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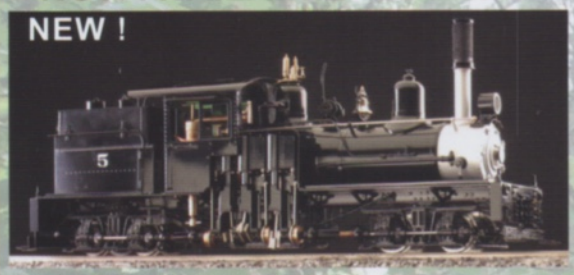

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STEAM IN THE GARDEN

Vol. 14, Nº 4

Issue Nº 76

Gather, friends, while we enquire, into trains propelled by fire...

Articles

Departments

FRONT COVER:

Larry Bangham's DJB K-27, immortalized in a Rocky Mountain setting by artist David Tutwiler. See *End of the Line* in this issue for full details.

Editor/Ink-stained Wretch
Ron Brown

Publisher, Overworked Nurse & Staff Shutterbug
Marie Brown

CAD & Other Drawings in This Issue
Paul Blake ● Tom Larson

Regular Contributors

Larry Bangham	California
Keith Bucklitch	England
Jim Crabb	Texas
David Hamilton	Canada
Les Knoll	Illinois
Kevin O'Connor	California
John Thomson	South Dakota

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Phone, fax, e-mail or write for mailing information on items for review.

Questions or comments? Phone us (Mon. - Thurs. - before 8:00 p.m. Eastern time, please) at 607-642-8119 ● 24-hr FAX 253-323-2125 ● e-mail address: rbrown54@stny.rr.com

Check out ***Steam in the Garden Online,*** located at: <http://www.steamup.com>.

CALENDAR OF EVENTS

July 22-25, 2004 - National Summer Steamup, Lions Gate Hotel, McLellan (suburban Sacramento), California. An opportunity for live steamers using 45mm or 32mm track to gather and run equipment in a secure, indoor, friendly setting. More tracks than any other small-scale steamup. Contact: (415) 931-0776, visit www.steamevents.com or e-mail steamup@summersteamup.com.

August 7, 2004 - Second Annual Summer Steamup at Les Knoll's Rivendell & Midland Railroad. Track opens about 10:00AM and doesn't end until all participants go home. There will be food and soft drinks, but all are encouraged to bring something to pass around. The Rivendell & Midland is located at 1310 Keenland Drive, Bartlett IL. An RSVP wouldn't hurt. The 45mm Rivendell & Midland has a 200' ground level mainline with 10 foot radius curves. In addition, there are branch lines, facing and trailing point sidings with run-arounds, a turntable, steaming bays and yards for those that want to operate as well as run. The day's festivities may also include impromptu concerts on the mighty three manual theater organ in Les's basement. Phone: (630) 372-8138 ● e-mail: steamrocks@aol.com

August 7, 2004 - Jim Curry's Steamup in Maine. 10:00 am til evening. Light lunch served. RSVP to jjc@structureguard.com or 207-273-3699.

August 12-15 at the 2004 Denver Garden Railway Convention. Come join the circus and steamup under the bigtop! Two covered tracks will be available from dawn to dusk (all night if you have a miner's helmet!) for your steaming enjoyment. Fuel and water will be provided. In addition to the tracks at the convention center, we will be running out at the Colorado RR museum during the Friday evening barbecue (ticket purchase required). Contact Information: REGISTER for the convention online (or print a form) at: http://www.denvergrs.org/convention.html For general convention questions contact Kelvin Harr at: kelvinharr7077@aol.com or 303-431- 6793. For questions specifically regarding the steamup email jreyer@earthlink.net.

August 14th & 15th 2004 - In conjunction with Crossroads Village & Huckleberry Railroad's Rail Fans Weekend, the Michigan Small Scale Live Steamers will be hosting their second annual steamup in the village. Two portable layouts will be available with four gauge 1 tracks. Gauge 1 steamers get free admission if they bring an engine and run. Ride the 1:1 scale live steam locomotive, visit the live steam saw mill, live steam cider mill and many other exhibits. For information on Crossroads Village & Huckleberry Railroad, visit: http://www.geneseecountyparks.org/crossroadsvillage.htm
For additional information on the steamup and the Michigan Small Scale Live Steamers, visit: http://www.smallscalelivesteamers.info/

September 3, 4 & 5, 2004 - Pennsylvania Live Steamers Fall Meet, Rt 29 1/2 mile N of Rt 113, Rahns, PA. Contact: Harry Quirk (610) 346-8073 or Mike Moore (mikemoore@comcast.net)

September 25 and 26, 2004 - Finger Lakes Live Steamers Annual Fall Open House. The Finger Lakes Live Steamers welcome visitors at our Gauge 1 layout in Marengo, NY (mid-way between Rochester and Syracuse) from 10:00 AM to 4:00 PM both days. The Gauge 1 track offers an elevated steamup bay with ground-level running. The open house will also include running on 7.25" gauge and 4.75" gauge tracks. Information available at http://www.fingerlakeslivesteamers.org/ or contact John Spencer (315) 689-3402 l e-mail airtrains@aol.com.

Because of publication lead time, please send info for Calendar of Events well in advance. Include name of host and location of event, with address and/or phone number to contact for complete information. Some basic info about the site is also useful (i.e., ground level or elevated, minimum curve radius, ruling grade, etc.)

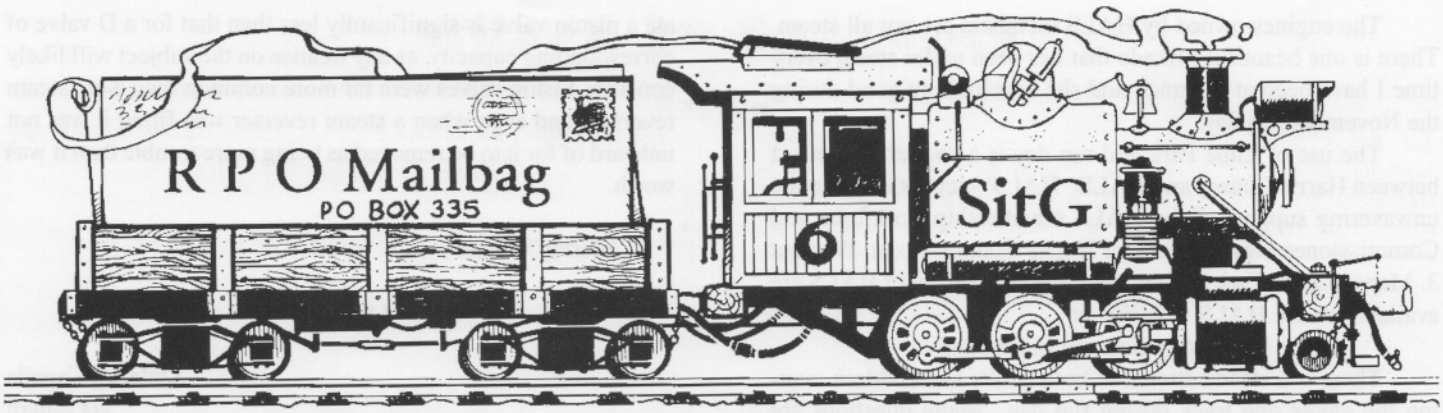
HELP WANTED!

We're running low on articles, steamup reports, loco and product reviews, photos, etc. So...we're turning to our readers for assistance. You have always been generous in your response to our requests for publishable materials with a focus on gauge 1 live steamers.

This is YOUR magazine, and YOUR forum for exchange of ideas and information, so send 'em in.

Got questions? The combined experience of our readers is the best in the world, so go ahead and ask.

Weedwood's water car.



Letters from readers are welcomed and encouraged. Offer advice, encouragement, suggestions or constructive criticism. Tell us about your current project (and don't forget the photos!) or just share live steam experiences. But please keep your letters to a reasonable length so everyone has a chance to use this forum. Letters may be edited for length or clarity. Send your letters & photos to: SitG, Dept. RPO, P.O. Box 335, Newark Valley, NY 13811, USA.

* * * * * *

La Mirada, California
via e-mail

Hi Ron,

In response to Arthur Cohen s letter on Momentum cars, I have heard the terms momentum, load, dyno, and drag used when referring to these cars, but I think the term inertia more aptly describes what these cars are intended to provide.

The inertia of an object (its resistance to change in motion) is an indicator of its mass, and these cars provide an illusion of mass by causing the engine to work harder starting a train and also provide realistic slow deceleration when stopping.

The working principle of these cars is generally based upon a step up transmission, driven by one or two axles, that spins a flywheel. Kinetic energy is stored upon acceleration and consumed upon deceleration.

Other side benefits include: the ability to negotiate up grades and down grades unattended with minimum changes in speed, the top speed governor effect, (see below), and also the improved drafting of meths and coal fired locomotives.

An important quality of the Inertia car, in addition to its resistance to acceleration, is its resistance to steady state motion, which increases in proportion to its speed. This can be the result of slight imbalance in the flywheel and friction in the mechanism, which is amplified through the step up gear ratio, hence the governor effect.

I recently added a clutch to one of my inertia cars which can be engaged when starting, disengaged for high speed running, and engaged again for stopping. The actuator hangs down below the car so it is easy to use while the train is in motion. This could be R/C controlled as Arthur suggested. The clutch and plate are faced with the plastic magnetic sheet material used for refrigerator magnets. This provides ample drive friction but will break loose during a panic stop, acting as a safety clutch.

For me, the effect of these devices, under the right conditions, is a reality flashback to the steam era.... in miniature.

Larry Bangham

* * * * * *

Houston, Texas
via e-mail

HALS Run Day
November 2003
David A. Young

While I have been interested in live steam engines for many years I did not become a member of Houston Area Live Steamers (HALS) until May of 2003 when Jim Crabb let us Texas Small Scale Live Steamers know that HALS was in the process of constructing gauge-one tracks for us folks interested in small scale live steam locomotives. The HALS track is located in Zube (pronounced zoo'-bee) Park near Houston, Texas. The HALS layout is a bit more than a garden railroad. It is indeed a park railroad.

The club, operational since 1992, completed its 1,550-foot Phase I loop of 7-1/2" gauge track on October 21, 1995. The 2,500 foot Phase II extension was completed October 2, 1999, and provides an outer loop run for Public Runs of 3,500 foot and a bi-directional "operations" run length of 4,500'. An additional part of Phase II is the 4-3/4" dual gauge portion of the Phase I loop. The gauge-one track layout currently has two loops totaling 300 feet.

Each month from March through November the third Saturday is set aside as a public *Run Day.* On Run Day the Houston Area Live Steamers offer free rides on their seven and a half inch railroad. Of course, a major reason for the gauge one tracks is for additional enjoyment for the public during HALS run days. This turns out to be great for both the public and for us small-scale live steamers.

The engines owned by HALS members are not all steam. There is one beautiful Mikado that has been under steam every time I have been at the track and she was looking good during the November run day.

The use of Zube Park and run day is a cooperative effort between Harris County and HALS. HALS' success is due to the unwavering support of the HALS membership/workforce and Commissioner Steve Radack of Harris County, Texas, Precinct 3. Maps to Zube Park and detailed information about HALS are available on the HALS web site at

http://www.hals.org/index.html

There is a steady stream of both adults and children visiting the gauge one track during run day. Many questions are asked by the public and answered by the small-scale live steamers. The most common discussions center around the fact that the gauge one engines are really running on steam and are definitely not electric trains. We also get a number of people asking, "Are you going to race?" I guess that is because of the shape of the layout.

The real draw on run day is the free ride on one of the many HALS trains in operation. Usually there are well over 2,000 people going for a ride; some run days there are over 3,000 that show up and go for a ride. The November 2003 total was less than usual due to the threat of rain much of the day. The last thirty minutes was hit with a real gully washer (For those not familiar with Texas terms a gully washer is one heck of a downpour. It cleans out the creeks and bayous.) keeping the days total at 1,829 riders.

On the other weekends of the month there is always some kind of activity for the members. There are workdays dedicated to track extension, improvement and maintenance. The workdays now include a day for the gauge one track. There are operations days when the members come out and operate their trains in the manner of full size railroads. HALS has training and certification program for conductors and engineers to ensure the rules of operation are understood and followed. Of course, qualified conductors and engineers are also required during run days but on run days the traffic patterns are not near a complicated as on operations days.

There are also meets held at Zube Park when locomotives and engineers come from across the country for several days of railroad activity. The meets include overnight camping and night operations.

On any weekend, everyone that comes to Zube Park and the HALS track will have a great time.

Dave Young

* * * * * *

Pennsylvania
via e-mail

Dear Ron,

I know nothing of the term Johnson Bar's origin, but must contest Peter Fowler's assertion that steam operated reversing gear was essential with piston valves. The force needed to operate a piston valve is significantly less than that for a D valve of corresponding capacity, as any treatise on the subject will likely confirm. Piston valves were far more common than were steam reversers and even when a steam reverser was fitted it was not unheard of for it to be removed as being more trouble than it was worth.

Murray Wilson

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Ontario, Canada
via e-mail

Ron,

I've just finished reading issue 75. It was worth the wait! I do like the new look. And I very much enjoy the variety of subjects and events covered. I read all the articles, even if I'm not particularly interested in that topic. I always enjoy finding out what others are doing. And you never know when you might learn something that may apply to your own situation or project.

I hope that you are recovering well. And that you may be enjoying getting out to boil some water yourself!

David Hamilton

* * * * * *

Opportunity knocks!

Tennessee
via e-mail

Dear Ron,

I would like to know if there is someone who would be interested in building a small quantity of Ram type pumps powered by an electric motor to pump water into the boiler of Gauge 1 Locos. Regner in Germany makes a suitable pump but I would hope someone in the US would be interested in this project.

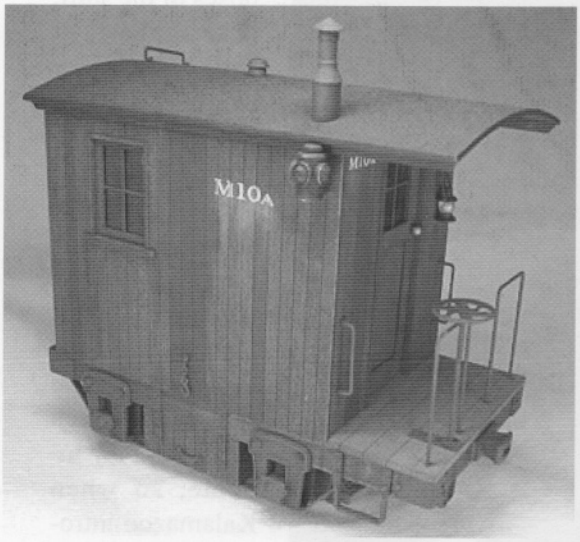
For further information and discussion, please Email as follows: bfindus@earthlink.net

Bill Ford

How about it, fellow steamers? Is there someone out there with some machining experience who would like to take advantage of this opportunity?

WHAT'S NEW?

Accucraft Company, 31112 San Clemente St., Hayward CA 94544, phone 1-510-324-3399, FAX 1-510-324-3366 continues to produce affordable, well made locos and rolling stock to help make our hobby more enjoyable. American Model Supply, a division of Accucraft, has released a new tank car in 1:20.3 Scale, 45mm Gauge. It is available in several lettered versions, as well as an undecorated version. Our sample is lettered for Standard Gasoline. The model is well done, with clean, crisp detail and neatly applied paint and lettering. The trucks are die cast and equipped with metal wheels, and the couplers are knuckle-type with working lift bars. Detail, including brass castings, is plentiful and includes underbody detail. Dimensions: Length - 509 mm (20") - Width - 126 mm (5") - Height - 184mm (7.25") - Minimum radius - 1.2 M (48"). These tank cars, as well as many others, are available from your Accucraft dealer.



