

The NEMES Gazette

The Newsletter of the New England Model Engineering Society,
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Vol 2 No 4
August, 1997
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Our Next Meeting is at 7:00 PM August 7th, 1997 at the Museum, 154 Moody Street, Waltham Ma.

From the Editor's Desk:

Have you got an idea for a meeting topic or a speaker for a meeting? Try to come up with one so we can get things lined up a couple of months in advance. Ron has done a really good job lining up topics and speakers, but he needs some help. If everyone came up with one idea for a main subject or a speaker we'd have enough ideas to last for the next couple of years even if half of them were duplicates.

See you all the 7th.. -- scl

The Founders Corner by Ron Ginger

I hope everyone enjoyed the poster session in July as much as I did. I was amazed at the range of items brought in and the kind of work our members are doing. I am sure Steve will have some more details later in this issue so I won't attempt to comment on any of the items. I am sure we will want to try this format again at some meeting- maybe we can do it on a regular basis, like every 3 or 4 months.

SHOW- October 4 Keep in mind the next show for October 4th. I assume we will do just about the same level of setup as we did in February. I will get a bit more organized this time and not have quite so many air compressors on hand! We will need help as before, with setup and a refreshment table would be most welcome (I hope our Ladies Auxillary Branch doesn't get tired of this :-)

August Meeting I do not have a firm speaker lined up yet- its been a busy summer. I hope we have a very good turn out for show and tell, and if anyone has a subject they would like to talk a bit longer about please contact me before the meeting- I'm home most evenings after about 6- 508/877-8217 Dick Boucher suggested a good slide show of the New England Wireless Musuem Steam Up, does anyone have some good slides they would like to bring in?

See you all August 7th. -- Ron

Calendar of Events

Thursday August 7, 1997 -- NEMES MEETING at the Charles River Museum of Industry, 154 Moody Street, Waltham, Ma 02154, telephone 617-893-5410

Thursday September 4, 1997 -- NEMES MEETING at the Charles River Museum of Industry, 154 Moody Street, Waltham, Ma 02154, telephone 617-893-5410

13 September, 1997, Original Yankee Steamup at the New England Wireless and Steam Museum. 9:00 AM to 4:00 PM Admission \$5, No charge for exhibitors.

Saturday, October 4, 1997 -- STEAM EXPO at the Charles River Museum of Industry, 154 Moody Street, Waltham, Ma 02154, telephone 617-893-5410

Saturday Feb 21, 1998 -- Second Annual NEW ENGLAND MODEL ENGINEERING SHOW at the Charles River Museum of Industry, 154 Moody Street, Waltham, Ma 02154, telephone 617-893-5410

The meeting, 3 July, 1997

Well, the third of July is probably a pretty lousy evening to hold a meeting, but those of us who managed to get there despite the long weekend that was getting under way had a good time at our first poster session. Attendance was down, and we didn't have a formal speaker, but we did have a good time.

I know I was wondering exactly what a poster session was before the meeting, but now I know. A bunch of the guys brought in things, and we all milled around admiring, gabbing, and having a good time. Some people left early because they had long rides to make, and I'd expected to get out early too but was having such a good time I ended up leaving later than usual.

About eight we had a quick meeting with a few announcements so that the folks who needed to get out early could leave without having to worry that they'd missed any big announcements.

Ron started it off by saying that the poster session was a neat idea and to keep the show in October in mind.

Don Strang told us that Paul Budlong had come down with pneumonia after the Orange show and that he was in Emerson Hospital in Concord. Hopefully he'll be home and feeling fine by the time this goes out. Don has been reading a book on the Saco-Lowell shops put out by the Harvard Business School in 1950. It's full of interesting info, and our meetings are in the Boston Mfg. Co., which was the predecessor of them. The marine engine show at Mystic Seaport will have a visit by a Liberty Ship at New London that day. Exhibitors at the show will be able to tour the engine room and see the engine turn. (for exhibitors only)

Howard Evers asked if anyone was interested in a trip to the former Union Twist Drill in Athol. Paul Gauffin is going to organize a visit by NEMES some Saturday morning. It's been closed for a few years now, but there is still a lot of stuff in there that is available at 5-10 cents on the dollar. He asked for hands to see if anyone was interested, and I think almost every hand in the room went up. Let Paul Gauffin know if you are interested so he can get a head count and set things up.

