



The Santa Barbara Courthouse Tower Clock Comes Back To Life

by Mostyn Gale

In the July 2010 Chrono Times article I chronicled the beginning of the restoration of the Santa Barbara Courthouse tower clock with these words: "On Friday, June 18th, members of the Chapter gathered to disassemble the clock. The pendulum was stopped at 11:46 AM and disassembly was complete by around 2:00 PM. Each part has been labeled, photographed and moved to my garage for cleaning, inspection, and/or repair." I am happy now to report that the clock lives again after a full restoration and was officially returned to service at 4:00 PM GMT on 31 December, 2010.

During a busy holiday season, members of the Chapter got together to reassembly the time train and to check out its operation. We were faced with a few challenges brought on by the fact that the clock was moved from its original position, but the ingenuity of the crew led to easy solutions and we were able to meet the goal of returning the clock to service by year's end.

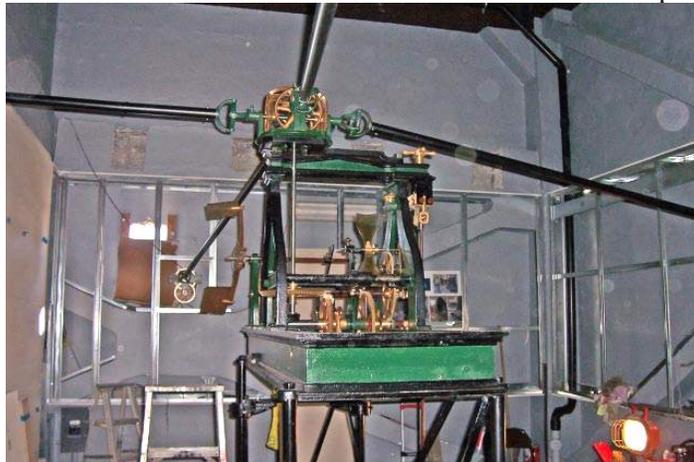
The official restarting of the clock was accomplished at a celebrated event. About 20 people were present, including the funding contributors, the Bisnos (David and Fay), and the Schalls (Dick and Maryan).

As a side note, David Bisno will be our Chapter 190 guest speaker in March to tell us the story of how the project got started and its importance to the overall story of timekeeping in America.

Also present at the celebration were other project members, the local television station KEYT, the Santa Barbara News-Press, our project videographer, Vinit Parmar, and a few random tourists who happened to be in the courthouse at the time. For more on

the celebration and lots of photos see www.bisnoschallgallery.com.

As with most clock overhauls, every part of this clock had to be touched. The motion works were perhaps the most challenging part of the project, but also needing work were the dial hands, the bushings of the 2nd and 3rd time train wheels, a very worn chain sprocket was replaced with a newly machined one, the escapement, (a complex gravity clock assembly) needed significant work on the spokes, the gravity arms required polishing, the motor and limit switch for the power wind were replaced, a new suspension spring was put in, leading-off rods were replaced, the electrical conduit for the motor power was moved to the inside of the frame. All this was accomplished along with the normal cleaning and polishing that go along with any overhaul.



The above photo shows the time train reassembled and back in operating order. The lead off rods are connected to the four motion works. Next comes the chime and strike trains. The aluminum frames along the walls will support the painted murals.

Below, Robert Ooley talks with Santa Barbara radio station KYET.



The motion works restoration was headed up by Ernie Jenson and George Antinarelli. Not only were the bearings dry and rusty but Ernie and his grandson, Chris, devised a unique position shifting mechanism to allow for clearance of the leading-off rods above the tower stairway. This was a very important part of the project goal which is to make the clock accessible to the public so that they could see, appreciate, and learn about time keeping history and a special part of Santa Barbara as well. For all the detail on this part of the project see Ernie's article in the August 2010 Chrono Times. The dial hands (not original) are made of fiberglass covered marine plywood. These were repainted and balanced. The hands and motion works were all replaced by a happy Chapter 190 crew in early August.

The worn sprocket, that also had three broken teeth, was replaced with a newly machined one.

