



# *The Call Boy*

## Saturday Work Party 1949



Not much has changed over the years with regards to club activities. Here in Redwood Park the crew is hard at it. Pictured left to right at the rear are: Mac McKenney, Bill Anderson, Scotty Gordon, Tim Reardon, Paul Shailer, Larry Duggan, Harry Dixon, and Gary Kubicek. In the front row, left to right are: Ernie Haase, Vic Shattock and Woody Steen. Note that the old cars in the background are the only way to tell this is a period photograph without knowing any of the members present for the day.

*Ken Shattock*

### Event Calendar

#### March

3/10/13 GGLS Member Meeting  
3/10/13 GGLS Board Meeting  
3/23/13 PV&A Chili Run

#### April

4/14/13 GGLS Member Meeting  
4/14/13 GGLS Board Meeting

#### May

5/5/13 GGLS Member Meeting  
5/5/13 GGLS Board Meeting  
5/18-19/13 Sacto Sping Meet  
5/24-27/13 L.A. Spring Meet

#### June

6/09/13 GGLS Member Meeting  
6/09/13 GGLS Board Meeting  
6/22-23/13 GGLS Spring Meet

# *The Call Boy*

## *Editorial Staff*

Pat Young  
Rick Zobelein  
Ken Shattock

## Officers

*President:* Rich Lundberg  
*Vice President:* Berne Holman  
*Secretary:* Pat Young  
*Treasurer:* John Lisherness  
*Safety:* Sheldon Yee  
*Ombudsman:* Ken Blonski

## GGLS Committee Chairmen

*Track:* Jim Dameron  
Bill Smith  
*Rolling Stock:* Richard Croll  
*Engines:* Mark Johnson  
*Public Train* John Bouey  
*Bits & Pieces:* Stan James  
*Bldgs. & Grounds:* Rich Lundberg  
*Boiler Testing:* Jerry Kimberlin  
*High Track:* Jeremy Coombs  
*Refreshments:* Les Cuff  
*Technical:* Charlie Reiter  
*Round House:* Michael Smith  
*Web Page:* Pat Young  
*Librarian:* Pat Young

## Membership

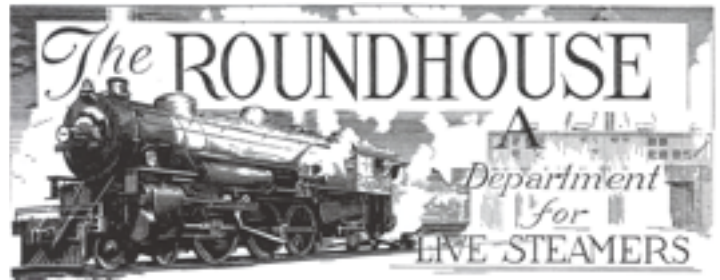
Rick Zobelein  
[rgz48@yahoo.com](mailto:rgz48@yahoo.com)

## Call Boy

Articles and photos submitted for insertion in the Call Boy should be sent to Pat Young at:

10349 Glencoe Dr., Cupertino, CA 95014  
[phty90514@yahoo.com](mailto:phty90514@yahoo.com)

**Deadline for submittal to next months' issue is  
15th of the month**



## *Announcements*

### Chili Run

Sunday, March 23, 2013

Portola Valley & Alpine Railroad

499 Old Spanish Trail

Portola Valley, CA

8:30 am to 5:30 pm

Chili provided but bring Pot Luck to share. Soft Drinks and Bottled Water available for \$1.00. RSVP required!

Directions elsewhere in newsletter

Peter Moseley [pmose@sbcglobal.net](mailto:pmose@sbcglobal.net)

650-224-9615

### Los Angeles Live Steamers 57th Spring Meet

May 24, 25, 26, Memorial Day Weekend

This is a big event with spaghetti dinner Friday night, Saturday BBQ w/apple pie and swing music live band. Sunday includes a Presidential Auction. Camping available. Due to park construction, the event may be cancelled so check their website: [www.lals.org](http://www.lals.org)

### Club Dues are Past Due!

Make out check to GGLS and submit to: *Suzanne Waterman, Box 151358, San Rafael, CA 94915*, no later than March 31 or you will be removed from the roster.

