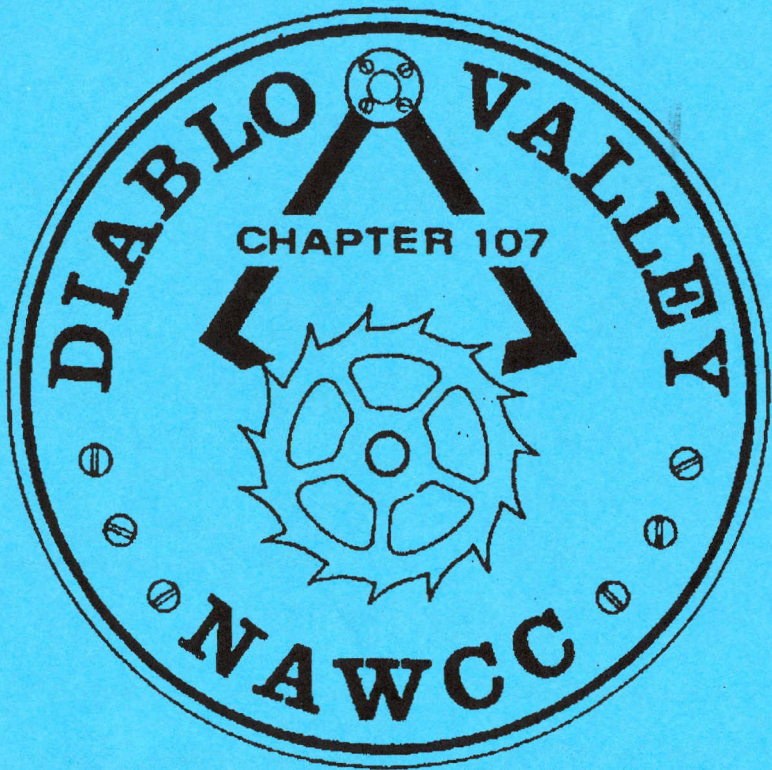


BULLETIN



April 2001
Volume 134

DIABLO VALLEY CHAPTER 107

National Association of Watch and Clock Collectors

Chapter Established March 5, 1978

Chapter Motto "Accent on Education"

MEETING DATES, MEETING TIMES, AND MEETING DIRECTIONS ARE IN THE BACK OF THE BULLETIN

OFFICERS

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Vice Pres.	Dale Gardner	510-531-7565	
Secretary	John Stohr	925-376-6476	
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DIRECTORS

2001/2002	Bert Bradley	510-527-3454	
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COMMITTEE CHAIRS

Display	****open****		
Raffle	Jack Coulter	925-284-1031	
Library	Sandy Cuthill	925-686-3144	
Libr. Storage	Roy Holman	510-530-5428	rhomanjr@juno.com
MART	****open****		
Membership	Roy Holman	510-530-5428	rhomanjr@juno.com
Nominating	John Stohr	925-376-6476	
Photo	Sophia Gardner	510-531-7565	
Program	Dale Gardner	510-531-7465	
" "	John Stohr	925-376-6476	
Refreshment	****open****		
Tool Library	Walt Hubrig	925-685-0260	
Editor	Bill Koppel	925-934-9391	wkoppel131@aol.com

APRIL 8, 2000 Meeting
 Acalanes Adult Center
 (The old Del Valle High School — Room A8)

**NOTE
 THE
 TIME &
 ROOM
 CHANGE**



***** *TIMES* *****

Mart/Social Time	12:00 Noon
Program Start	12:30 PM

***** *PROGRAM* *****

“SHOW AND TELL”

Dale Gardner will discuss one of his most interesting clocks.

“JAY’S TREASURE HUNTS”

Jay Taylor will talk about hunting for treasures. He will discuss:

- How to look for treasures.
- How not to look for treasures.
- Where he found his great treasures.
- Where he found his not so great treasures.
- The treasures he would not part with.
- The treasures that should be used as parts.

President's Message



Wow! Attendance at the February meeting was great. We had freebies, thanks to Jack Coulter, the first mart in a long time, and several new members. A special thanks to Bob Wahrer who "shared" his clocks. We also had a good turn-out for the Friday meeting in March. I know I had a great time providing the programs for these meetings. I hope you found them enjoyable and useful. At the Friday meeting, I promised to make a list of horological web sites. I want to also provide a couple of interesting bits of software. As soon as I get a chance I will put it all on a floppy or CD and distribute them at a meeting.