Errol Groff had his wife with him. They had seen a hog oiler at the Orange show and he was hoping that someone would be able to tell his wife that yes, they really did have such things as hog oilers. Several members

said that yes, not only they do have hog oilers, they're highly collectible.

The Poster Session

Bill Brackett had a quick change tool post he had nearly finished, and a boring bar holder built from the plans in the flyer that Projects in Metals was sending around a while ago to get subscriptions. He also had some steam engine plans that had been emailed to him by Roland Evans.

Roland Evans had steam engine plans and boiler plans, along with a bunch of pictures. He had the drawings for a 3.5x4.5x4.5x5 compound engine to be made from 27 castings that he had designed, and another set for a single cylinder engine with piston valves. Chris McMullins in New Zealand is building a replica of a Herreshoff steam launch from about 1850. It's being built to drawings from the MIT archive. Roland had pictures of the boiler and the engine.

Norm Jones had more on his Miser engine project. Last time he had the big disk that he wanted to decorate with engine turning but wasn't happy with the results. Now he has refined his technique. He's got the disk in a rotary table and is putting 9 rows of 20 spots around on it. So, 9 different size wooden mandrels fitted with 400 SiC sandpaper. Bring it down to touch, then go down a mil with water to cool it. Then up, rotate and repeat. He didn't bring it in because he had one row to go and didn't want to break the setup till the part was done. It's coming out much nicer than the last time and he hopes to have it running by the next meeting.

Gene Martha bought a 4" MSC vice with a hex on it and a big ugly cast handle that he didn't care for. So he made a very slick handle/wrench to replace the one that came with it. He started with a 15mm socket. It's pressed and pinned into a disk with three handles. The handles are 120 degrees apart and are tilted 15 degrees away from the socket and the plane of the disk. The handles are made of rod threaded at both ends. They screw into the disk and have black plastic balls on the other end. It looked really sharp - a lot like the quill feed on some drill presses. He also has a new Bridgeport Riser block - contact him at 508-695-5158 if you need one.

Erik Larson is working on a 10" SB restoration project. He had some pictures and a very nice looking tailstock and spindle.

Todd Cahill had what was certainly the most unique creation of the evening. It was a pot belly stove boiler with a 2 cylinder oscillating engine belt driving a wizard's wheel. The whole thing was on a metal stand so the works were just about the right height to watch while it was standing on the floor. I would have loved to see it run.

David Piper has designed and is building a 2 cylinder compound steam engine. He had the built up crank and lots of parts with him.

Jay Stryker brought in a canon model of a 24 lb long gun that is going to go into a diorama of between decks on the Constitution. He pointed out that it was a lot more done than when he had brought it in a few months ago. He also brought in an edge clamping fixture he had made from plans in ME recently. Three

blocks, with holes to fit the table so you can bolt them down.

Ron Ginger and Dave Beverage had their CNC Sherline mill running from a laptop running the software they are working on. They cut some letters and made quite a few chips during the evening.

Howard Evers had a quick change indicator holder that we should see in HSM when they get around to printing it and a clamp to hold an indicator on a mill spindle.

Errol Groff had the oval rollon container samples that he had made at a previous job. He also had two hand-outs with info on casting plastic that sets fast enough so you can make several casts a day rather than only one and on a micro surface finishing product.

Micro Surface Finishing Products Inc., 1217 West Third Street, Box 818, Wilton, Ia 52778. 319-732-3240 has 2400 to 12000 grade abrasive papers.

Alumilite Corp. 225 Parsons Street, Kalamazoo, Mi 49007. 616-342-1259 The casting kit includes 1 quart part A and B, and other accessories.

Walter Stanul brought in a Guitar Mold with an electrically heated metal surface. The heat came from a flexible rubber heating pad. He also had a small bronze plane he had made by lost wax casting in a ceramic shell mold.

Max ben-Aaron had a little 2nd operation Mill he had picked up somewhere.

