



Wes Peterson (center) from the Riverside Live Steamers ran his equipment during a visit to his family in Sacramento. Welcoming them were GGLS members Sammy Tamez (left) and Anthony Rhodes (right).

The CallBoy

November 2022

Pat Young CallBoy Editor
10349 Glencoe Drive
Cupertino, California
95014

The CallBoy Newsletter

Official Publication of the Golden Gate Live Steamers, Inc.
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Tilden Park 2491 Grizzly Peak Blvd, Orinda, California 94563	Pat Young, Editor phty95014@yahoo.com November 2022	A 501(c)(3) Non-Profit Corporation www.ggls.org or www.goldengatels.org
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Board Officers

President:	Jon Sargent	510-233-6481
Vice President:	Rich Croll	510-227-9174
Secretary:	Matt Petach	408-256-2883
Treasurer:	John Lisherness	510-647-8443
Safety:	Jerry Kimberlin	510-809-7326
Director at Large:	Mark Johnson	510-889-9451
Past President:	Rick Reaves	510-479-3386

Ombudsperson

Lisa Kimberlin 510-214-2595

GGLS Trust Fund Members

John Lisherness
Jerry Kimberlin (elected March 2015)
Sammy Tamez (elected August 2022)

GGLS Committee Chair People

Bits & Pieces:	Jeremy Coombes
Boiler Testing:	Jerry Kimberlin
Building:	Rick Reaves
CallBoy Editor:	Pat Young
Engines:	Paul Hirsh
Grounds:	Andy Weber
High Track:	To Be Determined
Landscape:	Jo Ann Miller, Bruce Anderson
Librarian:	Pat Young
Membership:	Sammy Tamez
Public Train:	Walt Oellerich
Refreshments:	Walt Oellerich
Rolling Stock:	Rich Croll
Round House:	Michael Smith
Security:	Jon Sargent
Signals:	John Davis
Technical Talks:	Charlie Reiter
Track:	John Lytle
Web Site:	Pat Young

Club Correspondence

All correspondence to the Golden Gate Live Steamers should be sent to the secretary, Matt Petach at this email: secretary@ggls.org

Membership

To qualify for membership, attend 2 monthly meetings. At the first meeting, please introduce yourself and obtain a membership application from Membership chairman or Secretary. At the second meeting, return your completed application, a signed release form, the yearly prorated club dues, together with the \$25 initiation fee and you are officially a member.

CallBoy

Articles, pictures, photographs, items for sale or any other information that would be of interest to the club should be sent to Pat Young, the CallBoy editor at phty95014@yahoo.com

Deadline for submittals to next month's issue is the 19th!

2022 Calendar of Club Sponsored Events

11/13	General Meeting/Board Meeting
11/19	BAEM meeting
12/10	Club reserved for BAEM potluck
12/11	General Meeting/Annual Meeting/Board Meeting

Announcements

The 2023 Board officer elections are approaching and the current 2022 Board members have agreed to run again. But if you are a qualified member & would like to serve, Lisa (our Ombudsperson & head of the Nominating Committee) encourages you to run for a position.

So if you would like to run for office, please contact Lisa Kimberlin (scorpeo@comcast.net), and state your name & the position you would like to run for.

Jon announced that membership renewals are due now where there is a 10% discount up until Dec 31st.

The Roundhouse and storage rental fees are also due now. Rates increased in May to \$300 for roundhouse, while all other storage track rentals fees increased by \$50 per track for 2023.

The membership renewal & storage track rental form can be found at the end of this issue of the newsletter.

Jon announced that the combination on the Shattock Workshop doors has been changed while the RG20 is up on blocks, having the driver work done. Louis Bradas asks if some tools can be made available on run days for members.

Guests and New Members

We heard from a returning member who has been gone for a year; he asked if we have a "new member" packet or something, as he hadn't gotten anything since he joined. We will look into putting a welcome packet together for new members.

Railroad Activities

Bruce rode behind a 118-year old locomotive at the San Francisco Zoo. Dave Bradas said it was a 22" gauge train. Locomotive was built in 1904, arrived in San Francisco in 1924.

Bruce also pointed out it's almost the 50th anniversary of BART.

Minutes of the General Meeting

Officers Present: Jon Sargent, Matt Petach, Jerry Kimberlin, Mark Johnson, Lisa Kimberlin, John Lisherness, Rick Reaves is present as past-president, Vice President Rich Croll is absent.