Sierra Valley Enterprises, 2755 Saratoga Avenue, Merced CA 95340 • phone: 209-722-8278 • e-mail: sierravalley@cell2000.net • web site: ww.sierravalleyenterprises.com has introduced another car in their Munger Mining Series. CCE-11' Caboose, #M10, is just as exquisite as all the other custom built stock from Sierra Valley. I don't know how Gary does it, but I've never been able to find a trace of glue on any of his models! Only the finest materials are used, including crisp detail castings and trucks equipped with Sierra Valley's own metal wheelsets. The workmanship is museum quality. Paint, lettering and weathering are tasteful and realistic. On this caboose, Gary has added yet another treat for us....working marker lights and lantern. Couplers are link & pin, though Kadees are available for those who prefer knuckles. We love the size of the Munger Mining Series cars...they fit in so nicely with our small Shays, Heislers and other tiny industrial locos. So when our sample caboose arrived, we unpacked it with anticipation and excitement. Once Faithful Assistant got a look at the Caboose, she appropriated it for use with her Cricket. Maybe if I ask nicely she will let me borrow it for steamups! Give Gary a call or e-mail to get your own Munger Mining Series Caboose.....but don't let your wife see it!

Twin Mountain Model Works, PO Box 60251, San Angelo TX 76906 l web site: www.TwinMountainModelWorks.com, proudly announces their Darjeeling Himalayan Railway Saloon Car kit. This easy-build kit, laser cut from aircraft plywood with alighnment tabs and laser scribed markings, will assemble quickly for the novice or seasoned modeler. Twin Mountain may be new, but proprietor Carl Malone is a familiar face and name to live steamers. His new company specializes in Laser Cut Rolling Stock Kits for the live steamer in 1:20.3, 16mm and 7/8n2 scales. Check their ad in this issue!

Steamer's Biography

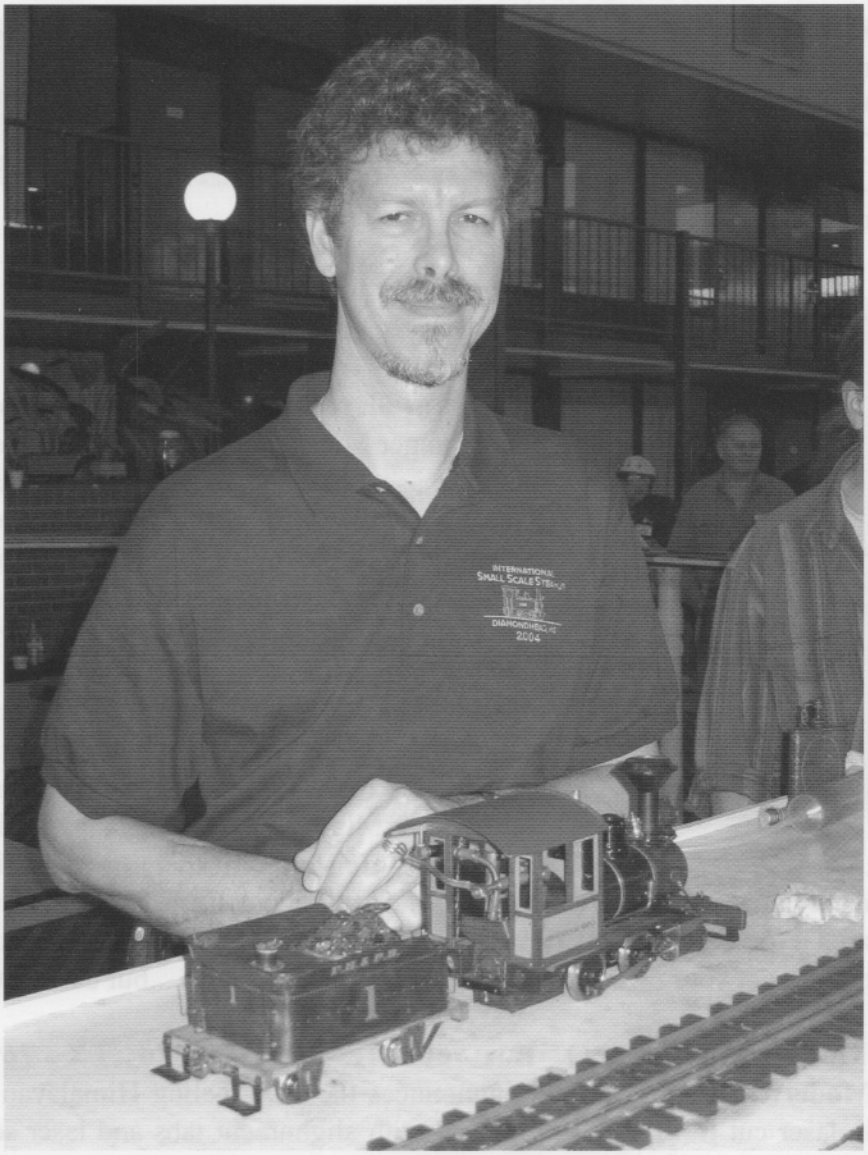
Vance Bass, the Absolutely True Story

by Vance Bass

First in a series of Steamer Biographies

I was born in the oil and cattle country of West Texas the year Lionel couldn't put Magnetraction on their locos because of the latest war. My life story between there and live steam is the usual stuff - a baffling early obsession with railroads, a tinplate train as a young kid, bugging my parents for an Athern HO set. It was all over by age 11, it seemed, when I discovered plastic hot rod models and Spider-Man comics. The usual biographical stuff follows: electric guitars, girls, Renaissance musical groups. (Wait, how did that get there?)

In college, at the University of Texas, I got to know a guy who shared my odd musical interests, and we ended up playing in a band together, then became friends and hung out together a lot. His name was Marc Horovitz. One day we were visiting garage sales and he found some vintage tinplate stuff, which he bought and we played with on the floor of his apartment. (He had been a kid with a train obsession, too.) This kicked off a big hunt for tinplate trains at garage sales and flea markets. We both still have boxes and boxes of the stuff, under the boxes of large-scale model trains.



Vance Bass, the subject of this issue's Steamer Biography and a really nice guy, is one of the people who help make this great hobby even better for the rest of us.

Back to the 'same old story' for a while: school, jobs, marriage. I continued trying to collect tinplate, but found that prices were escalating much faster than my income, so when Kalamazoo introduced their large scale 4-4-0, I bought one, along with some LGB Rio Grande passenger cars, and started planning a backyard railroad. That one never got finished. Neither did the one in the next house we

bought, in Knoxville, Tennessee, nor the one after that in Nashville. We moved quite a bit following jobs, and had a child, but I kept playing with my trains and trying to make progress on the railroads. (It turns out I liked modeling more than I liked earth-moving.)

In 1993, Marc called and told me I should meet him at some kind of gauge 1 live steam gathering in Diamondhead, Mississippi. (I should also mention that our project to build a camera to make Viewmaster reels had failed, so I needed something else unusual to get into.) Diamondhead was almost easy driving distance from Nashville, but I wasn't able to go to that first one. I made a point of clearing my calendar for the second steamup in 1994, though, since it had been several years since we had seen each other. I took along my 10-year-old son for a fun dad and son weekend. It was mostly a social visit, I thought. Wrong!

I was hooked, as Marc must have known I would be. I loved the locos, the steaming rituals, and the great people. But I was just a spectator, and after a couple of days people started noticing that I wasn't running anything. So Ken Matticks grabbed me one evening and asked "Would you like to learn how to run one of these things?" How could I turn that down? Ken tutored me through firing up his 16mm Finescale Peckett and let me run it around the track. It was easy and a load of fun and the rest, as they say, is history.

Next day, I elbowed my way into the dealer room, bought a Roundhouse Lady Anne boiler and chassis from Pete Olsen of Westlawn Loco Works and eagerly took them home. Luckily, a huge snowstorm hit Nashville the following week, so I was stuck at home for a couple of days while the plows worked their way up to our neighborhood. I commandeered the dining room table and put the Lady Anne together.

I had not yet developed a taste for British prototypes, so I wanted to try to turn the Roundhouse chassis into an American type loco, of which there were almost none commercially available at the time. Slowly but surely, I began learning the skills necessary to scratchbuild in brass and also bought a small lathe. As is my custom, it took about three years to really finish that locomotive, which I disassembled, worked over and reassembled many times. Eventually, it turned into the outside-frame 2-8-0 I wrote about in the Feb. 1999 *Garden Railways*.

Around the time I was bitten by the live steam bug, I began participating in Internet discussion groups for gauge 1 model railroads, so it was natural that I would see if any such thing was available for live steam, too. And of course there was a big group of riding scale steamers. But I think Harry Wade and I were the only ones in the group who did small-scale live steam, and even Harry had a 7-1/2" gauge locomotive. I learned a lot by hanging around in that group (and by meeting Harry!). The group's *frequently asked questions* (FAQ) was especially useful in the early days.

So after a while, I wrote to the compiler of the FAQ and requested more information about small-scale steamers. He replied that he knew nothing about the little ones and that if there was going to be small-scale steam in the FAQ, I should write something and send it to him. So, I did. I was a relative beginner so I had a lot of help, of course, from Harry and Marc Horovitz and Ron Brown and many others.

And once I got started, it seemed to take on a life of its own. Some ideas popped up, were followed, and then withered. The *Postcard of the Month,* for example. Or the *Pop-Pop Boat Regatta.* They were a bit of fun, then it was back to the serious business of small-scale steam locomotives!

When Accucraft's Ruby came along, it was time to start hacking and building again. It got the same treatment as the Lady Anne kit, though it started much closer to what I wanted. The result was a 2-4-0 with a Baldwin 4-wheel tender that Accucraft later copied for their own Ruby variant. I was experimenting with using laser-cutting to make model railroad kits, but hadn't really found a niche, when I decided to try making a cab for my Ruby bash. The metal cab was too reminiscent of the old tinplate stuff to suit me, so I tried creating a wood replacement for it. I remembered once having tried to make a 'wood' pilot out of brass and finding it an enormously frustrating and tedious job, so the power of the laser was put to good use there, too. This turned out to be a good idea, it seems, since there are now hundreds of Rubys with FH&PB Railroad Supply cabs and pilots. So others followed and it now seems like I have to buy whatever new locomotive comes out in order to have a test bed for a new cab kit!

So, I blinked, and now twelve years have gone by and I'm still crazy about little steamers. I have stopped flinching when my wife refers to me (affectionately) as a 'train nut'. I can admit it freely now. I have an office crammed with railroad books, photographs, cab kits, back issues of SitG, GR and Live Steam. Looking ahead, I'm working on a history of Baldwin's narrow gauge export locomotives and am starting to build a group project locomotive with a couple of fellow 'train nuts' from Diamondhead. Life is good!

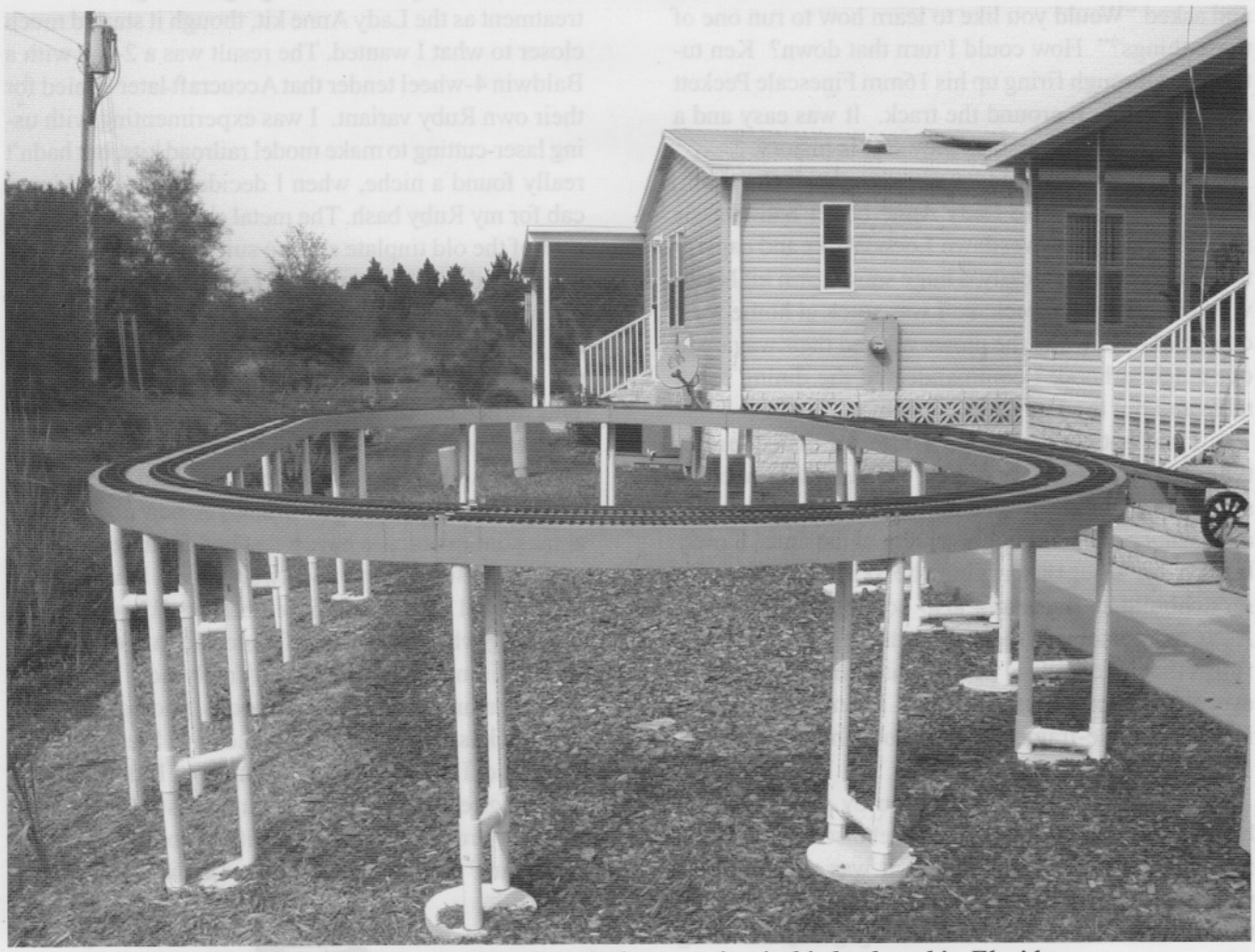
Workshop Project

Building a Portable Steam Loop

by Harold A. Dunsford

Approximately 10 years has passed since the construction of my first Steam Loop published in *Steam in the Garden* magazine, The Pelahatchie Bay Scenic Railroad. Since I move a lot, I have had the opportunity to build several additional steam loops using a variety of techniques to fit the land available. Our recent move to a Florida manufactured home provided the most severe challenge to date. 3-6 feet of lawn, all irrigated with a back yard sloping to a drainage ditch.

Prior to moving to Florida I had read Ernie Noa's article on building a portable steam loop, published in *Small Scale Steam Hobbyist.* I no longer have these articles, but I had kept the copy of his article I used for construction of the loop. Careful examination of my 'back yard' revealed that with care I could remove sod and irrigation devices and prepare a grass free space adequate for holding a 12 by 24 foot loop. Therefore I set out to construct a portable layout based on Ernie



The author's track, set up and ready for steaming in his backyard in Florida.

Noa's design, with several of my own modifications.

