## Free State Chapter 141 MD, PA, VA, WV

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Lou Orsini

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For more information about the chapter, you may contact the
President Lou Orsini at:
(oh2batc@verizon.net)
or 703-352-7260.
Feedback for the Newsletter should be addressed to Al Bush at: agbush172@verizon.net or 410-531-5307.

Feedback for the Web Site should be addressed to Alex
Snouffer at: arsnouffer@gmail.com

## April - May

> No. 2016-03

## President's Message

Well, it appears that spring has finally arrived and we should be safe from snow for another six months, although the temperature swings can be pretty dramatic. And another year passed without me taking time to see the cherry blossoms in the DC Tidal Basin, which may be one of my smarter moves. Even though a college basketball champ was just crowned (did anybody's bracket survive the first day?), and playoff time for pro basketball and hockey will start soon, opening day for baseball is here! I'm just waiting for a game to get snowed out in one of those northern cities.

More pertinent to us, however, is the next Annual Joint Meeting of Chapters 11, 12 and 141 at the VFD Community Hall in Woodsboro, MD with the usual variety of clocks, watches and associated materials, and another outstanding program. The speaker is David Todd, former Curator for the Clock Collection at the Smithsonian, who will make a presentation on "The Great Clock at Monticello", which he still takes care of. Proceeds from this meeting benefit all three chapters equally, so please support it through your attendance and helping to either set up or clean up. So mark your calendars for Saturday, April 23 and be there! Details, including the registration form, are on the Chapter 141 website at http:// community.nawcc.org/chapter 141/home/ under Events.

We had a really good meeting in March with the usual cast of characters and a very interesting and informative program by Tom Mostyn on the search for accuracy in timekeeping; see the summary of his presentation on page 3. I continue to be amazed that there is a market for watches costing hundreds of thousands of dollars when you can pick one up just about anywhere that's accurate enough for anything you may need it for. Our next meet-
ing is Thursday, May 12, and the program looks like another outstanding one. Sam Morataya, who owns a watch repair shop near the White House and written for our Tech Tips, will talk about some of his unique business experiences. I hope to see you there. And don't forget to bring a friend, colleague, coworker, neighbor or anyone else who might be interested in joining us. One final point of business: we are in desperate need of a Secretary to take notes at the meeting and write a short summary. I've been filling that position for the past three meetings and I need some help. The Chapter belongs to each of us, and ownership has both privileges and responsibilities. Please consider taking a turn at serving in this or another leadership position.

Finally, as always, please remember our brave men and women serving in so many dangerous and challenging places throughout the world. The plethora of threats our country continues to face is daunting as each of them have the potential to impact American citizens adversely in some manner. Fortunately, we have a dedicated cadre of service members, law enforcement officers, diplomats and aid workers looking out for our interests and protecting our security. Sometimes they are visible when providing security at special events or engaging hostile forces, but most times you won't even know they are standing watch except that the rest of us can go about our daily lives without fear or concern for our safety or for our loved ones. Please keep these dedicated professionals and their families in your thoughts and prayers, every day, until they return home. And take the opportunity whenever you can to thank our military and civilian public servants; it means a great deal to them to know that we really care.

Lou Orsini, president

Our next meeting will be $\qquad$ Thursday, May 12th, 2016 at Mountain Gate Restaurant

## Minutes of Freestate Chapter 141 - March 10th, 2016

The latest meeting of Chapter 141 occurred on March 10 at the Mountain Gate Restaurant in Thurmont, MD featuring past-President Tom Mostyn making a presentation titled "The Quest for Accuracy."

There were 26 members and guests in attendance for the buffet dinner, meeting and presentation. Tom mapped out the continuing search for accuracy in time-
 keeping starting with German Clockmaker Peter Henlein in the early 1500 s up to the present. He pointed out the three critical areas to examine when seeking to improve accuracy in a watch: the mainspring, balance spring and escapement. To improve accuracy of the mainspring, one needs to ensure it provides a constant force for the entire duration of the winding. Ways to achieve this over the centuries included stackfreed, fuzee and Geneva stops. A modern solution is the double barrel constant force rementoire by Arnold \& Sons Watchmaking in England. The problems associated with the balance spring are the effects of gravity causing it to sag, which creates six possible errors, and impact of temperature. Efforts to address these errors include
poising the balance wheel, providing a means to adjust the rate, and temperature compensating materials. Early efforts to improve the accuracy of the escapement included the verge and foliot and the lever escapement. Later innovations to address the effects of gravity on the balance spring and friction on the escapement include the tourbillon addition to the escapement in which the escape wheel, balance wheel and escapement are enclosed in a rotating cage, which was patented by Breguet in 1801. To further improve the accuracy created by the tourbillon, modern watchmakers such as Emanuel Bouchet, Laurent Ferrier, Jacob \& Company Astronomia, George Daniels, Ulysse Nardin, Tag Heuer, and Greubel Forsey added still more planes in which the combination assembly could rotate adding both complexity and costs. Another interesting addition to the mechanisms of some of these high end watches was the incredibly detailed mi-cro-miniature artwork by Willard Wigan. Tom showed the group a number of photos of some unbelievably expensive watches ranging from $\$ 100,000$ to nearly $\$ 2$ million, which were made so much more expensive by these added complications all in the quest for a higher level of accuracy. It was an enlightening presentation, which was enjoyed by all.