President Jon Sargent called the General meeting to order at 1003 hours Pacific time.

Officer Reports:

No officer reports except for the Treasurer, who gave an update on the club finances, and the Secretary, who will reach out to Portola Valley & Alpine Rail Road and Sacramento Valley Live Steamers to coordinate our two meet dates for 2023 to avoid any conflicts with their meet dates.

Committee Reports:

Grounds: Andy thanked Jo Ann and Bruce for their ongoing work on the landscaping, and asked for help cleaning out the drain line behind the station.

Roundhouse: Jon & John have been working to rodent-proof the building. A few more weeks and the stall doors should be done, although John noted it helps if people with equipment can come and help with the installation of their tracks.

Ground Track: Paul noted we have to re-weld a switch frog by the station. John Davis pointed out the track leading to the shop is in bad shape with a lot of loose rail and an abrupt kink. People that who know how to fix track need to step up and help fix that.

Landscape: Lake JoAnn is looking really nice!

Locomotives: Hunter, RGS22, Diesels are all working except the Heintz Atlantic needs more work and RGS20 is in the shop.

Please put the tools back. We are out of 7/16", 1/2", and 9/16" wrenches again.

CallBoy: Pat will put membership renewal form in the CallBoy and on the website.

A gentleman is selling GGLS belt buckles for \$30. Pat will verify it is legitimate and if so, will put an ad in the CallBoy.

Website: Pat has been putting Charlie's tech talks up on the website, and was going to list some items from Dave Bradas for sale, but Rick Reaves snapped them up as soon as he started to describe them.

Old business:

No old business.

New business:

Andy Clerici's wife Louise is selling their railroad equipment and their house; there is his steam engine, Louise & car, and a trench engine with two cars, a shop full of equipment. Dave Bradas will coordinate the sale of the items.

The members meeting was adjourned at 1051 hours Pacific time and then moved right into the Bits and Pieces segment.

Minutes of the Board Meeting

Officers Present: Jon Sargent, Matt Petach, John Lisherness, Jerry Kimberlin, Mark Johnson, Lisa Kimberlin, Rick Reaves; Rich Croll is absent.

President Jon Sargent called the meeting to order at 1127 hours Pacific time.

Mark Johnson made a motion to approve the September 2022 meeting minutes. Rick Reaves seconded the motion. No objections, no abstentions, the motion passed unanimously.

Old Business:

John noted he already fixed Bob Cohen's roundhouse track, so no need to discuss that.

New Business:

Combination Locks: Jon reviews the list of names Rich had put together last year for the limited access combination padlocks. We noted a few names that should be removed from the list.

Audit Committee: Lisa reported the audit committee has finished reviewing the financial documents, and the committee has signed off on the documents.

Matt volunteered to be the second person on the nominating committee with Lisa.

Parking Lot: Rick made a motion to accept the American Paver bid and move ahead with resealing the parking lot. John seconded the motion.

During discussion, the Board agreed to have John talk to Tiffany first to find out what East Bay Regional Park District (EBRPD)'s response is, to find out if they have a preferred paving company we should reach out to, and the motion was tabled pending that answer.

Bruce requested permission to donate a yellow stripe across the driveway entrance and mark the driveway as "GGLS" to keep the Public out.

Rick made a motion to allow Bruce to paint a yellow line denoting the driveway as private. John seconded the motion. During discussion, it was agreed it should wait until after the repaving/re-sealing of the parking lot. Additionally, we should check with EBRPD to make sure they are OK with us marking the pavement. The motion was tabled until Jon speaks with Tiffany.

Storage Track: The Board discussed two members who have storage tracks but have not met the terms of the agreement, and agreed that Jon will call them to let them know their agreements are being terminated due to failure to abide by the terms of the agreement.

A proposal is made to put a cap on the total number of tracks any one member can rent, but no motion is made.

The Long Barn rehabilitation was discussed, but as the Smiths are not here to discuss it, the topic is tabled.

Club Magazine Subscriptions: The Board agreed to have Pat renew Live Steam & Home Shop Machinist, but noted that he needs to bring the magazines up to the club where others can read them too.

New Member Packet: A proposal is made that we prepare a new member packet with badge, safety booklet, standing rules, etc..