Unfortunately, I will not be able to attend the April meeting, but we have a good program lined up. Jay Taylor will tell us about some of his collecting experiences and Dale Gardner is planning to bring one of his clocks for "show and tell." Dale is also hosting the May Friday meeting. Has a great collection. I encourage everyone to attend. Thanks, Jay and Dale. Remember to bring items for the mart. You may recall that we discussed a visiting speaker for April. It turned out he could not make it so that is on hold for now.

In June we will be visiting John Grass's shop in the south bay. John is an accomplished, as in professional, toolmaker and machinist. He also makes clocks. This should be a very interesting trip. We will combine the picnic and white elephant sale in August. We don't have anything lined up for October. Warm up your

thinking caps and feed me suggestions.

I have just finished reading "Dividing the Circle" by Allan Chapman. This book presents the history of the development of instruments intended to measure angles to high precision. This was crucial for validation of the Copernican view of the solar system – important stuff in the development of philosophy and science. He starts with Tycho Brahe and ends with Ramsden and the Troughton brothers. If you have been to the Royal Observatory you have seen some of the instruments discussed. Most of you will recognize the names of Tompian and Graham and know they were important clockmakers. It turns out they also played major roles in the development of instruments, in addition to clocks, for the Royal Observatory. Graham was particularly important. I also learned that one of the first prizes given by the Board of Longitude was for lunar tables. As clock folks we tend to think finding longitude by lunar distances was, you might say, loony or at least misguided. Maskelyne, the Astronomer Royal, is usually depicted as the great villain. Actually the lunar distance method was fundamentally sound and less dependent of mechanical devices than the clock method. Of course one did have to be able to see the moon and a useful star and take careful readings. I guess my point is that it is easy to guess the best answer in hindsight. The book also has interesting insights into gear cutting and the like. Anyway I found it interesting. Of course it started me worrying about a whole bunch of related issues relating to "how did they do that?"

Question of the month: When and where was it decided where the prime meridian for determining longitudes would be located? Why was that particular site selected? Answer on page 11.

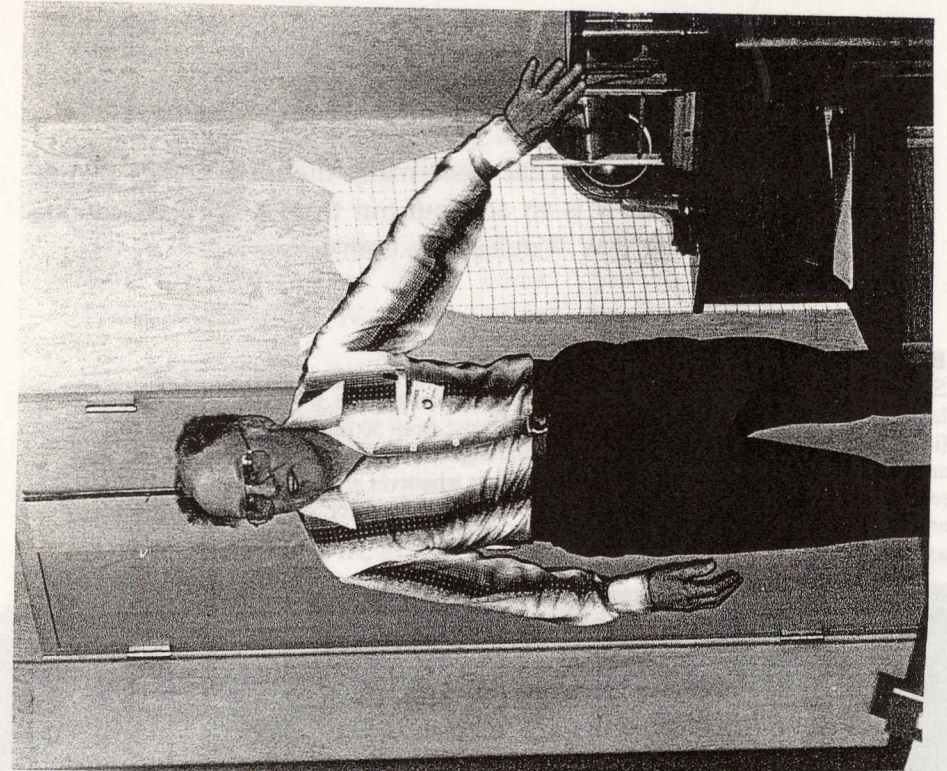
Price Russ

THE NEXT FRIDAY MEETING

The Friday meeting at Price Russ' house gave people who were unfamiliar with the Internet a chance to evaluate it. I think everyone found something of interest to them.