\author{

- Lou Orsini, <br> Acting Secretary
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## From your Treasurer

Hello! There are a couple of things I need to remind members aware of.
The deadline for making reservations for a meeting is the Tuesday before the Thursday meeting. I need to have a count for the restaurant by the morning of the day before the meeting. Please make every effort to get your reservations in by the Tuesday deadline so we are fair to Mountain Gate, and they can accurately plan for food and wait staff for us. I look forward to seeing you at the meeting.

Chapter Dues for Fiscal Year 2016-2017 must be paid by June 30, 2016 in order to be current. I have included a line item for dues on the reservation form should you wish to pay them now. Annual dues are only $\$ 8.00$ (unchanged since 2007). New members must use the renewal form below and include the additional membership information so we have the correct information for contacting you and providing the newsletter.

Contact me at horologybuff@gmail.com or call me at 717-487-5198 if you have questions. I look forward to seeing everyone at the Mountain Gate Restaurant for the next meeting. Please be prompt with your RSVPS for the meeting reservations.

## Darcy Bertelmann

Attention: It is important also to keep Darcy Bertelmann at horologybuff@gmail.com or at 717-487-5198 advised of any change in your membership information, address changes, etc. We cannot keep you informed if you don't keep us informed.

FREE STATE CHAPTER 141 MEMBERSHIP-RENEWAL APPLICATION
NATIONAL ASSOCIATION OF WATCH AND CLOCK COLLECTORS
$\qquad$ NAWCC No. $\qquad$ Interests
(CLOCKS, WATCHES, TOOLS, OTHER)

## Name

## Spouse's Name

Address $\qquad$ Phone Number $\qquad$


Email Address $\qquad$ Prefer Newsletter via Email $\square$ or US Mail $\square$
As of January 2007 Annual dues are only $\$ 8.00$ payable to Free State Chapter 141. Please send your check with this completed application to: Darcy Bertelmann, 925 Johnson Drive, Gettysburg, Pennsylvania, 17325-.8903 Phone: 717-487-5198; email: horologybuff@gmail.com


# If vou have an interest in clocks or watches vou are invited to Our Next Meeting: 

CHAPTER 141 PROGRAM FOR MAY 12th, 2016


The program looks like another outstanding one. Sam Morataya, who owns a watch repair shop near the White House and who has written for our Tech Tips, will talk about some of his unique business experiences. I hope to see you there. Plan on attending, we're looking forward to seeing you at the meeting. Come out and join us for a pleasant evening.

- Lou Orsini for Neil Armine


Meeting time is ~ Dinner: about 6:15 PM Mart. Come early for the mart Business/Program: follows dinner
MEETING RESERVATIONS: You may use the Meeting Reservation form below to mail in your reservations for the Free State Chapter 141 meetings. Please indicate the meeting date as you complete the form. You may also make reservations via e-mail to horologybuff@gmail.com and providing Darcy Bertelmann with the information requested on the meeting reservation form or by Calling Darcy at 717-487-5198 and informing her directly. (Please RSVP at least 48 hours before the meeting date)

Cancellation Policy: Our policy on meeting cancellations is simple. If the Frederick schools are closed due to inclement weather on the day of our meeting, we will cancel. Otherwise, you can expect the meeting is on. In the event of a cancellation, Neil will try to contact everyone who has made reservations (especially those who don't live locally), but it's all based on the school decision. (Several Radio $\mathcal{B}$ TV stations in the region carry closure information including WMAR 2, WTTG 5, WJLA 7, WUSA 9, WBAL 11, WJZ 13, $x 45, \mathcal{E}$ WETA 26.)

