



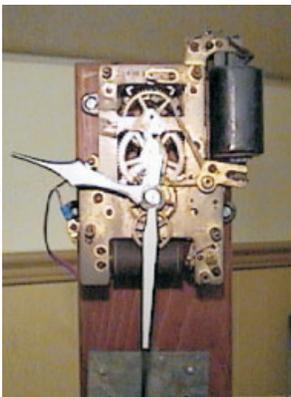
## Meeting minutes, Nov. 4, 2005

### Self Winding Clocks

After a successful two-hour mart, the meeting was called to order by President Charles Register at 8:00 P.M. The minutes of the previous meeting as published in the Tic Talk Times were approved. We welcomed our guest, Richard Gottlieb.

Charles announced upcoming marts and conventions:

- The Del Mar Regional, Nov. 17-19
- Chapter 130's Mini-Mart, December 4
- The Greater L.A. Regional, first weekend of February
- The National convention in Cleveland, OH, June 21-26



*A Self Winding Clock Company  
movement*

One more plea was made for volunteers to fill the positions of chapter secretary and open directorships. While the members

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## This month

### Time Trials, The Movie

Our program this month is one created by our own Dave Weisbart. As some of you know, Dave created a horological game show called "Time Trials." A presentation of this show has been taped and Dave produced a program which is now part of the NAWCC lending library. This will be a good chance for you to test your horological trivia knowledge. Come and see if you can beat the contestants on the tape to the correct answers.

Included on the DVD are some "sing alongs," so we may celebrate the holidays with a Dave Weisbart version of the "12 Days of Christmas."

Before the meeting starts, we'll have our annual holiday party, so get there early! Don't forget if you bring a plate of goodies this month you will not have to pay the usual door fee.

Come and celebrate the holidays with your horological friends.

*Bob and Cora Lee Linkenhoker*

## Message from the President

### Year End Thoughts

Now that the year is ending, it is time for reflection, and for me it would be the things that happened for Chapter 69 under my stewardship. After some reflection over the two previous years, I'd like to thank the members, board, and officers for their support and encouragement.

That being said, please don't stop your support and assistance. It is always necessary for a smooth running chapter. And we want to be the best.

I'd also like to wish all the membership a very Merry Christmas and a prosperous and healthy New Year.

*Charles*

Charles A. Register

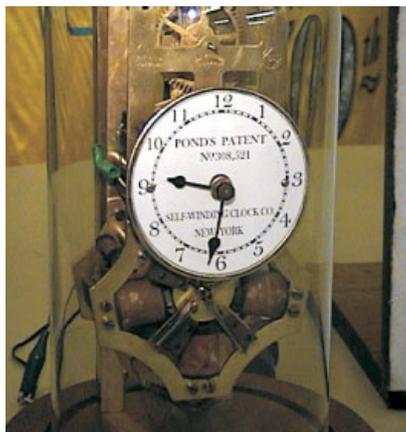


## Meeting Minutes *(from page 1)*

muller over that, Charles shared the Silver Certificate we received from headquarters acknowledging our contributions to member recruitment.

Elections were held. Continuing in the second year of their terms are directors Cora Lee Linkenhoker, David Weisbart, and Dennis Woodson. The slate of officers is: President, Doug Adams; Vice President, Ray Brown; Treasurer, Bob Linkenhoker; Secretary, Derald Kliem. (Derald was a last-minute volunteer. Thank you, Derald!) Volunteering for a directorship was Phyllis Adams. The slate was approved by a voice vote of the members.

Note that we are still in need of volunteers for directors. This is the first year in recent memory where we



*An early Ponds' patent clock*

did not have a full slate for our elections. Please consider volunteering!

For the Beginner's Corner, Dave Weisbart told us about his experience at the Ward Francillon Time Symposium in Houston, TX, in October. He showed pictures and told us a little bit about each

of the speakers and the topics of their lectures. He then showed a 12-minute video he made of two fabulous private collections which attendees of the symposium got to visit. The collections contained spectacular, museum-quality early American clocks. Dave wanted to emphasize just how valuable his experience was, and he encouraged more people to attend this annual event.

Our program was a very pleasant surprise. Les Lesovsky gave an excellent and highly informative talk on the history of time-standard distribution, and the role of the Self Winding Clock Co. The story began in Greenwich, England, in 1835. An enterprising fellow, John Belville, took his marine chronometer around to various locations and sold them the correct time, earning 500 pounds a year in the process.

In America, some college observatories earned money by providing similar services. In 1877, Western Union became the exclusive distributor of time signals from the U.S. Naval Observatory. Western Union continued this function until 1963.

Chester Pond ran the "Time Telegraph Co." starting in 1882. This was renamed the "Telegraphic Time Co." in 1885. He patented the self-winding clock in 1884. It



became the standard "slave" clock in railroad terminals all over the country.

The Self Winding Clock Co. and Western Union were separate companies until Western Union bought the clock company's assets in 1963. Shortly thereafter, the entire network of Self Winding clocks was abandoned in place, with the clocks simply remaining on their walls until someone decided to take them down.

Les's talk was accompanied by a Powerpoint presentation that included excellent pictures of old transits and other time-determining and transmitting apparatus, as well as depictions of the clocks. Thanks for a great talk, Les!



For Show & Tell, Charles Register brought two men's wristwatches (top) that matched the "U and V" theme this month: A Universal Geneve "Unisonic" and a Ulysse Nardine.

