



Free State Chapter 141

MD, PA, VA, WV

February / March – No.2009-02

Chapter 141

Officers

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Lou Orsini

Vice President

Bob Rothen

Treasurer

Neil Amrine

Secretary (acting)

George Hudson

Newsletter Coordinator

Al Bush

Registrar

Joe Joyce

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George Hudson

Frank Goad

George Tresansky

For more information about the chapter, you may contact the President Lou Orsini by email oh2batc@verizon.net or phone 703-352-7260.

Feedback or questions pertaining to the Newsletter should be addressed to Al Bush at: agbush172@verizon.net or (410)531-5307.

President's Message

Well, we are in the dreariest time of the year, and yet it doesn't seem so bad this year. We've had virtually no snow (at least in northern Virginia), and even the cold days haven't been that cold. Unfortunately, the word from Punxsutawney Phil is not good - Phil says we have six more weeks of winter (ugh!). But there are things to look forward to. The days are again getting longer, Mardi Gras and St. Patrick's Day provide reasons to party, March Madness will soon be upon us (for you college basketball junkies), and our high quality programs will continue. And now it's time to start thinking about spring, which, in this area, may be the best time of the year.

It is a time to renew acquaintances, spend more time with family and friends, and get serious about that New Year's resolution you foolishly made in the heady holiday period. Of course, it is also time to break out of those winter doldrums and work on building and/or weeding out your clock or watch collection. Don't forget - one man's junk is another man's treasure, so keep those clocks, watches, and related books and tools circulating. Our mart is a great place for our treasures to find new homes, making both buyer and seller happy, so please consider bringing something to sell and always be ready to buy!

For the second time in a row, I missed our January meeting due to business travel - this is getting to be a bad

habit, but hopefully one I can soon break. No travel scheduled right now for our **March 11th meeting**, but I often don't know I'm going until fairly late. Once again my thanks to **Bob Rothen** for running the meeting in my absence, which I understand went very well. I even heard back from one of the winners about how much he enjoyed his prize - I hope the other two winners were similarly pleased.

Once again I am asking for volunteers to fill any of the officer or Board of Director positions. These are **President, Vice President, Treasurer, Secretary, Newsletter Editor, Registrar, and Board of Directors**. In some instances the incumbents may choose to stay for another term (and we welcome their continued service), but we also would love to have members step forward to fill positions in which they have not previously served. That makes most everyone in the chapter eligible for most any of the positions, so I ask you to consider serving. Having served the chapter for several years now, first as Secretary and now as President, I can tell you from experience that the rewards are great and the commitment very manageable. As **George Hudson** keeps reminding me we are all in this for the enjoyment, so the officers don't need to suffer, and we don't (suffer, that is). Please see me or any of the officers if you are even remotely interested in serving; I think we can sufficiently twist your arm

Our next meeting will be.....Wednesday, March 11, 2009 at The Cozy Inn

President's Message Continued.

and get you to say "yes".

Finally, as always, please **remember our brave men and women serving in Iraq and Afghanistan**, as well as other dangerous places throughout the world. We have seen some positive indications of stability in Iraq, but it remains a dangerous place still bordering on a war zone. Afghanistan, meanwhile, is beginning to slide into greater violence, and hence greater danger for our troops. Throughout all the ups and downs, our soldiers, sailors,

marines and coastguardsmen remain the most dedicated service members you will find anywhere - they make us all proud. Whenever you see a service member in public, take a moment to shake his or her hand and say "thank you;" that small action will mean much more than you might imagine. Please keep them and their families in your thoughts and prayers, every day, until they return home.

Lou Orsini, president

January 14, 2009, Meeting Minutes

The January 14, 2009 meeting of Chapter 141 was held at the Cozy Restaurant in Thurmont, MD. The Mart commenced at 5:30, followed by dinner at 6:15. In the absence of President Lou Orsini, Vice President Bob Rothan conducted the meeting. During the brief business session, Bob Rothan pointed out that it is past time for annual elections and that the slate is filled, except for the position of Secretary. The reorganization of that position was reviewed for the membership. The nomination issue is to be addressed before the elections at the next meeting. Treasurer, Neil Amrine reported a modest growth in the resources of the chapter for the year of 2008.

The program was "Show and Tell." There were 5 presenters. Frank Goad talked about 3 unusual railroad

watches. Tom Mostyn called attention to a couple of interesting websites, and described a French windmill, industrial style clock. George Hudson showed a copy of the original order entry page in the records of the Seth Thomas Tower Clock Co. for the Emerson Drug Company's Bromo-Seltzer tower clock in Baltimore, the original record being at the NAWCC Library in Columbia. Al Bush presented a restored single weight cuckoo clock and its repair story. Jack Terry showed a clock-movement-powered, paper tape, signal-recording machine used by early telegraph services. 3 prizes were awarded to Tom, George, and Frank.