Materials Required to build a 12 by 24 foot steam loop with steamup area on one side:

5 ..... sheets of 1/4 inch 4 by 8 plywood
76 ... feet of 1 by 4 lumber
32 ... 1-1/2 inch PCV couplings
32 ... 1-1/2 inch PCV T coupling
8 ..... 10 foot 1-1/2 inch PCV pipe
1 ..... large box 1 x 15/16 sheet rock screws
1 ..... large box 1/2 inch sheet rock screws
32 ... straight metal brackets 1/16 x 1/2 x 3 inches
32 ... 2 inch by 1/4 inch carriage bolts with nuts and washers
Electric drill with 3/32 inch bit & 1/4 inch bit
Electric drill with countersink
Electric screw driver
Elmers Carpenters glue
Fiberglass Cloth - enough to cover tops
Polyester resin, 2 gallons with catalyst
Porch enamel paint, color of your choice
19 round or square 12 inch flat cement blocks (patio stepping stones)

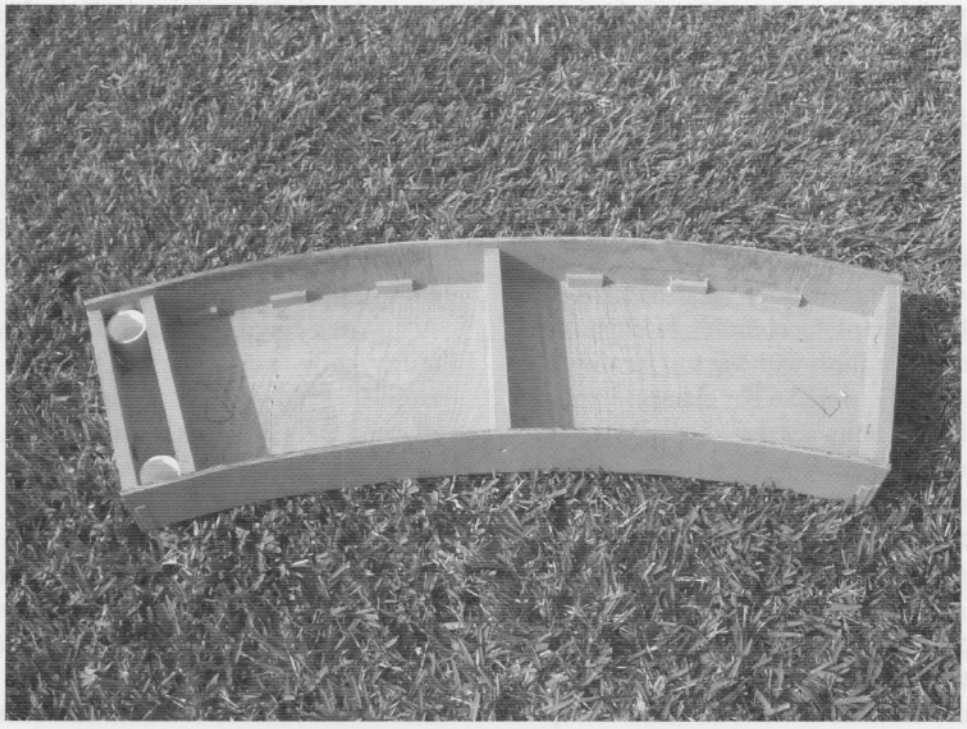
Building of curved sections

I chose to make my loop of 10 curved sections, each representing 36 degrees of a circle. The tangent length of the outside is 44.5 inches. The calculation (provided by my mathematical son) for a 36 degree angle is f = . 6 1 8 . Convert your outer radius to inches and multiply by 0.618 and you will get the width in inches of the tangent of the outer radius.

Lay out a sheet of 4 by 8 plywood. Mark a center line lengthwise. Make a radius tool from an 8 foot length of 1 x 4, also with a center line lengthwise. Drill a hole near one end large enough for a pencil to insert. Drill a second hole 12 inches from this hole and a third hole for a nail 6 feet from the first hole. Place the radius tool along the center line of the plywood with the pencil hole near the upper edge, attach the tool to the plywood with a nail through the 6 foot hole. Now scribe an outer arc across the plywood with the top hole and an inner arc using the second hole, these two arcs must be 12 inches apart.

To find the edges of your curved section mark the intersection of the outer arc and a point 1-3/4 inches from the edge of the plywood. Repeat for the other side. Use the edge of your radius tool to draw a line from the 6 foot nail hole on the centerline of the plywood to both of these intersections. Carefully cut out this piece, sand to the lines. This is the first curved section. Use it to mark out the remaining 9 curved pieces. Draw a center line on the second piece of plywood and use to align the template.

The 6 straight piece's tops are cut from the remaining plywood, each will be 48 inches long. I cut 3 x 12 inch wide pieces for one side of the loop and 3 x 18 inch pieces for the steamup side. The sides are now cut across the narrow 4 foot width of the plywood (to make them more bendy). Cut 32, 4 inch sides. Rip the 1/4 inch lumber to 3 inches wide. The small 1/2 inch pieces left over will be used for braces. Cut 52- 12 inch lengths of this 1x3 and 12- 18 inch lengths of 1 x 3.

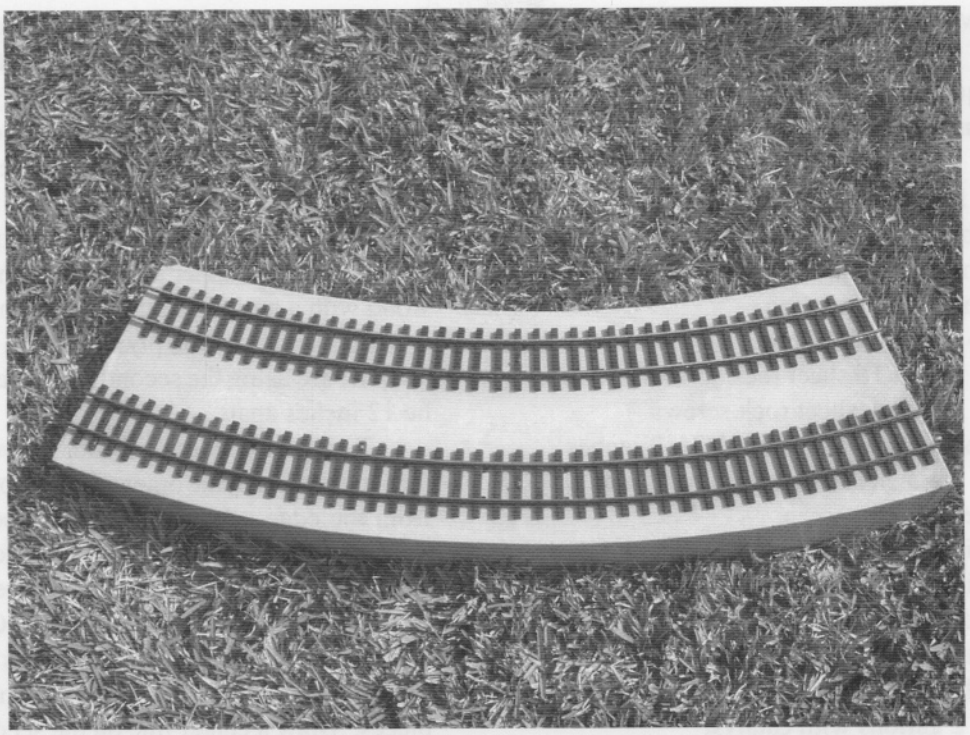


Bottom side of a curved section, showing attachment oints for legs.

Assembly of a curved segment

The center line previously marked on the plywood will identify the center of each

section. Place a curved section on the work bench on top of three of the 12 inch 1x3. Apply glue to the first edge. Place carefully, then drill and countersink the first hole near the edge and rechecking position, screw with the 1/2 inch screw. Repeat for the center and other edge. Be sure your board is perpendicular at this stage. Repeat for the other end and then do the center.



Top side of a curved section, showing how the track is attached.

Next step is to glue on the side pieces. Draw a center line on two 4 inch side pieces. Start with the outer piece. Align the side centered over the center brace and flush with the flat edge of the top. Drill and screw with 1 x 5/16 screw. When satisfied with alignment, remove screw, glue along edges of the 1x3 braces and along the edge of the top piece and screw center with two screws Now drill and screw outer two edges with 2 1 5/16 inch screws, leave the overhang for later. (be sure ends are perpendicular with top surface) Turn over and repeat for the inner side, again glue and screw middle first.

Once all screws are in place, turn upright and place bar clamps across the top to close up the seams. I usually used 6 bar clamps to completely close the seams. Be sure they are flush with the top for the entire length. Since I only owned 6 bar clamps, I could only build one of these units per day.

After the assembled curved section has dried, use a saber saw to cut off the extra plywood on each side. Turn section upside down. Decide on a side for the legs. All sections must have the legs on the same side. I chose the left side as seen facing from outside in. Take two 1-1/2 pcv couplings. I used Latex caulk to glue these into the extreme outer edges of the right side, then glue and screw in a 1/3 inch brace to support and trap these couplings. Two 1 x 15/16 inch screws from the sides are adequate.

Build the remaining 9 curved pieces and then the 3 12 inch wide straight pieces and the 3 18 inch wide sections using the same techniques as described above.

Fiberglass is the method I used to seal these units from rain. Without fiberglass the plywood will delaminate. Purchase fiberglass cloth and resin at hardware store, Marine supply or Auto supply. I was able to order the resin in gallon cans from Ace Hardware.

I fiberglassed three sections at a time (as this would fit on my saw horses) Cut cloth to the approximate shape of the section. The standard package of cloth carried by Ace covered 3 sections if you used two pieces to cover one of the sections.

Mix about 8 ounces of resin, and brush on carefully working from center to outside. Be sure fiberglass cloth is saturated with resin, flat without bubbles, especially at the end grain of the side pieces. You cannot fiberglass over a 90 degree edge, so stop at the edge of the top.

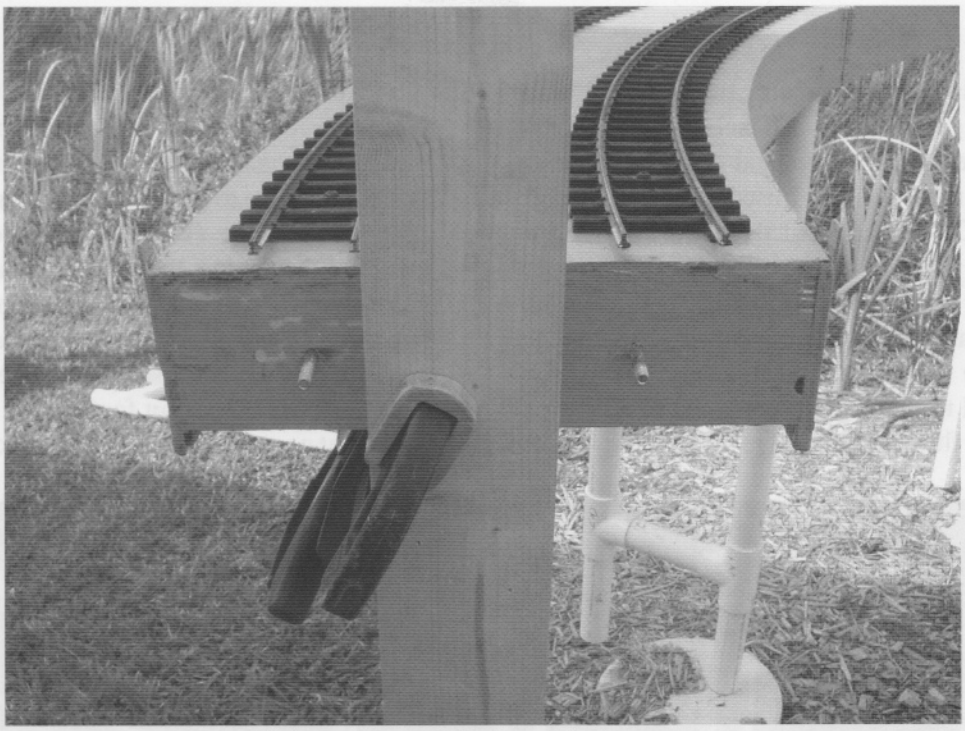
When cured (several hours or over night) use a utility knife to trim surplus cloth at edge of top all around. Sand with coarse sandpaper. I have a block of wood that fits in a standard belt sander belt. Works great. Don't use a belt sander, as you will quickly grind through the fiberglass.

With all three pieces trimmed and sanded, mix another batch of 8 ounces of resin and brush on a top coat, this time cover top, sides and ends. Once all sections have reached this stage, you are ready for final sanding, and drilling of end holes. 1 inch or 1-1/2 inch brushes can be cleaned in lacquer thinner and re-

used. Tin cans used for mixing resin can be reused after the left over resin has cured.

Jig for end holes

Cut a section of 1 x 4 12-1/2 inches. Now mark two holes for drilling, 3 and 3/4 inches in from each edge and 1 x 3/4 inches down from the top surface. Drill 1/4 inch holes with a drill press if possible, as these need to be straight. Place this board on work bench top surface up and screw on a second board 12 1/2 inches, centered along the top edge of the first board. Glue and screw a scrap of 1/4 inch plywood across the flush T of one of the ends. Now place this jig hard against the outer end of each 12 inch section, and drill 1/4 inch holes for the bolts.



Helper clamped in place during setup.

The 18 inch sections need to be drilled from the inside edge as the 6 inches left over will be on the outside of the loop. These holes will line up and allow assembly with the bolts and washers. Screw on the 1/16" x 1/2" by 3" metal plates to the side ends of each section, both ends. These allow stacking. The reason you trimmed the original braces to 3 inches thick is so that when stacked, the side edges sit on the surface of the lower section, sparing the track.

Paint inside and outside surfaces with porch enamel before assembling.

Legs

While the paint is drying it is time to cut the legs. The length will depend on your anticipated location. Mine had a steep slope so I started my high point with 30 inch legs. This means that all 32 legs are 30 inches. The cross piece was 7-1/2 inches (check on job before cutting many of these). The end that goes into the coupling in the table end must be tapered with sand paper until you get a snug but loose enough fit so they come out easily. The other ends are glued into the PCV T couplings. The cross part of the T joins the other leg with the 7-1/2 inch of PCV.

In my loop as I assembled the loop using a carpenters level. I added additional pieces of PCV without glue to the bottom of the T to lengthen the legs as we descended the slope. My outer portion of the loop is 50 inches high. All sections are numbered sequentially and legs marked to match, also inside and outside as on my loop inside and outside legs were slightly different.

Set up

Choose a good starting place. I had cleared the sod from my 12 by 20 foot area and placed 12 inch round cement stones at 4 foot intervals around the loop. Final leveling and adjustments were made as the loop was assembled. Start with your lowest section. Prop up the non leg side with a spare board and clamp, and set up the first section. Place bolts through the non leg side of the second section. These will enter the leg side of the previous section. I used two clamps to hold the sections with their surfaces in alignment while tightening nuts. Use a carpenters level to keep the loop level as you measure each subsequent section and cut additional PCV to increase leg height. The tense moment comes with the last section. Hopefully you will find that this comes together exactly without gaps. If you have a 1/4 inch or so gap, use a longer bolt to pull it together. Some jiggling of the other sections may be required.

Laying Track

This loop is designed to carry two tracks. 1 inch from each edge gives about 3-1/8 inch between tracks. I trimmed some 1 inch blocks and clamped these to the edge while track laying. I used code 250 Nickel Silver Llagas Creek track and tie strips and Llagas Creek switches which I had previously built from kits purchased from California and Oregon Coast Railway.