Golden Gate Live Steamers  
a 501(c)(3) Non-Profit Educational Museum

Track & Club House Location

2501 Grizzly Peak Blvd.

Berkeley, CA, 94708

510-486-0623

[www.ggls.org](http://www.ggls.org)

## Club Meeting Minutes

The Club meeting was called to order inside the club house on February 10, 2013 at 09:59 am by President Rich Lundberg. Attending were 34+ members on a cold, 38 degree day.

### **New Members and Guests:**

Bob Morris introduced his guest Steve Imialek who is a HO European train enthusiast and may be hosting a meeting at the club house on June 8, 2013.

### **Steam-related Activities:**

Rich Croll visited the Maricopa Live Steamers ([www.maricopalivesteamers.com](http://www.maricopalivesteamers.com)) Operations Meet in Arizona and had an interesting time running on their club facility. From his laptop he showed pictures he took where he had a lot of fun for 3 days picking up and dropping off freight cars from his train. He also mentioned reading a safety document that warned him to beware of snakes, scorpions and spiders.

Bob Morris reported that the Billy Jones Wildcat Railroad ([www.bjwrr.org](http://www.bjwrr.org)) in Vasona Park in Los Gatos, California may be getting a new locomotive soon.

### **Non-Steam-related Activities:**

None reported.

### **Officer's Report:**

Treasurer John Lisherness reported on the club's finances and the club treasury is growing steadily. More information can be obtained from him if interested.

### **Committee Reports:**

Building and Grounds Chairman Rich Lundberg discussed the following items:

Expect some construction next to the yard to replace the temporary fence with a permanent regulation chain link fence to allow the Public to view yard activity from a safe location. The walkway will then be paved the same as the patio.

Kudos to Bill Smith and others for the ingenious repair to the full size wig-wag (banjo) signal by Tilden Station so that it doesn't bash the tree trunk next to it.



*Bill Smith's modification to the wig-wag signal*

Bad news was reported by Andy Weber with regards to the club facility's water supply as there were many broken hose bibbs that had to be replaced. The use or installation of some mechanical way or to employ some procedure to alleviate the freezing pipe problem was again discussed but there seems to be no reasonable solution other than to be aware of the problem. Members are again requested to properly shut down and drain any water system that they activated.



*Freeze damaged hose bibbs*

Work on the signaling system continues and all the controllers except for one have been updated to the latest version. If there are problems with the signaling system, please fill out a signal error report form in the club house.

Jim Dameron wants to remind people that if they see rocks or debris between the points of the switch, to get



a screwdriver or stick to help remove them. Also be on the look out for vandalism on the club facility. Recall the removal of a track joiner on the outside track that was reported last month.

Public Train chairman John Bouey reported that the attendance from the public was down by half last month probably due to the temperature, weather and/or the football playoffs. Also 3 club propane tanks were found empty when no public steam engines were operating, so steps are being taken to prevent this from happening again. Any member that has a fairly large steam locomotive that could help pull the Public Train would be gratefully appreciated until the club locomotives come back on line.

Engine chairman Mark Johnson acquired some parts for the club's steam locomotives for Bob Cohen to attach. David Waterman is going to remove the Atlantic's boiler for a tube leak inspection and boiler evaluation by John Lisherness. John is still continuing the club Pacific's boiler rebuild and the Hunter Atlantic boiler's safety(s) are being worked on along with its injectors. The Baldwin diesel runs but is being investigated for a starting problem.

Rolling Stock Chairman Rich Croll is in the process of replacing one of the truck's ball bearings with needle bearings to see if he can salvage it. He also has a nice seat for the conductor car of the Public Train that is to be installed shortly.

Web/Call Boy chairman Pat Young mentioned that the club web site is pretty stable and he is ready to begin migrating technical articles from past CallBoy issues onto the web site. If anyone has a technical article that someone would benefit from, please send it in.