G.S.Hudson, acting secretary

Treasurer's Tidbits

FREE STATE CHAPTER 141
MEMBERSHIP-RENEWAL APPLICATION
*NATIONAL ASSOCIATION
OF WATCH AND CLOCK COLLECTORS*

Date _____ *NAWCC No.* _____

Name _____

Spouse's Name _____

Address _____

City/State _____ *Zip Code* _____

Email _____ *Phone* _____

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: Neil Amrine, 5621 Ogden Road, Bethesda, Maryland 20816
Phone:301-229-2587; email: neil54@aol.com

Hi folks!

I would remind all members to send in their dues, if they are not fully paid...

Contact me at Neil54@aol.com, or call me at 301-229-2587 if you have questions. I look forward to seeing everyone at the Cozy's in March. Please be prompt with your RSVPS for the meeting reservations. **We need to know the head count for the meal so reservations can be made.**

Thank you!!

Neil Amrine

Attention: It is important also to keep Joe Joyce (josephjoyce@comcast.net or 301-865-8464) advised of any change in your membership information, address changes, etc. **We cannot keep you informed if you don't keep us informed.**

Join us! If you have an interest in clocks or watches you are invited to our next meeting—March 11, 2009, at the Cozy Inn in Thurmont



CHAPTER 141 PROGRAM FOR MARCH 11, 2009

Meeting Time: Dinner: about 6:15 PM; Mart: Come early
Business/Program: Follows dinner

Wooden works were prominent in the 1800s and played a significant part in early manufacturing in America. We will have our own George Hudson talking about the tips and techniques he has learned working on wooden works clocks. George has been working with wooden works clocks for more than 40 years and has had many experiences with their workings and construction. He is a significant resource of information on the subject. It should be a very interesting and informative talk. We're looking forward to seeing you at the meeting. Come out and join us for a pleasant evening.

Meeting Reservations: You may use the meeting reservation form below to mail in your reservations for Free State Chapter 141 meetings. Please indicate the meeting date as you complete the form. You may also make reservations via e-mail to neil54@aol.com and providing Neil Amrine with the information requested on the meeting reservation form or by calling Neil at 301-229-2587 and informing Neil directly.

Please RSVP at least 48 hours before the meeting date.

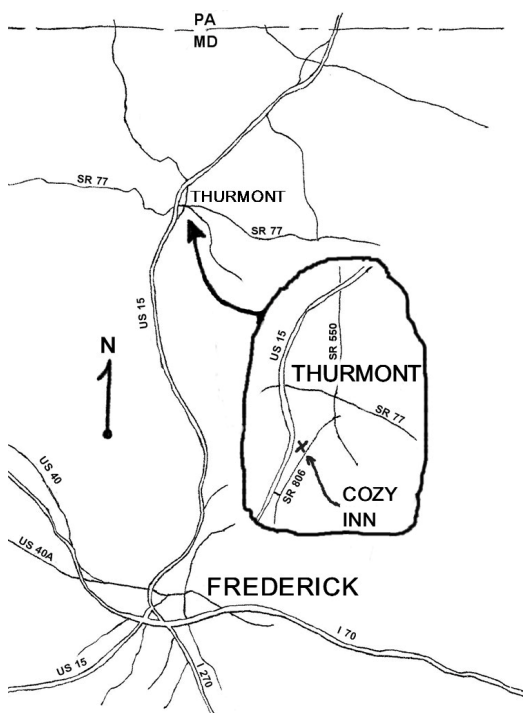
Bob Rothen

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.



Spring Approaches!

Free State Chapter 141 Meeting Reservation Form



Reservation for Free State Chapter 141 Meeting on _____

Name _____ Guest Names _____

Number Coming _____ x \$16.00 = Total \$ _____

Number of Mart Tables _____ (Mart Tables are Free)

Please make checks payable to **Free State Chapter 141** and mail to Neil Amrine, 5621 Ogden Road, Bethesda, Maryland 20816

Phone: 301-229-2587; email: neil54@aol.com

Directions (see map at right): Cozy Inn 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 0.4 mile on the left. If you need additional directions please call the Cozy Inn at 301-271-7373.

Tic Toc Tech Tips

Soldering – Part 2

In Part II we discuss soldering applications in clocks but first a few words about an item I neglected to mention in Part I on soldering materials. That is soldering paste. Some time ago I obtained glue dispenser tubes of solder paste sold by Radio Shack listing a Kester Solder address in Des Plaines, IL 60018-2675. I see a similar product in TimeSavers catalog as well. These tubes are shown in the first photo. Of the 3 tubes I have, one is labeled Pot-Metal, one Aluminum and one Silver Solder.