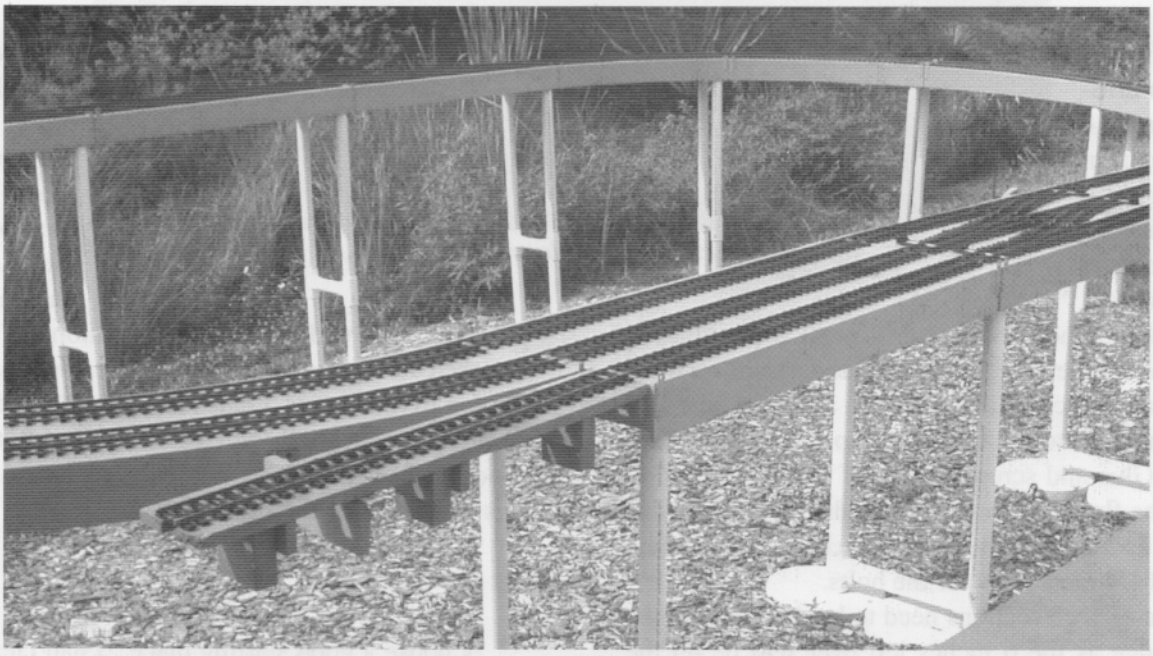
Bend the rail and assemble one strip for each section. Place the track on the section, use the 1 inch blocks clamped to the edge to position the rail. Cut the track so it is flush with the edge of the section, less a 1/16th inch, which will provide a 1/8 inch expansion gap. Allow rail joiners to slide completely onto one section's track. This usually required cutting away the tie next to the joint.

I used 4 switches to provide one crossover from inside to outside and access to the 12 foot siding and steaming bay on the 18 inch portion. These are the small switches, so that the center wide section contains all 4 switches.

Steaming Bay

Mount track to a 3 foot 1 x 4. Cut two 3 inch 1/4 pieces. Screw on to the free end of the yard track, 3/4 inch below the surface of the straight section. Screw the second piece to a door hinge. Mount the door hinge on the side of the first curved section past the yard track 3/4 inch below the section surface in such a position that when extended it will support the steaming bay track. Mount the board with track with a single screw to the first brace screwed to the straight section. This track can be cut out for lighting alcohol engines.

That completes the Portable Track. It sets up in a couple of hours. One person can set up and take down. Assuming all sections and legs are properly marked it goes back up easily. Each section is light (less than 10 pounds). Once taken down it stacks into two stacks that take up a 4 by 4 foot area of my shop or storage shed, plus space for the legs. Happy Steaming!



Crossovers to right - steaming track at lower left.

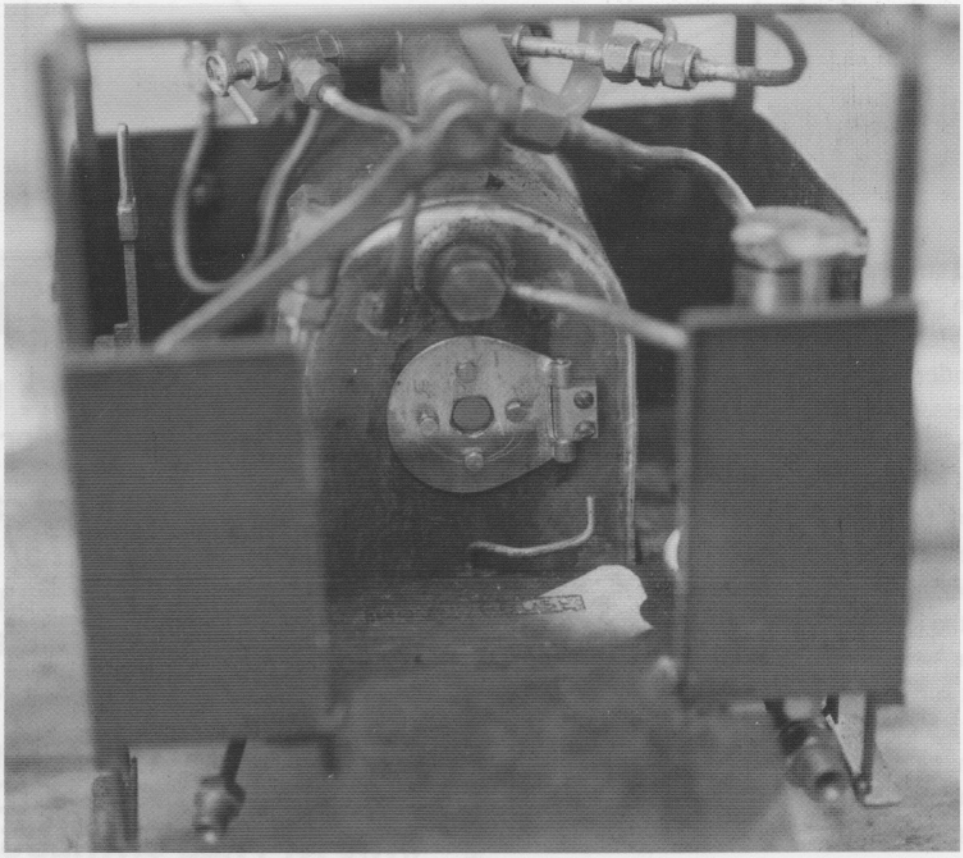
Workshop Project

Fire Gazing

by Jim Gabelich
CAD drawings by Tom Larson

Eye Candy - looking for that comforting glow

At a local steam up, I saw Larry Bangham's magnificent coal fired D J B Engineering K 27 locomotive (see *Steam in the Garden* № 69). His engine has a large firebox and the fire door cover has draft holes that allow you to see the fire. I have a coal fired Fowler, built by John Shawe. My firebox, on the other hand, is smaller and a hole through the door would interfere with the draft and the fire would go out.



The firebox door on the author's Roundhouse Fowler.

Solution: cover the hole, but with what? Larger furnaces use 'spy holes' but they have a metal cover on a bolt to gain access - not useful for my purpose. Isinglass was used in old pot bellied stoves but was much too thick, usually 3/8" or thicker. One of my sons found some Pyrex cover slips 1/8" thick. Perfect.

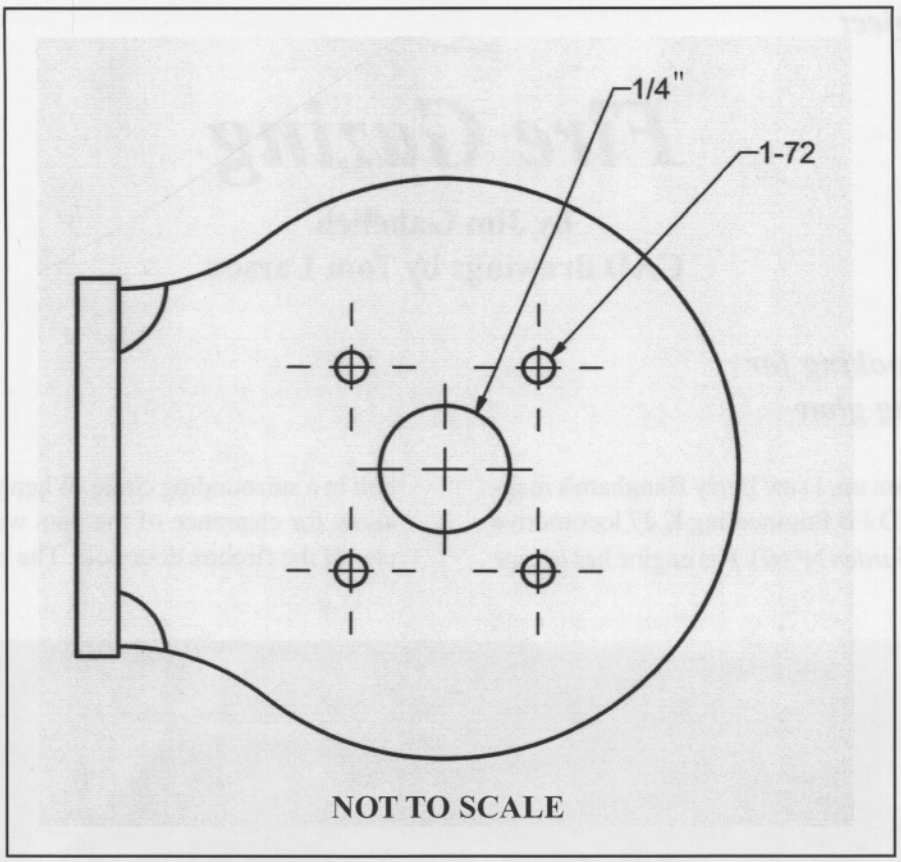
I center drilled the fire door using a 1/4" drill. Next, I drilled 4 holes using a #48 drill to clear a 1-72 bolt in a surrounding circle. When you drill the 4 holes, allow for clearance of the nuts with the inside diameter of the firebox door hole. The back of the door and the back of the firebox have to remain sealed for proper drafting on my loco.

Note: I found that using 3 bolts to hold the glass and the 4th to open the door works better, as it does not put any stress on the glass.

An alternate way to fasten the glass would be to use a #51 drill and tap the holes to 1-72. I thought of this but decided that hex head bolts would give the door better detailing. Your choice.

I chose a round glass to cover the hole. A square bolt pattern and square glass would have been easier but a round hole looks more prototypical.

To cut the glass, I sandwiched it in between 1/8"

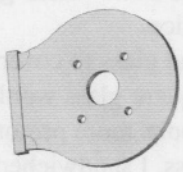


x 1/4" basswood strips and mounted it in a small vise. I then used a thin grinding wheel on a Dremel to scribe the lines on the glass then broke off the excess. I used a small disc sander with 200-grit to obtain the final shape of the glass. The glass is mounted by pushing the 1-72 x 1/2" bolts through the door, placing the glass in the center and holding it with a № 1 washer on each bolt followed by the nut. Tighten the nuts by hand evenly then use Loctite to set the nuts on the bolts. Don't tighten too much or the glass will break.

I have run the locomotive five times since adding the firebox door "window" and all is well. Every one who has seen it run has enjoyed gazing into the coal fire. I now have a loco that Looks Good, Smells Good, and has a fire that can be SEEN and Appreciated.

The project from start to finish took about 2 hours and needed no special skills.

Source for the glass cover slips: ESCO Products, 171 Oak Ridge Road, Oak Ridge NJ 07438-0155



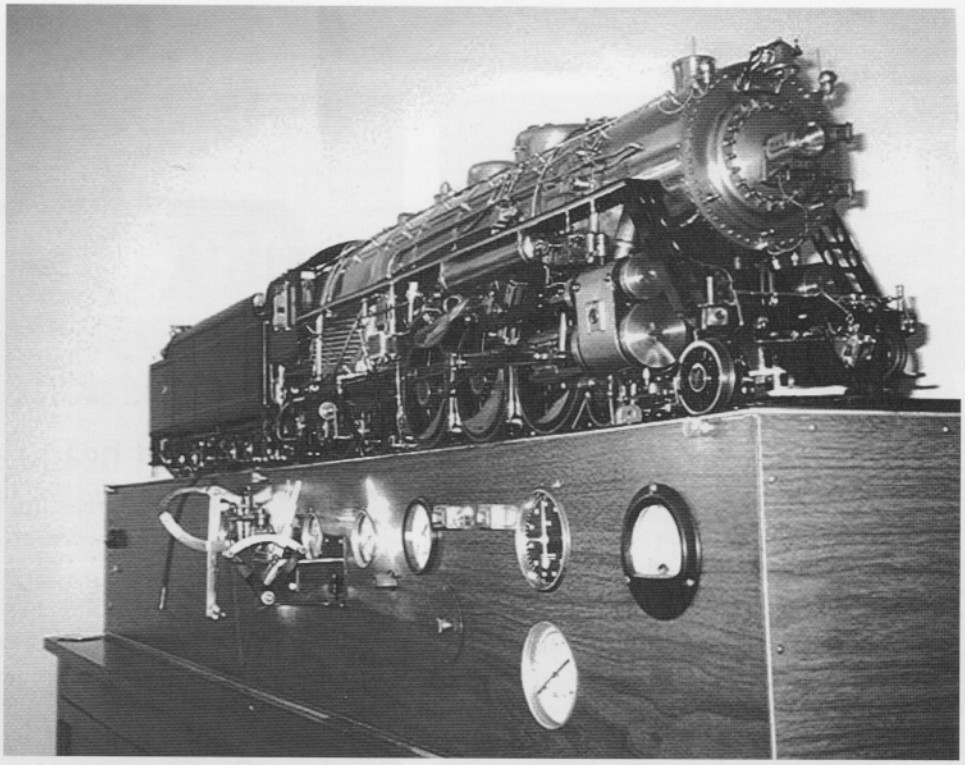
The Aimee

by Gerald Milden

One man's masterpiece...

Background Information on The Aimee

The Aimee is reputed to be one of the finest 3/4" scale live steam miniature locomotives in the world. It took master machinist R.L. Beekman thirteen years to build from scratch. It is a 4-6-4 Hudson type, Class J, NYC Number 464. It is 72" overall with tender, oil fired with an additional gas burner in the firebox, and connections for compressed air drive. It is built to operate on a 3-1/2" gauge track. The tender is a 12-wheel mountain type, class 800, constructed of brass and stainless steel, with oil calibration gauge relating to the prototype's 63,500 gallons



Aimee on her display stand.

The boiler jacket is made of satin polished monel. All other components being stainless steel, copper, and brass. All the air pumps and feed pumps are fully operational, as are back cab levers, valves, gauges and every other part. There are no dummy parts.

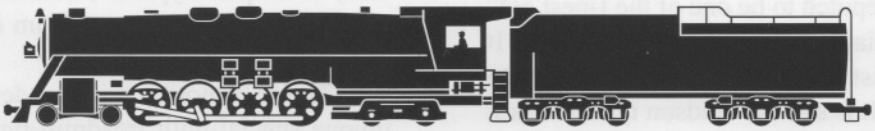
All of the parts were designed and built by Beekman to the closest possible tolerance and authenticity of the prototype. So, in actuality, it is a real locomotive and tender reduced from its full size counterpart.

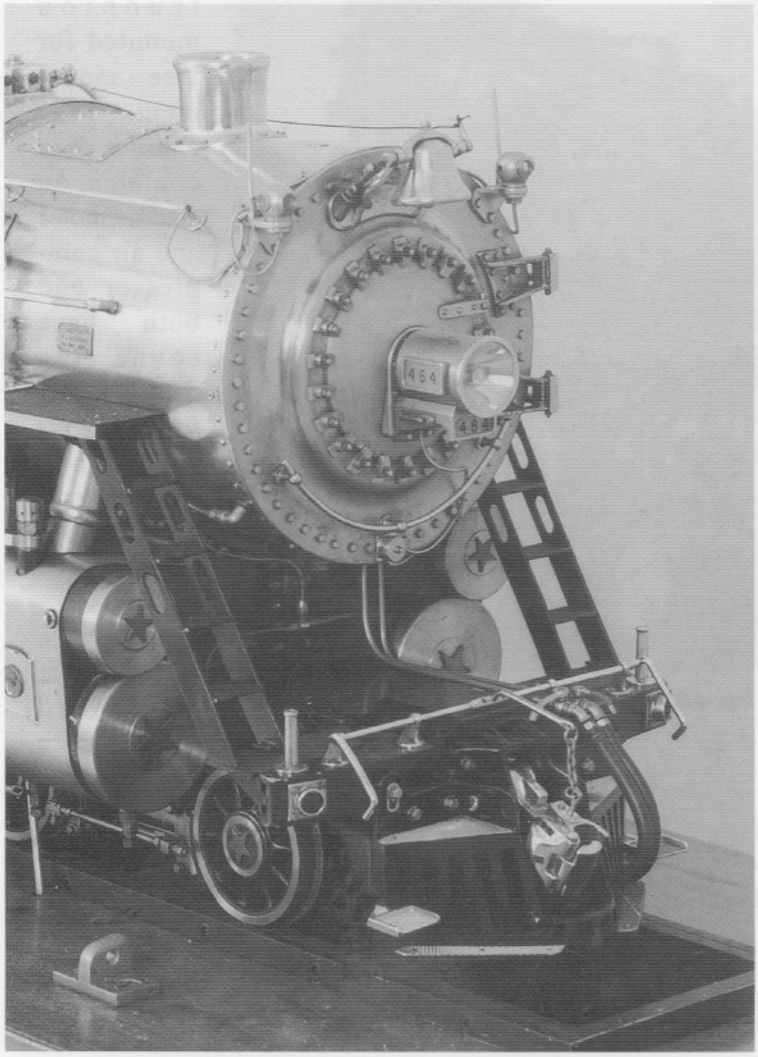
The locomotive with tender is displayed on a unique special-built treadmill-type test stand with a removable plexiglass cover. All wheels are trunnion mounted for free movement. The cabinet case contains an electric motor and air compressor and both have connecting drives to the trunnions for engine wheel and gear motion without firing up the locomotive.