### **Old Business:**

The Spring Meet's needs a non-Board member to lead it, so if interested, please contact Rich Lundberg ([luckylundy@sbcglobal.net](mailto:luckylundy@sbcglobal.net)). Rich says that if you can't do it, nominate your neighbor or friend. Rich Lundberg talked more about the media raffle where participants received raffle tickets for items into the raffle pool. People would bring in books, magazines, videos and other items of interest or not, and for each

item a raffle ticket is received. The items are bundled up, assigned a raffle number and are awarded to the winner. This event is to be done after the March club meeting, so come on down, participate and enjoy! More information can be found in this issue of the CallBoy.

### **New Business:**

An official face-to-face meeting to the East Bay Regional Park District was attended by President Rich Lundberg, Vice-President Bern Holman and Ombusman Ken Blonski in January. Discussions included clearing of brush or any other fire hazard on the club facility. The club involvement with the Park District have evolved thru the years and the club is much more beholding to the good graces with the Park District. The club is striving to continue and forge an even closer bond and communications with them. One of the new requirements is for the club to submit a yearly summary report that will include membership numbers, the number of people that the Public Train transported and possibly other facts to help justify the our existence on Park property. There was also discussion of a problem with some non-native pine trees that we hoped the Park District could provide some assistance in cutting down but they weren't able to help us. The club's Boyer's Bluff development was also discussed with the Park District and will be addressed further when more information is available.

The Board has voted to modify the policy to allow fully qualified 16 or 17 year old members to operate the Public Train as long as there is a qualified adult riding in the first car behind the engine. Although it does not ease the dilemma of not having enough qualified individuals to man the Public Train, it does allow the engineer a chance to rest when the teen engineer is running the locomotive. But even with this change, the Public Train still desperately needs volunteers to operate the trains. If you can donate any time on any Sunday, please contact John Bouey ([johnb@morcompost.com](mailto:johnb@morcompost.com)).

And speaking of volunteers, if you can help out or have some skill set that can benefit the club, please feel free to volunteer your time to help spread the load that many members bear in keeping the club running smoothly. All efforts and time offered are appreciated!

With the continuing and much appreciated effort by the Engine committee and other member volunteers to get and keep the club steam engines in a runnable state, the Board is investigating the possibility of having one of the club steam engines made available during certain designated periods & under qualified supervision, available for members for recreational use. The investigation is in the preliminary stage and more information will be disclosed in the future. If you have comments about this, please contact Rich Lundberg at ([luckylundy@sbcglobal.net](mailto:luckylundy@sbcglobal.net)).

On a different note, 2 items of interest for members of the club that use computers for more than just surfing the net and reading mail, Rich wanted to pass on two 'slick' applications that he was introduced to. One deals with the issue of computer information 'backup' to save an image of the computer system environment and the user data that resides on it for data recovery. He recommends using a free application named CRASHPLAN ([www.crashplan.com](http://www.crashplan.com)) that will download everything onto a friend's computer or external hard drive so that in case your computer crashes or data is lost, the data can be recovered. Not only that, it does automatic periodic 'change' dumps so at some set interval, it will identify what files have been changed and save the changed files to keep the backup up-to-date.

The other application with great potential is a operating system "virtualizer" from Oracle called "Virtual Box" ([www.virtualbox.org](http://www.virtualbox.org)) that allows an earlier unmodified operating system & its environment (eg XP) to run on a special environment on top of a current PC or mac operating system (eg System 7) at near host speed. Rich uses it to run an XP copy of AutoCAD LT 1997 on his new PC with System 7.

Thanks goes to John Smith is putting together a larger can/bottle recycling stand outside by the club house.

### **Board Meeting Minutes:**

The February 10, 2013 Board Meeting began at 11:56 pm. Board members present were Ken Blonski, Bern Holman, John Lisherness, Rich Lundberg, Sheldon Yee, Pat Young with Bob Cohen, Rich Croll, Rick Zobelein attending.

### **Old Business:**

The passage of the motion to allow qualified 16 and 17 year old members to operate the Public Train providing there is a qualified adult riding in the car immediately behind the locomotive has been confirmed by all the Board members.

In future proposals, a sunset clause that has a set time limit that would allow proposals to die if it doesn't work.

