

IRON HORSE QUARTERLY

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The Billy Jones Wildcat Railroad & W.E. "Bill" Mason Carousel

Steam Returns April 19 and 20

Easter weekend signals the start of steam operations

Peter G. Panacy
Chief Executive Officer

Easter has been the historic debut of operations at the Billy Jones Wildcat Railroad ever since the railroad was moved into Oak Meadow and Vasona Parks in Los Gatos. Before the early 1990s, the railroad would shut down entirely for winter, which gave the maintenance crew time to perform the needed fixes and repairs that had accumulated over the season.

After the inclusion of two diesel locomotives—requiring much less maintenance than their steam counterparts—the railroad was able to open year-round.

Still, the BJWRR is a steam-driven railroad, rich with history and the legacy of steam locomotives. The brand-new No. 5 adds to that legacy having joined the railroad's locomotive fleet in 2013.

Winter still remains a needed period where all the maintenance and repairs can be performed on the labor-intensive steam locomotives. Thankfully, the diesels can shoulder most of the work during winter

continued on page 2

INSIDE THIS ISSUE

- 1 Steam Operations Resume/2-Spot Cylinder Repair
- 2 Volunteer Spotlight: JP Sheehan
- 3 Maintaining Safety at the BJWRR & WEMC
- 4 A New Passenger Car in the Works
- 4 Local College Students Help the Railroad
- 5 How a Steam Locomotive Works
- 6 Calendar of Events

Repairs Ongoing for No. 2

BJWRR's 2-Spot receiving much-needed repairs

Peter G. Panacy
Chief Executive Officer



Former Chief Engineer Bill Ulleseit was the last to repair the 2-Spot's cylinders back in 1969. Photo courtesy of BJWRR collection.

The last time the historic 2-Spot had its cylinders bored was back in 1969.

For those who have some knowledge of the Wildcat Railroad's history, one would know that this was shortly after Billy's railroad moved from his ranch on the corner of Winchester Boulevard and Daves Avenue to Oak Meadow and Vasona Parks in Los Gatos.

Along with the rebuilding of an entire railroad, the No. 2 also needed a complete overhaul. This included the installation of brand new cylinders in its cylinder block—5" by 7" to be exact. The design and installation was completed by longtime Chief Engineer Bill Ulleseit who spent countless hours finding the resources necessary to ensure the cylinders would be ready by the railroad's reopening in July 1970.

Nearly 45 years later, the 2-Spot was again in need of having its cylinders addressed. Scheduled winter inspections revealed the cylinders had worn down over time, which had greatly affected the overall efficiency of the locomotive.

After an exhausting search performed by the railroad's current Chief Engineer, Bill Church, a decision was made to have the work outsourced to Hillcrest Shops in Reedley,

continued on page 3

months—traditionally the slowest portion of the year.

With Easter comes spring. Spring means better weather, and better weather means more crowds. The crowds love our steam locomotives.

The No. 5 will take part in the debut of steam operations in 2014 while the No. 2 continues to receive outsourced maintenance into spring

Easter falls on the weekend of April 19 and 20.

The 5-Spot is expected to be in operation on both of those days. Yet there remain only a handful of qualified engineers who can operate the new locomotive, so fans of the railroad should expect the diesels to be sprinkled in on some run days in April and early May.

Still, the return of steam is always an exciting time at the railroad, and this year is no different. ♠

Volunteer Spotlight

Board member and volunteer JP Sheehan



J.P. Sheehan wears many hats at the BJWRR. Photo by Francesca Balistreri.

Peter G. Panacy
Chief Executive Officer

If you are a frequent visitor to the Billy Jones Wildcat Railroad and W.E. Mason Carousel, it probably will not be too long before you run into a casually dressed, fisherman hat-wearing guy talking trains and naval aviation.

J.P. Sheehan encompasses almost everything BJWRR is about. Not only is he actively involved in preserving and maintaining the railroad and carousel, but is also adamant about ensuring future generations understand and appreciate the mission of the Wildcat Railroad.

Once an aircraft-carrier pilot in the US Navy, the Cal grad worked budgets for Ford Motor Company. Now his attention has turned to BJWRR.