## Free State Chapter 141 Meeting Reservation Form

Reservation for Free State 141 Meeting on $\qquad$

Name $\qquad$

Guest Names $\qquad$

Number coming $\qquad$ x $\$ 16.00$ $=$ Total $\$$ $\qquad$
Number of Mart Tables $\qquad$ (Mart Tables are Free)

Local Chapter Dues Renewal $\qquad$ @ $\$ 8.00$ per member for the year beginning June 30. (New members please use Membership \& Renewal form under "From Your Treasurer").

Please make checks payable to Free State Chapter 141 and mail to Darcy Bertelmann, 925 Johnson Drive, Gettysburg, PA 17325-8903

Phone: 717-487-5198; email: horologybuff@gmail.com.
Directions: Mountain Gate Family Restaurant is in Thurmont, about 16 miles north of Frederick. Take Route 15N if coming from Frederick or 15 South if coming from PA. Take the Thurmont ramp to MD806 and go east on Thurmont Blvd (right if traveling north, left if traveling south) for about a quarter mile, then take a left on Route 806 (Frederick Road) heading north. The restaurant is about 600 ft . on the left. If you need additional directions, please call the Mountain Gate Restaurant at 301-271-4373.


## Horological Talk \& Tips

Strike on the Hour Adjustment
I Somebody asked me the other day why their clock strikes 2 or 3 minutes off the hour. This very simple question can have some very complex answers. There are many varieties of movements and several reasons the strike and time can be off, more than I can cover here, but maybe I can touch on a couple.

The minute hand should be exactly at the 12:00 o'clock position when the clock strikes. Well at least reasonably close to being exactly on the 12:00 o'clock point. The hour hand is not so critical but should point at the hour being struck. I usually line it up for striking at 12:00 o'clock, thus both hands are also together. If the positions of the minute hand does not line up at the 12:00 o'clock point on the dial when the strike sounds that can be caused simply by the minute hand being incorrectly positioned on its arbor. Maybe the hand can be rotated on its arbor and retightened. If it doesn't have a square shank that can be an easy fix. If the design is such that one has to go inside the movement, you will find some time and strike movements have a pin on the minute hand drive wheel that trips the strike and this wheel may need to be lifted and rotated a tooth or two clockwise or counter clockwise
 to correct the error (strike with chime may be different). The time and strike clock usually strikes when the strike lever drops off one of those pins. If the time strikes OK but the half hour is off, you will likely find 2 pins on the wheel that are spaced $180^{\circ}$ apart on the minute wheel so as to trip either a full strike or just a single half hour strike. The half hour pin will cause the lever to lift and drop once, giving a single strike, but not be lifted enough to trigger a full hour strike. In this case they space the pin for the half hour strike closer to the center of the wheel so as to not raise the lever as high and trip a full strike. The hour strike pin is placed closer to the outer edge of the wheel to give more lift to the lever to trigger the full strike.

When doing such things as rotating wheels to mesh ahead or behind the current positions, you should use a magic marker to mark the original position before
making the change so that if it doesn't work you can go back to the original position and try again. You can rub off the magic marker and not leave multiple marks. Once you have found the right combination, it is wise to make a small punch dot at the base of the respective tooth and at the matching space between the two meshing teeth on the opposite wheel. I wasn't too happy with the photo below but without taking a clock apart and shooting more photos, it was the closest I could find. In the photo (A) and (B) are a 1:1 ratio, (A) being on the minute arbor. The pinion associated with (B) drives the hour wheel and since the minute wheel rotates once per hour the ration of the (B) pinion to (C) must be to give a 12:1 ratio. If the hand on the hour wheel is not readily rotatable, the position of the meshing of $(\mathrm{B})$ and $(\mathrm{C})$ can provide this correction so the proper hour is shown at the proper time.

Going back to the previous comment about rotating the minute hand on the minute arbor, I have found clocks that have a brass hub fitting on the square shank with the hand riveted to the hub with a slight angular offset from the 12:00 o'clock point. Sometimes the hub can be placed on a square shaft held in a vice so the hand itself can be grasped close to the hub and forced back or forward to correct the error. (I grind a square shank on a hardened concrete nail for this) Be care-
 ful how you grasp the hand so as not to twist and break it. If you can loosen the riveted joint first before twisting that makes it less risky. After rotating it, you should tap the hub to retighten the riveting or you could put a touch of super glue on it. If super glue is used, be sure it is set and excess glue cleaned off before putting back on the arbor or it might be difficult to get the hand off the arbor in the future.

