the problems of 9-tracks and carts. A DAT is about the size of a standard audio cassette, costs a little more than an 9-track tape and can hold 8 GB or more of data.

Because DAT cartridges use a digital rather than analog storage, the alignment of heads isn't a problem. But DATs suffer from some of the same disadvantages of other tapes. The data is accessed serially. They are unstable, so copies should be made every couple of years. Also, damaging a small part of the tape will destroy large amounts of data.

Nevertheless, DAT's offer inexpensive storage for massive amounts of data. And if you don't mind slow access to your data, they make a good archival medium. DATs, at between $10 and $25 each, are cheap enough to make extra copies for offsite storage. DAT drives are available for about $2,500.

Magneto-optical (MO) drives, a somewhat more exotic storage medium, show great promise for data storage. The drives use a rewriteable glass disk that resembles a large compact disk (CD). For about $130 these disks can store 1.2 GB of data. Although MO disks are more expensive than tapes, they can be accessed almost as quickly as a hard drive (19 milliseconds). An MO acts almost like a removeable hard drive. Data is not read serially, meaning the computer goes straight to the data you want.

Data on an MO disk is virtually uncorruptable and the disks themselves are hard to damage if handled correctly. Also available are WORM (write once read many) disks. Once written, data on WORM disks cannot be changed. This makes them useful for network systems where users can access data without the ability to alter or damage it.

Cost remains the biggest disadvantage of MOs. Drives sell for about $3,000 and the disks are expensive for long-term data storage. If you can afford it, it's the way to go.

Writeable CDs also have gained ground as a viable medium for archiving data. Although they are not rewriteable, CDs are inexpensive (about $22), hold a lot of data (680 MB) and are virtually uncorruptable. With triple and quadruple speed CD drives on the market, access time has increased nearly to that of MOs.

Once a "master" has been created using a writeable CD drive, copies can be made for about $5 each, depending on the number needed. Still, CD writer drives are expensive ($3,500 - $5,800) but they are more cost-effective than they were a few years ago. CD "jukeboxes," which operate much like their musical counterparts, allow ten or more CD's to be online at any one time providing an exceptional network data library.

Flopticals are 3.5-inch floppies but they hold 21 MB of data on an optical disk. Access time is similar to that of a floppy. The drives are inexpensive (less than $350) but the disks are still pricey at $21.

In deciding among the above options, most organizations should consider the levels of storage needed. Frequently accessed data should be stored on hard drives, MOs or CDs. DATs or 9-track tapes are good for off-premises archival storage. By combining the two, a news outlet can continue to make use of the data they've collected and still have room to work.

Have you had some good experiences with the hardware discussed here? Had some nightmares? Share your experiences by calling, e-mailing or writing us at NICAR.

Getting your program to talk back

By Richard Mullins

Our last tech tip illustrated something you can do with a simple database program that you can't do with a query: jump through a table at a certain interval, say every 11th or 531st record, and then copy that record to another table. The extracted version would be a small version of the original. And if the records in the parent table were unordered, then the extracted records would be a genuinely random sample.

When I made the program, I just needed a small slice of a large table. I wanted to test my queries on the small table, since they would execute faster, then do them on the larger table when I got them right.

A shorter version of the program was printed in *Uplink* in the September 1993 issue. It worked fine, but you had to edit the variable parts of it — the Skip Interval, the Source Table Name, the Target Table Name — every time you wanted it to slice a different table to a different size and a different name. That can be just a slight inconvenience for a knowledgeable user, but it's a barrier to less experienced users.

So we'll add some code to the program so it will ask the human at the keyboard what database to extract from and where to put the extracted records.

The lines beginning with asterisks are comments. The program ignores them, so you don't need to type them for the program to work, but they're important to you. They help you remember how the program was written, how it works, and anything you'll need to know when you look at the program code a month or a year later.

To create a program file, go to the command window and type: **modify command xtract**

This opens up the Fox text editor. Type in the program as it's printed here. When you're done, pull down the FILE menu, choose CLOSE, and answer YES to the Save Changes Dialog Box.

The program begins with defining the variables to be used. We give them an empty value (zero, or a string of spaces) to start with:

```
* Set up the variables
    nExtract = 0
    TargetDB = space(30)
    SourceDB = space(30)
```

The next part puts up a prompt, a space to accept the answer and then stores that answer. The command to get user input is the "@ ... SAY ... GET ... READ" sequence. This and all other Fox commands can be looked up in the manual or in the on-screen help directory. But here is a brief explanation:

The At-sign (@) sets the screen position (row, column).

The part in quotes is the prompt.

The name after the keyword "get" is where the program stores the answer.

The two answers are plugged into the command to open the databases.

The "alias" lets you give the databases an temporary nickname.

```
* Ask user for input
    @ 8,5 say "Source DB? "  get SourceDB
        read
* Open the Source database
use (SourceDB) in 1 alias source
@10,5 say "Target DB? " get TargetDB
      read
* create an empty Target Database
copy structure to (TargetDB)
```

The next part looks complicated, but it helps the user. Before asking how many records to extract, it helps to know how many records there are. Make sure you get all the nested parentheses typed in.

```
* Now put up info for user and get input
@12,5 say "There are " + alltrim( str(reccount
("source"))) + ;
  " records in " + SourceDB
```

The program works by skipping over a defined number of records, copying one, skipping the defined number, copying one, and so on to the end. Here the program displays the record count, then asks the user how many records should be extracted. Based on the answer, it figures the Skip Interval to yield that number.

```
@13,5 say "Extract how many records?" get
nExtract
    read
        nSkipInt = int ( reccount("source") /
nExtract)
```

Now everything is ready to roll. It helps to let users know that something is really happening, so we'll clear the screen and put up a message.

```
@8,0 clear to 15,70
@12,5 say "Extracting records..."
* Here's where the work is done...
select source
copy to (TargetDB) for mod( recno(), nSkipInt
) = 0
@12,5 say "Done. "
```

The "copy to" line, roughly translated, says: "Copy records to the Target database where the record number is evenly divisible by the Skip Interval the user typed in. Here's how the arithmetic works: The **mod()** function finds the remainder from dividing two numbers; in this case it's the internal record number divided by the Skip Interval. If the remainder is zero, then record is copied to the Target table.

