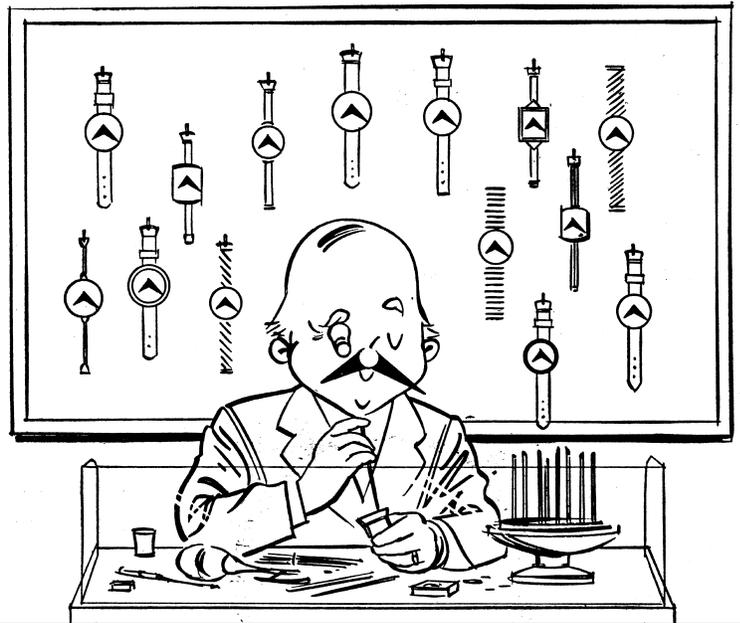


Who Needs a Watchmaker?

by Domenic J. Calzaretto (NJ)



I can't believe how much time has passed since I submitted my article "The Watchmaker an Endangered Species" published in the December 1996 *NAWCC Bulletin*. The Latin term "Tempus Fugit" (Time Flies) really applies. Incidentally, I've been a member of the NAWCC for 33 years and always was impressed by our logo, which appeared on the front cover of the old smaller *Bulletins*, of an Englishman (Tommy Ticker) with proper attire, a top hat, and an umbrella tucked under his arm. He had a pocket watch in his hand and compared the time on his watch with the sundial. Also included was the Latin phrase "Tempus Vitam Regit" (Time Rules Life).

When I wrote the 1996 article, I received some skepticism and opposition to my premise about the shortage of watchmakers. However, as time has evolved, statistics reveal that apparently I was right in foreseeing this serious occurrence.

In addition, I've been told almost weekly by individuals—some in a serious tone, some jokingly—that most people throw their watches away because they're so inexpensive. This has some validity but is not entirely true. I've also heard the younger generation say, "We don't even wear a watch; we use our cell phone for the time." This may be true, but someday you'll inherit your parents', or grandparents', or great-grandparents' watch. You'll treasure it and desperately want to see it functioning and telling time again. My contemporaries and I will slowly but surely fade away. Good luck on your quest!

I am currently 75 years old; at age 15 I started watchmaking school and am still working full-time after 60 years of practicing my trade. I'm in more demand now than I was as a young watchmaker. I tried to retire 10 years ago at age 65 but all the businesses I serve told me that they had no replacement for my services and would be forced to stop taking in repairs. A guilt trip was placed on me because I was taught as an apprentice that watch

repairs paid the store's rent and brought customers in to see the jewelry items, which could possibly lead to a sale—where the real profit is.

When I was a young man, watchmakers were a dime a dozen, but, nowadays, good competent watchmakers are few and far between. I worked in a large trade shop in Philadelphia for 37 years, with anywhere from 10 to 15 watchmakers from all over the world.

I started as an apprentice and eventually worked myself to shop foreman. After 37 years of employment, I decided to work for myself and opened a shop at my residence in New Jersey, across the river from Philadelphia. I've been working in my shop for 23 years, servicing local jewelry stores; unfortunately, I find myself alone, with no meaningful competition.

