



April 2014



Outshopped by BLW - March 8, 2014

The search for dimensions and detailed information for this onesixteenth scale model of an EMD SD 70 ACE began in earnest in October 2012. Now, less than a year and a half later we have the finished product. It is powered by a Troy-Bilt weed wacker gasoline engine driving a 1996 Geo Metro alternator and that, in turn, powers six axle mounted traction motors. ... **BLW**, of course, is the **Balmer** Locomotive Works, not the Baldwin Loco Works. Next month, we'll have the *rest of the story*.

From the President's Desk:

Unfortunately I am back from the sand box of Florida! Brrrr! While I was in Florida, I had the opportunity to visit two tracks.

The Manatee Central was the first. It is a very long and well laid out. I met a lot of people including the president of Florida Live Steamers and I had the opportunity to meet Bill Hayes from Michigan who has a big track in Flint. He had no idea who I was and I had no idea who he was. He invited the Cinder Sniffers to his track sometime. (I found out later he also builds engines up there.)

Next I visited the Ridge Live Steamers in Dundee. This track was in the middle of an orange grove. They had trestles, bridges and tunnels and lots of yards everywhere. They also had a shelter with a nice place to eat lunch and get in out of the rain. Lou Lockwood and I borrowed an engine and car and made two laps by ourselves. Everyone had a great time. To my surprise, they also had someone bring in a Model A.

On another topic, there are some things to do at our track but we will discuss them at a later date. We will be having a work meeting to get ready for our April 19 club run. Remember, this is a private run so please, family and close friends only!

If you ever are in Florida in February, I would suggest visiting either of the above tracks. They are well worth it. .. This is all for the moment. I hear warm air calling my name. Hurry up spring! Your (brrr!) President, Harvey Bond





Steam Boat JEANETTE

March 8 and 9, 2014 were the dates of the **5th Annual Mini Model Engineering Show** in which several of our members exhibited. The MMES shows are free and are sponsored by EnterTRAINment Junction -- a gift to the hobbyist and to the community at large.

For the third year at the front entrance was Carl Schwab with his 16' steam launch *Jeanette* -- a beautiful piece of work. To give you a little history: it was started as a cooperative project between Carl and Bob Maynard. As it turned out, Bob designed the boiler and was the project consultant. Carl was the craftsman and, indeed, a craftsman was required. It was Carl's first venture at boat building.

The first milestone was the acquisition (in late 1980s) of a low maintenance fiber glass hull (or shell) from Jim Thayer of Colorado. Thayer built shells patterned after steam launches of the 1910's and 1920's. And with a grin, Carl notes "Thayer built these hulls in the middle of the Colorado desert".

Then time passed.

In the mid 1990s Carl and Bob located a steam engine plan that suited them. Ray HasBrouck of New Paltz, NY offered drawings for an *open column*, single cylinder (marine) design which utilized ball bearings throughout. And it could be built without castings. At the time, Carl had access to a large Bridgeport milling machine at his Father's machine shop, which he used to complete the engine in the late 1990s.

Jeanette's helm, boiler and engine

Carl Schwab on the hull's woodwork

Building the engine and boiler were a piece of cake compared to transforming a piece of fiberglass into a presentable looking boat.

I had never built a boat before and, in my opinion, my biggest problem was measurement. There are no straight lines or corners that can be referenced. Patterns were made and used, but cutting pieces long and then trimming them to fit turned out to be the basic process.

The first task was painting the outside of the hull. With the help of neighbors, we turned the hull over and then prepped and painted it with \$200 per gallon marine paint.

With the hull right side up again, it was time to start the inside woodwork. Ribs are needed for strength and curving them to the contour of the hull calls for "steam bending". I knew that steaming would be needed and the boiler was built first for this purpose. Steaming wood is putting it in an enclosure and applying steam for thirty to forty five minutes. When removed, it is over 200 degrees and, depending on thickness, pliable for forming. Steaming was used about eight times.

This whole process, with or without steam, continued by putting together, taking apart, aligning, shaving here and there until one is satisfied with the results.

I subscribe to *Wooden Boat* magazine with pictures of large all-wood boats, either being repaired or built new. I am in awe of the craftsmanship and the joinery of the people doing this work, all the while working in cramped spaces or hanging off a ladder or scaffold.