FEBRUARY'S SUNDAY MEETING

Last Sunday's meeting was a nice change of pace. A large number of items (some free) were brought to the before-meeting mart. During the meeting the room was divided in two and a competition began. Our President, Price Russ, began asking technical and historical questions. It is really surprising the number of answers I didn't know and how much some other members did know. I guess it's all in the effort one puts into horology. The following are pictures from the meeting are 1. The Mart with Bert Bradley in the foreground. 2. Bob Wahrer discussing his clock at "Show and Tell". 3. Jack Coulter conducting the raffle.



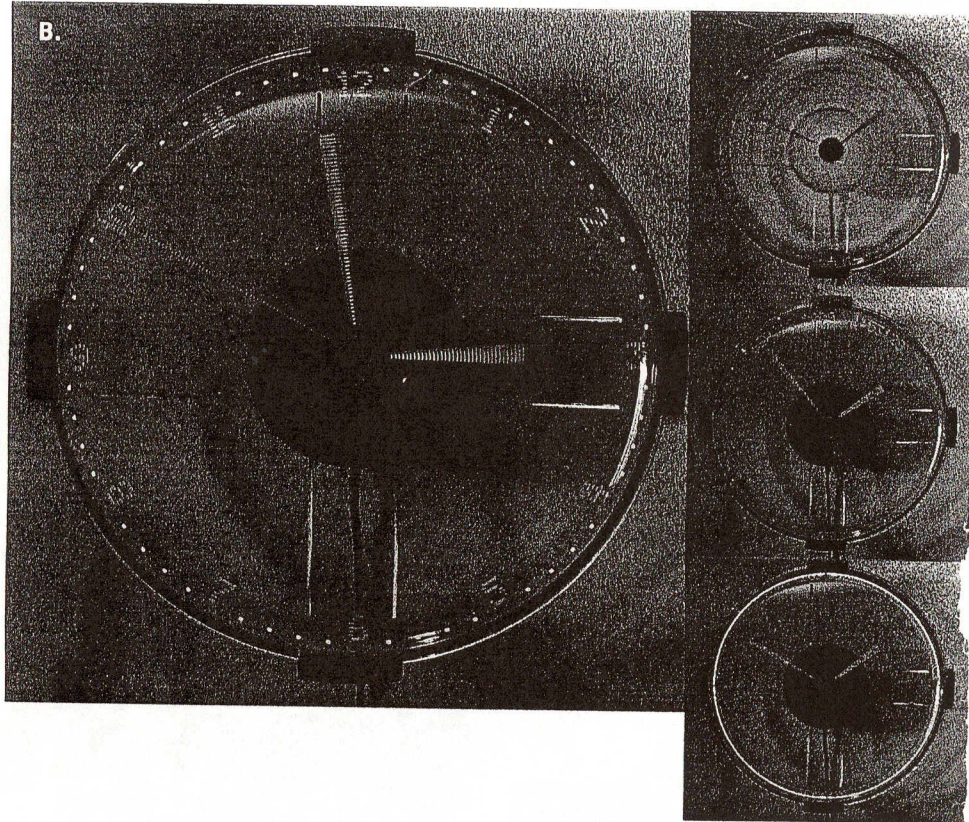
DIFFERENT CLOCKS

It never ceases to amaze me how many different clocks people come up with. Below is an ad I cut out from a Wireless catalog (also available at WWW.WirelessToo.com).

B. Virtual Clock

So cool, it turns everybody into a clock watcher: a clear clock face is illuminated with a laser-precise display of light and animation. Choose from 30 futuristic clock face options (including different number styles, hands, and digital displays); customize with text and animation, or select demo mode to get a new face whenever you check the time. It's easy to set time, choose options, and play for hours with the remote control (uses two AA batteries, not included). 19" diameter, 7' 8" power cord. Wall mount only. *Gift box not available.*

#86738 \$299.95



THE Y1936 PROBLEM FROM INVENTION & TECHNOLOGY - WINTER 2000 BY MARK KINSLER

This article was Provided by Sarah Russell. Don't hesitate to look in all kinds of magazines for clock articles.