I now find myself inundated with more expensive, high-grade, complicated, and antique watches than I ever encountered as a young watch repairman. Unfortunately, today there are fewer and fewer craftsmen who are qualified or competent enough to repair these fine timepieces.

When I was in watchmaking school, circa 1950, the class went to the Hamilton Watch factory. There were approximately 4,000 employees (mostly women) with hands-on expert assembly skills. I was very impressed. We spent the whole day there. Of course, Hamilton, as well as all of the American watch factories and the skilled craftsmen and women are all gone, along with their skills and experience.

With the advent of the electronic watch a whole new era dawned. The first electronic watches I recall were digital: you pressed a button and the hour and minute numbers lit up on a red crystal (Pulsar, et al.). The watch repairmen around me foresaw doom and gloom, because these were not really watches with moving parts, but sealed electronic units with nothing to repair, except perhaps to clean out corroded buttons and/or replace a bat-

tery. I did not share any of their feelings because I knew that in America alone hundreds of millions of watches had been manufactured from the beginning of the 1900s to the 1960s. I felt there still would be sufficient demand for mechanical watch repair during my lifetime. Even today at least 70 percent of my watches are still mechanical watches.

Within a short period of time customers tired of pushing a button and receiving a numerical readout. They expressed a desire for watches with hands, calendar (day-date), moon phases, chronographs, etc. Hence dawned the advent of the quartz analog watch, whose outward appearance is strikingly similar to the average mechanical watch. But the power source is no longer a mainspring. The three basic components powering this electronic timepiece are the battery, coil, and circuit.

Watch factories found themselves in a situation where they didn't have enough skilled craftsmen to be able to manage both the electronic knowledge and the mechanical skills required to service these timepieces. The electronics technicians lacked the experience, skills, and dexterity required to handle the tiny wheels, levers, and springs in a mechanical timepiece. Also very few watch repairmen had acquired the knowledge necessary to master the electronics aspect of the quartz timepiece. Watch manufacturers launched a two-pronged effort to alleviate this situation. They sent instructors to trade shops throughout the United States and also held seminars at various locations. In a short period of time the watchmaker was able to overcome his fear of electronics, learn to use the proper electronic equipment, and continue to pursue his profession. As President Franklin Delano Roosevelt said, "The only thing to fear is fear itself." The electronics technician had a more difficult time because of the reasons mentioned previously.

As I mentioned above, I've been in an American watch factory and witnessed the labor intensity required to manufacture a mechanical watch. I've also seen pictures of quartz watch manufacturing in watch magazines and journals. The plants producing quartz watches from the photos I saw were primarily robotic, with a very minimal labor force and the final cost per piece is a fraction of mechanical watches.

I reasoned that there would never be manufacturing of mechanical watches again. To my surprise, I have been reading in watch magazines, advertisements of Swiss high-grade, complicated, expensive mechanical watches being manufactured. Many are made by the small, old, prestigious factories that have been in existence for over a century, which I compare to our mini-breweries. These watches are starting to appear in my shop and they prove to be of excellent quality. I am very pleased and impressed.

Apparently, there will always be the have and the havenots in every society or political system. There will hopefully always be sufficient individuals who will appreciate quality and fine craftsmanship, who have the ability to recognize the difference and the means to afford it.

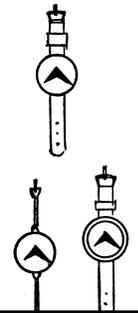
Unfortunately, our problem here in the United States and elsewhere in the world is the serious shortage of watch repairmen with the skills required to properly service these fine timepieces.

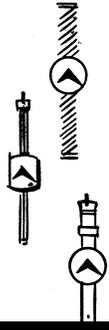
I read one article in the AWCI journal from December 2008 titled "Are Watchmakers an Endangered Species in the United States?" It revealed that in the year 2007 there were at most 8,000 watchmakers in the United States. Unfortunately, half of them were over 61 years of age. The number of watchmaker training facilities has declined to 11 from 43 in the 1970s. The maximum graduates a year, if the full complement of students is enrolled and complete the course is 80—less than the amount of aged watchmakers a year who retire or sadly expire and take their years of experience with them. In a country of over 300,000,000 people, we are and have been experiencing a critical shortage of watchmakers.