Bob Cohen discussed further, on the approved 12-tank outside propane storage locker for round house member usage. The location selected is close to the round house and funds have been appropriated by Board for the purchase of the least expensive unit or obtain a donated unit if possible. Management of the propane storage locker is being done by Bob and if interested, contact Bob Cohen at ([rcohen@lumiereprod.com](mailto:rcohen@lumiereprod.com)). Note that this storage unit will be restricted to roundhouse stall holders.

The recreational use of a club engine proposal is being postpone until all of the club steam engines are functional and it is being requested of the Board members to think more on the pros/cons, practicality, etc. of the proposal. A procedure for awarding the Dick Thomas award for innovation needs to be created is still under investigation. Charlie Reiter as Technical chairman will be asked to develop a procedure.

### **New Business:**

A proposal was send out earlier by the President to the Board members to continue the building policy used previously by the Board and members during the construction of the round house and apply it to development of the area around Boyer's Bluff that involve the construction of an engine barn and transfer table. This policy is to have the members build a Board approved structure at their own expense, after which they would be allowed to use it rent free for a prescribed period of time after which the club assumes ownership and starts charging rent. Vice President Bern Holman brought up the question of whether or not the building cost should be somehow be tied to rent amount. This and the rent determination has not been resolved yet. More ongoing investigation, planning and developing is still to be done for Boyer's Bluff and if interested,

contact Bern Holman ([enreb4talako@gmail.com](mailto:enreb4talako@gmail.com)). The Atlantic's Boiler condition was discussed. In order to do a thorough inspection and repair, the boiler needs to be removed from the locomotive chassis and could be the perfect job for the teen members to undertake. Since the club's steam engines seem to require constant repair, Bob Cohen made a proposal to use some of the club's money to purchase a 2.5" scale, narrow gauge locomotive for use on the Public Train. The Board was favorable to the proposal and Bob will head up a committee to investigate this further. so if interested, contact Bob. The issue of responsibilities pertaining to junior members within a family membership was re-visited and discussed. It may be necessary to spell out, in more detail, what the rights and expectations of a junior member in a family membership are to be. Also there was a lengthy discussion on the reoccurring issue of how to deal with the awkward situation of having to communicate with a junior member and adult authority in which no clear solution was forthcoming. A question was asked about a junior member staying if he drove himself to the club without a parent. But the club rule is still in force stating that a junior member coming down to the club facility by him/herself is not allowed if a parent or guardian is not present. Finally, a suggestion was made that the junior members should participate at the club meetings since the information also pertains to them.

Each Board member has been asked to provide a written job description outlining their official duties so that a document is available on file, summarizing the expectations of such office. This will be completed in the near future and that information will be inserted into the file cabinet.

### **Bits and Pieces**

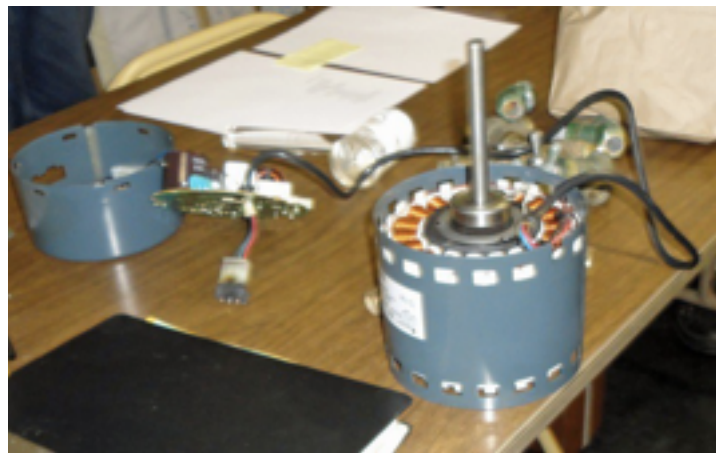
By Stan James ([sjames563@gmail.com](mailto:sjames563@gmail.com))

A very good showing this month of member's 'Bits and Pieces'. Perhaps because of the recent prompting towards more members participating in this part of the Club's activities. It is possible that the impression has been created that only current project are to be displayed, and while current activity projects are the ones generally shown, they need not be the only ones. Building an engine is usually a lengthy process over many years and various problems have to be

solved, often by unusual means, that are not time dependent in their interest to others. So, whether something of interest was done recently, or ten years ago, is of no consequence, bring it to one of the club's monthly meetings and show it to other members at 'Bits and Pieces' and help somebody else.



