Clear road ahead?

New cable, improved heads may keep reporters from drive(ing) themselves nuts

Jon Schmid
MICAR

About this time last year Bob Paynter of the Akron Beacon Journal and Judy Miller of the San Francisco Chronicle were pulling their hair out in frustration over tape drive difficulties (See Uplink April, 1991).

Paynter's Qualstar 1260 tape drive just never seemed to work. Sometimes it would do as he asked, and other times it would just rock back and forth interminably. Paynter, who was suffering from problems with XDB at about the same time, probably thought his PC and tape drive were possessed.

"I didn't know what was wrong with it," he said. "It was like asking a kid if his first car was operating properly. I just didn't know."

Loeb selected for Scripps-Howard award

Penny Loeb, investigative reporter for New York Newsday, and former MICAR research assistant Tom Braden, have been selected as co-recipients of the Roy W. Howard Public Service Award, presented yearly by the Scripps-Howard Institute.

Loeb and Braden were selected for Loeb's Newsday series that exposed problems in New York City's collection of taxes and billing of services.

Braden assisted Loeb by providing some data analysis, and writing a story for the series.

The series was accomplished by using a personal computer to analyze more than 17 million city finance records.

"For once its a public service award that truly served the public," Loeb said. Because of her series the city owes its property owners $275 million due to overpayments.

Braden said he was pleasantly surprised to be selected as a co-recipient. "I was surprised because I thought Penny would be the only recipient," Braden said. "All I can say is that Penny is one helluva reporter."

The award will be presented in April.

Mercury News finds that criminal justice isn't 'color blind'

Christopher H. Schmitt
San Jose Mercury News

In California, justice isn't color-blind.

Constitutional guarantees of equality notwithstanding, that's what the San Jose Mercury News found recently in a computer-assisted study of nearly 700,000 criminal cases over a nine-year period. As more and more cases are decided by plea bargain, whites as a group get significantly better deals than Hispanics or blacks who are accused of similar crimes and who have similar criminal backgrounds.

Instead of judges or juries handing down verdicts, the fates of hundreds of thousands of defendants a year often are negotiated over the telephone, in hurried hallway or parking lot conversations or in closed-door meetings.

What happens?

At virtually every stage of pretrial negotiation, whites are more successful than non-whites. They do better at getting charges dropped. They're better able to get charges reduced to lesser offenses.

Our story began on the campaign trail in 1990. In get-tough-on-crime rhetoric, the two major candidates for governor — including soon-

to-be Republican Gov. Pete Wilson — were sounding a lot like outgoing Gov. George Deukmejian, who himself was elected mostly on a law-and-order pitch.

So we decided to look at what nearly a decade of enacting new crime laws, appointing hundreds of "common sense" Deukmejian judges and building cavernous new prisons had done to cut crime and make neighborhoods safer. The answer was: Not much. One reason, we were told, was California's "determinate sentencing" law, which removes discretion from judges' hands by mandating specified prison terms for specified crimes. The idea behind this law was to remove racial disparity from sentencing.

But, one of our sources suggested, what if discrimination had simply shifted elsewhere in the process?

And thus our story was born.

As we moved into it, it became clear the story was tailor-made for computer-assisted reporting. Simply doing some limited sampling of cases wouldn't work. Once you start looking at specific crimes by criminal background and by specific racial/ethnic group, the numbers can get pretty thin. And when that happens, it doesn't take much to distort results.

Our main data sources were two state files: O, detailing adult felony arrest dispositions, the other providing information on those sent to state prisons. We're pleased to say we handled the entire project on a PC, without having to resort to mainframe or systems people help at all. Our largest of several files was about 100 megabytes, and although we bumped into a limit on the number of fields allowed in a record, Paradox was a speedy database manager for combing through all the information.

Getting the data was a best-of-times, worst-of-times affair. The felony arrest data came from a state agency still willing to make information available quickly and (in this case) at no charge. Getting the prison data, however, was an ordeal. In an experience very much like that recounted in Uplink recently by the Orange County Register, it took months of negotiation and haggling over price before we got what we wanted.

Standing up for criminals' rights isn't politically popular these days, but we thought the story important enough to devote about seven months to it. But as much time as that might seem, it still pales next to how long would have taken without our trusty nine-track tape reader and a 33-megahertz 386 clone.

Ohio newspapers battle for state drivers license data

Bryan Edwards
MICAR

It was only a matter of time before two competing daily newspapers would request the same database at the same time.

Such was the case with two Ohio newspapers.

The Dayton Daily News and the Akron Beacon-Journal both requested state drivers records from the Ohio Department of Motor Vehicles — not knowing of the others request. Supplying the DMV with about 70 nine-track magnetic tapes, the Daily News received the database in November 1990 with intentions of finding repeat offenders of the D.U.I. law.