Electronic Donations: Mark made a motion that we pass a resolution empowering the secretary to work with the treasurer to complete whatever steps are necessary to enable the organization to accept electronic donations. Rick seconds the motion. No Nays or abstentions, the motion passes unanimously.

Jon adjourned the meeting at 1240 hours Pacific time.

Bits and Pieces

by Jeremy Coombes

From Jeremy: A big thank you to Bruce Anderson & Pat Young for the photographs.

Paul Hirsh showed the rear driving wheel set from the club RG20. This locomotive needs tire replacements on all drive wheels. No, not the black rubber things, a replaceable ring that is fitted to the Outside Diameter (OD) of the wheel and contacts the rail head.



During use the wheels have slowly had a groove worn into them by the rails. Paul is leading the effort to remove the wheel sets and Jerry Kimberlin has been coerced into machining the wheels and shrink fitting the new tires. Jerry explained that the OD of the wheel will be machined .004 to .005" larger than the Inside Diameter (ID) of the tire, and a step will be left on the OD. Jerry was asked why the step was needed and he replied "Because John Lisherness said so." That's good enough for me!

The assembly process involves heating the tire to around 450 degrees F and then quickly placing the ring (tire) onto the wheel. The step acts as a registration feature to properly align the two pieces providing a "hard stop" to achieve the correct location before the ring cools and the two parts are shrunk together. For more information on different types of fits and

clearances “Machinery’s Handbook” is the definitive source.

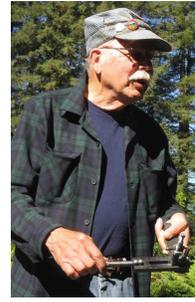


Andy del Hierro has been doing some sheet metal work and improving his riveting skills. He brought along his tender tank assembly for the Ken Schroeder Shay he is building. It is a kit from Allen Models and appears to be a nice way to build a tender without some of the frustration. Andy reports the pieces are cut and shaped to size and the rivet holes “spotted through” with the laser cutter, which requires the builder to open up the holes to a slightly larger size during fitting and assembly.

The kit also includes a set of Cleco clamps to keep the holes aligned while rivets are being installed. Andy is doing a nice job of assembly and the rivets look good; and there are quite a few of them! Keep on going Andy, I’ve heard riveting gets easier after the first 15 or 20 thousand!



Paul Wallace, a visitor and potential member, gave a brief introduction and told us of the 12” gauge Ottaway locomotive he is currently recommissioning. It belonged to his grandparents and was run regularly at their property. Paul had the propane burner system and the boiler feedwater steam pump and asked for advice about restoring them to working order. His goal is to have the engine running again sometime this year. After the meeting several members discussed options with Paul regarding potential rework plans. We look forward to seeing photographs of this engine at future meetings.



Past president Rich Lundberg showed a ball turning tool he made several years ago. It was nicely fabricated, and Rich reported he has made many parts with this simple but elegant tool. I have not had a need to turn a radius and therefore do not have a ball turning attachment; however, I’m beginning to get an inferiority complex after the recent rash of ball turning devices brought in by members.

Hmm. Maybe I should root around in my off-cuts pile and see if inspiration strikes.

Pat Young made the mistake of showing his wife some of the nice pieces he has been making with his 3D printer recently. She was duly impressed and asked if he could print her a badge for her Optimist International club. And Pat, being a kind husband and a 3D printing opportunist, readily agreed. He created a CAD model of the logo and set about making test pieces. The first was too small and his wife didn’t like the grey color. The second one was too big and needed adjustments to improve detail.



But the third one, made from iridescent gold colored filament, was just right. Seems I’ve heard something like that somewhere before!

Pat’s wife was pleased, and Pat got to make other stuff. So, at the end of the day, all was well, and they lived happily ever after. At least that’s Pat’s story, and he’s sticking to it!

Shop Practice X3 Drills and Drilling

This is a big subject. There is no other shop process that is used more often than drilling and, so often we just go ahead and drill without even thinking it through. “Just pop a hole in it” and that is of course an expedient and praise worthy attitude but it also is the hallmark of the casual and inaccurate machinist.

We do it so often that we don't give it much thought, and we rely on previous experience to guarantee the results. So many times I have drilled without adequate preparation and the results have been less than stellar. The hole that is slightly off or out-of-round or even oddly, the wrong size, all use up our available shop time to remedy the problem. I chastise myself for not taking the time or not being bright enough to visualize the outcome but then I do it again. Certainly work holding plays largely into this.

