VIPS Adventure

By Ghislain A. Devlaminck

I'm riding back to the Eastern Airlines Miami, FL data processing center in an old jalopy that is one repair job away from permanently going to the junk yard. How did I get the opportunity to ride in this beat up old car in Miami?

The airline had purchased four Sperry Voice Information Processing Systems (VIPS[1]) to be used for crew scheduling. During their once a month maximum use period, the systems would lock up about every 20 minutes. The trip was planned to have me be at airline's center during their next maximum use period. I was a bit worried that I might not be able to resolve the problem, but an easy fix turned into an interesting adventure.

Voice Information
Processing Station

Each VIPS unit could handle twelve phone lines. During that busy week the phone lines were all active 24/7 when crew members would choose their next month's assignments from a phone. VIPS was developed by Sperry's defense group in Eagan for Sperry's Blue Bell, PA commercial division. Users on the phone would press touch tone buttons in response to questions generated by the mainframe computer that managed the crew assignment database.

The airline's Information Technology (IT) folks had discovered that when the VIPS unit locked up, they could reset it and the process continued from where it had left off, because the mainframe was controlling the information exchange. For the users on the phone, it left them thinking that there was just a long pause.

I connected my Z80 emulator to unit #1. When the system locked up I got an expected breakpoint. I started to analyze the data, but within a minute a lady in the data center reached in between me and VIPS unit to reset it. After the lady's third reset I said, "I may as well pack up and go home."

Less than five minutes after my impulsive comment, the Eastern Airlines Vice-President for IT was in the center talking to me. When I explained the situation to him he said, "When you get the next breakpoint, you can have that one unit for two hours to analyze the problem." After having a little time to examine the data I was able to come up with a fix. With the fix installed and running on the emulator; VIPS Unit #1 no longer locked up.

I arranged with Eagan support department to change the code and to send four Programmable Read Only Memories (PROM) burned with the new code to Miami. They would send them counter to counter via the airline, but the PROMs would not get to Miami until about midmorning the next day.

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[1] Reference page 6 of http://vipclubmn.org/Articles/The%20Invention%20of%20Voice%20Mail.pdf.

Learning about the delay in getting updated PROMs, the airline guy I was working with said, "We could burn those PROMs at my house. I've got an Ultra Violet (UV) PROM erasing oven. If you save the code on the floppy disc we can take it to my place and program the PROM."

I thought, *what the hell we might as well try this to get the first two systems up and running sooner.* Unit #1 would run off the emulator and unit #2 would get the updated PROM. If those units ran without locking up overnight it would give us confidence the fix worked.

Carrying the floppy disc with the fixed code, we headed outside to the parking lot. I started to head toward my rental car, but the airline guy says, "Let's take my car, I know where I'm going." On the way to our destination he told me, "the 'reset lady' is the VPs girlfriend and she called him the instant I made my comment."

We finally got to this house, where he was temporarily living with his in-laws. He had this specialized equipment to burn PROMs as part of a side business he was involved in before he moved to Miami. Except now, it was all stored in boxes sitting in his in-law's porch. While we were in the porch digging through the boxes for the floppy drive reader, UV oven, and other needed equipment, his mother in-law was standing at the kitchen sink periodically looking over her shoulder at us while she did dishes at the sink. We got the equipment set up and successfully erased and re-burned the PROM with the fixed code.

Then, back at data center we installed the PROM in Unit #2 unit and continued to run the first unit with the emulator. The two units ran overnight without crashing. About midmorning the four updated PROMs arrived from Eagan, were installed, and we had all the units running.

I stayed one more day just to make sure everything continued to work through this max-use-period crew scheduling time frame. It did!

And that old rental jalopy went back to the lot for the next 'driver'!

Gish Devlaminck.

{Editor's notes:
    1. The images herein are copied from the paper referenced on page 1.
    2. This paper is an example of an engineer solving a problem while at a customer's facility. AND, the home office accepting a hardware or software change from an engineer in the field.
    3. Mr. Devlaminck and his wife joined the VIP Club in July 2009 after retiring from LMCO.
    4. Gish joined the Club's board in 2015, taking on responsibility for our membership database.
Edited for the web by *LABenson*}