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PRESIDENTS MESSAGE

By Mike Schmidt

The New Year is a time of reflections and planning. The Chapter begins its 5th year with 121 members, all bills are paid with a sound reserve. The year ahead for the NAWCC and chapter members offers us all many excellent opportunities to improve our clock and watch collections and add to our horological knowledge.

The program for the January meeting will be presented by Bill Robinson. The program will be on the "American Clocks before 1850." Bill has been a collector, restorer, and student of historical American clocks for many years. His knowledge and presentation will be a very interesting and learning experience.



2011 DATES TO REMEMBER AND ACTION TO BE TAKEN:

February 4 and 5 Greater Los Angeles Regional: This event is a must for clock and watch collectors. The Pasadena show is the best regional in the country. There will be a wonderful free exhibit and two days of mart and scheduled programs. I guarantee that you will see something at this show that you have never seen before. Also, remind your friends that Saturday, February 5th will be open admission for the public.

February 25-28 FSW-200 Fundamental Skills for Lathe & Clock Repair. This is the first class in the preparation for the lathe classes. The workshop is valuable for anyone doing clock repair. *Coordinator; Giorgio Perissinoto.*

Phone: 805 637-9810 • e-mail: Giorgio@spanport.ucsb.edu

April 17- Chapter 190 Annual Mart This year's clock, watch, and antiques show is a special event with new possibilities. It will be at the Ventura County Fairgrounds.

May 20-23 FSW- 201 Fundamental Skills for Lathe & Clock Repair Course Part II. *Coordinator Giorgio Perissinoto, Phone: 805 637-9810*

E-mail: Giorgio@spanport.ucsb.edu

July 29-Aug. 1 FSW- 202 Lathe Clock Repair Course Part III

Coordinator, Alan Davis, Phone: 805-659-7148 • E-mail: Jesoda.1@netzero.net

Congratulations go to all the students who completed the December FSW 103 "Introduction to Chime Clocks", Instructor Ray Marsolek, class coordinator Paul Skeels, Students: Mostyn Gale, Richard Henderson, William Frank, Steven Schechter, Lex Rooker, Gregory Miller, Daniel Kerker, and Bedros (peter) Ozuzun.

The free workshops given prior to our monthly meetings have been terrific. If you want to learn or get some help with a repair problem, this is the place to be. The next round table workshop at 10:30 AM will be led by Ken McWilliams. The starting topic will be "Striking hammers, rods, chimes and how to repair and adjust to achieve the desired sounds from your clock. The coffee will be on early.

See you at the Meeting *Mike*



Happy Birthday

**Katherine Demny, Mike Everman,
Sylvia Griswold, Richard Henderson,
Virginia Norwood, Lex Rooker, Zaki Salahuddin
Paul Skeels, & Ken Young.**

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The chain was cleaned and checked out. It was slightly stretched, so one link was removed to compensate. See George and Ernie's article in the September 2010 Chrono Times for detail on all of this work.

The escapement had very bent arms from years of use and possible abuse and the pads on the ends of the arms were quite worn. The arms were straightened, and reversed to utilize the unworn side. The arbor needed to be slightly straightened and the pinions filed and polished.

Some of the reassembly challenges were the result of moving the clock position. It was decided to move the clock a couple feet away from the doorway and rotate it 180 degrees to give it better visibility and accessibility for the public. While this was not a fundamental problem in terms of clock operation or transmission to the dials, it did result in some unanticipated interference; first, with the fly blade from the strike train, and then, secondly, from the regulating nut at the top of the pendulum. The clearance from the strike train fan is a little less than an inch. This, we decided to leave as is and only time will tell whether this was a wise decision. The clearance for the regulating nut was solved by removal of a 3/8th inch thick washer under the nut. We replaced it with a much thinner one. Yes, it is that close!