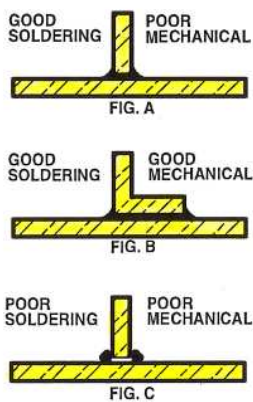


Soldering paste

The “Pot-Metal” indicates for zinc die-cast, pewter and white-metal pot-metal with a melting temperature is 400° F. The “Aluminum” indicates aluminum to aluminum, brass or copper with a melting temperature 395° F. The “Silver Solder” indicates high strength solder joints on copper,

brass, stainless steel, nickel and bronze with a melting temperature 430° F. The paste appears to be made of micro balls of solder in a flux paste and it recommends thorough cleaning of joint, application of paste and then use of a torch to heat the work (not the solder). I expect this could be used in an oven as well. I had some success using the pot-metal but felt I could do better with wire solder and a torch or an iron. However I think I should mention this technique because there might be a situation where this technique could be used to a benefit.

You should first have a good fit between the parts being joined to obtain a good solder joint. The parts should be clean, be free of oxide and oils and have flux applied. It is recommended that you use solid core solder, i.e. apply the flux separately. Apply the soldering iron or torch to the work and heat it to the melting temperature of the solder and apply the solder to the work. Do not melt the solder onto the iron and carry it to the joint. This often leads to cold solder joints which can also happen using an undersized soldering iron. The joint needs to be heated up so the solder can flow freely and not ball up. Balling up usually indicates that the base metal of the joint is not hot enough, oxide exists on the surface or the flux has not activated the surface. Do not apply the heat longer than needed and keep in mind that if you evaporate all your flux before the solder melts



Sample cross sections

and flows over the area, the base metal may become oxidized causing the solder not to adhere. In a “cold solder” joint the surface tension of the molten solder will often cause it to “ball up” as mentioned above and not adhere to the metal joint. This leads to a weak and poor quality joint. The final product should have a smooth look in which the solder has flowed out to a thin (feathered) edge. The figure on the left shows a sketch of a good solder flow (Fig. A), a good mechanical joint with good solder flow (Fig. B) and a poor cold joint with poor mechanical strength (Fig. C). You

will note that in Fig. A the solder did flow in between the two pieces of metal while in Fig. C, there is a void between the two

pieces. In cases where you have the option, bending the one piece to give a small flange allows a larger surface area for the solder to bond giving a more secure joint.

Most of my solder joints are made with “Solder Sticks”, flux and anti-flux using a torch for the heat. Heat sinking is used if I wish to limit the heat distribution. The use of chemical putty (Vigor Heat Shield, GrobetUSA.com, Amazon.com, about \$15.00/16oz.) will cool the area. I believe it works by evaporating moisture and providing a heat absorbing mass. It washes off with water. Once the job has been completed, the area needs to be cleaned of oxides, heat absorbing putty, any residual flux or anti flux and any excess solder. Keep in mind that removing solder in some cases can reduce the strength of the bond. You probably should retain a fillet to maintain joint strength.

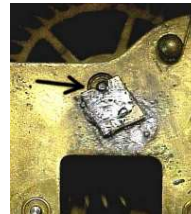


Poor solder job



Good solder job

I want to mention some of the poor repairs I have seen to illustrate the problems one can encounter. The most recent case I observed was a poor job of soldering a clamp on a bezel to secure a crystal of an old shelf clock. The crystal was falling out and the retaining clamp was only partially attached. A poor soldering job was at the heart of the problem. The solder had not adhered to the bezel and the back of the retainer flange showed no solder when it fell off. The photos show the poor solder job (top) and a good solder job (bottom). There were other examples where attempts to solder wheels to arbors and pinions to wheels as well as other applications that failed.



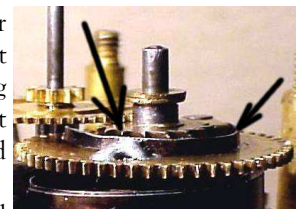
Soldered



Replaced

They appeared to have not been cleaned and heated enough to allow the solder to flow and adhere. Had they been done properly they might have worked even if they did not exhibit good craftsmanship.

I even had one case where a worn bushing was repaired by soldering a piece of scrap brass across the edge of the bushing hole to counter the wear. In this case it should not have been soldered but the bushing should have been replaced. The next photo shows the bushing replaced with the solder mess cleaned up.



Cold soldered click spring

Another example where I would not solder is shown in the next photos. The top photo shows the movement with a broken click spring soldered to the spring drive gear. By using a piece of brass spring wire, a spring can be formed, fit in existing holes in the gear and clamped as shown in the lower photograph.



Replaced with wire spring

Hopefully this will give you some ideas and a better feel for making repairs in clocks using solder. AGB - 200902