IN THE MID-1930S LOS ANGELES, THE FASTEST growing city in the United States, was desperately in need of two things: water and power. The Boulder (now Hoover) Dam was being built to provide both. Electric power lines would stretch 266 miles from the dam site, on the Colorado River, to Los Angeles. They would carry 275,000 volts of power and provide Angelenos with cheap electricity, but there was a problem.

The city-owned Los Angeles Bureau of Power and Light had up to this time generated AC power for its 285,000 customers at 50 cycles per second. But as electric utilities across the country were rapidly interconnected, a new national standard was established, which L.A.'s new hydroelectric power system would have to meet: 60 cycles.

The change was bound to create problems, so the city earmarked half of the \$3.25 million it had budgeted for the changeover for alterations to customer equipment. Most of this money was to go toward modifying motors used in industry. As for household appliances, almost all refrigerators, lamps, sewing machines, toasters, and other devices would run as well at 60 cycles as at 50. But electric clocks would not. The speed of a clock's motor was entirely dependent on the frequency of the current that supplied it. The change would cause a 50-cycle clock to gain 12 minutes an hour.

The synchronous electric clock was

ubiquitous in the 1930s, expensive and highly prized in the days before crystal-controlled, battery-operated timepieces. There were about 125,000 of them in greater Los Angeles in 1936. A mantel or grandfather clock was the centerpiece of almost any well-appointed living room, and businesses used electric clocks both in the workplace and on signs and storefronts. Almost every school, hospital, department store, and factory in the city had a system of electric clocks. Each of these timepieces would have to be converted, usually by altering the gear train, or be replaced before the Boulder Dam power reached Los Angeles.

In what was surely one of the oddest public works campaigns in its history, the bureau of Power and Light gave the E. W. Reynolds Company a contract to serve the problem by replacing or converting every electric clock in Los Angeles, free of charge to the owner. Reynolds rented a large factory and hired about 75 experienced clock repairmen. It then used proficiency tests to cull an additional staff of 125 unskilled workers from a pool of several thousand applicants. Each of these unskilled workers was trained, over the course of six weeks, to change one make of electric clock from 50-cycle to 60-cycle operation. For common clocks, manufacturers were asked to build conversion kits providing new gear works. The factory's own machine shop would cut gears for more exotic models.

District by district, as the frequency change was phased in across Los Angeles, the power company sent letters to customers and placed notices in newspapers and on the radio. Residents were asked to bring their electric clocks to neighborhood collection centers. The clocks were then trucked to the factory to be cleaned, converted, lubri-

cated, and tested and were returned to their owners within five days. If a clock could not be converted, it was replaced with one of comparable value. At the same time, the professional clock repairmen worked on a host of commercial timekeeping devices.

It took 18 months, but the work was finished right on time, in October 1936. When it was all over, the Bureau of Power and Light faced an unusual problem. What do you do with 55,000 nonconvertible 50-cycle clocks? The city ended up dumping most of them into Los Angeles Harbor.

The unskilled workers didn't fare much better; they were given their tools and sent back to the Depression's unemployment lines. Their training, limited as it was to only a single model of clock, was hardly the basis for further employment elsewhere. It is believed that none of them ever worked in clock repair again. Their training, it seems, was as obsolete as all those 50-cycle clocks.

PRICE'S ANSWER

In 1884, the International Meridian Conference, in Washington DC voted to place the prime meridian at the location of Airy's transit. Sir George Biddell Airy, the 7th Astronomer Royal, had his transit telescope installed at the Royal Observatory in 1850. Its location defined a new meridian. It was the best such instrument ever built. Its designation as the prime meridian, the primary time reference point, was an acknowledgement of this fact. The Airy Transit Circle was used for observations of the sky until 1954.

QUESTIONS

It is not only by the questions we have answered that progress may be measured, but also by those we are still asking. -Freda Adler.

NEW MEMBERS

Three new members have come to our Chapter via Waynes's clock class. Please make welcome:

Celeste Graham
Carol Slatten
Ed Werner

QUOTE OF THE MONTH

"Never doubt that a small group of thoughtful, committed people can change the world: indeed it's the only thing that ever has!"

-Margaret Mead

WHO IS THIS PERSON?