We are proud of this accomplishment and looking forward to the continuing challenge of restoring the strike and chime trains to operation for the first time in their eighty plus years of its life. *A big thank you to Chapter 190 – we have a lot to be proud of!*

**The next Meeting & Mart for Chapter 190
is January 16, 2011**

Sellers may start setting up at 11:30

The Mart is open from 12:00 til 1:15

The Meeting starts at 1:15

PROGRAM

"American Clocks Before 1850"

Presented by Bill Robinson

***Bill is a walking encyclopedia when it comes to early
American clocks. You're guaranteed to learn something new.***

SHOW & TELL

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Welcome New Members

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**Bob McClelland
from Woodland Hills**



Those Wonderful Hand Wound Wristwatches

by Henri Bonnet

Man seems to possess an insatiable drive to automate practically everything he can, not the least of which, wristwatches. In many instances, automation is deemed to be synonymous with progress. Progress, of course, being in the eyes of the beholder. As a wristwatch aficionado, I derive considerable pleasure from the mere possession of a high quality timepiece, automatic or not. However, does a wristwatch lover derive more satisfaction from wearing an automatic timepiece, versus its manually wound counterpart?

Not an easy question to answer. I have known people who would not have traded their manually wound wristwatch for an automatic one, at any price. Luckily, most manufacturers of high grade automatic wristwatches continue to produce top quality manually wound timepieces. Apparently the high end market for hand wound wristwatches is still alive and well.

What is it then, that drives some wristwatch lovers to purchase a quality manually wound timepiece in lieu of an automatic one? Price could hardly be a reason, since the best manually wound wristwatches cost as much, and sometimes more, than their automatic equivalents. What kind of person nowadays would spend a bundle for a quality manually wound wristwatch? In the days of "everything automated" such a person would have to possess a keen appreciation for, and a deep affinity with such a timepiece. This person would also have to place a high value on time itself, in a way not entirely comprehensible to anyone else.

It has often been said that a wristwatch defines its wearer. Albert Einstein and John F. Kennedy, for example, both wore manually wound wristwatches. There is no question that man derives untold satisfaction from interacting with his world, be it science, society, or machines. Is a timepiece that requires less interaction with its owner any better? To some people, it apparently is not. There was a time when winding your wristwatch was pure delight. It was an act that one was looking forward to performing every morning upon getting up. Somehow, doing so contributed to a cheerful beginning of your day. The wristwatch winding crown was suitably proportioned and sized for its purpose, including sharp and deep knurling, easy to grasp, and friendly to your fingers. The resistance to winding the mainspring was just right and the clicking of the ratchet delightfully audible. The feel was so enticing that at times you had to refrain yourself from winding your watch numerous times during the day, just for the sheer pleasure of doing it. The fact is that simply touching and handling your watch was a pleasurable experience, including resetting it to the right time. Radio stations would

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broadcast time signals several times a day, by which you could set your watch.

Manufacturers of high grade timepieces considered the proper sound and feel of winding a watch synonymous with quality. The president of a top Swiss watch manufacturer insisted on personally winding every watch, including automatic ones, as a final quality control check, prior to their release for sale. Some of the major Swiss manufacturers intentionally engineered this enticing feeling of the winding mechanism into their watches, so as to make the action more pleasurable to their owners. Of course, all that attention to details contributed to making a wristwatch more desirable, and as a result increased sales potential. Those days are apparently gone forever, but what a time it was!

Owning a wristwatch was more than a mere necessity, and a watch was indeed an intimate part of your persona. People were very proud of their watches and few were readily willing to lend theirs to others. Due to their straightforward simplicity, manually wound wristwatches were quite accurate. Simplicity of construction meant fewer components and less things likely to go wrong. Servicing and repairing a wristwatch of the forties and fifties could easily be done by your local watchmaker at a reasonable price. Few watches were ever sent back to the factory for routine repairs, as is often the case nowadays.

In the late fifties and sixties, when automatic wristwatches began to proliferate, hand winding was deemed superfluous and the crown was used primarily to reset a watch, rather than winding it. The crown itself began to be the object of cosmetic creativity over functionality, and in some instances, disappeared from sight altogether, as if its mere presence was considered unfashionable.