Short story is that the repair depends on the construction of the clock and type of strike trip mechanism. One quick reference: If chimes are involved Steven G. Conover has written a book "Chime Clock Repair" that describes such adjustments in detail. In particular, he describes the chime systems such as the Seth Thomas NO. 124. I found that very useful when I recently worked on one of those clocks.
from your webmaster, Alex Snouffer


Hope everyone is enjoying this fairly calm winter. We are always looking at our website and further detail as to how to accomplish improvements. If anyone has thought about the "history of the chapter" information or other ideas, feel free to email me. Hope to see everyone at the next meeting.

Hope to see everyone at the next meeting.

## Personal Postings For Chapter 141 Members

INTRODUCTION: This section is for Chapter 141 members to post horological questions, ads, or notices at no charge. The Newsletter Advertising Policy is repeated here for your convenience. It has been defined and will be on file with the Chapter 141 records for viewing. Updates will be posted from time to time as needed.

Members submitting information for posting will need to provide the information in a form that can easily be conveyed to NAWCC Headquarters for editing, printing, and distribution. It is not intended that any editing will be required for information you submit. The information should be submitted in Microsoft WORD file format as a .doc or .docx file by email to AGBUSH172@VERIZON.NET. This email address will be checked for input when the newsletter is prepared to send to press. If you do not have access to a computer, I suggest you contact a friend and seek their help to prepare and email the posting for you. Effort will be made to maintain your posting, wording and presentation as you have submitted it.

## PERSONAL POSTINGS

LOOKING FOR SOMETHING? HAVE SOMETHING SOMEONE ELSE NEEDS?
$\qquad$

## SEE THE ATTACHED FLYER ON OUR WOODSBURO MEETING ON

 APRIL $\mathbf{2 3}^{\text {rd }}$
## NOTE TIME \& LOCATION for our NEXT MEETING ON:

THURSDAY, MAY 12, 2016 at the

MOUNTAIN GATE FAMILY RESTAURANT in Thurmont, MD 21788, 301-271-4373.



Come out and join us
for a good meeting!

## ANNUAL SPRING JOINT MEETING

MARYLAND CHAPTER 11
WASHINGTON CHAPTER 12 FREE STATE CHAPTER 141 National Association of Watch and Clock Collectors Saturday, April 23, 2016
WOODSBORO, MD - VFD COMMUNITY HALL

10307 COPPERMINE RD. ZIP 21798
TEN MINUTES NORTH OF FREDERICK


COMBINED MEETING THREE CHAPTERS 8:00 a.m. - 2:00 p.m. SPEAKERS AT 11 A.M. 60 MART TABLE SPACES AVAILABLE


SPECIAL GUEST SPEAKER WILL BE: DAVID TODD HIS PROGRAM WILL BE "THE GREAT CLOCK AT MONTICELLO." David has been taking care of this clock, together with other clocks in the house, since the early 1980's.

Directions to Woodsboro Vol. Fire Department Community Service Hall:

- From the East: 1-70W to US RL. 15 North, to US RL. 26 East to St. Rt. 194 North to Coppermine Road. Tum right $1 / 2$ mile for VFD Community Service Hall on the nighe. From the South: US Rt. 15 North or $1-270$ North to St. Rt. 26 and then follow above.
*From the West Take I-70 East to US RL. 15 North and then follow directions above.
${ }^{*}$ From the North: US RL. 15 South to Thurmont, then St Rt 77 East through Thurmont to St Rt 550 East to Woodsboro. Turn right on St Rt. 194.
Turn lefl $1 / 2$ mile to the VFD Community Service Hall, 10307 Coppermine Roed.


RESERVATION FOR JOINT MEETING \& MART
Name $\qquad$ NAWCC\#
(Must show card)
Phone $\qquad$ -

Address $\qquad$
City $\qquad$ State

Zip $\qquad$
Spouse (Free) $\square$ Guest (Name)
Children under 14 (Free) $\qquad$
Guests must be accompanied by NAWCC member and must follow NAWCC guidelines.
Meeting \& Mart Pre-Registration
Admission to Meeting \& Mart at the door Mart Table
(a) 10.00 \$
(a) 12.00 S
(a) 17.00 \$

Total \$

April 23, 2016
Make Checks Payable to: NAWCC Chapter 11

Mail to:
Bill Miller 4301 Meadowcliff Rd Glen Arm, MD 21057 410-592-7013
Enter quick and easy Badges will be mailed if SASE is received by:
APRIL 13, 2016

IMPORTANT: The NAWCC, its officers, and members, including officers of the Host Chapters, the Chairpersons, and members of the Joint Meeting committee disclaim responsibility, and for acts by others, for errors, emissions, neglect, inconvenience, loss, or accident caused by events surrounding or related to activities of the Joint Meeting.