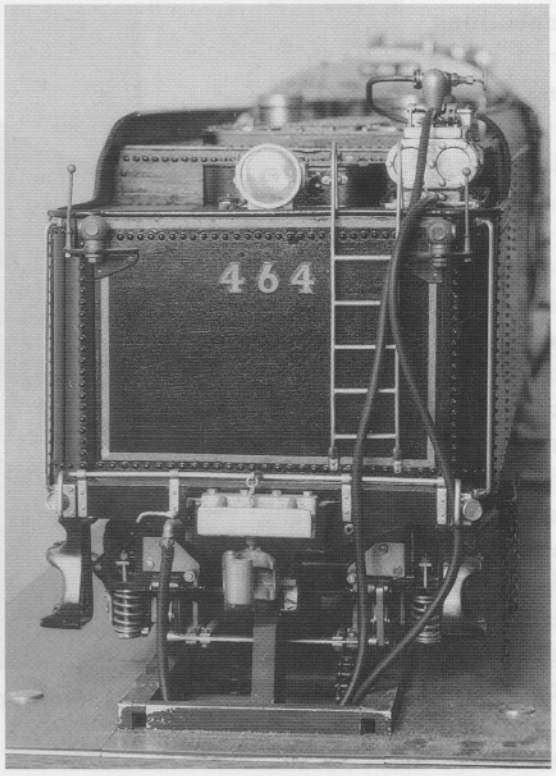
The present owner purchased The Aimee from the Beekman estate in 1994. The Aimee comes with the creator's drawings and work books which include detailed construction logs. Perspective purchasers can contact the owner in Chatham Massachusetts at 508 945 4600. His email address is milden@comcast.net

Model Specifications

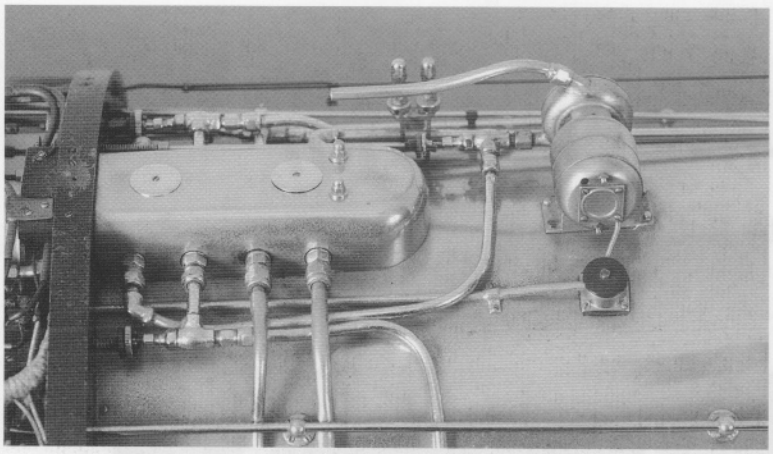
Drivers ..... 4-15/16"
Working pressure ..... 150 lbs.
Cylinder size ..... 1-7/16" x 1-3/4"
Heating Surface ..... 940 square inches
Firebox grate ..... 46 square inches
Booster engine ..... at pilot truck
Turbo generator ..... delivers 2.5 volts DC for lights
Weight of the model ..... Approximately 300 lbs.

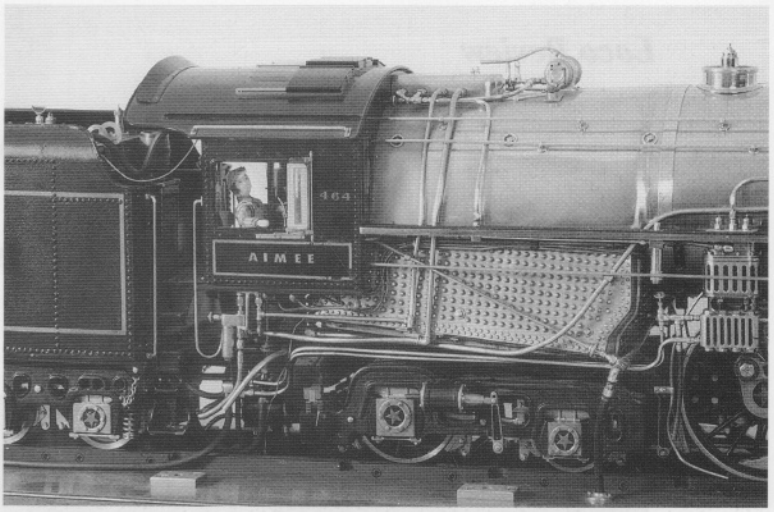






Front and rear views of Aimee. Notice the exceptional level of detail in the photos of this beautiful model on this page and the preceding page.

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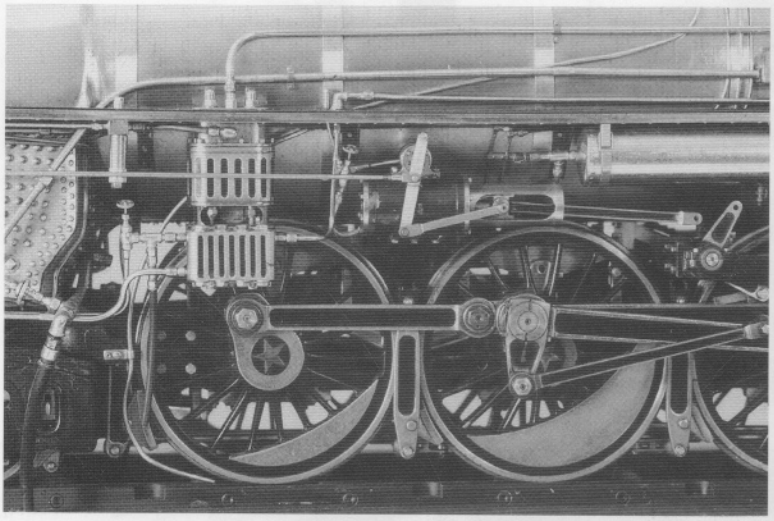
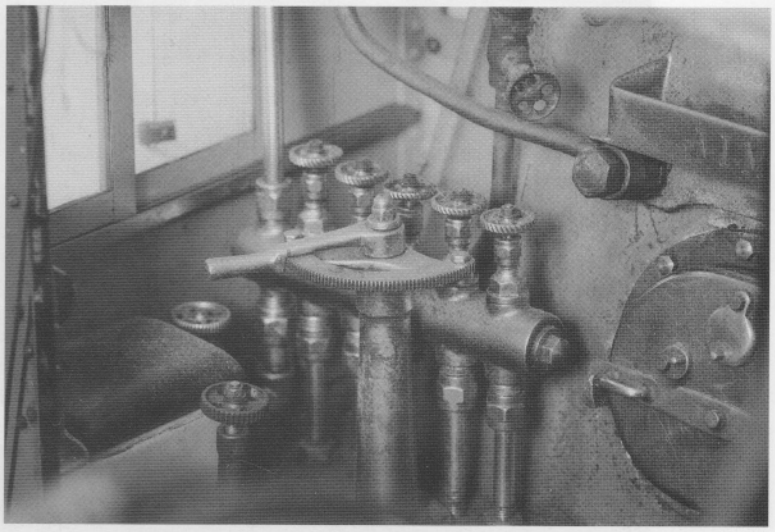
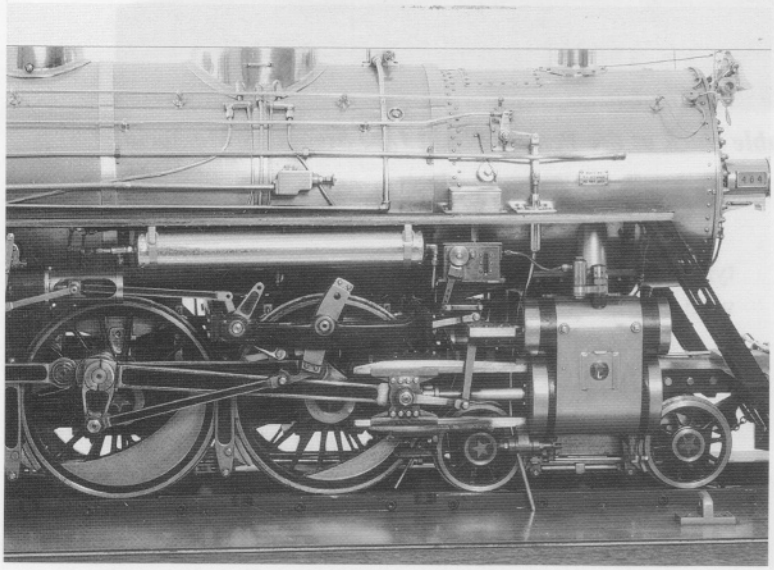
AIMEE

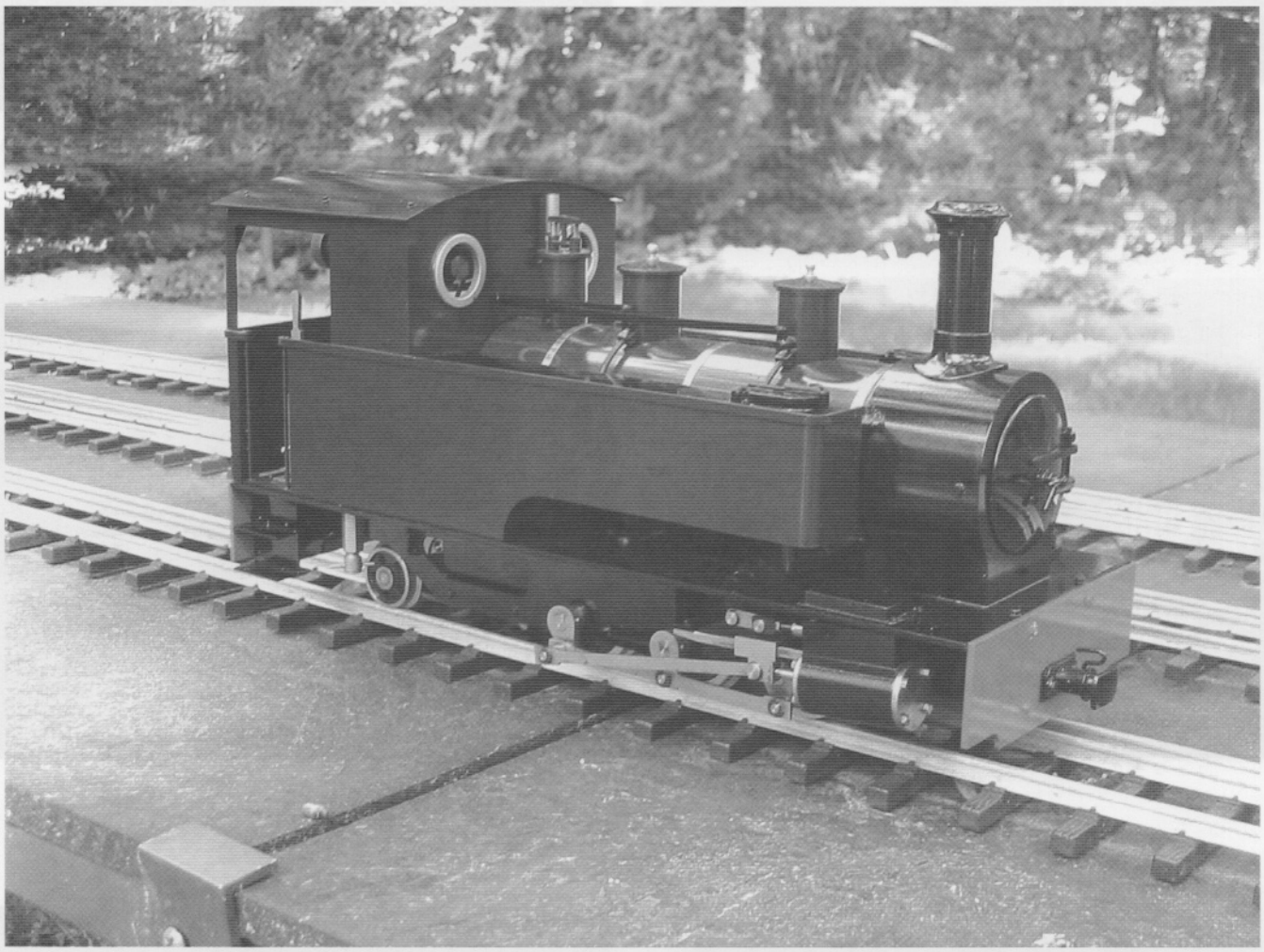






Accucraft's 0-6-2 Superior

review and photos by Rob Kuhlman



Accucraft SUPERIOR, seen here on Mike Moore's portable track at the Pennsylvania Live Steamers Memorial Day steamup.

The Accucraft SUPERIOR is a model of an extant U.K. prototype, the SUPERIOR, built in 1920 by Kerr Stuart for the Bowater Paper Mill's 2 ft. 6 in. gauge railway and currently hauling trains of visitors to the Whipsnade Wild Animal Park. After 20 minutes of following links for the Park in a futile search for contemporary photos of the prototype I gave up; I can't therefore vouch for the integrity of the model's prototype conformance. Perhaps readers could write to SitG with additional prototype info and/or links to images.

Accucraft has had this model out for awhile; I saw my first one over a year ago. Accucraft has produced several models of U.K. prototypes which are regaugeable between 32mm (gauge 0) and 45mm (gauge 1); the SUPERIOR is the largest of these models. When Accucraft sent one to Ron Brown for a prod-

uct review, due to his impending surgery Ron invited me to pinch hit for him; I jumped at the chance.

