Two Russian Clocks

In 1997, I bought a new Russian "ship's watch" for my collection. According to Juri Levenberg's book Russian Wristwatches, this clock, Model 5-24M, was made at the Wostok Watch Factory in Chistopol, Tatarstan, about 500 miles east of Moscow. It has a painted metal dial that says "Komandirskie" and "Made in USSR." During the 1960's and 70's, commander watches could only be bought in stores reserved for officers. I was curious and the price was attractive, so I bought one. I assumed that, for this price, something had to be wrong with it!

So I took the clock completely apart, and was pleasantly surprised to find a 12-jewel platform similar to that of a French carriage clock, if not high grade. The hairspring had a Breguet overcoil. The back plate had a jewel for the contrate wheel. However, it appeared to be dry. The mainspring was powerful, but poorly finished. When I lubricated the escapement, the balance had to much swing and suffered from overbanking. In addition, the bearing and pivot surfaces of the barrel arbor and second wheel were not smooth, so polishing was necessary.

I purchased a new mainspring, 16mm wide, 0.013" thick, and 78" long, Merritt's part #80865. I cleaned the new mainspring and lubricated it before installation. I polished the four pivots and the bearing surfaces for the barrel on the arbor. I disassembled and lubricated the platform escapement. I adjusted the stop mechanism on the barrel so that it would stop with one full turn left on the mainspring (counting from the unwound position rather than the fully-wound position, contrary to normal procedure, because the mainspring is a little too strong in the fully-wound position and this was the best-fitting spring I could buy from my suppliers). Reassembly, lubrication and adjustment required just over an hour's work.

I recommend the above work to anyone who has one of these submarine clocks, because the mainspring in mine had some rust on it and was so poorly finished. I felt it would break sooner rather than later, causing much damage. The new mainspring also improves the timekeeping of the clock. Polishing the pivots and adding proper lubrication increases the clock's life expectancy. I expect they were sold unlubricated because they were intended for use in very cold Siberian weather, rather than in Texas.

Click on the photos below to see enlargements in a new window.
16 November 1999: a friend bought two of these clocks and brought them over to show them to me. These clocks have steel plates with brass bushings inserted into them. There are several other details I noticed in these clocks that were different, most notably that the construction was not as good. The only positive change was that these newer clocks had been lubricated, whereas the clocks I bought in 1997 were dry. I do not like these new clocks with the steel plates and cannot recommend them. The ones with the brass plates were not wonderful, but they were considerably better than the ones with the steel plates, I am sorry to say. Caveat emptor.
Below are photos of a hand-made chronometer by Poljot, circa 1996. This clock was sent from Worcester, MA. I did not fully disassemble this clock since it only needed minor repairs. The brass parts appear to be gold plated. The mechanism has a fusée with chain and a wind indicator on the dial. It has 15 jewels and a chronometer detent escapement. It has a compensation balance and a palladium helical hairspring. The fit and finish of all parts are very good (unlike the Russian Submarine Clock) and the clock keeps excellent time. While this clock was very well made (extraordinary effort was obviously invested in its creation), collectors should be cautious because they will find it difficult (if not impossible) to find replacement parts.
"Without time there is chaos. Time links cartography, physics, math, astronomy, navigation, art and military history."

New York Times

Few clocks demonstrate these links better than marine chronometers.

Mark Headrick