

# Y2K@andrews

## Andrews looks to the not-so-distant future

by Chris Carey

**T**echnology and theology have long walked side by side at Andrews University, but the path has become rockier with the approach of the year 2000.

Will the lights go out? Will the buildings freeze? Will Christ reappear and the world as we know it come to an end?

Some of the best minds at Andrews believe the answer to each question is no. But they are not taking chances. A team of

technologists has been working since mid-1998 to make sure all the university's machinery keeps functioning when the calendar turns over to the new millennium. And a seminary theologian has written a book offering a commonsense spiritual approach to what some predict is a year fraught with peril.

"We think we'll be ready," said David Wilber, AU's director of plant administration. Just in case, though, he has asked his staff to remain in Berrien Springs over the New Year's holiday.

"I don't believe there are going to be any problems," said Patricia Mutch, vice president for academic administration. But registration for winter term is being delayed a week, until January 9, to allow time to fix any glitches that develop on January 1.

"Yes, we'll have it licked," said David Heise, director of information technology, who is overseeing the campaign to make sure all computers and computer-controlled machinery are ready for 2000.

Jon Paulien, the seminary professor whose new book counsels a calm caution, expects 2000 to look a lot like 1999. Nevertheless, he has postponed a West Coast speaking engagement by a week so he can be home with his family over New Year's weekend. The Paulien household will stock up on extra food and make sure the camp stove is working before

Christ will return to earth with the coming of the new millennium.

Paulien, a specialist in the Book of Revelation, wrote his book, *The Millennium Bug*, at the request of the Seventh-day Adventist General Conference. "The book is specifically concerned about a tendency of many Adventists to be constantly reading the tea leaves of current events,

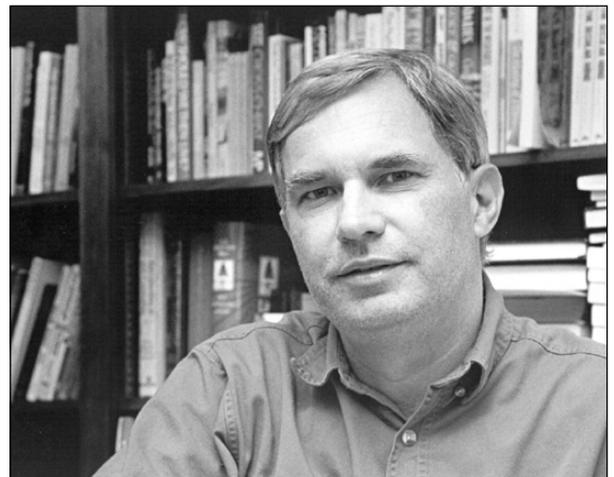
**"...you've got to be balanced in the way you approach these things"**

the calendar turns over, in case the electricity goes off.

The "Y2K problem," as computer users call it, arises from the use of just two digits to indicate the year in computer applications. "99" means 1999. But, if no changes were made, "00" would mean 1900, not 2000. The problem goes far beyond computers. It affects anything with electronic chips that are time-sensitive, such as valves that control heating systems and the recorders in fire alarms. If these systems were left unrepaired, the timing could be off by hours or weeks or a century, or the machinery could fail altogether as soon as the calendar turns over.

Adding to this huge technical problem is a spiritual one: Some preachers are predicting that

looking for some signal of what God is doing in the world," he said. "Too many are too sure of what they've seen.

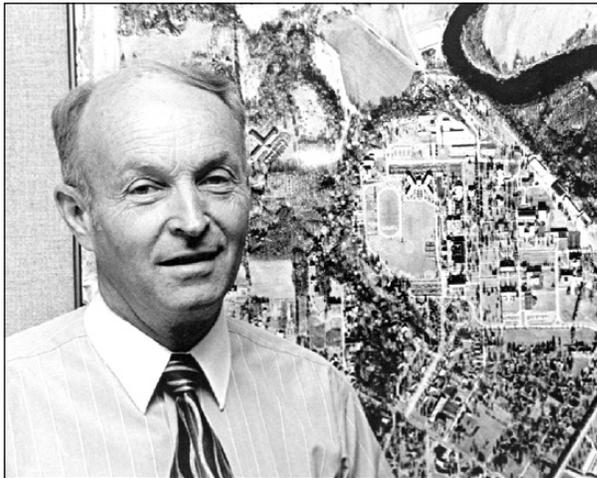


Jon Paulien, a specialist in the Book of Revelation and author of *The Millennium Bug*.

"I don't see anything that makes it absolutely certain that God is acting decisively in the next year or two to bring an end to the whole thing. I'm just trying to help people see that you've got to be balanced in the way you approach these things. The church asked me to write the book to make sure that as the year 2000 approaches we maintain as much sanity as possible."