But the Daily News did not start analyzing the

For discussion:

Rape series points out serious flaws in system

Shey Wessol
MICAR

The Minnesota Corrections Department believes in helping its convicted rapists and child molesters, but its therapy isn't working.

Instead, convicted rapists and child molesters walk away from jail sentences and attack again, the Minneapolis Star-Tribune found in a nine-month computer analysis of recidivism patters of sex criminals.

Nearly one-third of all rapists who had undergone treatment programs were re-arrested within three ars — compared to a one-quarter return rate of six years for criminals who served jail terms — the Star-Tribune reported.

Star-Tribune reporters Allen Short and Donna Halvorsen, intern Dan Eggen and survey specialist Denise Brownfield began compiling the criminal histories of 932 first-degree sex criminals in February 1991. Their findings, published in November, shocked many Minnesotans, and raised the ire of the treatment community by questioning the state's sentencing and treatment procedures.

"What we wanted to do was not only come up with a valid research project involving numbers, but we needed to show the human side as well," Short said.

The two reporters conducted between 125 and 150 interviews with officials, victims and their fami-
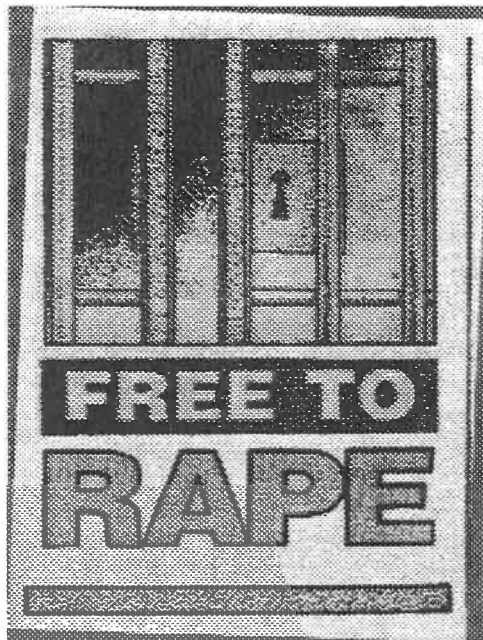
Courtesy Minneapolis Star-Tribune

lies, convicts, therapists and researchers, Short explained.

The investigative team used an IBM mainframe computer to track the criminal history of each individual for a 10-year period using information from three different state agencies, and the four major Minnesota treatment centers. The entire database, consisting of 10 data files, took up 20 megabytes of space, or 13,000 pages of single-spaced text on standard typewriter paper.

The data was not available on nine-track magnetic tape, according to Rob Daves, assistant managing editor for research. "We try to be as flexible as we can here and use whatever technology is available to support the reporters," he said. "We don't let technology drive the reporters."

"This project combined ele-

ments of computer-assisted reporting, social-science research and good old-fashioned shoe leather reporting," Daves said.

From the Minnesota Sentencing Guidelines Commission the team acquired, on a diskette, the names and charges of 932 sex criminals convicted on first-degree charges during the 1980s. Since Minnesota law requires actual penetration of the victim to warrant first-degree charges, the team knew they were getting criminals convicted for the most serious attacks.

That information was supplemented with three megabytes of paper data containing the complete criminal histories of the 932 men from the Minnesota Bureau of Criminal Apprehension, which was keyed into the computer.

"We made a deal with them so that we could get the rap sheets on all of our guys," Daves said.

All the information from the BCA was used for research purposes only, in the statistical analysis and the summary data.

Finally, the Star-Tribune team went to the Minnesota Corrections Department and asked for information on incarceration to calculate when the criminals were on the streets and when they weren't. That data, 400,000 bytes long, was also on paper and entered into the computer.

"We had some stumbling blocks along the way," Short said.

"In 1988, the Corrections Department said the tapes weren't there and that a newspaper couldn't do a valid study on sex crimes. We just went around the Corrections Department until the very end."

All of the information was inserted into Paradox databases, shaped into a flat file and uploaded into the paper's mainframe computer, Daves said. All the analysis was done using SAS, a statistical analysis program.

Manipulating the data was a challenge, Brownfield said. "I do mostly survey data here," she explained. "The biggest challenge, for me personally, was the different number of records for each person. It's the first time I've ever done anything like that."

Short, the lead reporter on the project, began looking into sex crimes in 1988 after a number of rape-murders were reported. Some of the criminals had undergone treatment programs.

"As a reporter, I asked the Corrections Department if they had any information on the outcome of their treatment programs," he said. "They didn't. At the same time, the state was spending millions of dollars on treatment."