Bob Selene had an unusual Oswald clock (left) with an all-wood case, made by Oswald Uhrenfabrik. Roy Irick showed a

beautiful champeve-decorated crystal regulator marked "Vincenti." It was a bit smaller than the typical crystal regulator, and featured a real mercury pendulum. Roy talked about the benefits and pitfalls of dating a clock by the award medals shown on its movement.

Door prizes were won by Eric Leung, Alan Lynn, and Charlie Lowry.

*Respectfully submitted,  
Dave Weisbart*



# Timekeeping at the U.S. Naval Observatory

The United States Naval Observatory is located at 3450 Massachusetts Ave., NW, Washington, DC.



In 1845, at the request of the Secretary of the Navy, the Observatory installed a time ball atop the 9.6-inch telescope dome. The time ball was dropped every day precisely at Noon, enabling the inhabitants of Washington to set their timepieces. Ships in the Potomac River could also set their clocks before putting to sea. The Observatory's Time Service was initiated in 1865. A time signal was transmitted via telegraph lines to the Navy Department, and also activated the Washington fire bells at 0700, 1200, and 1800.

This service was later extended via Western Union telegraph lines to provide accurate time to railroads across the nation. The Observatory participated in a program of determining longitude by comparing local time with that telegraphed from a clock at another fixed observatory, and thus exchanged time signals with other observatories and with the Coast Survey field parties.

Beginning in 1934, the Observatory determined time with a photographic zenith tube (PZT), a specialized instrument that points straight upward toward the zenith and automatically photographs selected stars crossing the zenith. This gave a measure of the Greenwich Mean Time (now called Universal Time), the "time of day" based on the rotation of the Earth. Improvements in clock technology, including the Shortt free-pendulum clock and quartz crystal clocks, soon proved conclusively that the

## FOR SALE

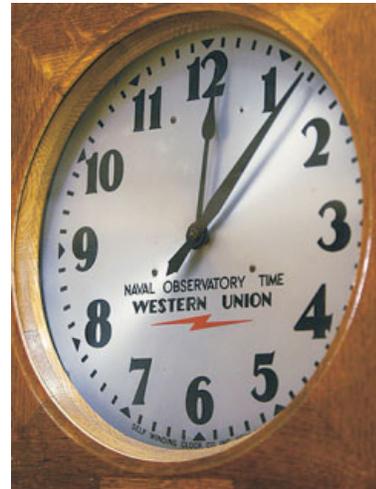
HONDEN LATHE	10" CRAFTSMAN
8" Swing by 27"bed	OVERARM SAW
Many accessories	4 Extra blades
\$450.00	1 Shaper blade set
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For information contact Bob Linkenhoker at 951/898-5825 or rlink3@juno.com

Earth's rotation was not uniform, and a new uniform time scale known as Ephemeris time came into use in 1956.

Defined by the orbital motion of the Earth about the Sun, in practice Ephemeris time was determined by observations of the Moon, first undertaken with the dual rate moon camera, invented by William Markowitz at the Naval Observatory in 1951. In 1984 the family of time scales known as dynamical time replaced Ephemeris time as the time based on the motion of celestial bodies according to the theory of gravitation, now taking relativistic effects into account. In the meantime, the development of atomic clocks brought about the introduction of a much more accessible time - the Atomic time scale based on the vibration (an energy level transition) of the cesium atom.

Time dissemination has also been continuously improved. In 1904 a naval radio station transmitted the first radio time signals ever; they were derived from a U.S. Naval Observatory clock. This was the beginning of a system of radio time (WWV and other stations), constantly improved and increasingly automated through the century, that now spans the globe. The function of rating, repairing and disseminating chronometers and other nautical instruments, a major and especially critical effort during World War II, was transferred from the Observatory to the Optical Section of the Norfolk Naval Shipyard in Portsmouth, Virginia in 1950.



Excerpted from

<http://tycho.usno.navy.mil/history.html>

Written by Dr. Steven Dick.

## Tic Talk Times On Line

Would you like to save the chapter some money and receive the *Tic Talk Times* over the Internet?

Send an email request to [webmaster@nawcc69.org](mailto:webmaster@nawcc69.org). You can also view the current and past issues at [www.nawcc69.org](http://www.nawcc69.org)

**DATED MEETING NOTICE  
PLEASE DO NOT DELAY**

*The National  
ASSOCIATION OF  
WATCH & CLOCK  
Collectors, Inc.*  
Orange County Chapter No. 69  
c/o Dean Armentrout  
332 Forest Avenue, Suite 6  
Laguna Beach CA 92651



**Our Next Meeting: Friday, December 2, 2005**

*Program:*

**HOLIDAY PARTY!**  
Plus a live/video show  
"TIME TRIALS"

*Beginner's Corner Mini-Seminar:*

No Beginner's Corner this month

*Show & Tell:*

Horological items beginning with the letter "W"

*Board Meeting:*

No Board Meeting This Month

**FREE ADMISSION WITH A PLATE  
OF HOLIDAY GOODIES!**

*Time:* 7:00 – Doors open  
8:00 – General Meeting

*Admission:* \$4.00 – General  
\$6.00 – Couples

*Location:* Acacia Grove Masonic Lodge  
11270 Acacia Parkway  
(in the Civic Center)  
Garden Grove, CA