Here are some important numbers:

Length over end beams = 12-1/4"

Width of end beams = 4-1/2"

Height from railhead to chimney cap = 6-1/2"

6-coupled wheelbase = 3-1/2"

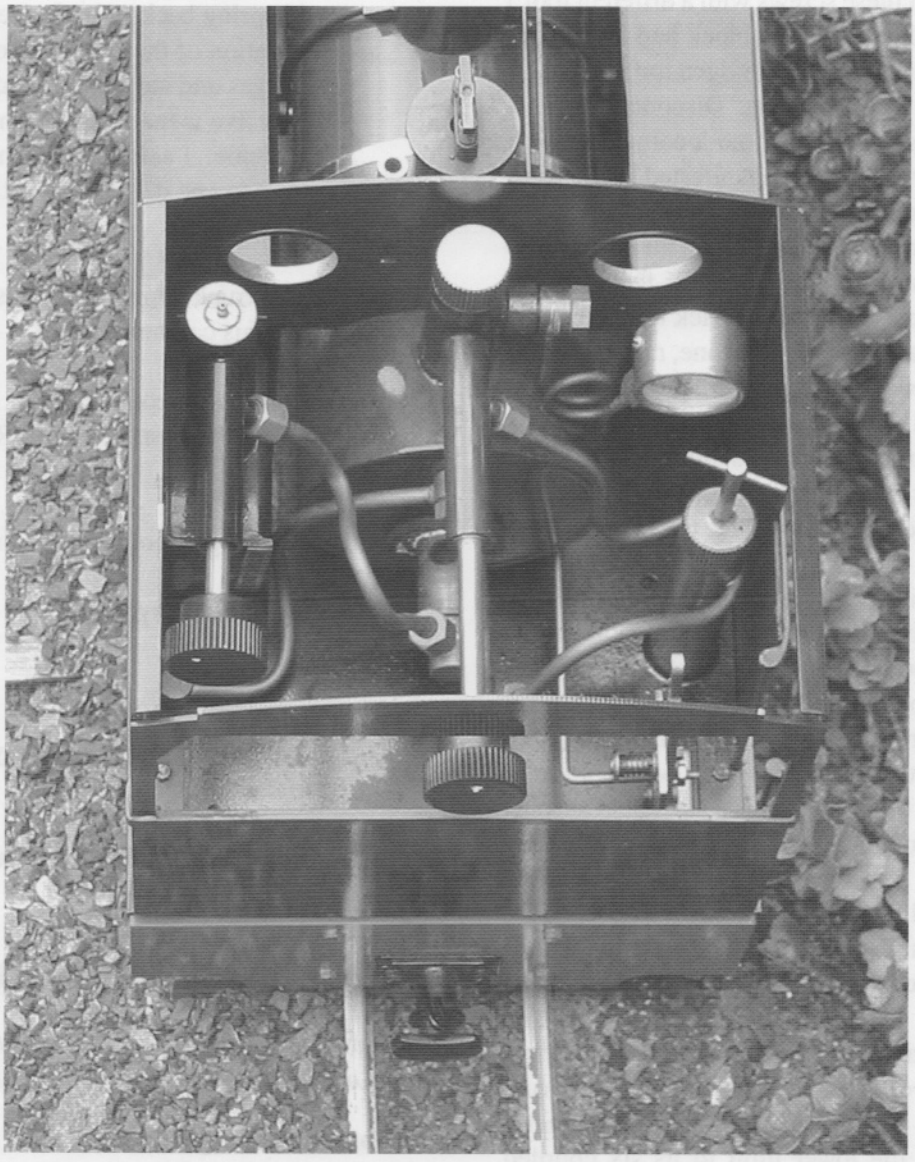
Wheelbase including trailing truck = 7-1/4"

Locomotive weight = ~10 pounds (bathroom scale)

This model is a handsome locomotive! It comes in two colors, apparently both prototypically correct. Maroon and what I call Coleman Camp Stove Green. The smoke box, side frames, tops of the side tanks, and cab roof are painted black. End beams are standard U.K. red. The paint is glossy and seems scratch resistant, and I could see no bleed or overspray anywhere. The boiler bands, spectacle windows, spindles on the two sand domes, the modeled safety valves, and whistle are brass. The details, which are aesthetically pleasing, include the following: the modeled safety valves, the cab handrails, the side tank water fillers, the sand lines, and the delicate hex screws used in assembly. If you're into U.K. prototypes, this locomotive is just crying out for complementary lining and minimal superdetailing, both of which would result in a stunning model.

The boiler is gas-fired with a standard poker gas burner; a stainless steel steam pipe runs down the flue. Valve gear is fixed eccentric; cylinders use piston valves. Valve events are reversed in the cab with a control stand. All six drivers are flanged. Allen socket grub screws (wrench included) secure the drivers into fixed 45mm or 32mm gauge position via dimples on the axles. The rear trailing truck comes with interchangeable wheelsets; the appropriate axle block is simply screwed into the trailing truck tongue.

Access to the cab is obtained through generous side and rear window openings plus the cab roof which slides completely off to the rear. The gas tank is located in the left front and has its filling valve positioned near the top of the cab via an extension - a great idea! The gas control valve is accessed from the left doorway. A blowdown valve is located under the left side footplate forward of the cab steps. The throttle is located high in the center and its knob extends a tad rearward of the cab's back for easy access during operation. Both the gas and throttle control knobs are plastic and stay cool to the touch.



Bird's-eye view of the cab layout. Roomy, convenient and functional.

The pres-

sure gauge is positioned in the right front corner, aft of which is the lubricator. The lubricator's cap is knurled and it also has a T-handle extension for those of us who have an excess of thumbs. Both the lubricator drain and the blowdown are located under the footplate and are opened/closed with a supplied tool. To the rear of the lubricator is the reversing control stand, operable through the rear window and right doorway. It's a spacious and functionally designed cab layout; Accucraft is to be commended.

With regard to the locomotive's operation, at this point I need to be forthright. The first sample that I received, the maroon one, had some flaws. First, there were no instructions packed with the locomotive. The supplied hex nut driver rounded the hex screws on the trailing truck when I attempted to swap in the 32mm wheelset. (If you regauge this loco, I recommend that you initially loosen these screws with a different tool.) Plus, the 32mm wheelset's axle block had hole spacing for these affixing screws a smidgen too narrow for the spacing on the mating tongue. Disconcerting. Finally, and most discouragingly, the locomotive had a serious steam blowby problem, manifested by the venting of its boiler pressure right up the stack. I had a hard time raising more than 20 psi, and the loco would run out of breath after running about 75 feet light engine. So this sample was shipped back to the factory.

The second sample, the green one, ran much better. This loco, however, wasn't a fresh factory locomotive - it arrived with a patina of rail grunge on its wheel treads, oil dripping from its motionwork, water in its boiler, and even some leftover gas in its gas tank! Clearly this sample had polished the rails before it arrived, so I knew it would run properly.

The preparation and firing procedures are covered nicely in the instructions, so I won't review them here. The blowdown valve began to vent steam after 6-8 minutes and operating pressure was reached 3-4 minutes thereafter. At this point, after clearing the condensate, I'd get a good 20 minutes of operation in before the gas ran out. There was a sufficient surplus of boiler water remaining. On one occasion I refilled the gas tank after clearing the condensate and I was able to get a solid 30 minutes of steaming in before running out of gas. However, there was only a modicum of boiler water remaining, so I didn't repeat this procedure.

While operating, the loco tracked well over my 32mm ground level roadbed, best described as 'rustic', but I suspect that my eased 7-1/2 foot diameter end loop may be the lower limit to its six coupled flanged wheelbase (for comparison, my six coupled but center-blind LADY ANNE has no trouble with this curve). It displayed formidable pulling power and should haul more rolling stock than most of us 32mm'ers are inclined to couple behind.

Subjective Summary Thoughts:

Cons:

Valve gear and drive rods are fastened with snap rings, not nuts

Burner is noisy

Burner has very coarse adjustment - little variation between boiler blowoff setting and burner off

Burner adjustment has a memory - the knob would spring back to its former setting. The combination of these two factors results in wasted gas and steam and reduced run times.

Safety valve is inaccessible under a permanent steam dome. I couldn't determine how to access it to test it, and instructions were silent about this.

Trailing truck spring tension is a bit too strong, though this can be adjusted

Serious quality control issues, related above, regarding the first SUPERIOR tested

Pros:

Drop-dead gorgeous locomotive

Functional cab layout

Easy operation

Easy and comprehensive one year warranty against defects

Eminently affordable; I was quoted an MSRP of $1019

Photo top right: ***SUPERIOR pulls a train of empties on the author's 32mm line in Pennsylvania.***

Photo bottom right: ***A handsome loco, the Superior is also a hard working steamer.***

Katy Texas Steamup
October 25, 2003

It Rained and It Rained

by John Frank

Well, it hasn't rained here in Katy for at least a month, but schedule a steamup and see what happens. John Frank scheduled a steamup on his backyard live steam garden railroad. We had a somewhat light attendance because of the threatened rain, but those that came had a good time anyway, running steam and dodging rain showers.

Attendees were Tom Burns (K27), Steve Speck (Proud owner of a new Catatonk Mark II Shay), Jim Cash with his Sammy, Bill Courtright and his beautiful Frank S, Tom Herbert who brought some very nice custom painted Bachman passenger cars and Marvin Nite who brought his better half Lemma and the rain (just kidding Marvin).

John furnished lunch, drinks and ran his K-27 and C-16. It was a marvel to see Bill's Frank S running in a torrential downpour without missing a beat...and pulling a 5 car train. Jim's Sammy was putting out some nice steam plumes, as were all the engines courtesy of the cooler weather and humidity. Tom's K27 was pulling his usual heavy stock trains until the radio control was swamped by the water. Everyone seemed to have a good time and used the rainy periods to swap stories and technical information. All in all a good steaming day, rain and all.

Haines City, Florida Steamup

photos and report by Marie Brown

Harold Dunsford invited us to attend a steamp at his home while we were in Florida for the coldest part of the winter. (see Harold's portable track construction article in this issue) Several other steamers attended, and we enjoyed a very pleasant day of steaming. Harold's track performed flawlessly, as did our steam locos. We all enjoyed Harold's track and his hospitality and hope to do it again!

Top: John Riley tends to his steamer as another train circles the track.

Bottom left: Harold Dunsford adjusts his quaint and charming scratch built steamer.

Bottom right: A Catatonk Heisler pulls a short train around the loop.

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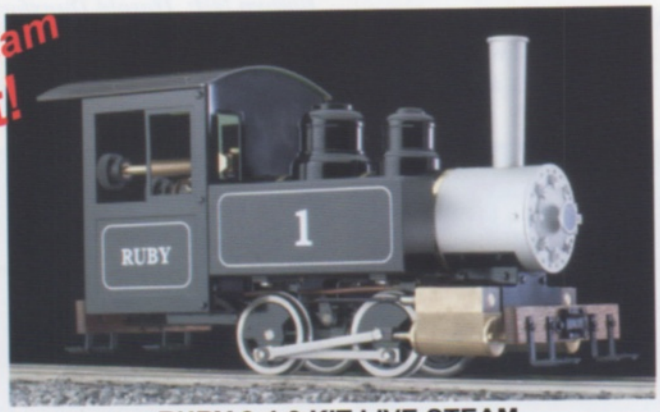

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Workshop Project

Radio Control for the Aster Climax

by Paul Blake

Taming a wild logger...

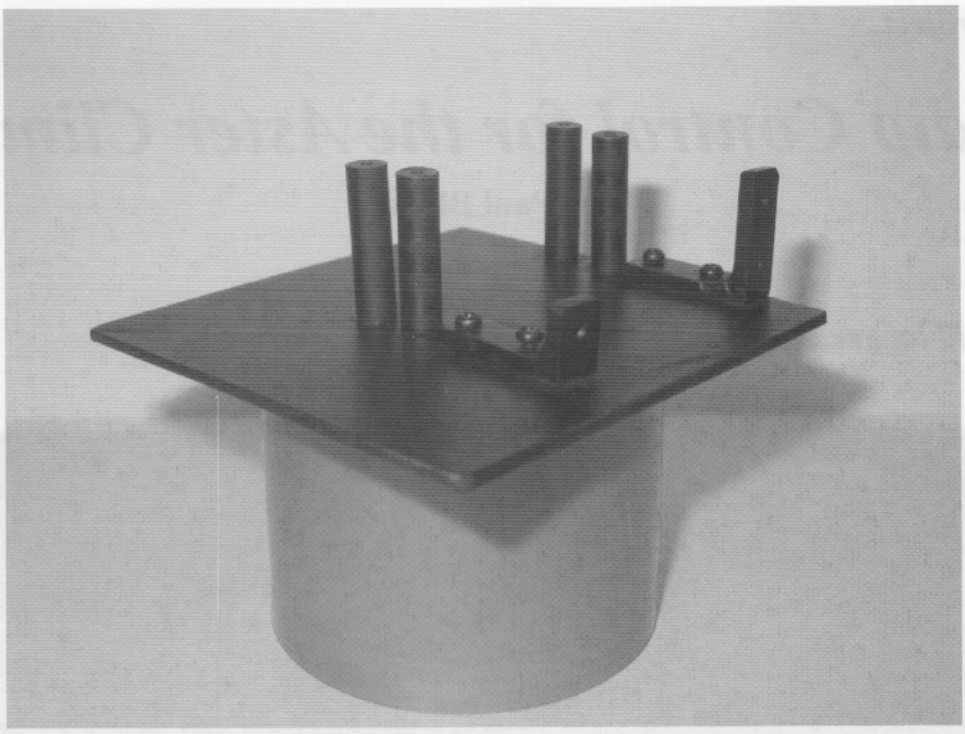
A fine performer but a bit out of control. The Aster Climax benefits greatly from the fitting of a radio control unit.

There is no doubt that the Aster Climax is an impressive loco with a great deal of power, long running capability and great audio and visual effects, but in my experience keeping the beast running to typical geared loco speeds is a real challenge. The classic three truck loco gave a good account at this year's Diamondhead Drawbar Pull Contest, shifting more than 87 ounces in overall fourth place, and this performance is consistent with what I have found since I purchased my example earlier this year.

But I was keen to tame the speed to reflect Climax practice so I set about fitting radio control. As part of my justification in purchasing the Aster was the investment potential, I was keen to carry out the modification without modification (if you know what I mean). So I set myself the target of fitting radio control without drilling holes or cutting body work.

In Australia we can purchase two channel radio control originally designed for remote control cars running on 29mhz and I have had good success with these on my scratch built locos as long as batteries are kept charged and my good friend Gordon Watson's advice

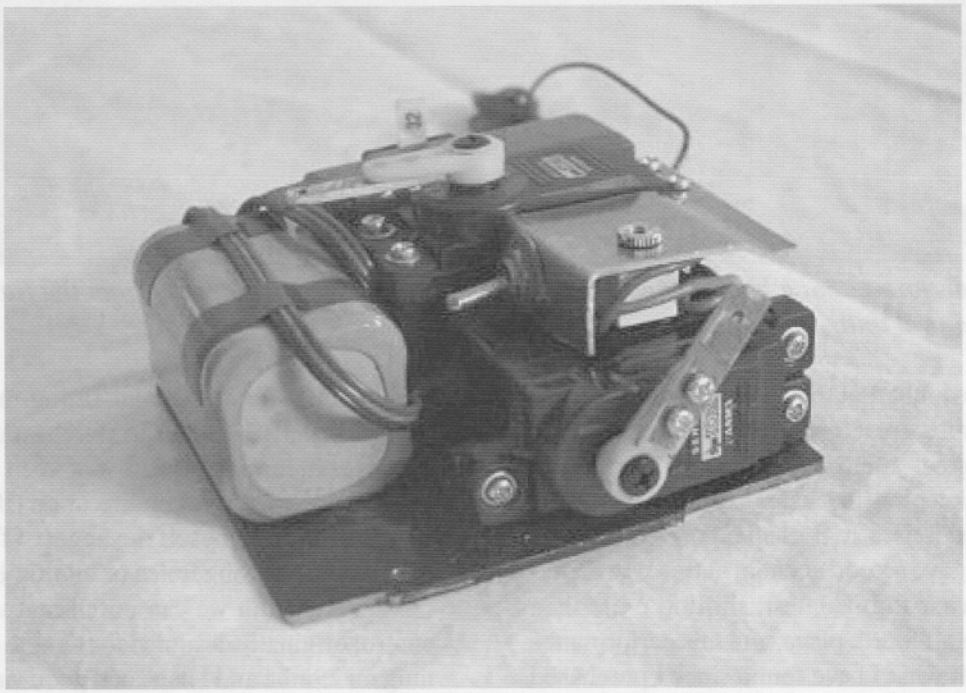
on aerials (maybe my USA friends call them antennas!) is followed. So I purchased one of these units along with a rechargeable battery pack and set to work. Similar units are available in the US and UK but operate to a different frequency. In the US for example I understand that 75 MHz is the commonly available unit.