The Minnesota Corrections Department spends $6.3 million annually on treatment programs cure many of its first-degree sex offenders. But the agency has never conducted a study to find out if its program works, citing a lack of resources, the Star-Tribune reported.

As a result of the series, both parties in the Minnesota legislature, as well as the attorney general, have proposed new legislative packages for sex offenders.

"In essence, the study engendered a rather heated debate in the treatment community, as it should have," Short said. But, he added, after spending 11 months reporting on rape, "we don't want to write about rapists for a long time."

data until June of 1991, according to reporter John Erickson. "This was such a huge database, we put it on the mainframe," he said.

In fact, the data included every person who was ever an Ohio driver. "There were about 60 million records on the tapes, including drivers who were dead," Erickson said. The problem was much bigger than that. The records were divided into two separate databases — one with the key field, names, addresses and so forth, and the other with all the conviction information. This meant that it could possibly take days to run a simple join.

Then reporters found that the DMV didn't send them all the documentation for the tapes. They scrambled until they located a "lower-echelon" computer technician who helped unscramble the problem.

To add to the growing list of difficulties, they had to use a "primitive" software program called Quick Start, forcing technicians to write a different program for every task. "They wrote a sorting program and gave us the results on paper," Erickson said. Not being able to use a personal computer was another disadvantage, according to Erickson. "It's a lot easier to work on a PC," he said. "You have much more control over the data. When you're on the mainframe you pass along what you want, but you can't play with it."

"It's like being at a press conference and not being able to ask questions," he added. While the Daily News was plodding ahead in their data analysis, the Beacon-Journal was hard at work analyzing the same database. The difference was that the Beacon Journal used a PC to analyze its data.

But problems still arose.

"At the time we had a 1600 BPI tape drive and the tapes were 6250," said Bob Paynter of the Beacon-Journal. "We wrote a program on the mainframe allowing the drive to read the data. Then we loaded it into the PC."

Paynter explained that he used the mainframe to "pare down" the data pulling out only the records they needed. "We ended up with about 5 million records," he said.

Mainframe technicians then copied the records on to a nine-track tape at 1600 bpi. Paynter then imported the records into his PC.

"If I would have had a 6250 bpi tape drive at the time, I would have done it all on a PC," Paynter said. "Then the only time consuming problem would have been load...

After a more than a few panic calls to Qualstar technicians, Paynter discovered his tape drive problem had a name — intermittent C-75 component (a capacitor in this case) on the read board.

He also discovered that the "intermittent" problem was particularly aggravating because sometimes the part would work and sometimes it wouldn't.

Simply put, Paynter packaged up his Qualstar tape drive and sent it back to the company for repairs.

Qualstar, as it so happens, is the company of choice for many newspapers because of the portable lightweight tape drives they manufacture. The 1260 tape drive is an inexpensive, 6250 bpi-capable drive, and is usually purchased through CHI Corp. CHI manufactures the controller card and software that go inside the PC to make the tape drives and computers communicate.

According to Qualstar technician Dan Nguyen, Paynter's drive problems may be the exception and not the rule. There are other problems causing similar symptoms that have simple solutions, he said.

Qualstar customer support has a few "quick fixes" — such as cleaning the heads or re-seating the read and interface cables and the controller card — if your drive is acting demon-possessed.

"I've found that 50 percent of the time re-seating the interface card and the interface cable solves the problem," Nguyen said.
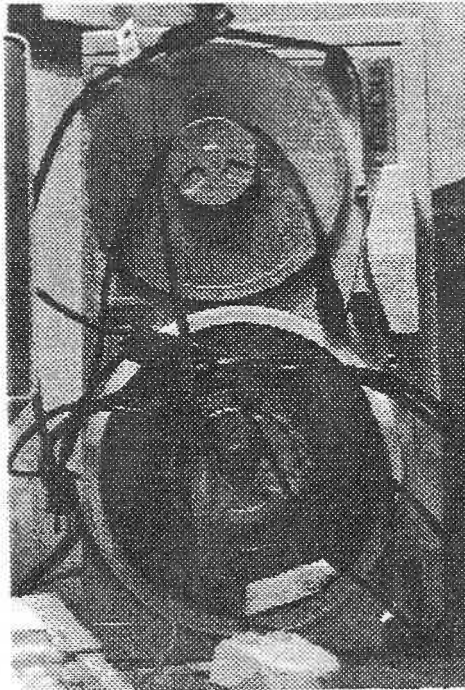
And what about the other 50 percent?

Well it's not that easy. The read cable, for example, has caused more than its share of headaches with no at-home solutions.

Miller can more than relate to that particular problem.