Using a starter or center drill is good practice and making a punch mark for the drill to pick up is necessary. Here I will say I do not recommend "automatic" center punches. The common prick punch and a light hammer is far superior. Yes, you can screw it up and punch off center but at least it's you and not the tool.

Larger drills have a very pronounced center flat wedge which is being pushed into the work. Its action is scraping out the center of the hole at low speed and this is where a lot of the resistance in drilling is. As you decrease the size of the drill that flat gets smaller but it's still there. By using a starter drill you get the advantage of a small flat and a stiff body, so it does not wander. Then by using progressively larger drills to open up the hole, it usually remains right where you planned.

A huge factor for success is using the right drill and it being a sharp drill. Mostly we use "twist" drills as they are so versatile. I now am much more aware of drill sharpness and actually will go through a drill set sharpening those that are dull when I have extra time, and I check each drill as I start its use.

Having a drill sharpener unit has helped with that but it can only sharpen twist drills 1/16" up to about 5/8". That leaves a lot to do by the hand held method but you can either throw it away & replace it or give it a shot. I will admit to having over shortened some drills in the pursuit of a sharper edge. This can be a bad thing as many twist drills have a thicker web as you grind back into the body of the drill. "Splitting" the point, or grinding to thin the web is a very useful attribute of some drill sharpeners.

About sharpeners: The sharpener is just a tool and it will only do a good job if it is used with care. There are many types but I have found the Drill Doctor to be the best compromise. It's versatile and gives a decent edge. The best part is that it's small, it's fast and can live on the crowded bench next to the drill stands. No longer do I have the thought that "there are only 6 more holes to do so I can make it". Now I just touch the drill up.

It would be very worthwhile to spend some time

learning about the geometry of the twist drill. You may never have the occasion to make a special grind for a particular drilling application but having a familiarity with the standard drills will allow you to troubleshoot the problem you're having. You are directed to Machinists Handbook and of course it's all on the internet.

I have accumulated a lot of drills in part because I can resharpen and have collected handfuls of used & unsorted drills. I have also been very fortunate to have been able to buy used drill sets from shops that have been closing or friends downsizing. I even have drills my grandfather used.

Then there are the specialized drills made for a particular use, shortened and lengthened ones are the most common but also really flat angle on the edge. And if you do woodworking there are many boring drills. Having number drills in standard, brass dubbed, stubby and square ended, is a real luxury and for the work I do, having letter and also fractional drill sets in standard and brass dubbed, makes the work at the drill presses go much faster.

What I mean by brass, or dubbed drills are drills that present a square cutting edge to the work so they do not hog in. You can make them by grinding the sharp edge into a little flat. Also useful for drilling plastics, the coolest ones are straight flute, no twist, because a dubbed twist drill will still hog in if you become too enthusiastic at the down feed. Be sure to keep the dubbed drills separate since they will be very dull for drilling steel and just tear up wood.

Any drilled hole will benefit from being drilled in a drill press. Having the work on a surface that is square to the tool and the chuck being referenced stiffly to the table keeps errant motion to a minimum and allows you to control the down feed, hence the load on the tool.

A drill press vice is a very good idea. As well as adding bulk and stability to the work, they also are useful around the shop for other purposes, they even make good door stops.

By far the best drill press is a milling machine and if you have one, it makes heavy drilling & large cutters much safer & reliable. I am opposed to using gloves around machine tools as they can be a real hazard but when drilling holes in a sheet metal assembly I will wear a leather glove on my left hand. I am very careful about it, using a position & posture that will push my hand away rather than pulling it in. But sometimes it is not practical to fixture something and you have to hold it. I think it has something to do with requiring 5 stitches.

There are many types of drills and some of the

specialized ones can really make you work cleaner with more accuracy. Unibits or step drills are really a great addition to the shop. With one tool you have a set of drills where they excel at thinner materials and they give very clean holes. They can drift a little but usually they will stay right there and rather than change drill bits you simply go down to the right size. I mark the right depth with a sharpie pen to simplify the depth. I recently noticed another attribute, that since these drills have a standard size shank, 1/4", 3/8", 1/2", you don't have to change from a collet to a drill chuck to drill in the mill. That saves a setup pause.