Occasionally, when an automatic wristwatch needed to be hand wound, it became a most unpleasant experience. Handling a tiny hard to grasp crown wasn't something one was looking forward to. The old pleasant clicking sound was gone and was replaced by a dreadful grinding. Also, the high torque that needed to be applied made the winding job even more difficult and distasteful. Luckily enough, the automatic winding in most wristwatches worked quite well, and people forgot what winding a wristwatch actually felt like. It was at that time that a wristwatch lost some of its intimate character and became merely an item of necessity. It required no daily handling other than strapping it to your wrist in the morning. It received no more attention than putting on a shirt or a coat. Sadly, manually wound wristwatches practically disappeared from the mass market altogether, save for high end timepieces. Automatic wristwatches required many additional components, and repairs became more frequent and expensive.

You may be so fortunate as to possess a quality hand wound timepiece passed on to you by your dad or grandfather. Perhaps it lies forgotten at the bottom of a desk drawer. You may consider having it serviced or restored by a competent watchmaker and wear it daily in lieu of your automatic, or quartz wristwatch. You may then experience the joy of winding your wristwatch every morning and having a most wonderful day thereafter. You may now even have something to brag about to your friends, and which is not least, remember kindly the person who gave you the watch in the first place. Not a bad thing altogether, is it? It is entirely conceivable that you may never want to wear any other timepiece afterward. What do you think? ■



1. This Nomos and Piaget are two manually wound wristwatches. The Nomos with an intelligently designed crown, the Piaget crown having succumbed to cosmetics at the expense of functionality.



2. This Patek and Omega are both automatic wristwatches, each with a delightfully, user friendly crown. This type of crown (to wind and set a watch), now taken for granted was patented by Patek Philippe in 1861.



3. This Hamilton and Seiko are both automatic wristwatches. Both feature crowns that make winding and setting those timepieces difficult and unpleasant.

Tales From the Bench

by Ferdinand Geitner

A Seven Day Tale

A popular collectors item came my way the other day. The Hebdomas 8 day pocket watch with visible balance, not quite a “visible escapement”. Hebdomas actually refers to the duration of seven days, a cycle of seven and derives from the ancient festivities of Ebdomee, held in Sparta, Croton and Mileto, which celebrated the birth of Apollo on the seventh day of the month.



Hebdomas started its activities in the late 1800's in La Chaux-de-Fonds. The craftsmanship of the Swiss Watchmakers from that region is world renowned. Since 1888, all Hebdomas watches have been manufactured by hand and its pieces have been awarded several gold medals and distinctions.

The 8 day watch traces its roots back to the original Hebdomas watch by Schield S.A. This unique 8 day movement was developed and patented by Irene Aubry of Saignelegier (Switzerland), on the November 14th 1888.

As with any unusual design it develops its own unique problems with wear and bad repairs over the years. As one can see the layout of the movement is not conventional, where the center wheel (where the minute hand sits) is placed in the middle of the plates and the barrel driving it to the side, limited in size (and therefore duration) by the overall diameter of the movement.

So, the designer of the 8 day watch places a barrel the size of the movement on the back of the movement, so a very long spring can be fitted inside. A problem of this design is the friction of the edge of the spring on the back plate and some designers put a thin hardened steel disk under the spring to prevent this. The spring needs to be good quality as the power curve tends to drop off drastically towards the end.



The barrel itself only turns when one winds the watch and the winding gear engages in the (quite fine) teeth at the edge of the barrel. Unfortunately, the winding stem is only held by a small screw (to keep it from being pulled out), its tip in the plate and the pipe on the case. If the movement has a little play in the case and turns a little or the stem has some play in the case tube, the winding gear does not engage very well and wears the teeth on the barrel drastically.

The barrel arbor is a large gear on a tube (looks like a larger hour wheel) which runs on a “polished” center shaft on the back of the movement and drives a steel gear which comes through the plate. This presents a problem to some repairers during dismantling as it looks like the wheel on the inside of the movement is forced onto a square and should be removable. It's not designed to be removed and one can create quite a few problems trying! The steel gear on the barrel side of the movement is “screwed” on and removable. Some repairmen may think that it is pressed on and try to push the shaft through thus breaking it or stripping the threads.