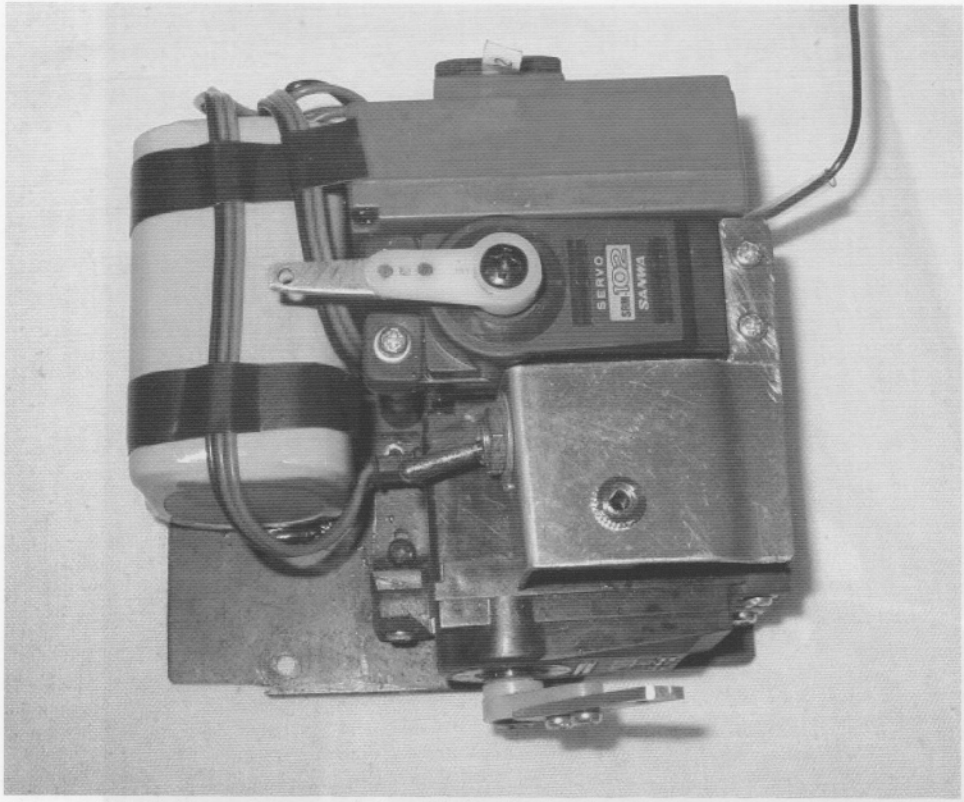
The radio control mounting plate prepared for mounting the servos. The servo for the throttle is mounted flat and the reverse servo vertical.

First step in our installation is to remove the gas line and the four hex head screws holding the bunker top in place and lift this out. Next remove the screws holding the inner bunker in place and remove this also. This part, the original reversing lever and the throttle wheel are the only parts which will not be reused. Next remove the throttle wheel lock nut and throttle wheel which both unscrew anti clockwise. Finally dismantle the reversing lever and replace it with the radio control lever which is supplied with the locomotive. If for some reason this part has gone missing, you can simply make up a new reversing lever with holes drilled in the shaft to take the clevis for the servo arm.

A new throttle lever is made by cutting an 8mm length of 12mm brass hex and drilling it to fit snugly over the throttle shaft. Cut a piece of 1 to 1.5mm brass 25mm by 8mm. Silver solder this to one of the hex flats to make a lever and drill a 2mm hole close to the outer end. Finally drill the hex and tap for a 6BA Allen head grub screw. I bent the actuating arm a little forward to clear the front of the bunker. Fit the arm and position at about 10 o'clock, then tighten the grub screw and replace the lock nut. I filed a small flat on the throttle shaft to help locate



The radio control module complete and ready for installation including a rechargeable battery. Note that the entire unit fits completely inside the bunker of the Climax without drilling or cutting.



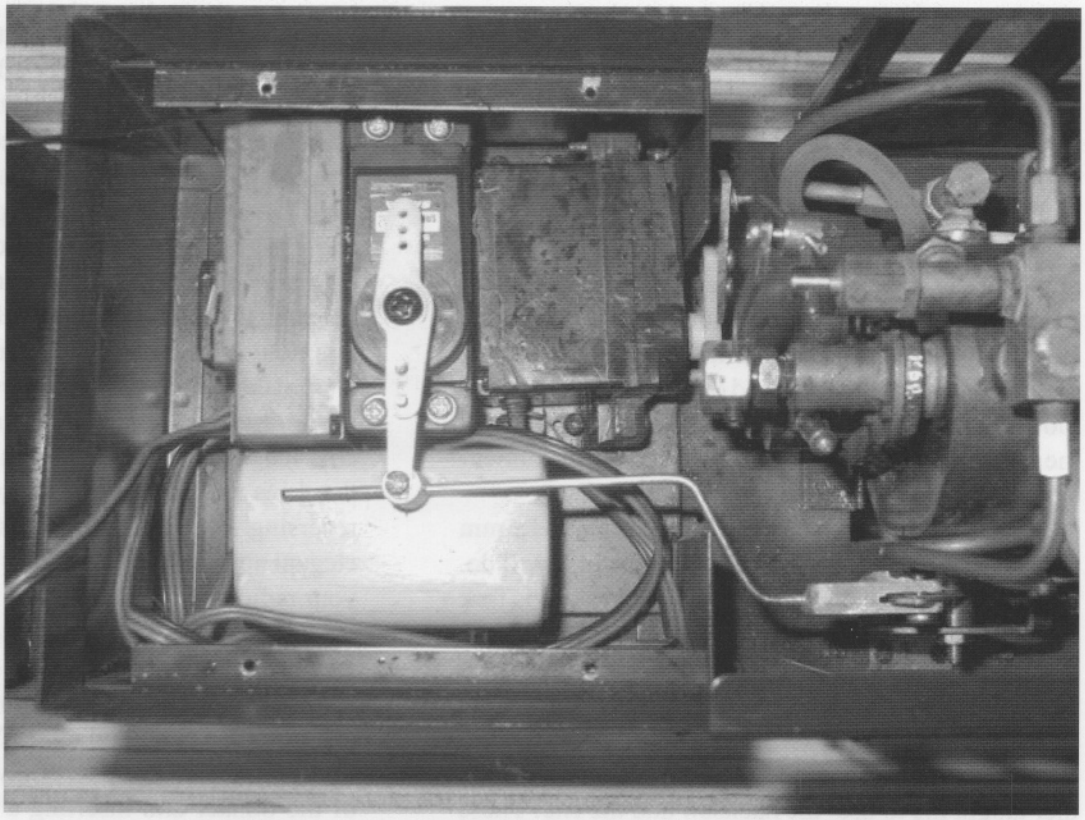
An overhead view of the module which clearly shows the on off switch and re-charging jack.

dismantling the entire loco. My drawing shows the basic dimensions required. I would note at this point that my drawings are all based around the Hitec brand radio control unit which I purchased. If you purchased another brand you may wish to check the dimensions of components. The good news is that the main suppliers seem to all use a standard for most dimensions.

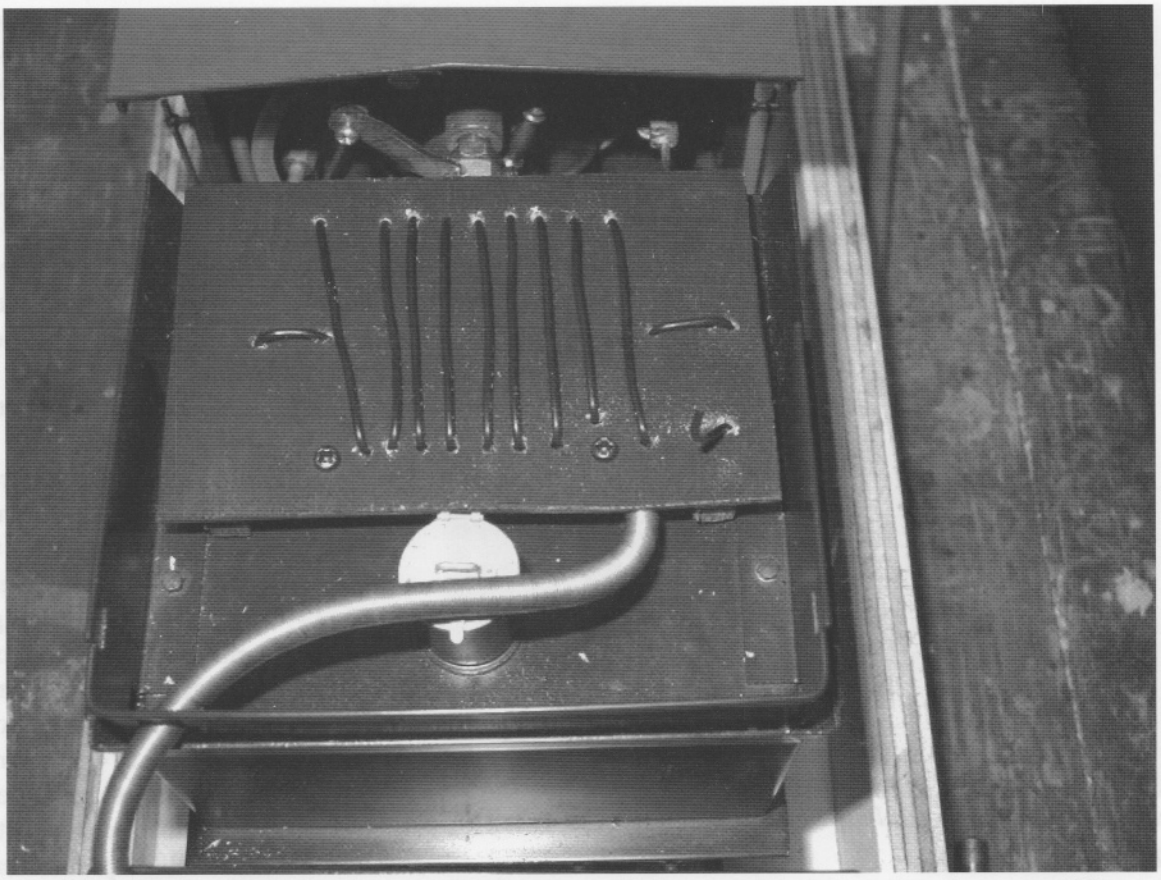
As you can see from the photos one servo is mounted on its side to drive the throttle and one is mounted vertically to operate the reversing lever. I made up brackets from angle brass for the throttle servo and for the reversing servo. I cut four pieces of 4.7mm brass rod 28mm long and threaded them with 2mm threads at both ends. These four 'posts' were then mounted to the mounting plate

the grub screw but I am not sure this is entirely necessary.

The next part of the project is to make a mounting plate which will fit into the base of the bunker space on which to mount all the main components of the radio control unit. The mounting plate can be made from 1.6mm thick brass or steel and is made slightly smaller than the space available to enable the radio control module (the mounting plate with all components attached) to be slipped into place without



A test fit inside the bunker before final tidy up and painting.



The radio control fully installed and ready to go. A few logs or lumps of coal and no one will know it is there.

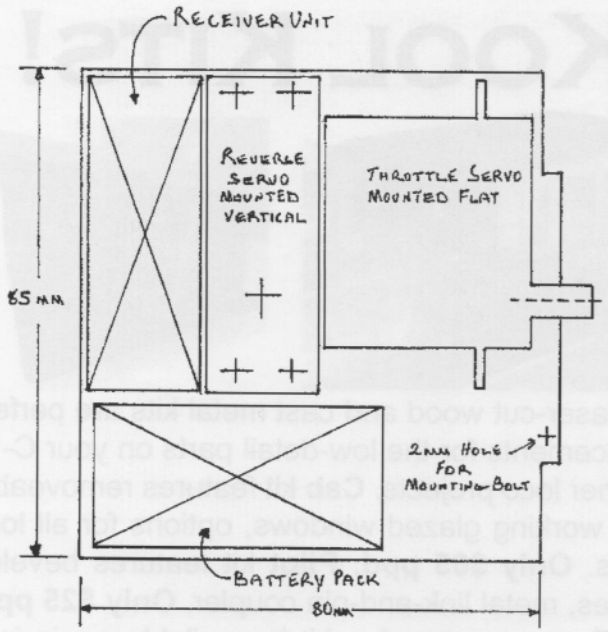
with countersunk screws from below to allow the mounting plate to sit flat on the floor of the bunker. I mounted both the servos and then fixed the receiver unit to the mounting plate with Silastic. I also fixed the rechargeable battery pack in place the same way, but an alternative is to make a brass strap and fit it over the battery unit. To make for a neater job I actually shortened the servo and battery pack wires and refitted the plugs, making sure not to mix up the wires.

In the further quest for a neater job I made up a plate from brass which screwed onto the reversing servo mount to which I mounted the power on/off switch and the recharging jack. A diagram also shows the dimensions for this switch plate.

The drive rods were made from some 1.6mm stainless steel rod I had available, but any rod will do. On one end I made up and silver soldered a clevis fork which is simply made from some 6.3mm square brass cut to 25mm length and with an end groove cut in it using a hacksaw. It is interesting to note that despite learning to use many machine tools over the years I still make extensive use of the first two tools my father taught me to use- the hacksaw and the file! These drive rods should be made a little over length as you can easily trim them shorter after tuning.

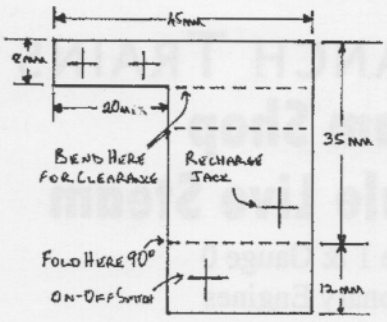
The next item is the adjusting linkage and I have adopted a very simple but effective device for these. Cut of a piece of 6.35mm brass rod about 8mm long. Drill a 1.6mm hole across the piece about 3mm from one end. From the other end drill a 1.6mm dia hole thru the centre of the piece until it meets the cross hole and then take it carefully thru to the end. Thread this hole 2mm all the way thru and clean out your 1.6mm cross hole after you have cut your thread. Slip the adjuster onto the 1.6mm drive rod and fit a suitable length 2mm screw which will screw in to lock the drive rod but will still allow the throttle and the reversing lever to move. This is a very simple and elegant approach which allows for fine adjustment of your radio control.

Make up an antenna plate as per the drawing and fit a couple of 2mm screws as shown. I have no idea why Gordon's design works, but it seems to with minimal glitching and good range. You can now fit the radio control module by carefully locating it in the floor of the bunker and inserting a 2mm hex head screw

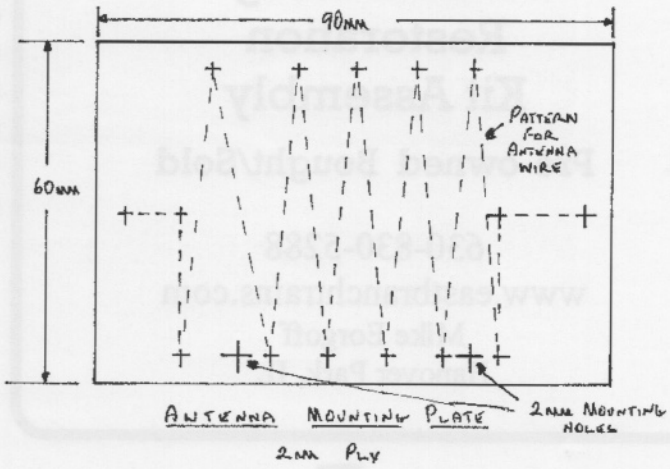


R/C BASEPLATE

2MM STEEL OR BRASS



SWITCH MOUNTING PLATE 1MM BRASS



into one of the threaded holes which originally secured the inner bunker. I have found this single screw holds the module firmly in place without the need for additional fixings. Reinstall that ugly gas line which runs across the top of the bunker (why did Aster do such a silly thing on a great loco???). Reinstall the bunker top and then you can position the antenna plate using two of the holes originally used to mount the inner bunker.