Hole saws are very useful as well. They start at 5/8" and I have seen them up to 8". Hole saws are tricky and don't give the cleanest holes with size wandering. They chatter and the teeth load up but to get a big hole they are expedient. You have to withdraw the tool often to clear the teeth so I like to keep a paint brush at hand to brush off the teeth. By drilling a hole on the waste side of the hole you're making you can create a chip drop point that helps keep the saw edge from loading up. Slow speed always helps and remember that the edge of the saw is traveling much faster than the small twist drills you are used to using. A job I have found hole saws extremely useful for is trepanning. This is the process of cutting out the center of a piece in the lathe. For instance making a 3" hole in a 4" round you can use a 2 3/4" hole saw without a pilot and saw through thereby saving a piece of material, then bore to the desired size. Use a cutting fluid and clean the teeth frequently.

Speaking of cutting fluid, in metal it is always wise to use cutting fluid. Tools stay sharp longer and hole quality is improved. If you need to keep the work clean you can always use alcohol as a cutting fluid. The best method I have found for adding cutting fluid to the work is an unbreakable tank with a good base, tall enough to hold a couple of acid brushes upright. Then you fill it with less than an inch of fluid. When the inevitable happens and you knock it over there is less waste and less to clean up.

End mills make very accurate holes. It helps to first drill out with an undersized drill to remove the heavy burden, and then re-drill with the end mill. End mills are not designed as drills and have limited center cutting ability. An end mill can give an excellent on-size hole with the quality of a reamer. This is the sort of thing you should test before committing to making a critical hole.

You can't drill an accurate hole on an angled surface, they deflect, but you can use an end mill to spot the surface to flat to make it right.

Reamers are all about hole quality & size, but if the

hole is not in the right place you will have a great hole in the wrong place. Reamers just follow what is already there. There are a few issues you can fix with a reamer but miss alignments can lead to very low quality work. That said, sometimes that's good enough. The lesson here is to make the best hole you can before reaming it to perfection. There is not a lot of clearance in a reamer so it is best to withdraw them and brush the debris from the flutes. As I said, there are a multitude of specialized drill types and I have only touched on a few. Hopefully I have covered enough. Happy boring, and wear your safety equipment.



This is a collection of some of the drills I use, intended to show the range. The twist drill sets are number (60-1) in stubby, standard, and brass dubbed. I use yellow and orange markings to separate these. Then there are fractional sets in standard and dubbed with a set of fractional reamers at the rear, and a set of D-bits. The letter drill set did not make the photo opp. Down in front there are extra long and customized just to give an idea of problem solving drills, there are many more of these modifications. The hole saws are represented and in the corner step drills. Let me draw your attention to the bottom one which was shortened to get into a firebox with a 90 degree drill motor to clean up 5/8" tube holes. "You do what you need to".



In this picture we get a closer view of "D-bits" which are great for making seats in check valves. These were commercially made but they are easy to make up as needed. The two "blacksmith" drills are 1.25" diameter. One is sharp, the other (orange) is dubbed. You can just see the little edge flat. On top of those is a set of twist drills from #61 - #80. The range size in these tools is huge. Biggest twist drill I ever used was 2.5" diameter and the smallest .006".



Membership & Roundhouse Dues Renewal Notice

It is time to renew your Golden Gate Live Steamers membership & Roundhouse dues for 2023.

Regular Member (lives within 100 miles of club facilities):	
If renewed on or before December 31, 2022	\$ 40
If renewed on or after January 1, 2023	\$ 50
If renewing after March 31, 2023, see note below.	
Associate Member (lives beyond 100 miles from club facilities):	\$ 30
Family Membership:	
If renewed on or before December 31, 2022	\$ 50
If renewed on or after January 1, 2022	\$ 60
Roundhouse & Storage fees:	\$300
Other storage buildings pay an additional \$50 per track for 2023	
Note: Roundhouse & Storage fees are due now and must be paid by December 31st.	

Please make the checks out to “**GGLS**” and send them to the following address:

Lisa Kimberlin
324 Nevada Avenue
Pt. Richmond, CA 94801

If payment is not received by March 31, 2023, your name will be deleted from the club roster and require a \$25 initiation fee to be reinstated.

The Golden Gate Live Steamers is a 501(c) 3 non-profit corporation.