Sheehan initially started out as a volunteer filling a specific need that the railroad had at the time—a woodworker to be exact.

He eventually found his way into the pool of locomotive engineers before eventually winding up on the railroad's board of directors. Currently, Sheehan serves as the board's Vice President and Controller.

In addition to influencing the railroad's policies and directions, Sheehan also plays a significant role setting up the organization's annual fiscal budget.

We sat down with Sheehan and got his take on some of the reasons why he is here.

IHQ: What attracted you to becoming involved with BJWRR?

JS: A fellow board member said we needed a woodworker and I thought I could help out.

IHQ: When you first got started with the railroad, what did you think your initial duties would be?

JS: We were refurbishing the passenger trucks and I was cutting the oak for the new trucks. Sooner or later, I thought I might become an engineer but I wasn't in any hurry.

IHQ: Did you ever think you would be as actively involved with the railroad and carousel as you are now?

JS: No. I didn't really think my involvement would ever reach what it is now—being a member of the board of directors and all. My initial thoughts were focused solely on the volunteer tasks at hand and little more.

IHQ: In your opinion, how does this organization differ from other groups that you have been involved with?

JS: It was a non-profit and I had never dealt with a non-profit environment before. That attracted me.

IHQ: What are your biggest hopes and goals for the railroad and carousel moving forward?

JS: I want to see us continue to modernize our facilities, give job opportunities to the youth of the community and expand our ridership and outreach into the public. ♠

Safety at the Heart of the BJWRR

Maintaining a safe environment is key to ensuring the railroad and carousel's success

Peter G. Panacy
Chief Executive Officer

There is a lot that goes on behind the scenes of the Billy Jones Wildcat Railroad and W.E. Mason Carousel.

It is easy to think that the train and carousel simply “run themselves” with a knowledgeable crew maintaining and operating the rides and equipment enjoyed by thousands of visitors per year.

In a way, this is the intended effect—making the job look easy and fun. Yet far more goes into keeping the train and carousel in tip-top shape. Key among the various aspects of operation is ensuring that we are safe. It may sound vague, but its importance cannot be understated.

Each staff member undergoes a thorough training regimen and ongoing refresher training on a yearly basis. Tight regulations from the State of California ensure the BJWRR is compliant. The railroad and carousel strive to meet such expectations, not just to be in compliance, but also because we owe that to the public.

Locomotive engineers receive special training given the responsibility associated with their assignments.

“You can’t just sign up and immediately become an engineer,” said BJWRR’s Safety Program Administrator Brandon McCracken. “Engineers must be capable of demonstrating absolute proficiency considering the responsibilities of their job. We want them to be the best they can be, which ensures our visitors have a safe and enjoyable ride.”

BJWRR board of directors member Mike Kotowski followed up by saying, “Our safety record is exemplary. Not once have we had a serious incident.”

The railroad and carousel continuously strive to maintain a safe and fun environment for all our patrons. Whether this is accomplished from rigorous training or from detailed and thorough planning and documentation, the entire staff at the railroad and carousel can count upon ensuring that safety remains a vital part of what we do.

Each one of the over 100,000 persons that visit us each year deserve nothing less. ♠

California.

Hillcrest Shops has one essential piece of equipment necessary to perform the work—a horizontal boring machine. Since the cylinders run parallel to the ground, the only way to bore out the necessary diameter is to have the boring machine run the same path as the pistons do within the cylinders.

“Hillcrest has a very professional and detail-oriented operation,” noted BJWRR’s CEO Peter Panacy after he and board member Brandon McCracken transported the No. 2 to Reedley. “I am fully confident in their abilities to be able to perform the required work to specification and within our budget.”

Upon completion of the boring, the 2-Spot will be brought back to Los Gatos where BJWRR volunteers will finish installing new pistons and rods before completing the running-gear assembly.

“If all goes to plan, we should have the locomotive back online towards the end of April,” Church said. “We still have to test things out and get the necessary yearly certifications from the state completed.”

This likely means the No. 2 will miss out on the debut of steam at the Wildcat Railroad, but not for long. During that brief tenure, the No. 5 will handle all steam operations.

