

The NEMES Gazette

The Newsletter of the New England Model Engineering Society,
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Vol 4 No 45
January, 2000
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**Our Next Meeting is at 7:00 PM on Thursday
December 2, 1999 at the Museum, 154 Moody
Street, Waltham Ma.**

*Annual dues is \$20.00 - Please make checks payable to "NEMES" and
send to the NEMES Treasurer: Kay R. Fisher 80 Fryeville Road
Orange, MA 01364*

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From the Editor's Desk:

We've had a bit of discussion about whether the "3000 Degree Furnace Cement" and Perlite mixture was an adequate refractory for a home foundry. I can now report that it is not, having gotten soft and gooey in mine and sagging pretty badly down into the bottom. My next try is going to be fire brick from Home Depot. Six bricks standing on end in a hexagon will give me just about the bore I'm looking for, and two 7 inch ducts from the plumbing section snapped together to make one 14 inch duct will be just about right for a steel shell outside the brick hexagon to hold it all together. It may not work a whole lot better than the mix I was using before, but I have high hopes, and not a very big investment in terms of money.

This month we've printed the member roster again, as it's been quite a while since it's been printed. It's also getting bigger. For a long time it was hovering around the 100 mark, but this one has 140 members listed. Ron keeps the membership list in an Access Data Base, and he sent me a comma delimited file of all the members. I put it into an Excel Spreadsheet and after messing around with it some output a tab delimited file that I then included into the Gazette, where I set up a new paragraph style to attempt to print the roster in legible form. It came out pretty good, but it's not perfect. If you see any incorrect info about yourself let us know and we'll get a correction printed and hopefully get it fixed in the database so next time will be right. As Ron has said before, we're publishing the list

to help people stay in touch with their fellow members, not for commercial use.

Whether our January meeting will be in another millenium than the December meeting was or not, it's definitely a new year, so happy new year.

See you next Thursday night - scl

The President's Corner by Ron Ginger January Meeting

We will have one of our members, Earle Rich speaking about his experiences building windmills for commercial power generation. A question about this appeared on the Internet a few weeks ago, and when Earle gave a good answer it seemed clear this was a topic for a club meeting. I know a few of our members have tried to build their own windmills, so this should again be an interesting talk.

Related to this, Ive always wanted to hear from someone that has built an electric vehicle- anyone know about them, and willing to speak at a future meeting please let me know.

As usual we will have time for a few short show and tell items, so dont be shy, lets hear from some more of you.

February Show

Its time to again start to think about our show, Saturday, February 19, 2000. I assume we will follow pretty much the same format as the past couple years, but I would love to see some new ideas as well. If anyone has some ideas for demos, or special exhibits Id like to hear them.

We could also use some help in arranging for some door prizes. As you visit your favorite tool or material suppliers, ask them about a donation to the club.

We need someone to make up a flyer, and get a batch printed to hand out at the February meeting and then have everyone take a handfull and hang them in your favorite shops, libraries, at work, etc. Do we have an artistic volunteer, or

will I have to crankout my old flyer and just change the date?

CNC Workshop

There seem to be a few fellows interested, and it looks like to large a group for my shop, so Steve Peters has offered his space in Shrewsbury MA. Id like all those interested in this to gather for a few minutes at the January meeting so we can agree on an exact time and coordinate some topics and equipment.

CABIN FEVER

Its now just a month away to the Cabin fever show. We have a good signup for this- it looks like at least 25, so the bus fare will be just \$80 each. We may even reduce that a few dollars if a couple more sign on. A few of us talked about the hotel and we have decided to use the same one as last year. We will arrange a bus ride to the other hotel for the hospitality suite.

So, if you plan to go, make your room reservation NOW. call the Inn at Reading, 800/383-9713 and book your room. Tell them you are part of the NEMES group to get our discount (although a few guys last year got as good a discount with AAA or AARP). Remember the room rate is the same for 1 to 4 people, so if you want to share a room hook up with a friend and make a reservation.

If you did not signup yet, there is still plenty of room, but please do let me know that you plan to go.

Magazine Sale

I have been contacted by a woman that wants to sell her late husbands collection of HOME SHOP MACHINIST and 2 GUN magazines. She thought the HSM was the complete set from the first issue. She was to send me the exact details, but they had not arrived by the time this had to go to print. She lives in CT, but has family this area that could help to deliver the magazines. So if you want a set of magazines call, Jeanne Garvey at 203/264-5572.

--Ron

Calendar of Events

Jan 6, 2000 Thur 7PM

NEMES Monthly club meeting
Waltham, Ma.
Charles River Museum of Industry 617-893-5410

Jan 28-30

Cabin Fever Trip bus trip
128 T-station at noon

Ron Ginger 508-877-8217

Feb 3, 2000 Thur 7PM

NEMES Monthly club meeting
Waltham, Ma.
Charles River Museum of Industry 617-893-5410

Feb 19 Sat 10-4

NEMES show
Waltham MA CRMI Moody St.
Ron Ginger 508-877-8217

April 29-30

NAMES Show

For a listing, please sent name and brief description of event, time and place and a person to call for further information to.