Finishing the bright work is ... sand, varnish, sand ... for five or six coats. My number. Some boats might get twelve to fifteen coats.

My friend Neil Sohngen was my consultant, cheerleader, helper and mill work guru. His hobby is furniture making and he has the equipment to take a piece of wood down to 0.281", or whatever.

Thanks to Jeanette for her tolerance and staying out of the way when things were not going well. ... If I build another boat, I think I'll chose a different design. ... *Carl Schwab*

The next piece of the project was to build the boiler. It was Bob's job to design it. Bob had designed and built two different vertical boilers for the CliShay, but in terms of cylinder volume the HasBrouck engine was more than seven times larger. So first, it seemed, tests were needed to verify how much steam the new engine would actually consume. As the builder and owner of a CliShay, Carl rigged his CliShay's boiler up to the new engine and fired that boiler at a rate which it had never before seen and, I'm sure, has not seen since. This, of course speaks well of the CliShay design. It was able to supply sufficient steam to power the larger engine, "generating about 2 HP at the Prony brake", says Carl. ... It was now November 2001.

Based on these test, Bob came up with a properly sized boiler and, if you get a peek at the plans sometime, you will notice that the boiler outline is rather unique. It does, however, have conventional fire-tubes and (unlike the CliShay) a firebox surrounded by water cooled walls. Carl says "sixty four 1/2 inch copper tubes about 18 inches long were rolled into the tube sheets."



Testing of the new boiler and engine, Aug 11 2007

The hull's woodwork was next. A platform to support the engine & boiler had to be built, as did a rib-structure, the deck, the seats the works. For more about that, see the sidebar on the left. ... *Continued on page 6*

A note from Member Brain Valleau

With his dues payment, Brian, who lives in Park Ridge (a suburb Chicago) and a CSI Associate Member since 1980, wrote: "Hope to make it for a couple of runs this year. Actually, got a job researching and part of a rebuild team for a small steam locomotive. Will tell you more when I come down. Say Hello to all. .. Yours in Steam, Brian" ... Brian, we'll look forward to your visit.

A Touch of History



The seedling of live steam had been planted as 2-1/2" gauge and grew, and now [in 1935] it was a large plant with many branches and promised to grow into a real bush as 3-1/2" gauge. Little did we realize that it was destined to become a tree as 7-1/4" [& 7-1/2"] gauge. .. From "Live Steam of Years Gone By" by Charles S Purinton.

Larry Koehl not only did much of the organizing of the Model Engineering show, he brought in three exhibit items from his own collection. But I must admit, I didn't realize the significance of what I saw until I began gathering information for this news item.

The first display was a *Tom Thumb* model. But first, let's back up. In April of 1932, Henry J Coventry wrote (for the then hobbyist publication *The Model Maker*) an article entitled "A Working Steam Model of *Tom Thumb*", <u>the first American-built</u> <u>steam locomotive</u>. Coventry's design was based on the full size replica built in 1927 (now preserved in the B&O Railroad Museum). According to the article, he offered detailed drawings and castings. But the design, though authentic, was too light to be practical and, in 1932, this 3-1/2" gauge locomotive was, perhaps, before its time as there were very few tracks of this gauge available.

In 1940, after the tilt from 1/2" to 3/4" scale, Lester Friend, proprietor of Yankee Shop Machinist, beefed up Coventry's design. The vertical boiler was fattened and the prototypical single cylinder engine was replaced by a 2-cylinder. Friend advertised it as a "fine engine for the beginner" with "building time 6 to 12 months".

Larry's exhibit (shown here) of Friend's design was built by Ralph Knox, one of the six founding members of the Cinder Sniffers. Larry writes: "This *Tom Thumb* was the one locomotive that Evelyn Maynard was able to run comfortably. In those days the tracks were elevated and everyone rode sidesaddle. ... When



Ralph Knox passed away she expressed an interest in having it but Russell Conley beat her to it. It then passed to Ralph Payne and subsequently to Jon Payne who delivered it into my hands. ... I and son Joe have cleaned the engine up and reworked the piping and the water tank and coal bunker but have not gotten around to firing it up. The locomotive as Ralph Knox built it is somewhat plain Jane - he left off the handrails and posts and instead mounted a coal bunker and water tank on the engine. The original plan called for water and coal to be supplied from the trailing riding car."