Clive Dalby had a Jacob's Chuch with a 1 1/2 by 8 thread on the back to go on the spindle of his lathe. He says he often uses it where he'd otherwise have to use a collet. He also had a Shaplane Engine Lathe Radius tool and a Stuart 10 H engine kit that he started 20 years ago on a unimat. He lost interest in it and hasn't worked on it in quite a while.

Bob Cumings of New England Brass and Tool, Inc brought a 5-C collet indexing fixture.

Tips And Techniques by Ed Kingsley

HEAVY METAL

The following people still have metal to pick up. If you can't be at the August meeting and you can't make arrangements for someone to pick it up for you - CALL ME, please. (617) 233-3671.

M Boucher, Cahill, Craib, Jones, Lovely, McIlvaine, Wells and White.

I bought a little extra of a few items to help hold down the price, and I will happily part with them at cost. I have the following eight pieces:

12L14 - [12" of 2"] diameter & [8" of 3"] diameter Round, plus [12" of 3/4" x 3/4"] Square. Cast Iron - [(2) 12" pieces of 1"] diameter and [(3) 10" pieces of 2"] diameter Round.

I will have both the ordered and the extra stock, in the parking lot, at 6:30. Please try to pick up your order before 7 PM. To be fair to everyone - first come, first served on the extra stuff.

My sincerest thanks to Vern Eshbaugh and to Rick Tomer for their extremely generous help with this 'madness'. I could not possibly have gotten through all this without them.

I had the pleasure of cutting my first chunk of Cast Iron, last week, and I was delighted at the result. OK, maybe it's a little 'dirty', but if you haven't tried it yet, I think you're missing out on something interesting. 12L14 is very nice, but Cast Iron has a certain funky cache all its own.

CENTERING GUIDE

That 'first project' I made from Cast Iron was a 1 3/4" diameter x 1 1/2" long 'plug' that fits into the back of the thru-hole in a 6", 3 jaw lathe chuck that I picked up awhile back. The chuck has no backplate and I've just used it as a work holder on the Mill and Drill Press. I had a piece of 1 1/2" diameter by 12" long aluminum bar that I needed to turn, but I had no accurate way of drilling a 60 degree hole for the center in one end of the bar. The CI 'plug' that I made has a 1/4" reamed hole through its center. I clamped the aluminum bar in the 3 jaw chuck, passed it through the hole in the drill press table, chucked a long center drill in the drill press, fed it into the 1/4" hole in the 'plug' and drilled the center hole in the end of the bar, easily and accurately. I've been meaning to make this jig for a long, long time.

SCREW DATA CHART - GOOD HOME PAGE

While cruising the WWW, I came across a useful table of the "Dimensions of Common Screw Types", on the Home Page of the "Houston Home Metal Shop Club". It has the head and hex key sizes for most types of machine screws, from #0 through 1". Download it yourself and check out the rest of their stuff at: <http://www.flex.net/~geotek/hmsc/index.htm>

THE TOOL SHED

Andy will be again holding the doors for us until 6:15, on August 7th.

MULTI-LOUPE

Carolyn and Bob Cumings, of "New England Brass & Tool, Inc.", had a table set up in the parking lot, last month, and were selling odd pieces of brass and aluminum, as well as a few of the many precision tools that they carry in their catalog. I have been looking to add an Optical Comparitor to my tool box for many years, but their high cost has kept me just looking. I picked up a curious box from their table and discovered in it the Fowler "Multi-Loupe". It is an optical comparitor of 7x, with 16 different measuring reticules - on two interchangeable revolving disks (of 8 each). The price was \$15, and my tool box is now a smidgen heavier. Check one out.

Speaking of the right tool(s), I've been making-do with an odd assortment of Allen Wrenches; the usual loose collection (always missing the one you need), a couple of the 'jack-knife' type, folding gizmos and a poor set of the T-Handle variety. I broke down last month and bought a set of Bondhus 'screwdriver' type, ball-end wrenches, and I'm here to tell you that they really make a difference! There are thirteen wrenches from .050" to 3/8" and the set will cost you between \$26 and \$36, depending on the source (and the sale), but, for me,

they have definitely become the hex tool of choice. Check them out, also.