Bill Brackett at wbracket@ultranet.com or 508-393-6290

Nov/Dec 1999 Treasurers Report

Previous balance -----	\$3880.96
Dues Deposit -----	40.00
Interest -----	1.67
Bob Niedorff (newsletter expense)--	-83.25
Dues Deposit -----	20.00
Mike Boucher Filing Fee for Report-	-15.00
Dues Deposit -----	80.00
Interest -----	1.61
Dues Deposit -----	20.00
Bob Niedorff (newsletter expense)--	-84.24
New balance -----	\$3861.75
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I somehow forgot to submit a report last month
so this one is for the last two months.

Respectfully
Kay R. Fisher

The Meeting, December 2, 1999

I doubt that I'll get everything that was at the meeting mentioned, because there was a lot of good stuff and although I made an attempt to get everything I was mostly circulating around having a good time. If I missed what you brought I apologize.

Because of the special event at the Museum we didn't meet in our norm upstairs room, but in the lounge area at ground level outside of the museum proper. The lounge is a nice place to meet, but isn't really set up for our normal style of meeting with a speaker. So, we had a poster session. Lot's of interesting things showed up, and there were even some posters.

Walter Winship brought a cast aluminum head that he had done in his back yard. A friend

of his had a Winton car that was restorable but the aluminum heads were corroded through. He couldn't get anyone to make the patterns for the heads, although he had a foundry that said they would cast them if he provided the patterns and core boxes. Walter hadn't ever done any patterns as complex as the Winton heads before and didn't really want to do it, but then his friend said he'd pay him to do it and Walter said that made the difference. He had a couple of pictures showing the cores and the heads, along with the first casting he had made, which was a reject because of a void near one of the plug holes. Walter had the existing heads to use as a guide for the pattern, but had to pretty much design the core based on what he figured had to be inside the existing heads. The engine is a 6 with three separate 2 cylinder heads. Walter ended up doing the castings in his back yard as well as making the patterns and core box because the foundry said they couldn't do the job once they saw the tooling Walter had made. Having cast a little bit of aluminum myself, I found the reject head Walter brought to the meeting very impressive.

Bill Brackett had done quite a bit of machining on the aluminum casting that he's making into a honing fixture for his woodworking planer and shaper blades. Last time he brought in the rough casting from the pattern he made. He still needs to put a couple of slots into it for the clamps to hold on the blade while it's being sharpened, but the casting looks solid and I expect it will work out nicely for keeping the blades in good shape.

Errol Groff brought in some old drills that caused quite a stir as we all circled around them looking to see if there was something we needed for our shops. The material all came from the Dumpster at his school. They need a couple of tail stock wrenches for SB lathes (1 1/16 inch across the flats) if anyone has a spare. The school is in Danielson Conn and is having an open house 14 Dec, but if you didn't hear at the meeting it's too late to go now.

Roland Evans is building another steam engine, and on this one he's tried something new to him. He brought in the base plate for the new engine, and it has poured babbit bearings. He cast the babbit on the shaft, using machined fittings at each end of the journal to contain the metal. He had to press the shaft out, and then used a coping saw to split the poured bearing.

He has scraped the oil passages into the babbit, and is using peelable shimstock in the gap between the base and the cap of each journal so that it will be easy to adjust the bearings as they wear. He put the bearings together with the shaft in place, added oil to the cups, and gave the shaft a turn. Then he disassembled it all and checked the oil on the shaft. It was coated all the way around so he figures the scraped in oil passages are working. He used Tuftin #73 High Nickel Babbit.

Ron Ginger has been busy on his hybrid radial engine, and had a lot more pieces from it to show us than there were the last time I saw it. The front half is the Kinner K-5 from Strictly IC and the back half is the gear box from the Morton M-5.

Bill Shoppe brought a glass flat that's used for checking surface plates.

Henry Szostek brought a watchmaker's lathe, and a bunch of Dupont Corian counter top material that he handed out. He also had a sample knurl that he'd made. It had a positive knurl on one end, and a negative knurl on the other. He got the tooling to do the negative knurl a while back when he was duplicating a hose fitting for a Stanley where the original had a negative knurl. The negative knurl is quite interesting - you look at it and it's obvious something is different but you have to look close to see what it is.

Joe Warfel has brought a lot of interesting photo accessories in at various time, and this time he had on that I thought was pretty slick. It was a camera mount to go into a car window, with a fitting to hold a camera the way a tripod does. Roll the window down, put the blade at the top into the slot where the glass goes, then roll the glass up into the slot on the bottom and the camera is securely mounted to the car.