By Bob Wahrer

Our mystery person is well known throughout the world as a religious political leader. He has always enjoyed repairing watches as a hobby. He recalls that in his youth, he occasionally became impatient while handling small parts. On several occasions, he would pick up the watch and smash it on the table. Of course would be ashamed of this behavior and it was very embarrassing when he had to return a watch to its owner in a worse condition than it was before. Once you know who our mystery person is, you will certainly agree that he has learned to control his emotions very well. — The answer is upside down below.

Our mystery person is the Dalai Lama. Ref "Ethics for the New Millennium" pg. 95.

ANSWER TO "WHO IS THIS PERSON"

DUES DUE

Membership Dues;

This will be the last bulletin sent to those who haven't paid for 2001. I will be enjoying the sunshine, camped on some sunny beach in Baja California in April, so I won't be at the April 8th meeting. Please send your check to me to continue to receive your bulletin and to participate in all the club activities. Dues are still \$15. Make your check out to Diablo Valley Ch. #107.

Roy Holman
4300 Everett Ave.
Oakland, CA 94602

FROM THE EDITOR

Articles needed as always. It helps if you edit a document rather than sending me a large document that I have to read and summarize. — Thanks, Bill

TOOL LIBRARY

The following tools are available for loan.....at NO COST!

call Walt Hubrig @ 925-685-0260

*** L&R Ultrasonic Cleaner w/basket 11 3/4" x 9 3/4" x 6"

*** TIMETRAX #160AC Timing m/c with beat amplifier

*** Webster Depthing Tool

*** Webster Escape Wheel Tooth Straightener

*** Power Punch (for end holes in mainsprings etc.)

CHAPTER #107 MEETINGS*

*Meeting Days and Times***

Mart Second Sunday 12:00AM - Even numbered months
 Chapter Second Sunday 12:30PM - Even numbered months
 Board Second Sunday - following the Chapter Meeting
 Evening First Friday 7:30PM - Odd numbered months

This Year's Meeting Dates

<u>SUNDAY & Board</u>	<u>FRIDAY EVE</u>
February 11 th	January - None
April 8 th	March 2 nd
June 10 th	May 4 th
August 12 th	July - None
October 14 th	September 7 th
December 9 th (luncheon)	November 2 nd

*If any members are having problems or issues with transportation to and from meetings, let a director or officer know so we can help find a carpool. We want to keep our members coming to the chapter meetings on a regular basis.

**Dates may vary due to conflicts.

Other NAWCC Chapter Meetings in Northern California		
Chapter	Meeting Address	Meetings
De Anza #94	Odd Fellows Lodge 20589 Homestead Rd Cupertino, CA	1st Sunday even months (except April)
Monterey Bay #70	Live Oak Grange Hall 1900 17th Ave Santa Cruz, CA	3rd Sunday odd months
Sacramento #71	Sacramento Garden Center 3330 McKinley Blvd. Sacramento, CA	4th Sunday odd months
San Francisco #5	San Leandro Boys & Girls Club 401 Marina Blvd. San Leandro, CA	2nd Sunday odd months (except May)

DIRECTIONS TO CHAPTER MEETINGS

Sunday Meetings

Acalanes Adult Center, room A-8
1963 Tice Valley Boulevard

From Oakland - Highway 24 going East

Take Pleasant Hill Road South exit
 At light, turn right onto Pleasant Hill Rd
 At end, turn left on Olympic
 At light, turn right onto Tice Valley
 Go up until first light
 Go another 150 yards and just before Pedestrian X-ing - turn right

From San Ramon - Highway 680 going North

Take South Main exit
 Left on Newell
 Left on Olympic
 Left on Tice Valley
 Go up until first light
 Go another 150 yards and just before Pedestrian X-ing - turn right

From Benicia - Highway 680 going South

At 680/24 take Highway 24 to Oakland/Lafayette
 Take first exit - Pleasant Hill Road South
 Go under freeway onto Pleasant Hill Rd
 At end, turn left on Olympic
 At light, turn right onto Tice Valley
 Go up until first light
 Go another 150 yards and just before Pedestrian X-ing - turn right

Friday Technical Meetings

Across Tice Valley road from the Acalanes Adult Center (directions above) at the Civic Bank of Commerce.

Note: Due to our tax exempt status only NAWCC members can participate (buy or sell) in our MART - be prepared to show a current NAWCC membership card.