THE SECRET LIFE OF TOOLS

(Courtesy of r.c.m)

THE HAMMER: Originally employed as a weapon of war, the hammer nowadays is used as a kind of divining rod used to locate expensive car parts not far from the object we are trying to hit.

THE ELECTRIC HAND DRILL: Normally used for spinning steel Pop Rivets in their holes until you die of old age, but it also works great for drilling rollbar mounting holes in the floor of a sports car just above the brake line that goes to the rear axle.

THE HACKSAW: One of a family of cutting tools built on the Ouija Board principle. It transforms human energy into a crooked, unpredictable motion, and the more you attempt to influence its course, the more dismal your future becomes.

WISE-GRIP PLIERS: Used to round off bolt heads. If nothing else is available, they can also be used to transfer intense welding heat to the palm of your hand.

THE WIRE WHEEL: Cleans rust off of old parts and then throws them somewhere under the workbench with the speed of light. Also removes fingerprint whorls and hard-earned guitar calluses in about the time it takes you to say, "Django Reinhardt".

E-Z OUT BOLT AND STUD EXTRACTOR: A tool that snaps off in bolt holes and is ten times harder than any known drill bit.

THE PHILLIPS SCREWDRIVER: Normally used to stab the lids of old-style paper-and-tin oil cans and splash oil on your shirt. Can also be used, as the name implies, to round off Phillips screw heads.

THE AIR COMPRESSOR: A machine which takes energy, produced in a coal-burning power plant 200 miles away, and transforms it into compressed air that travels by hose to a Chicago Pneumatic impact wrench that grips rusty suspension bolts, last tightened 40 years ago by someone in Deerborn, Michigan, and rounds them off.

THE DRILL PRESS: A tall, upright machine useful for suddenly snatching flat metal bar stock out of your hands so that it smacks you in the chest and flings your beer across the room, splattering it against the auto-graphed Rolling Stones poster above your bench grinder.

-- Ed Kingsley

Classified Letters

Steve - please include in next news letter - if I made it in time - if not delete.

I called Village Press and discussed the possibility of a NEMES group purchase of their new book "Build an EDM" by Robert Langlois. As most of you probably have noticed this book has been offered at a reduced

pre-publication price of \$15.00 plus \$3.00 S&H up till 1-Aug-1997.

If we can get a group of over 6 folks who want one we can get it for 25 percent off the \$15.00 price and the 1-Aug-1997 won't apply to us as I explained that the next NEMES meeting wasn't going to be until August.

Also we can save significantly on the postage and handling by having them all shipped to one address and distributing at the next NEMES meeting. If we get over 10 orders we can get 30% off and that would bring the unit cost down to AROUND \$10.00

Actually I had in mind a group project where we could all contribute some expertise and perhaps enjoy a saving on group purchase of the electronic components and chassis and etc. But I figured almost everyone would want their own book anyhow - so the first question is who wants a book at whatever group discount price I can come up with. If you can't attend the next NEMES meeting then contact me via phone to be sure you are on the list.

Thank you

Kay R. Fisher (508)493-4319 days (508)575-0663 evenings

Hi folks,

I thought I would share what I got in the mail yesterday from the museum...

The N.E. Wireless and Steam Museum with the Corliss Chapter #1 NAPE and the Fidelity Amateur Radio Club present:

The Original Yankee Steam Up Saturday, September 13, 1997

For model makers, engineers, & all interested in the engineering ingenuity & history. Three boilers on line & the only George H. Corliss engine running under steam today. Also radio and spark exhibits open. Coffee & Allies donuts in Am. Lunch by NAPE #1.

1300 Frenchtown Road East Greenwich, RI 02818

<http://users.ids.net/~newsm>

ENGINES RUN RAIN OR SHINE (401) 885-0545 FAX: (401) 884-0683

On the back there's too much text for me to type in right now, but it talks about how great this museum is, and all the neat stuff they've got. If you're at all interested in steam power or magnificent models, this is a must see event, IMHO.

c'ya Mike Boucher

The NEMES Gazette

c/o Stephen C. Lovely

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