Thankfully, this is work that does not need to be performed on a frequent basis. The previous cylinders lasted over 40 years. These new ones should last just as long. ♠



The 2-Spot's cylinders shall be bored horizontally, similar to this procedure. Photo courtesy of OldEngine.org.

A New Passenger Car in the Works

BJWRR to begin construction on a new passenger car



Another passenger car will soon be added to the railroad's current roster. Photo by Greg Reiter.

Peter G. Panacy
Chief Executive Officer

For as long as this author can remember, the BJWRR has had a total of five passenger cars on its roster—four standard cars and one wheelchair-accessible car.

The cars are pieces of history themselves. Pulled from operation from the Overfair Railway in San Francisco, Billy Jones used these cars on his ranch. The handicapped car is the newest of the group, having been fabricated after the railroad moved to Oak Meadow Park. Each car has since undergone multiple restorations and overhauls.

Through 1995, the length of the depot limited the number of cars a locomotive could haul. Yet after the depot was lengthened in the winter of 1996, the overall length of a train could be increased to include all five cars.

While the handicapped car is able to carry some additional passengers, it does not have the capacity to hold as many as the standard car design—often 16 persons.

During the fall of 2013, former locomotive engineer and current advisory board member Phil Reader approached the board about constructing a new car, identical in design to the four standard cars currently on roster. He presented a donation from his late grandmother who was instrumental in getting Phil involved with BJWRR when he was young. That contribution would help kick-start the project.

Additionally, there are enough spare parts and pieces of equipment at the railroad to assemble much of the hardware portions of a new car.

It may take some time, but we can hopefully expect a new car to bolster the roster in the near future. ♠

BJWRR Gets Assistance from Students at Santa Clara University

SCU's engineering department provides needed assistance in a variety of areas

Peter G. Panacy
Chief Executive Officer

A recent and relatively unknown relationship has been forged between the BJWRR and engineering students at Santa Clara University.

SCU's engineering department requires its students to take on community projects around the area and the BJWRR has been the lucky recipient of a number of these efforts.

The relationship began in 2012 when Prof. Patti Rimland approached the railroad about possible engineering projects SCU students could work on at the railroad. After meeting with some of the students, a number of projects and tasks have been drawn up—almost all of which have benefitted the railroad in some way or another.

“The students have been a great asset,” commented CEO Peter Panacy. “We benefit from their expertise and work, and the students receive practical, hands-on experience. It's a win-win situation.”

Some of the projects have included a civil engineering survey of the railroad's mainline, determining the approximate weight of a passenger car and one of the steam locomotives and determining the efficiency and horsepower of the No. 2.

Each one of the students is required to develop a close-working relationship with the railroad and then determine the best possible avenue for addressing the specific needs within the project. After acquiring the necessary data, the students then come up with a solution to the issue or question before presenting their findings to both the railroad and their respective engineering classes at SCU.

One aspect of the students' projects is that they have to reveal specifically how their work will benefit the community. Case in point, the No. 2's efficiency and horsepower data will be included in BJWRR's manual of the locomotive—required by numerous regulatory agencies.

The relationship between SCU and BJWRR is mutually beneficial. In addition, it ensures that future generations will continue to play a vital role in perpetuating the railroad and carousel for years to come. After all, this young generation will keep BJWRR alive. ♠

How a Steam Locomotive Works

A simple explanation to one of the most-asked questions at the railroad



The steam locomotive is a combination of basic physics and mechanical engineering. Photo by Phil Reader.

Peter G. Panacy
Chief Executive Officer

In my 18-plus years at the Billy Jones Wildcat Railroad, one of the most commonly asked questions I receive is “how does that thing work?”

These persons are, of course, asking about our steam locomotives. We are living in a time where the age of steam locomotives has come and gone. Few can remember the days when steam dominated the rails. That work has long-since been turned over to diesel locomotives or the trucking business. Now, steam engines are merely a reminder of the railroad’s storied past and little more.

So how do these greasy, loud and seemingly violent contraptions work?

The long answer would take up too much time and would have to factor in aspects that only the most intrigued and dedicated student of the subject would have interest in. There are plenty of books on that anyway.

Instead, let us evaluate the short answer—necessary since most of our guests have very limited knowledge on the workings of a steam locomotive.