This is usually the pivot and bearing that need attention as many times before it was not disassembled and takes more force from the spring than the other gears. Note the five ridges inside the barrel! The mainspring is not hooked into the barrel, but, into a thicker piece of spring which has a hook at the end that locks into these ridges. When the watch is wound almost full it slips and locks into the next ridge so one cannot “over wind” these watches. Naturally, the slipping action has to be just at the right tension or one would lose duration or break the spring.

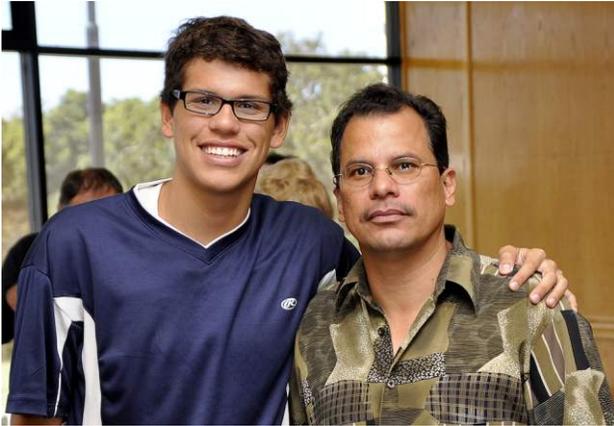


Apart from those little idiosyncrasies, it's a very nice watch and can give satisfactory service for many years (with quality maintenance). ■

CHAPTER 190 PEOPLE

Jorge Montoya

by Robert Gary



Jorge was born in Nicaragua where he lived with his parents, five brothers, and a sister. His father was a watchmaker and owned a chain of jewelry stores in their native country. Jorge loved to accompany his father to the store and play with the large supply of “junk” parts on his father's watch repair bench. One day, while the boy was at the repair bench pretending to fix watches, a customer brought in a Rolex wristwatch that was in need of repair. The clerk, knowing that Jorge's father was not on the premises at the time, took the watch in for repair, assuring the gentleman it would be properly serviced.

The seven year old Jorge decided to surprise his father by repairing the watch himself and perhaps earn a repair fee. Not knowing how to remove the back of the watch, Jorge drilled two holes in the back cover to gain access to the movement. He had every intention of repairing the drilled holes so that no one would notice.

Of course, Jorge's repair method wasn't successful, and was soon discovered by his father, who had to reimburse the owner for the cost of the watch. Understandably, Jorge's father was irate by his son's actions, but he also realized that his son had a natural desire and calling in horology. His father sent the boy to Switzerland to stay with his uncle (his dad's brother), to learn proper watch repair methods. His uncle enrolled Jorge in the WOSTEP school, (Watchmakers Of Switzerland Training & Education Program.) Jorge was home schooled by tutors for his regular education, because only Swiss citizens could attend public schools. He lived and studied in Switzerland for four years then returned home, a much more knowledgeable watch repairman than when he left.

Jorge returned to Nicaragua in 1976 (age 11) and worked with his father until 1979, when the area was taken over by the Sandinista guerillas. The government was very unstable and many businesses were confiscated and local leaders imprisoned or executed. Jorge's father lost his business and was sentenced to 45 years in prison.

Jorge was also arrested on the charges that he was an American spy because of his trip abroad. At the age of 14, Jorge was tortured in an attempt to get him to confess

to being a spy. Shots were fired at his feet, and a gun was held to his temple with threats of immediate execution if he didn't admit to spying. He chose not to.

In 1980, his family arranged his escape, and the family fled, without his father, to Honduras. They were placed in a refugee camp where they spent the next 10 years. During this time, Jorge would sneak out of the camp and travel ten miles to a town where he found work at a jewelry store, as a watchmaker.