I finished the installation off by gluing some logs over the top of the antenna plate. Strictly speaking this large Climax probably ran on coal but wood looks more in keeping with the other locos on the Canungra and Pine Creek Tramway. You will need to do a bit of fine tuning of the actuating levers and trimmers on the transmitter unit but once you have this sorted you will have a very docile and controllable Climax.

Model Steamboats at Cabin Fever Expo 2004

by Steve Siegel
photos by the author unless otherwise noted

The wind chill approached 20 degrees as a large crowd watched a model steam launch gracefully glide across the pond, a plume of steam trailing from its funnel in the still air. This could only happen at the 8th annual Cabin Fever Expo at the York Fairgrounds in York, PA on January 17th and 18th, where the frigid winter weather was *outside* the hall and a huge model boat pond was *inside*. And huge the pond was. At a width of 32 feet and a length of 80 feet, it was perhaps the largest temporary indoor pond in the country. Its 12" depth made the total volume of water close to 16,000 gallons, and its size allowed even the largest of the steamboat models room to comfortably maneuver.

Jerry and Darla Powers check out their tug Cruiser before launching

Cabin Fever Expo is a model engineering show highlighting all types of precision miniature steam, gas, and Stirling-cycle engines, as well as miniature machine tools. Operating model steamboats have been a featured part of the show with the introduction of an enormous indoor model boat pond at last year's event. Saturday's attendance was estimated at about 4000, although Sunday's was significantly less due to a snowstorm which took everyone by surprise, including, it seems, the meteorologists. There were 28 model boats on display, almost all of them steam-powered (a submarine or two also made an appearance at the show). Most spent a good amount of time running on the pond and delighting the huge crowds. The model boats were displayed on 14 tables set up around the pond, and space was tight even with this amount of table space. Practically all the steamboat modelers were members of the North American Steamboat Modeler's Association

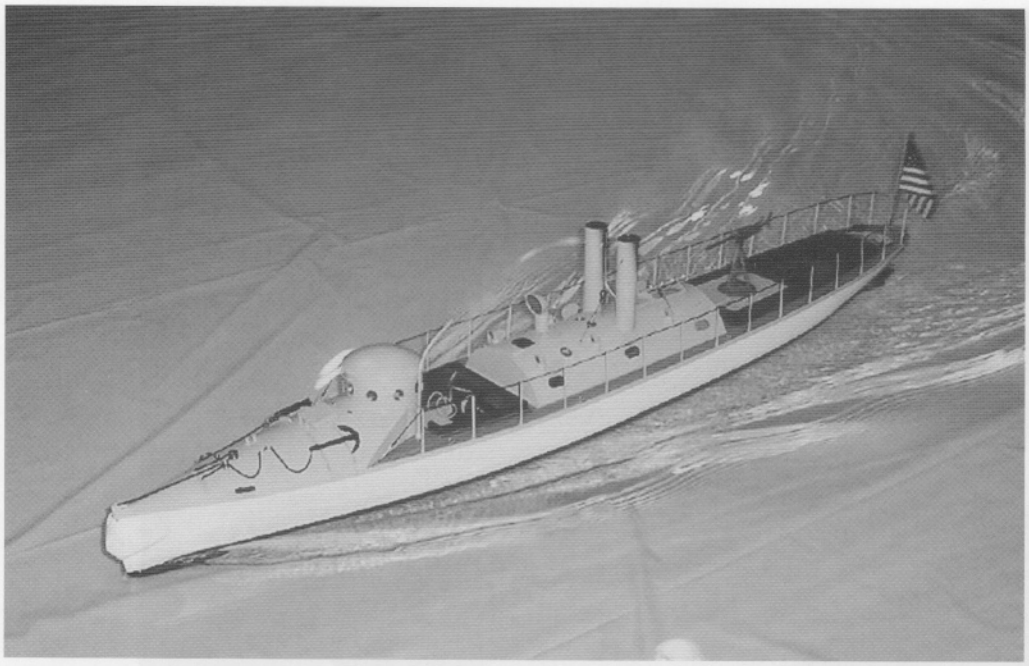
(NASMA), a club whose members exchange information on the model steamboat hobby.

As was to be expected, steam launches and tugboats were by far the most popular modeling subjects. A pair of less common entries were the author's 1896 steam torpedo boat in 1/12th scale powered by a Saito three-cylinder engine, and Quentin Johnson's City of New York, a 1/24th scale model of a Chautauqua Lake steamer powered by a Stuart D10. Of course, one might also call Charlie Roth's 1/12th scale African Queen a torpedo boat of sorts (go see the movie again if you don't know why). But as proof that one does not have to build such an elaborate model to enjoy the hobby, it was a delight to watch Jack Ullman's modest 20" freelance steam launch Tsipele steam across the pond, it's single cylinder engine of unknown origin and its hull scratch-built from a tinplated olive oil can!

Charlie Roth's African Queen (Tom Ray photo)

Bill Ray explains details of his scratch-built Atlantis tug

Cheddar's Automatic Boiler Control (ABC) system was seen in a couple of the steamboats. This unit senses boiler steam pressure and adjusts the butane supply to the burner according to demand. Bill Ray had just installed a unit in his scratch-built 1/48th scale At-



Steve Siegel's 1896 Torpedo Boat at speed (Marty Feldman photo)

lantic tug, powered by a Cheddar Pelican twin cylinder engine. The boat ran very well.

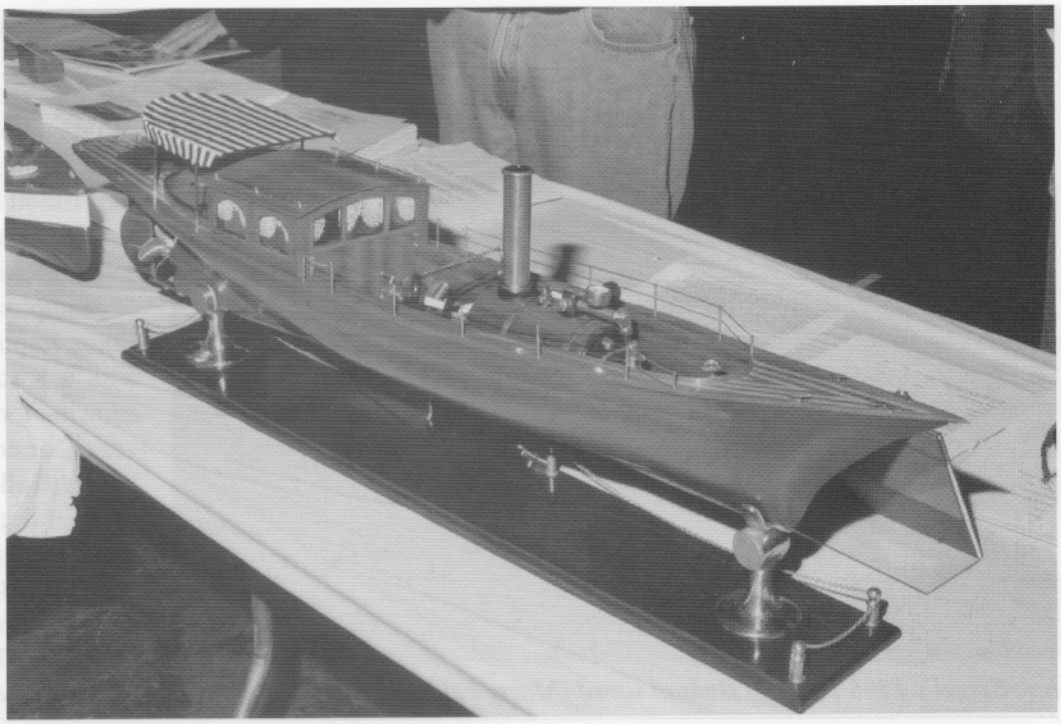
On a larger scale, Jerry Powers combined the ABC system with an engine-driven water pump and on-board water tank in his 1/20th scale tug Cruiser, one of two similar tugs that launched the Titanic. The fiberglass hull was from Harbor Models and power came from a Cheddar Proteus engine and boiler.

Another impressive large-scale model, also running a Cheddar Proteus, was a *** scale 1900's launch by Jim Delaney, modeled after a boat used on Yellowstone Lake. Jim's model had full interior and exterior working lighting installed.

I must stress that the smaller models were enjoyed by the crowds at least as much, if not more than, the more elaborate craft. This is possibly due to the fact that they are less intimidating to a beginner and are viewed as something that even a less experienced builder could complete successfully. Of these, the Midwest Elliott Bay model is perhaps the most popular, and there were a number of examples at the show. Elliot Kaplan fitted his with a Kitchen rudder, allowing forward and reverse operation. Jeff Bennett added an oak planked deck to his and a 'steam gauge' made from an old watch case. Another small-scale model was Tom Ray's 1/35th scale Minivap class tug sporting a Cheddar Kompact steam plant. The diminutive Minivap hulls, this one from Kingston Mouldings in the UK, are a lot more difficult to fit out than their small size would have us believe!

Model steamboat activity greatly restricted the time I had to browse the wares of the 80 or so vendors of machine tools, books, and engineering supplies. I also regret I did not have more time to marvel at the

Bill Schappert and part of his fleet



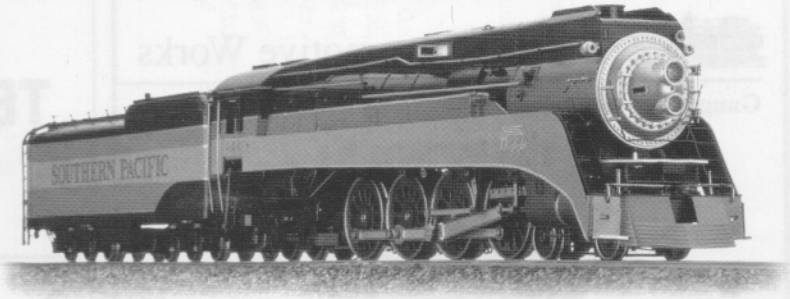
Jeff Bennett's all-mahogany Daydream

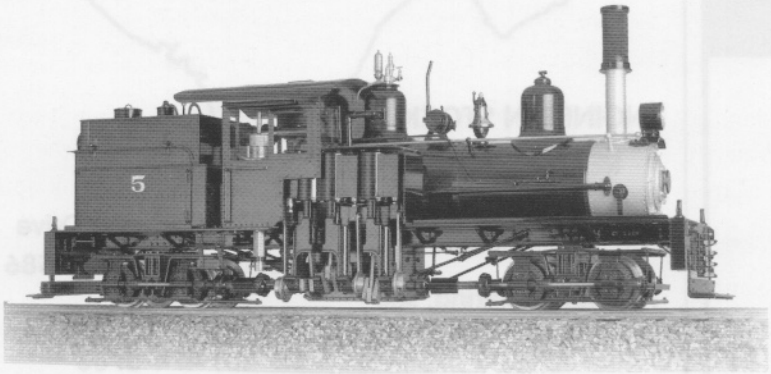
many hundreds of operating model engines or visit the 400+ exhibitors. Maybe they should make it a three-day show next year!

Show organizers Jared and Gary Shoenly did a magnificent job engineering that huge pond. And thanks go to Ron Hermann and Charlie Roth of the South Orange Seaport Society for the use of their frequency board which kept all of our boats running interference-free. This show has become the ***Diamond-head*** of the model steamboat crowd, so put it on your calendars for next year. For more information regarding NASMA and its activities, please contact Steve Siegel at stefans@enter.net, or P.O. Box 802, Fogelsville, PA 18051.

The Atlantis steams across the pond (Tom Ray photo)

Accucraft's exciting new SP Daylight (GS-4) in Live Steam, priced at just $4449.99! Now taking orders...don't miss out on this one! Call for order forms. A small deposit will be required to secure a place in line. ("Built to order" engines - C-21, K-27 Daylight require deposits)





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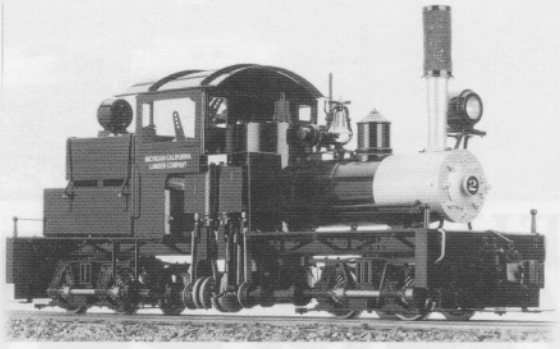

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End of the Line

Mended Hearts

Thanks to all of you who remembered me in your prayers and who sent cards or e-mails or made a phone call to cheer me up or express your concern about my condition after surgery. I'm happy to report that I'm doing well and am back in the saddle....or at least the editorial chair.

Cover

Long-time readers of SitG will notice something different about our cover this issue. Rather than a photograph of a model live steamer, we have instead a painting of a live steam loco....but set in appropriate surroundings. Larry Bangham wanted to have a painting of his K27, so he commissioned famed artist David Tutwiler to do the job, which was done to perfection.

Mr. Titwiler's paintings hang in some of America's most prestigious collections, both public and private. He is an avid railroad enthusiast and a member of the Society of Steam Era Artists.

The artist welcomes special "portrait" commissions of locomotive models, such as this, placing their engine on location, in "real" time or by itself as a model. You can contact him via e-mail at.....

dltutwiler@pngusa.net

You can see samples of his work and read about his background on his web site at...

www.tutwilervickeryfineart.com

Something New

Beginning in this issue with the bio of Vance Bass, we will be publishing biographies on the "movers & shakers" in our hobby. If you have suggestions for someone you think should be included, please give us a call or drop us a note. Better yet...write a bio on that person and submit it to us!

Faithful Assistant and I are preparing to travel to Michigan this week for the Shay Days steamup. We hope to see you there....or at another steamup around the country this summer.

Happy Steaming!

Ron

Photo, outside rear cover - Murray Wilson's gauge 1 steamer speeds past on the Pennsylvania Live Steamers track as a 7.25" gauge Santa Fe FA hauls passengers in the background.

photo by Rob Kuhlman

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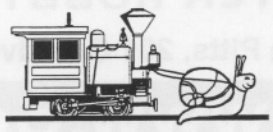

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The BR 52 features axle driven feedwater pump, tender hand pump, boiler drain valve, bypass valve, whistle, blower valve, water glass, pressure gauge, super heater, opening fire box door, Roscoe lubricator, Waelscharts valve gear, forward / reverse lever, functional leaf spring suspension and al

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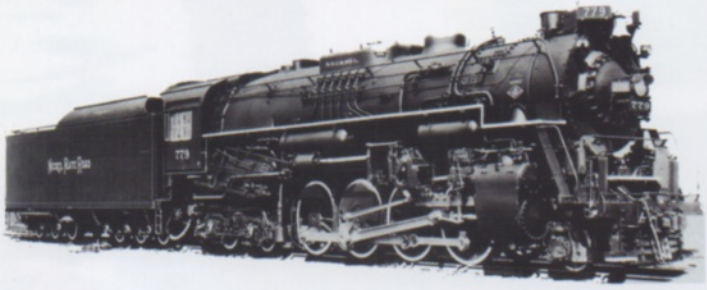

NKP 779 Berkshire will be the next US prototype live steam locomotive produced in limited quantity by Aster Hobby Co. Inc. This famous engine is a must have for any US locomotive aficionado. Please contact your authorized Aster dealer and reserve your version early. **Available spring 2005**

Aster Hobby USA LLC

LMS Duchess of Sutherland

This colorful 4-cylinder locomotive under development now at Aster will be a great addition to any collection of British mainline locomotives. Projected date of release:

Winter 2004

(Picture shown may not exactly resemble the prototype chosen by Aster.)

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