

## Member Spotlight: Verlyn Kuhlmann

I've liked every job I've had. Here are highlights of a few.

I joined the Navy, in 1951; went through boot-camp at NTC in San Diego; after electronics training was assigned to a Destroyer Escort, where I & 3 other "ET's" were responsible for the maintenance of the electronics equipment on the ship. I left the Navy after 4 years, having made 3-trips to Japan (during the Korean "conflict"). I really enjoyed the electronics experience I had in the Navy!

After my discharge, my first job was with "United Airlines" (UAL) in Denver, as a "Ground Radio Operator".

The job was to communicate with UAL planes: 1) Giving a Time-Check & the ground-altimeter reading (to calibrate the plane's altimeter), prior to takeoff; 2) Monitoring the plane's progress via reports from the plane; 3) Forwarding the report to "Air Traffic Control"; and 4) Relaying any flight-change decisions from the Air Traffic Controllers back to the plane. Of course, planes now report directly to Air Traffic Control. This job was very interesting & challenging, but the downside, occurred when I was unable to contact a plane that I was monitoring. I was getting anxious for the plane to make its first report at their projected time over the mountains. The expected report was getting very late and I was "shaking like a leaf" – I was finally relieved of my duties. I have a **VERY DEEP RESPECT** for "Air Traffic Controllers". We later learned of plane wreckage. The plane had crashed in a field just east of the mountains. It was later determined that "John Gilbert Graham" had placed a bomb in his parents luggage, with plans to take over his parent's restaurant. John subsequently was executed in the gas chamber. Years later, as I changed TV channels, I ran across a movie with one of my favorite movie stars (Jimmy Stewart), so decided to watch it. As the plot unfolded, I said "this plot seems familiar". It turned out to be the first episode, about "John Gilbert Graham" bombing a plane in Denver, in "The FBI Story", which consisted of a number of actual cases from the files of the FBI.

I attended the University of Denver (part-time while with UAL, and full-time after I left) and graduated with a BSEE in 1959. I took a civil-Service

job at "NEL" (Naval Electronics Lab) in San Diego. On my very first day on the job, my boss asked me if I was interested in attending a computer class. I jumped at the chance, because I knew absolutely nothing about computers. I initially learned that a "digital computer" is a device which performs logical & numerical calculations using a binary system operating with "On" & "Off" signals, represented by "One's" &



"Zero's". The very first program I had to write was to use only the basic "1's" & "0's" – which required learning the concept of "Binary Arithmetic" and counting in "Octal" instead of "Decimal". The program, if I remember correctly, was to design a working "Clock". **THIS WAS PERHAPS MY FIRST HOROLOGICAL PROJECT.**

I've seen many computer technology changes in my career: I have taken many other computer courses and learned different levels of programming languages, such as: Assemblers" & "Compilers" (the next step above "1's" & "0's"); the next evolution, "Higher Level Languages" such as "FORTRAN" & "COBOL", which use entire functions instead of individual steps. I've experienced the use (and pitfalls) of a variety of "Input/Output" media: I started with "Paper-Tape" (after passing through a "Reader", the tape "dumps" into an oversize plastic container and requires a very careful rewind; also if a large roll is not very carefully supported while handling, can fall apart, or uncoil from the inside spiraling onto the floor requiring hours to untangle before it can be rewound); next came Punched-Cards (with their notorious "Chads"); Floppy-Disks & Diskettes; up to the present-day CD's, DVD's & Flash-Drives. Hardware changes, from: room-size computers using vacuum-tubes; & refrigerator-size computers using transistors

& circuit-boards; to "PC's", "desktops" & "laptops" some of which have more computing-power than the old room-size computer. I've seen a vast change in "computer use". Initially used primarily by: educational -institutions; the government; & the military requiring an intimate knowledge of a computer's design. To today's wide-spread use, which has been made possible by more "user-friendly" operating-systems & programs which don't require the "user" to understand the intimacies of computers.

I have worked with computers for my entire career (initially with "hardware", but soon switched to "software" because it was much more satisfying), and have "LOVED" every moment.

In my civil-service career, I worked on many interesting projects all related to computers: at NEL (over 29 years for the Department of the Navy); on two different submarines, one, the USS Dolphin – the world's deepest-diving commissioned (diesel-electric) submarine!: My last project (just prior to retiring) was a "War-Games - like" project to develop a computerized torpedo to be used against "Soviet submarines". I also worked on several very interesting projects at the Bureau of Standards in Boulder, CO (1966-1970), such as "Over-the-Horizon" radar. But the most interesting of which was for the "Voice of America -- VOA", where we ran tests to predict the ionospheric reflection (bounce-action) of High-Frequency radio waves, which was the technique used by the "VOA" to penetrate the "Iron-Curtain".

The only reason I retired (June 1993) was because government consolidation required a move to Newport, RI and since I enjoyed the excellent weather of San Diego, decided to "hang it up".

I got the clock bug (repairing clocks) in the mid 70's. Phyllis talked to someone at Sears Roebuck, and learned of a clock club in La Mesa. We attended a meeting of Ch59 & I joined NAWCC (&Ch59) in Feb of 1978, and have enjoyed it very much. I am primarily interested in "400-Day" clocks, electric "Mystery" clocks by "Jefferson" & "Haddon", & "musical-alarm" clocks.