Now in possession of her fourth Qualstar tape drive, Miller was forced to send back two of her first three drives because they wouldn't function properly.

Claudia Ortega Medellin - MICAR

"Our first drive didn't work, so we sent it back," Miller explained. "CHI Corp. was really good to us, and they sent us another one that worked at first. Then census data arrived and it started to rock back and forth."

All Miller could get was a 'C3' or head error. She immediately called Qualstar and talked to a technician who walked her through head cleaning and reseating — making up 50 percent of the problem — and got the drive working again.

The next day, Miller said, it just consistently started rocking.

After sending the errant drive back to Qualstar Miller found that the replacement (the third by this time) they sent, wouldn't work at all.

Ed Foldessy of the Wall Street Journal has a similar story to tell.

"We had plenty of problems right from the beginning," Foldessy explained. "I would download one tape and everything would work fine. But when I'd download the next tape, all I would get is a read error."

Foldessy said he'd then clean the heads — which became a ritual — and the same thing would happen, again and again and again. "Qualstar finally sent me a new read cable, but after a few tapes the same problem would crop up again," he said. "I finally gave up and sent the drive back to Qualstar."

"They told me their was nothing wrong with the drive, but they upgraded the hardware and shipped it back," Foldessy said. "I haven't had any problems since."

The culprit, according to John Thome of CHI Corp., is a grey ribbon found in the older model drives connecting the green read-board to the head. When Uplink talked with him a year ago, Thome said that the green card-edge connector ribbon was the problem, and that CHI was sending customers new cables.

According to Nguyen, Qualstar now uses a blue cable from a different vendor and reports much better performance. He also explained that when you send your drive in for its yearly tune-up, Qualstar engineers replace pesky

problem parts like the dreaded grey cable.

Qualstar has also identified a read problem with the old Hamilton heads when reading certain tape brands and is now installing DRH heads on new machines. Nguyen recommends using only 3M 700 Blackwatch tapes.

Brant Houston of the Hartford Courant, said that his current Qualstar drive is working fine. Houston, like Miller, went through four drives before getting the 1260 model upgrade.

"After a lot of misery we have finally got a drive that works fine," Houston said. "The problem is that after going through that misery, there is a lot of mistrust, and my company would probably not purchase another one."

Houston's drive problems, like those of Paynter, Miller, and Foldessy, had to do with the read cable. With that problem rememedied, all are happy with the current performance of their drives.

Other problems which Qualstar technicians have found within the past year include fried power boards (due to electrical surges), "lost clusters," and faulty controller cards. Nguyen maintains that the most common problem plaguing the tape drive is the accumulation of dirt on the head. Qualstar recommends that you should clean the head and everything in the tape path every two hours of use. This includes rollers, guide and the tape cleaner below the head.

Make sure to apply pressure

when cleaning the head but not so hard as to scratch it. Clean the head horizontally with a swab or q-tip and isopropyl alcohol — 90 percent or higher, Nguyen said.

"I got to the point where I cleaned the heads every five minutes, it was almost like a voodoo ritual," Paynter said. "But to quite honest, I have been remiss since I haven't had problems."

"I've had no problems with the drive at all," Miller said. "Everything is working just fine."

"I guess you could say the fourth (drive) was a charm."

ing the data from 70 tapes."

Once past the drive problems, Paynter experienced others.

"Every time I used XDB I had trouble," he said. "I had import problems, export problems. I literally spent weeks dealing with the XDB people on the phone."

When Paynter began crunching numbers, XDB presented more problems. "I would run it (query) through once and get one result, and get another result the next time," he explained. "I just didn't trust it."

With the frustration level rising, Paynter decided to use another data analysis program called Paradox. The end result was rewarding, he said.

"It's worked great," Paynter said. "But the XDB problems could have been something I was doing. I just don't know."

By September 1991 the Paynter had the results in hand and was able to publish a story about police officers and snowplow drivers with poor driving records.

The story surprised the Daily News.

"We thought we were the only ones who had it (the database) and I think we got a little too comfortable," said Steve Sidlo of the Daily News. "All of a sudden the Beacon-Journal runs some pretty good stories, but it wasn't what we were working on." It became quite clear that the Beacon-Journal had the same database as the Daily News, Sidlo said. So the Daily News began pushing harder to finish the story on DUI repeat offenders. It yielded the story in November 1991.

In December, the Beacon-Journal ran its story on DUI repeat offenders. Too close for comfort for the Daily News, according to Sidlo. He said the Daily News might have waited another two weeks to run the story if it had not known about its cross-state rival. And both papers continue to use the drivers license database regularly. They have broken the data down to make a sub-database that includes only drivers in the circulation area of the respective paper. When a story breaks, they have quick access to information about drivers in their region.