Bits, Bytes and Barks

American U. plans CAR seminar

Journalists covering the federal government may want to look into a seminar entitled "Journalists, Computers and the Federal Government" July 17-22 at American University.

For more information contact Wendell Cochran at (703)276-5805 or via email at WC9923a@american.edu.

CAR stories in the NICAR library

After reading Dan Browning's *Uplink* story (March issue) on St. Louis restaurant inspections, Devin Smith of The Olympian in Olympia, WA., sent us his work using a county restaurant inspection. Clips of both pieces are available from NICAR. Among other articles, NICAR has received CAR stories from the *Charlotte Observer* on food inspections, criminals in the classroom, and foster care. *The Roanoke Times & World-News* sent us stories on parking tickets and the Wisconsin State Journal mailed more stories on crime from its excellent ongoing series called "City Of Hope." We also have the Akron Beacon Journal's Pulitzer Prize winning series "A Question of Color."

Attention NICAR shoppers

NICAR is working to make software less expensive for journalists. Our first offer is Nine-Track Express, which we will sell for $250, a discount of $149. We will let you know about other bargains as we arrange them.

Government continues infotech push

Journalists who have yet to go online will fall even farther behind during the next few years if the federal government follows recommendations to give all its employees access to electronic mail by 1997.

In a report issued last month, the Government E-Mail Task Force also advised agencies to provide outside access to their networks and publish their e-mail addresses by the end of this year.

NARA proposes archiving e-mail

The National Archives Records Administration (NARA) has proposed new rules for treating electronic mail as public records that must be preserved, according to a recent article in Government Computer News.

The proposal comes on the heels of a federal court ruling that ordered NARA to preserve all e-mail records along with agency documents.

Although not all e-mail messages may qualify as public records, those created in the conduct of agency business do. Personal messages unrelated to agency business would not be included under the proposed rules.

Arch Investigations

June 16 - 19. 1994

Here's a look at the developing line-up for the optional day, June 16, at the St. Louis National IRE conference. This day we will focus on computer-assisted reporting. For more information on the conference, please all IRE/NICAR headquarters at (314) 882-2042.

Thursday

Optional day

8-8:30

Online on the beat: 30 ideas in 30 minutes
Bill Dedman, Associated Press

9:20-9:50

Data analysis on the beat: 30 ideas in 30 minutes
Shawn McIntosh, Dallas Morning News

8:40-9:50

Specialized session: Business
Rob Wells, Associated Press
Penny Loeb, U.S. News & World Report

Primer on online searching: Power up, modem in, log on. Everything you need to know to get started
Beth Marchak, Cleveland Plain Dealer

10-11:10

Creating and recycling databases: When to use a database and which ones to keep available for use on deadline
Jeff Kummer, St. Paul Pioneer Press
Teresa Leonard, Raleigh News & Observer
James Derk, Evansville Courier

Government and social sciences
Dan Browning, St. Paul Pioneer Press
Rich Robertson, Arizona Republic
Shawn McIntosh, Dallas Morning News

The mystery and power of Internet
Dan Woods, Raleigh News & Observer
Dan Gillmor, Detroit Free Press

11:20-12:30

Using spreadsheets and national tabular data to show where your town or state ranks
William Casey, Washington Post
Rich Gordon, Miami Herald
Chris Schmitt, San Jose Mercury News

Environment on computer
Dave Davis, Plain Dealer
Jane Kay, San Francisco Examiner
Wendell Cochran, USA Today

Online on the cheap
Nora Paul, Poynter Institute for Media Studies
Mike Berens, Columbus Dispatch

1-2

Brown Bag lunch: Attribution and accuracy on the information highway
Nora Paul, Poynter Institute for Media Studies, moderator

2:10-3:20

Deadline online: Using bulletin boards to find eyewitnesses and experts and profiling people
Deborah Crowe, Alameda Newspaper Group
Matt Reavy, NICAR

Mapping software on deadline: How to plot census, crime and gerrymandering information
Susan Brown, St. Louis Post-Dispatch
Jennifer LaFleur, NICAR

Medicine and science
Bill Allen, St. Louis Post-Dispatch
Paul Overberg, USA Today
Beth Marchak, Plain Dealer

3:30-4:40

Access to federal, state and local online records: Success stories and pending battles
Sandra Scott, Missouri School of Journalism
Mike Casey, Dayton Daily News

Statistics can be your friend: Five statistical tools you need to know
Jon Schmid Sotomayor, Raleigh News & Observer
Phil Meyer, University of North Carolina

The electronic newsroom
Corky Johnson and Karl Idsvoog, WPCO-TV, Cincinnati
Mark Nichols, Indianapolis Star
Neil Reisner, Bergen Record

7:30-9 p.m.

Getting Started
NICAR staff