Larry notes that the <u>Friends design</u> is still available and that yet another *Tom Thumb*, again in 3-1/2" ga, is currently being described in Live Steam & Outdoor Railroading. Thus, this historic prototype has inspired many, including a few CSI members. ... Continued on the following page.

And a note from Stan Hepler in Warsaw Indiana, a 4-3/4" gauge CliShay builder and an associate member since 1987:

"I'm planning to retire May 31 and hope to make it down to the track a couple times a year. I do have too many interests and hobbies but hope to pull the throttle more in the coming days."







Larry's second exhibit was also a touch of history. In the April 1935 issue of *The Model Maker*, a small classified ad by L.D. Langworthy of Rhode Island appeared. He offered drawings and castings in **3/4" scale** for the New York Central Hudson. The offering was well received as this "new", larger scale was just ramping up. A third (3-1/2" ga) rail to accommodate it was to be added to Carl Purinton's track for the annual Brotherhood meet later that year. Today, having passed the test of time, the drawings/castings are again available from Friends Models.

About the exhibit, Larry writes: "It was built by Clarence Hearst of Indianapolis and acquired by me in the mid 1980s. He had passed away before he could complete it. Bob Maynard knew Clarence and was contacted by his widow seeking a buyer for it. The workmanship is excellent. The chassis is complete and running on air. It has Baker valve gear, double barrel axle pump, complete operating brake rigging and cylinder cocks and linkage. The copper boiler is finished to the point of successful hydro testing and lagging. Clarence also finished many other parts safety valves, check valves, reverse lever and dummy power reverse and reach rod, front end poppet valve throttle, two mechanical lubricators, sight glass - two different versions, tender hand pump, two blow down valves and the front running board steps. About the only things not present are a whistle and a finished turret, however parts and materials are there. A complete set of castings were apparently purchased for the project. But some were not used as Clarence preferred fabrication."

"The small locomotive with the yellow cab", Larry writes, "is a G-Scale live steam model of the 'FALK' produced by Wuhu Brand Arts and Crafts, Ltd. of China. Check out their wares at http://www.bowandeusa.com/. They had a booth at the 29th National Garden Railway Convention held here in Cincinnati last June. I acquired it at that time. The tiny engine is a model of an early west coast logging locomotive of the 'Gypsy' type which had a steam driven capstan mounted across the front of the locomotive for the purpose of loading the logs upon arrival in the woods. On the model the steam cylinder for the capstan is a dummy, but the tiny locomotive features a pop valve, whistle, sight glass, pressure gauge, hydrostatic lubricator, onboard water tank and an axle pump. It also has working Stephenson valve gear. The original full sized FALK still exists in operating condition and resides in a California Park where it is operated. Maybe not now that there's going to be water rationing in that state." Larry Koehl / jsk.



Steam Boat Jeanettte, continued from page 3:

Then, on Oct 15, 2011, Carl and Jeanette invited many of us to the Christening and initial launch of steam boat *Jeanette*. It was a grand event and a tribute to Carl's dedication and perseverance. Sadly Carl notes: "Mr. Thayer, who built the fiberglass shell, died the day before the boat was launched."

Back at the entrance to EJ, Carl gets the occasional question: "How fast will it go?" .. Carl answers: "6 mph"(*). The kids who ask the question, of course, are missing the point -- that of enjoying a leisurely, peaceful, and maybe romantic ride on water, WITHOUT the NOISE and RUMBLE of the INTERNAL COMBUSTION ENGINE. Only the occasional tending of a coal fire is required. ... jsk

NOTES

Additional info may be found in a Hamilton Journal News article.

Plans for the HasBrouch engines are included in a new book from Village Press, titled: *Steam Engines of Ray HasBrouch*. Also more info is <u>here</u>.

* This is an easy and accurate answer. As you may know, for a displacement (non planing) boat, the limiting speed is related to the hull's water-line-length. 6 mph is the limit for this hull.



Friend Jackie Wenger breaks the bottle of champagne to properly christen *Jeanette*. Photo: Dorothy Keith



The first launch and sail after the christening in their backyard neighborhood pond (nothing like carrying out the initial test in front of a hundred guests)

All photos: Jim Keith, except as noted