Andy Weber showed a brass 90 degree ducting part that demonstrated an unusual fabrication technique.



Of more technical interest was an ECM electric motor, a type that remains very efficient at the variable speeds that it can be run at. Other types of motors can have their efficiency greatly reduced when run at higher or lower speeds.





Richard Rizzoli displayed a very nice six-wheeled tender truck for a Pacific locomotive that he is building. The truck was notable for its fine detailing and finish. We look forward to the day when this assembly will roll on the club's tracks.



Charlie Reiter brought the center truck for the Heisler that he is resurrecting. Though he explained that he may not 'drive' it, as well as the other two trucks, because of the difficulty involved in making the connection to the drive shaft.



Charlie also showed a nicely made stainless steel tank, that was the major part of a 'mist' cooler-lubricator on a lathe, but could be used in other applications.



Jerry Kimberlin demonstrated the principle, noted above, of things being of Interest, regardless of the time of their fabrication, and a little prompting by myself, by showing an eccentric turning fixture. An article in the 1991 Model Engineer described such a device, though it was designed to fit the Myford ML7 Lathe, and be fabricated on it. Jerry modified the design to suit his 13" x 36" lathe and built his version of it at about that time. Jerry also showed a radius turning device of his own design, a part of which was the incorporation of a fairly lengthy ball ended handle. This enables a smoother feed to the radius turning operation, plus it keeps one's hands further away from the cutting process, adding to its safety. Another interesting feature is the 'slide' that feeds the cutting tool in and out, it has a graduated dial, similar to the 'top slide' of the lathe. Most such devices have only a crude means of making tool adjustment.



Rich Lundberg showed a collection of devices meant to be used for marking out angles, both for wood and metalwork projects. A common limitation of the readily available devices is that the 'arm' against which the marking scribe, or pencil, is run, is very short, and thus not long enough to give an accurate long line, at the correct angle. Rich's answer to this problem was displayed in a collection of 'gadgets' and devices, best envisioned by looking at the accompanying photographs.

### **Don't Miss It!**

### **Book /Video Exchange at the March Club Meeting**

By Rich Lundberg

We will be having an exchange of books, videos and anything else you can think as appropriate at the end of the March club meeting. Items should be relevant to railroading, model railroading, live steaming or model engineering. The exchange will be done similar to what was done in the past at our annual dinners. You will receive one raffle ticket for each item you bring. The Master of Ceremonies will hold up an item and draw a ticket. The ticket holder will then get that item. The drawn ticket will then be recycled into another container. In this way, each person should take back something to replace what he brought. After the initial drawing, a second drawing will be held for items donated by the club. The drawings will be held immediately after the March club meeting.

### **Workday Summary**

By Rich Lundberg



*Loading Andy Weber's truck for a trip to the dumpster*

February's workday was a great success with over 25 members participating. One crew under the direction of Sheldon Yee cleared all the brush from behind the Shattock Barn. One load was hauled away but there are many left to go.

Bob Morris' crew finished up the new retaining wall out on the Heinz loop. The Signal crew installed the last controller and did maintenance on the system. The young members worked on the roundhouse tracks and painted and coated one of the tenders. Suzanne was gardening all day. All in all a very productive day. Many thanks to all concerned.

### **The Fear of Failing**

By Charlie Reiter, Technical Chairman

As the technical chairman, I am supposed to respond to requests for technical information from the membership.

The system was devised based on a topic being requested and then vetted to see if there is enough interest in the topic to warrant taking up everyone's time with a presentation. This is then followed by finding someone conversant with the subject that was willing to develop and present information. Well, it seems with fewer members building, there are not a lot of topics requested and not much interest in extending membership meetings with technical discussions. This has caused me to take a different approach of trying to meet the member's needs by occasionally publishing some information in the Call Boy. This should tie in well with the technical articles that Pat Young is intending to re-publish in the Call Boy. One topic that



keeps popping up from various individuals is the reticence they experience in undertaking some machining operation due to the fear that the individual is going to "screw up". Simply, it is the fear of failure. We all experience it to differing degrees as we all screw up and then have to figure a way out of it. Give this some thought. We all have a group of skills and do something with all the confidence in the world and are ready to assume the burden of consequences for our actions.