We didn't have a speaker, but in the middle of the meeting we did have a few announcements. The Cabin Fever Trip is going to be staying over at the same hotel as the last two years. There was some talk about going to a different hotel where they were going to have a Hospitality Suite, but we have a bus so will probably take the bus over to the other Hotel for the evening. Earle Rich sent a message to the model engineering list mentioning that he had worked with a wind farm on the west coast making electricity with windmills. Several of us

picked up on that right away and thought it sounded like a good talk for NEMES. He'll be the speaker at the January meeting.

Roland Gaucher as a problem he'd like some help with. He recently purchased a machine for his garage that changes automatic transmission fluid. You hook it up in series with the cooling lines for the transmission and it puts in 12 quarts of fluid and takes out 12 quarts. They say you've just changed all the fluid, but Roland doesn't believe it. He'd like to know how he can easily determine what per cent of the fluid he has actually replaced.

Don Strang had some info on the Y36 problem. Not as well known as the Y2K problem, but quite likely a lot more real. Prior to 1936 the Los Angeles electrical system was all 50 hertz. In 1936 when Bonneville Dam came on line it was 60 Hertz, so all the clocks in Southern California were going to start telling really bad time. There was a massive project to convert all the electric clocks from 50 to 60 Hz operation.

Victor Kosakevitch brought in two clocks, one working and one that he is working on. They were French clocks from about 1880. Both were made by Marti and are the same striking movement. The working one just needs to be cleaned, the other one needs to be rebuilt. They were mass produced, with the store name hand lettered on the inner dial in India Ink. This is something that can cause the careless repairman some grief as if you clean the dial to aggressively the store name can come off. If it was a well known name such as Tiffany cleaning the name off could reduce the value of the clock by \$500. The movements have flat sided jewel rods in the escapement, which is a "Brocot" dead beat escapement - the second hand stops between beats but does not move backwards. The parts are made of cast brass. The gold plating on the clocks was done by the burn off method. Gilding powder was applied with mercury to form an amalgam that coated the parts. Then the parts were heated until the mercury evaporated off. Just imagine what an OSHA inspector would say about that.

Don Milligan had "GEE-HAW" sticks that had been made by his boy scout troop as a fund raiser, along with a real poster. A gee-haw stick has a short propeller on one end that spins when you rub a second stick against some notches down the side of it. The prop changes

direction when you tell it GEE or HAW, just like a well trained ox team pulling a wagon. I'm convinced there's a gimmick to it besides talking to it, but I watched Don for a few minutes and I couldn't figure it out.

Larry Twaits is almost ready to make a "keeper cutter" on the cutter relieving machine he's been working on. Seeing all the work he's gone to be able to relieve a cutter to make a gear (or whatever it is that he's making the cutters to do) makes me appreciate being able to go out and order one from a catalog. I don't think I've got the patience to make something like that, but it sure is neat.

Ed Wlodyka had a South Turning Man on a miniature wooden chariot. It was mounted so that it would go around and around in neat circles so that you could follow how it really did always point the same way. He also had a couple of beautifully made wooden dovetails that slid together at funny angles so at first glance they looked impossible. Then when you managed to get them apart you had to wonder why it took you so long to figure them out. My favorite of the things he had with him was the kinetoscope, a device for continually flipping 24 photos of another one of Ed's wooden creations so that it appears to move. It's a model of the kinetoscopes that Edison made 100 years ago where you put in a penny, looked into a peephole, and turned the crank to see a short silent movie flip past on a series of cards. I remember them from Salem Willows when I was a kid and more recently from main street in the Magic Kingdom at Disney World in Florida. Ed and I had a discussion at the meeting about what the proper name for it was, and neither one of us was really sure. I was pretty sure it was a kine something, and later I was able to find it in my WWII vintage Funk & Wagnalls dictionary.

Classified Ads:

For Sale, Becker #25 Horizontal Milling Machine. 8" by 27" table with autofeed. 110 volts, single phase 1 HP motor. \$300. Tom Patterson 401-539-7212

O.S. Porter 2-6-0 Mogul, 3.5" gauge. Burns coal and has pulled 2 adults (roughly 300 lbs total) up a 2% grade. Kit Manufactured by OS Engines Man. CO., LTD. in Japan. \$6500 + shipping (serious offers will be considered) This is less than the cost of the kit and is assembled and runs well. 4 Wheel Switcher - fully operational miniature diesel locomotive (runs on a car battery) 33 1/2" long, 10" wheelbase, 1 -1/2" scale, 7 1/4" gauge. \$1500 + shipping. Call Father Jay Finelli (401) 766-0917 (Mon/Tues), (401) 434-1878 (Wed - Sun)

Seneca Falls Mfg Co #25 Metal Lathe - good restoration project for someone who would like to fix up an antique. It needs a good home. Stephen Lovely 508-473-8621

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c/o Stephen C. Lovely
Post Office Box 277
Milford, Ma. 01757-0277