There also was an article from Switzerland several years ago stating that their goal was to train 25,000 watchmakers in three years' time, which in my opinion is near impossible for a couple of reasons.

First, students drop out. When I went to school in 1949 it was also a three-year course with 23 students enrolled. Three years later only three of us had completed the course and graduated. One year out of school and the other two fellows gave up watch repairing altogether. So I remained the sole survivor of the watch repair class of 1949.

Second, the complications that watch owners expect and demand in today's watches are difficult. Watches feature calendars (day-date), moon phases, automatics, alarms, chronographs, etc.





When I started in the trade, watches basically just told time. When the first calendar came to our shop, we all gathered around the old master and witnessed the dismantling, explaining, and reassembling. It was just a date calendar and took about an hour past midnight to complete the changing of the date.

Then came the first automatic and again we witnessed and received an explanation on this new marvel in engineering. The same with the first wrist alarm watch. Finally, the combination of all three functions in one watch.

Fortunately, I was there at the inception of these new innovations and grew in knowledge and experience as the years progressed. Of course, the inevitable occurred with the addition of all these functions to the chronograph, which created a much more complicated watch, requiring a great deal of skill and experience.

Watch owners demanded a calendar with day and date but also with the ability to change precisely at midnight and not over an hour or so. This required more complications to achieve, such as levers, cams, wheels, pinions, and springs. There were many improvements on the automatic mechanisms over the years compared to the early ones.

If the Swiss were able to assemble 25,000 candidates for their watch classes and retain them until graduation, I sincerely doubt that they would be considered qualified and experienced enough to be entrusted with servicing the complicated, high-grade, and expensive watches being produced today.

As I was ready to conclude this dissertation, a customer entered my shop (absolute truth). He told me he was getting married and his fiancé was presenting him with a Baume & Mercier chronograph-calendar watch. He asked my opinion on this timepiece. I gave a par excellence recommendation on this watch, because it is a high-grade, complicated, and expensive watch. This incident reinforces my premise that I'm being exposed to more quality, complicated, and expensive watches than ever. Incidentally, the price was \$3,400. I sincerely doubt that he will be throwing this magnificent timepiece away when it needs service. But if he decides to discard it, I hope he informs me, so I can be there to catch it.

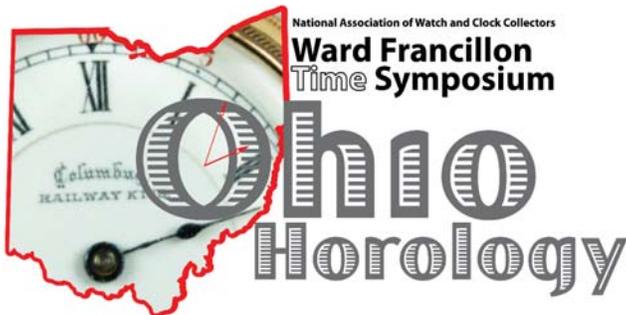


Apparently, the American psyche has been programmed to believe that watch repair is a thing of the past and no longer needed. Nothing could be farther from the truth.

I sincerely hope that our government and the rest of the world wake up and begin to recognize the seriousness of the shortage of watchmakers before it's too late.

As I stated in my previous article, "Time is rapidly approaching when you'll be lucky to say, 'I have a friend who knows a friend whose relative has a friend who knows a watchmaker.'"

Watchmaker Domenic J. Calzaretto at his bench.



October 20-22, 2011
Cincinnati Airport Marriott, Hebron, KY

Symposium information begins on page 376.

Off-Site Tour



American Watchmakers-Clockmakers Institute Training Facility, Harrison, Ohio.

Tour includes the training facility, research library, and museum.

Symposium information continues on page 441.