*Bill Wolfer (left) and David Heise, leaders of the team making Andrews computers and other electronic equipment ready for year 2000.*



*David Wilber, the man in charge of keeping the campus running on January 1 (and every other day).*

In mid-1998 President Niels-Erik Andreasen turned over Andrews' toughest Y2K problem—computers and chip-controlled machinery—to Heise and his 25-member team in the Information Technology Service. Heise recruited William

Wolfer, a former professor of computer science, to help coordinate the effort. And Wolfer recruited about 150 people across campus, at least one from each office, to check every one of AU's more than 1,250 desktop personal computers, or PCs. "People made some heroic efforts to make sure their departments were

accounted for," Wolfer said.

Wolfer's army found about 900 PCs that already were Y2K compliant or could be made so with electronic updates from the manufacturers.

The other 350 computers were taken out of service this summer and replaced with 350 new ones, bought from Dell Computer Co. for about half a million dollars. "That was quite a historical event," Heise said. "I daresay we're not going to see it happen again here."

The computers would have been bought over the next few years in any case. With the bulk purchase, Andrews got a price break, a three-year on-site warranty, and some control. "Supporting them is going to be a whole lot easier," Heise said, because his staff knows where each one is and knows its characteristics.

All the PCs are linked to Andrews' local area network and through that to the Internet. The big computers at the center of the network, the servers and hubs, are Y2K compliant.

Heise and Wolfer also created a database listing all campus computers, computer software, and other devices controlled by electronic chips, such as elevators, fire alarms and heating valves. There are some 1,300 non-computer items in the database, with notations on whether each one is compliant or what steps remain to make it so.

A few items were still being discovered and added to the database in early autumn. "I think we have a pretty thorough approach," Wolfer said, "but I'm not sure we can say we'll catch them all before January 1."

If Andrews is as ready as it can be, what about the services the university relies upon?

Wilber, who oversees the physical operation of the campus, has been assured by the electric and gas companies that their service will

not be interrupted. But he is taking precautions anyway.

"We have bought a backup diesel generator

that will keep the heating plant going at a minimal level," he said. The 100-kilowatt generator will keep one boiler running.

Just in case the natural gas supply fails, Wilber has arranged for a new tank that holds enough propane to keep the heating plant going for three days in wintertime. It will be in place before the calendar turns to 2000.

He also has his eye on a two-megawatt generator that would keep the whole campus powered up. The big generator would cost about \$250,000, Wilber said, "but that's not much compared to what repairs would cost if some of our 40 buildings were to freeze up. We're spending about that much right now to replace heating coils in just the west half of Meier Hall." The big generator would also be used in case storms cut off power long after Y2K worries are forgotten.

Four smaller generators are available for critical functions. One is ready to supply power to the sewage treatment plant, and another is in place to keep the telephone system operating. The other two are portable and will be moved around as needed (to pump fuel into university vehicles, to pump water from wells into the water tower, to keep milking machines going in the dairy barn and for other purposes).

If all goes as Wilber, Heise and the others expect, students will notice only one change: The winter term will start a week later than usual, with registration on Jan. 9 and classes starting Jan. 10. This will be only the second time that registration is 100 percent web-based, with students signing up for classes in their advisers' offices rather than after standing in long lines. The first web-registration, in September, was carried out with only a few minor glitches. Those problems could be identified with the process itself, not with Y2K, and will be fixed in January.

Delaying winter registration by a week means that "if there's a problem, we've got the time margin that we need to deal with it," Vice President Mutch said. One holiday, President's Day, is being dropped from the winter calendar and exams are being pushed back a day to keep instructional time the same as in the past.

Preparing for 2000 has cost the university relatively little money. Most of the people doing the work would have been paid anyway. The computers would have been purchased eventually. The other equipment was needed in any case.

Globally, however, the Y2K cost has been enormous.

Paulien noted congressional testimony that nearly a trillion dollars has been spent worldwide on the problem.

"It was not a throwaway issue," he said. "But apparently that money has done its job, at least in North America and significant other places."

## **"...if there's a problem, we've got the time margin we need to deal with it"**

If there is a Y2K disaster, he expects it to be in some Third World country or in some developed country, such as Germany or Japan, that has been wrestling with other problems for the last few years. And because the world is so interconnected, he warns, problems overseas could have an impact here.

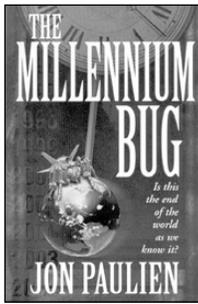
Using Internet links to gather information

from public and private intelligence agencies, Paulien assembled masses of data from around the world on progress toward fixing the problem. "I think intelligent people looking at the issue are a lot more sanguine about it than they were a year ago," he said. "In the summer of '98 there was panic coming out of Senate hearings. They were saying it's worse than people think and it isn't going to get

fixed. Now the latest documents are saying it looks like, with the exception of a few government departments, everything is going to be ready, and those few departments will probably have their most critical systems on line.