Take the very generic example of driving an automobile. There was a time that you could not or did not drive and the complications of driving seemed difficult. But now most of us simply pick up the keys and just go do it, and that car is worth a lot more than the casting you have spent the last two days contemplating. When you get in your car you try to avoid accidents but sometimes they are unavoidable. But rather than let fear of failing keep you off the street, you say "I'll fix it" and that is exactly the message I want you to think about.

I have seen technicians drill the wrong size hole in the wrong place in million dollar parts. Sometimes that hole remains as sort of a makers mark reminding us all we are human, but more often a solution to the problem is found and in review the participants are prouder of the fact they fixed it even after they blew it in the first place.

I like to restore and rebuild old equipment as well as building new. The older stuff is more interesting from the standpoint that I get to see how others have made or messed up what they built. On a recent engine, the eccentric rod had what appeared to be a crack in it. It turns out that the rod was either lengthened or shortened by silver brazing the "blade" onto the eccentric follower and the fix showed. I left the fix as it was, because it was fully functional (the engine ran well) and is a makers mark showing the heritage of the part.

I have seen and made lots of fixes to improve performance or aesthetics. Even when you're perfectly right, in the live steam hobby, the numbers on the prints are often highly questionable. I finished my British Showmen's engine after many years of struggle by studying similar models on internet advertisements. They had modifications that were not in the plans. I have also set castings aside and made a part from bar stock because it's easier. The

point I'm leading to, is that you can't fail if you don't start, and you can't finish either. So JUST DO IT. I guarantee you will be able to fix the mistake, and you will gain the experience by fixing the problems.

Lastly, let me just encourage members to present items made (and problems also) in the Bits and Pieces segment of our meeting. Mistakes are more important than successes as we all learn from them and maybe you will get a great suggestion or help. I am the perennial presenter at B&P and if you listen, I generally talk about the issues that had to be overcome to make the part.

## **Mystery Tunnel At The Track**

by Michael Smith



Now that our Saturday work crew has cleared the brush from behind the Shattock Barn during last weekend's work day, suddenly a track and large doors appear on the hillside visible from our facility. What could this be? Is this part of our property with a long forgotten tunnel for a future GGLS track expansion project? Could it be an entrance for a long lost gold mine with riches for the digging? Unfortunately for us, this is only a short cavern from our neighboring Redwood Valley Railroad used for storage of a flat car. Since there is only one opening and only extends less than 50-feet under the roadway, we can't even call it a tunnel. Apparently, at one time Redwood Valley had wanted to expand their railroad on the hillside north of our track. With a change in roadway from the park district, the railroad expansion project never materialized and instead extended from the original

railroad heading in a northwesterly direction as the present track plan.

If any other members have additional information either on this “tunnel”, our property (which was one part of the US Army’s Nike missile defense screen for the Bay Area) or surrounding areas and you think would be of interest to members, please write a short article in the CallBoy. It is guessed that our public train crew will now be asked questions of these doors when guests notice them as they ride around our track.

### **For Sale**

January 10, 2013

### **The Shay Locomotive, Titan of the Timbers**

numbered and signed by Michael Koch

Limited edition in mint condition.

No price mentioned but if interested contact member Bill Ulleseit in San Jose, California.