In 1990, a military friend of Jorge's father arranged a prisoner exchange that reunited him with his family. Later in 1990, with the aid of the friend, the United Nations became involved and arranged asylum for Jorge's family. They were offered the choice of going to Spain, Australia, or the United States. Jorge's father was familiar with Los Angeles and that is where they chose to settle.

During his interview by the American authorities, Jorge's education in Switzerland as a watchmaker was documented and brought to the attention of Rolex, Los Angeles. The company conducted a thorough background check on Jorge and when all of his claims were found to be true, Rolex offered him employment.

Jorge worked for Rolex from 1990 to 1997. He left Rolex in 1997 to open his own jewelry store. It was a lot harder running his own store than he expected, but as luck would have it, Rolex decided to open a West Coast service center and contacted old employees with job offers. The following year, Jorge was back with Rolex and continued working for them until 2005. He again left Rolex to start his own business, but this time he would specialize only in watch repair.

During his time with Rolex, he was privileged to some of the best watch repair training available. They sent him to their Pennsylvania center for 5 months, Dallas center for 4 months, New York center for 3 months, plus three trips to the Rolex facility in Switzerland.

One of the first things Jorge did in his adopted country was enroll in an English class. On Jorge's second day in the U.S., at the English class, he met Sofia, the woman who would later become his wife. Jorge and Sofia are the proud parents of a son (Jorge Jr.) a daughter (Melissa) and have made their home in the city of Paramount.

He is now teaching his son, Jorge Jr., watch repair and hopes he will carry on with the family business. Besides watch repair, Jorge Jr. is a very accomplished swimmer. His bedroom is covered with trophies and about fifty medals that he has won in school competitions. Watch out Michael Phelps, here comes Jorge Jr.!

Melissa's bedroom is a typical little girls room with a zillion stuffed animals and cartoon characters.

Two of Jorge's brothers are also watchmakers. The love of horology has truly had a profound influence on the life of Jorge Montoya, and brought a very remarkable and talented man to our chapter. ■

THE EXTRA PAGE

FACES SEEN AT NOVEMBER'S MEETING

Photos by Bill Robinson



November's free workshop on "Clock & watch photography"



For Sale: Bridgeport Milling Machine

Type HV, Frame 56, Design B, Serial # 64406, 1/2 hp 3 phase 220



Professionally fitted Acra head with less than 40 hours of use. Anyone who has owned one will tell you there is nothing quite like creating parts on a well maintained, full size Bridgeport Mill. This is as steady as Gibraltar and accurate enough for the finest clockwork, the ideal wheel cutting engine and the most versatile tool in any machine shop. The addition of the Acra head takes it to yet another level of usefulness and accuracy. Over \$7,500 was invested in this machine, which has never been used hard. The Acra head alone cost over \$3,500. Asking \$3,500 or best offer for a quick sale.

**Contact Julie Palladino, Solvang Antique Center
805-688-1969**

This month's Mini-Workshop

will be an open workshop.

***Any subject is open for discussion,
any clock, watch, or tool may be brought.***

Ken McWilliams

***will open this month's workshop with
"Adjusting hammers, rods and gongs"***

The workshop begins at 10:30 AM. Free to members

CLASSIFIED PAGE

This page is dedicated to advertising for Chapter 190 members. It is, of course, free to members.

SERVICES OFFERED

The Montecito Clock Gallery

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FOR SALE

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I will have a huge selection of watch repair
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French type-platform escapement (no pendulum)
Winding hole spacing of 38.9 mm, (1.53")
Repairable, other details available on request.
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Antique French 2 or 3 dial calendar clocks.
Antique English 2 or 3 gear-train skeleton clock.

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4255 E. Main St., No. 15, Ventura, Ca.
Located in Firehouse Plaza (Main St. & Telephone Rd.)
Tel. 805-650-8800

- Chronometer -

Hamilton 21 Marine Chronometer in running condition, with
inner box and gimbals; outer box not essential.

Please contact: **Giorgio Perissinotto**
E-mail: giorgio@spanport.ucsb.edu

- Watch Repair Tools -

I'm just starting out and need just about everything.
I would prefer to purchase an entire collection of old
watchmaker's tools.