"A lot has happened in the last year that is minimizing the general sense of panic. But you have to be aware of the possibility that the interactivity of the systems could still cause us a lot more trouble than we think."

Paulien's short book notes that the year 2000, with the three zeroes, has a certain



**Jon Paulien's book, *The Millennium Bug*, is published by Pacific Press Publishing Association of Nampa, Idaho, and Oshawa, Ont. It costs \$9.99 in the United States and \$14.99 in Canada. It's available at Adventist bookstores and from booksellers on the Internet.**

mythic quality that inspires doomsayers but has no historical meaning. If something tremendous were to happen 2,000 years after Christ's birth, it probably would have happened in 1996, because the best historical evidence is that He was born in what we call the year 4 B.C.

Still, the prophets of calamity are out there and have a following among "that segment of Adventism that has a tendency to go too far with this and to try to know everything in advance."

Paulien's book reviews some of the alarmists' purported evidence (the 1987 collapse of the stock market, the end of the Cold War, President Bush's declaration of a "new world order" after the Persian Gulf war, and other events). But to say that these and other world changes portend the end is to make an unwarranted "leap of logic," he writes.

Better, he says, to follow the advice of Jesus

in Acts 1:7: "It is not for you to know the times or dates the Father has set by His own authority." Or the words of Ellen White (*Selected Messages*, Book I): "No one will be able to predict just when that time will come."

Paulien worries that if 2000 comes and goes with no unusual event, some Adventists will fall into a personal crisis of faith. He advises them to balance their expectation of Christ's return with the necessities of dealing with life here and now and, perhaps, for years to come. By preparing every day for Christ's return, he says, people will be ready whenever it comes.

He counsels focusing on Jesus and His message: "Those who are living in the experience of the 'kingdom' now by faith will be ready when the ultimate kingdom comes."

Studying the Bible and watching current events are both important, Paulien writes, and his final chapters offer tips on how to do both intelligently.

Paulien notes that the end of time is more about Jesus than about events or ideas, and he concludes by quoting from Jesus' message in the Book of Revelation to the last-day church at Laodicea: "Here I am! I stand at the door and knock. If anyone hears my voice and opens the door, I will come in and eat with him, and he with me."

## '99-'00 activities calendar features Y2K

That puckish guy carrying the computer monitor is all over the Andrews campus this fall. He's sprawled on the sidewalk as the crowd walks around him outside Pioneer Memorial Church. He's sitting on a pool table while players are shooting. He's in the swimming pool, in the laundry, in the classroom. He's watching a couple holding hands on a spring evening. And always, he's holding a computer screen.



*Tyson Thorne with one of the uncut sheets of the 1999-2000 student activities calendar.*

He's Monitor Boy, the recurring theme of the 1999-2000 AU student activities calendar.

"He represents some of the hysteria surrounding Y2K, the apprehension of facing the unexpected," said Tyson Thorne, the graphic design senior who put the calendar together for Andrews' Office of University Relations.

"Except for Monitor Boy, each photo is of everyday life at Andrews. But then he shows up in every picture, the unexpected."

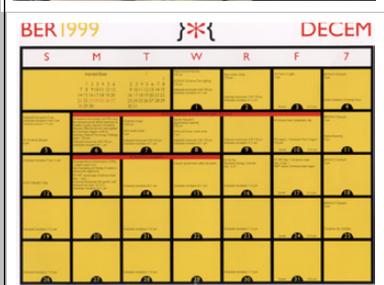
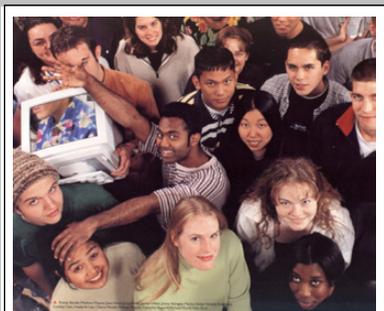
And in each photo, the picture on the monitor screen is a fragment taken from another photo, another month of the calendar, so

that one season weaves into another.

"I would hope that people would come up with their own interpretations," Thorne said. "We're leaving it up to people who see this calendar to figure it out for themselves."

Indeed, anyone who takes the time will find all sorts of riddles in the calendar. Even the monthly headings look like computer glitches of one kind or another, from backwards spelling to topsy-turvy type.

In real life, Monitor Boy is Jesse Hibler, a senior studying architecture. "He's got an impish look, just right for the part," Thorne said. The photos are the work of David Sherwin, an AU grad who teaches



part time in the photography department and operates a studio nearby.

Sherwin's quirky work fulfills the calendar's theme. "With the approach of the millennium many people have many fears," Thorne said, "and those fears are often irrational. We're playing off some of that hysteria in a lighthearted way."

The calendar runs through next August. By then some of the levity may have worn thin. Or maybe, if millennium doomsayers turn out to be right, it won't matter a bit.