Cell (408) 221-5595

Home (408) 292-5302

### **For Sale**

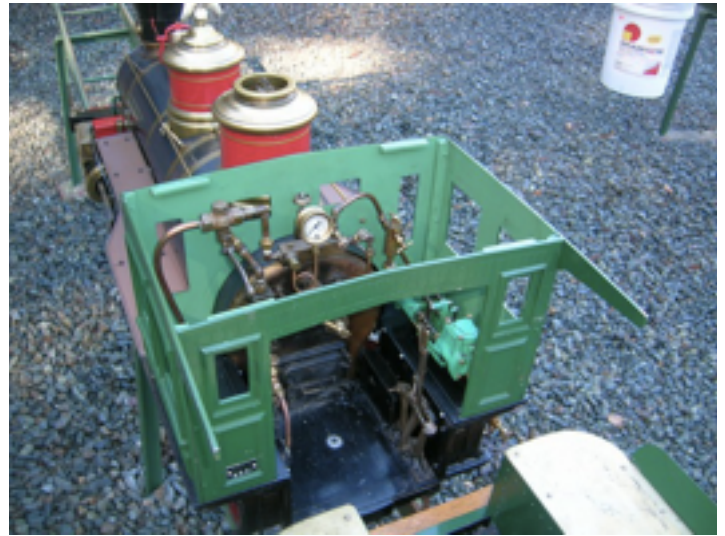
February 17, 2013



Selling a read-to-run 1.5 inch scale 7.5 inch gauge Railroad Supply 4-4-0 American steam locomotive and tender. This is a beautiful operating locomotive which would make any live steamer proud to be the new owner.

The locomotive has a copper boiler, spun copper diamond smoke stack, brass domes, safety valves,

steam whistle, duplex feed water pump located in the cab, an All-American pressure gauge, crosshead feed water pump, mechanical lubricator, in addition to many other details.



The sight glass piping was recently upgraded in order to comply with current GGLS club safety regulations which require the water sight glass to be blown down from either the top or bottom boiler connections. The majority of screws have been replaced with high strength alloy socket head cap screws. A RRSC headlight kit with mounting brackets and a machined bark set is included for installation by the buyer. Major portions of the engine and the tender have recently been cleaned to bare metal, primed and painted with oil based enamel paints. Lettering and numbering is left to the new owner to suit their favorite railroad line and preferences.





The tender is fabricated from brass/copper with a brand new single sheet of 16 gauge brass for the tender top. The tender is equipped with the standard RRSC manual feed water pump, a knuckle coupler and motorcycle style folding foot pegs. The Central Pacific style sprung tender trucks are highly detailed and roll on ball bearings.



The copper boiler was tested to 1 1/2 times its operating pressure along with a wheel gauge check on 02/05/12 by a GGLS club boiler inspector. The locomotive is coal fired has been run under steam at the GGLS facility on numerous occasions. The last run was on January 6th, 2013 where the locomotive freely ran around the track for a number of hours pulling two adults. The locomotive has Golden Gate Live Steamers (GGLS) boiler tag, No. 325.

A shovel, coal poker, air blower for starting the fire, and bucket of coal are included. A set of drawings are included. The locomotive can easily be converted to propane for those wishing to fire the locomotive on this fuel.

The only reason we are parting with this beautiful locomotive is the fact that we have 4 other steam locomotives and space is at a premium in our garage machine shop.

Asking \$13,400. Can be viewed at the Golden Gate Live Steamers track in Berkeley, California. Will steam up and demonstrate for buyer on day of sale. Please contact Michael B. Smith at (650) 615-0475 for information.

**For Sale**  
March 2013



Shay for Sale: Contact George Delucchi.  
[gdelucchi@cpa-online.com](mailto:gdelucchi@cpa-online.com). 408/983-0503

**PORTOLA VALLEY & ALPINE RAILROAD,**  
499 Old Spanish Trail, Portola  
Valley, CA 94028

Driving Directions:

**Southbound:**

Take ALPINE RD. exit off highway 280 (roughly 8 mi. south of Redwood City)

1. Go RIGHT on ALPINE RD. (drive approx. 2.4 mi. westbound)
2. Go LEFT on LOS TRANCOS (drive approx. 1.9 mi.)
3. Go LEFT on ROMONA (drive approx. 0.7 mi.)
4. Go LEFT on VISTA VERDE, (drive approx. 0.3 mi.)

5. Go LEFT on OLD SPANISH TRAIL to  
PONY TRACKS RANCH

entrance (495/9 Old Spanish Trail) and follow train signs after passing the gate. It's the first gravel road on the left.

**Northbound:**

1. Go LEFT on ALPINE RD. (drive approx. 2.4 mi. westbound)
2. Repeat 2-5 above.

(The location is up in the hills west of 280 with several winding, steep roadways. The gated entry is on the left and activated by pulling up directly to the gate. Strongly recommend bringing a printed map!)