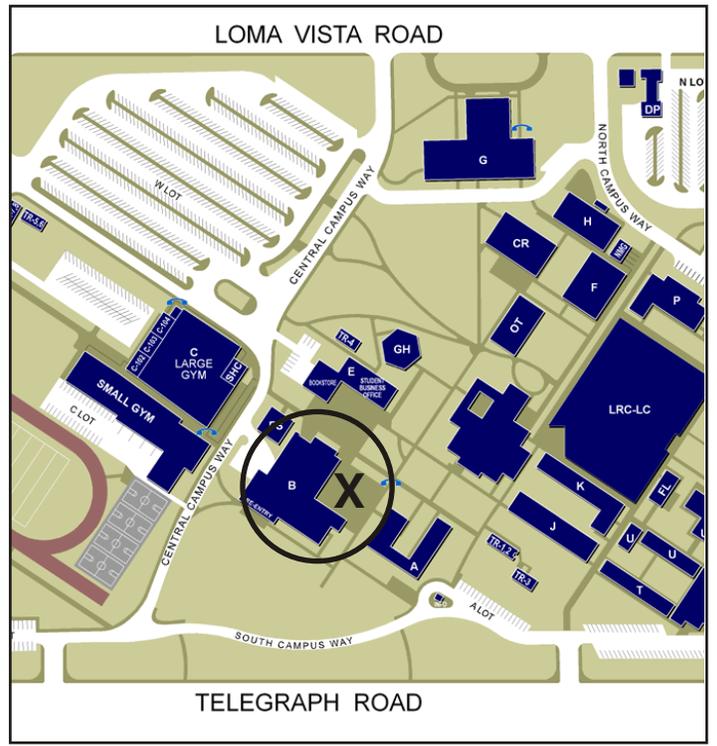
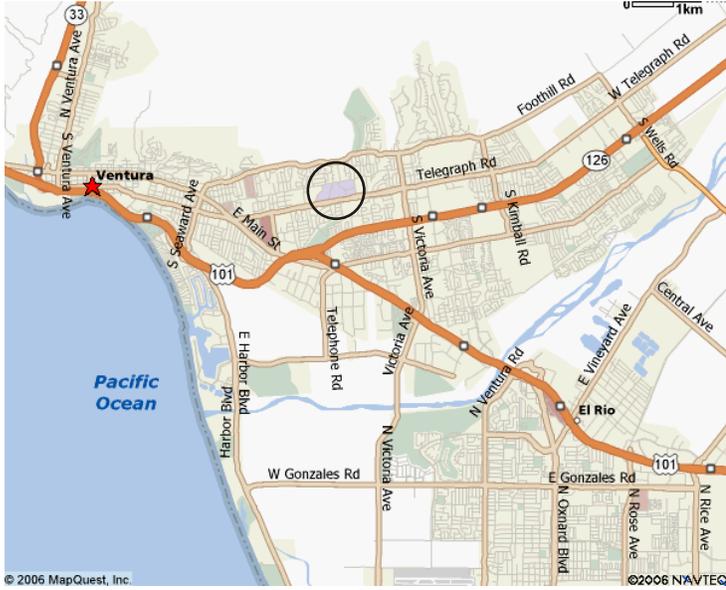
Please contact:
David Clarkin Tel: 805-988-4384

I need a few watch item,

- (1) 18 size Howard staff for Series III...(Coles Escapement)
- (2) I have the collet for an Adams & Perry watch...needs hairspring and stub to fit in balance cock, or someone to replace what is missing and give the timepiece a good cleaning so that it runs correctly, without breaking the bank!

Dan Weiss (Pennsylvania 190 member)
Contact: (215) 725-5463 • dweiss17@verizon.net

The Chapter 190 meetings are held the third Sunday of each month. (No meeting in December)
 We will meet in the cafeteria on the Ventura College campus. The cafeteria is located in building "B", east of the gym and athletic field.



January 2011 Issue

NEXT MEETING
JAN 16



Chrono Times
 If Undeliverable return To:
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 Northridge, CA 91325