

REFLECTION

Editor’s note: Op-Ed pieces and Letters to the Editor are welcome. Discussion of ideas and issues is one of our fundamental rights and duties, as well as being essential to the advancement of all people. The main requirement for acceptance is that they maintain civil discourse. Articles or letters that engage in ranting or ad hominem attacks will not be published. An extra long article or letter may be edited for the sake of space. Email your article or letter to tina.fieldsmedia@gmail.com, or send it via the USPS to Editor, Northwest Michigan Voice, PO Box 28, Rapid City, MI 49676

Puzzle

October 2, 2026

It has bothered me greatly to hear someone say that the Y2K scare was an empty hoax, since nothing significant actually happened. Yeah, that’s because thousands of programmers worked for about ten years fixing the problem. If they hadn’t, when the disaster happened, the critics would have been screaming “You could see this coming for years and you didn’t do anything to stop it!”

So, what was the problem that needed fixing? It was that millions of programs had saved space in the dates by using just two digits for the year. That worked just fine for a long time. But, we were about to go from a year ending in 99 to a year ending in 00. Calculating time from some date in 1997 to a date in 2000, for instance as 00 minus 97 is a problem.

Imagine trying to calculate a membership in a video club, or how long a balance has been outstanding, that now comes out to minus 97 years. Oh, oops. And if only the absolute value of 97 is used, the penalties on a balance that is 97 years old would be tremendous. Any agreement or contract or function dependent on knowing how much time has gone by between any two dates is going to crash if it tries to subtract a bigger number from 00. Yup, that was the problem.

What was needed in order to fix the problem? Every program that had a two-digit field for the year had to be corrected to accept a four-digit field for the year. And how many lines of code would have to be examined for that little problem? Many millions of lines of code – many, many, millions!

Well, okay, so it will take some time to do it, but what’s the gib deal? The programs we had to correct were mostly written in coding languages that limited the size of a record to 256 characters. It was because of that limitation in size that programmers had used a

two-digit field for the year in the first place. Programmers were faced with some serious decisions. Do we figure out a way to cut two digits our of some other field in each record – and how do we choose which field that will be (it has to be the same field in every record)? Do we use a newer programming language and recreate the entire thing – often millions of lines of code? Oh, and how do we find all the programs that need fixing? Some of them are installed on little control devices located in thousands of locations in the electrical grid, and we aren’t sure where all those devices are.

By now, dear reader, you are beginning to see why this was not just an important matter, but also how great a challenge it was going to be.

I am a programmer. I did help. I only fixed three database applications. That took me nearly two years. Fortunately for the world there were millions of programmers around the globe, most of whom fixed many more applications than I did.

On December 31, 1999, all my family members in Michigan gathered in the family farmhouse so we would be together as we went over into January 1, 2000. In case the electrical grid didn’t hold up – some little control device having not been found and reprogrammed – we would at least have each other in a safe place. We had a fireplace we could use for heat and cooking. We still had the pitcher handle pump we could replace on the well. We had a freezer full of food that would stay cold down in the unheated basement. We no longer had an outhouse, but we could work out a makeshift substitute. So, if things went wrong, at least we could survive until things got fixed.

Midnight came and went and the lights were still on. The telephone worked. The furnace worked. We still had running water. Phew! We did, indeed, dodge that bullet.

The dedicated work, the creative reprogramming, the determined search for all those little two-digit year fields in the dates of millions of lines of code – it had worked. The disaster was averted. I was thinking “Eureka! We did it!” Who knew at that moment that we would all get mocked for our success? Because we prevented the disaster, the cynics in the world claimed that the danger never existed at all. But, since we saw it coming, if we had not prevented it, the world would have condemned us for irresponsible failure. I still struggle to get my mind around that – damned if we do and damned if we don’t. Definitely not fair.

I personally know of only one little disaster. There probably were some others. This one was in a billing system. The charge record payment date field contained “00” if payment was due and not yet received. So, when payments came in and were entered with January 2000 dates, the billing system generated a new payment due invoice. As customers received repeated payment due notices after making their payments, they quite understandably got upset and objected vehemently. It didn’t take much longer for that system to be properly updated.

If anybody tries to tell you that the Y2K threat was just a hoax, I hope you will tell them about the years of work by millions of programmers to keep that threat from coming true. Please give the programmers the respect they are due for saving us. Don’t let people mock them.

Well, that’s what I’ve been thinking about.

Shalom

Tina Norris Fields
Editor

Citizenship Corner

These questions may require some research on your part. Thank you for making that effort. The answers will appear in the next edition of the Voice.

From time to time, we hear a lot of talk about the 25th Amendment. Let’s look a little closer.

- 1) There are four sections to the 25th Amendment. What are the first two about?
- 2) What does Section 3 of Amendment XXV cover?
- 3) Has any President invoked Section 3?
- 4) What does Section 4 deal with?

Citizenship Corner

Answers to last issue’s questions

- 1) According to the Constitution, who can be impeached?
A. Per Article II, Section 4L The President, Vice President and all civil Officers of the United States, shall be removed from Office on Impeachment for, and Conviction of, Treason, Bribery, or other high Crimes and Misdemeanors.
- 2) What is the Constitution’s definition of treason?
A. Per Article III, Section 3: Treason against the United States, shall consist only in levying War against them, or in adhering to their Enemies, giving them Aid and Comfort.
- 3) Does the Constitution establish the number of Justices to serve on the Supreme Court?
A. No, the Constitution is silent on the matter of the size of the Supreme Court.
- 4) Why do we have an odd number of Justices on the Supreme Court?
A. Having an odd number of Justices prevents the possibility of a tie in decision making..



Everything in this
paper is important
to somebody