Let us start with the first necessary element—steam. In order to make steam, one needs water. This is provided by the locomotive’s tender and injected into the boiler.

What is a boiler? I’m glad you asked. Water, if of itself,

will not generate the energy needed to pull a train. One has to change its phase into a gas—steam to be exact.

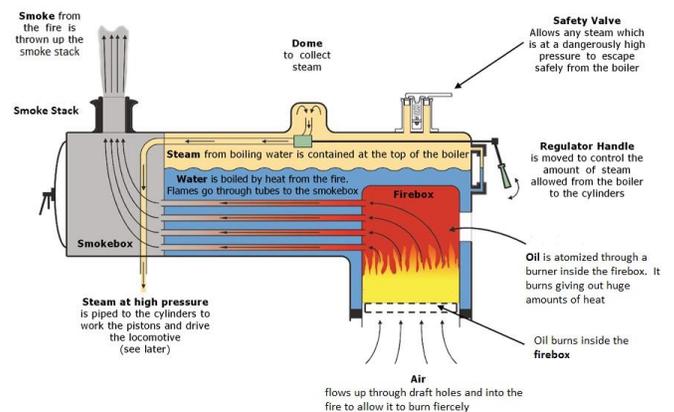
Phase changes require a massive amount of energy. At home, you can boil water by applying heat from a stove or an open fire. In a locomotive, you need to supply this energy from a fire contained within the boiler’s firebox.

Anything combustible can burn. Locomotives can use a variety of different fuels. There are engines that burn coal, wood or oils. BJWRR’s steam engines actually use diesel oil—vaporized inside the firebox and ignited.

Heat from the fire is transferred to the water inside the boiler with excess exhaust being emitted from the locomotive’s smokestack. Adjusting the right levels of atomization, draft and air intake can ensure the most efficient levels of energy transfer.

Boiling water emits steam which expands approximately 1,700 times its initial volume. When contained—such as within a boiler—there is tremendous stored potential energy.

The Boiler - How the Locomotive Makes Its Steam



A throttle valve allows this steam to be directed towards each of the locomotive’s cylinders. Specific timing mechanisms allow for this steam to push the pistons inside the cylinders forward and back as needed. The pistons are connected to the locomotive’s running gear, which are subsequently connected to the drive wheels. Once the drive wheels start turning, the locomotive and attached cars begin to move.

There is obviously much more to this concept beyond this simple explanation. Hopefully at least, it gives the reader some basic knowledge into this fascinating aspect. ♠

CALENDAR OF EVENTS

APRIL 19TH - - STEAM OPERATIONS RESUME

Steam operations return Easter weekend—April 19 and 20. The No. 5 will handle the bulk of weekend operations until the No. 2 returns from major repairs.

MAY 8TH - - CB HANNEGAN'S WINE TRAIN

Come enjoy samples of local wines and food pairings in this exclusive, adults only event sponsored by CB Hannegan's, Los Gatos. Limited tickets available by contacting CB Hannegan's restaurant.

MAY 26TH - - MEMORIAL DAY

The train and carousel will be open Monday, May 26 from 10:30am to 4:30pm in observance of Memorial Day. Honor those who have given their lives in service of this country and spend a warm day with your friends and family at the park.

JUNE 14TH - - "FLAPJACKS AND RAILROAD TRACKS" PANCAKE BREAKFAST

Kick off summer with a fun-filled morning breakfast at the railroad featuring pancakes, sausages and much more. Breakfast starts at 8:00am and the train and carousel will be open early as well.

JUNE 15TH - - START OF SUMMER SCHEDULE

From June 15 through Labor Day, the train and carousel will be open daily from 10:30am until 4:30pm, weather permitting. Steam locomotives typically open Saturdays and Sundays with the diesels running during the week.

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ADDRESS CORRECTION REQUESTED

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Persons interested in volunteering in the machine shop may also call (408) 395-6269.

Visit our website at www.bjwrr.org for further updates and information.

The Billy Jones Wildcat Railroad is a non-profit 501(c)(3) organization working with the cooperation of the Town of Los Gatos and the Santa Clara County Parks Office. Contributions are tax deductible.

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