



Tucson Garden Railway Society's

Time Table

Society web site: <http://tgrs.homestead.com>

Editor e-mail: dizen@aol.com

October, 2004

Meeting This Month

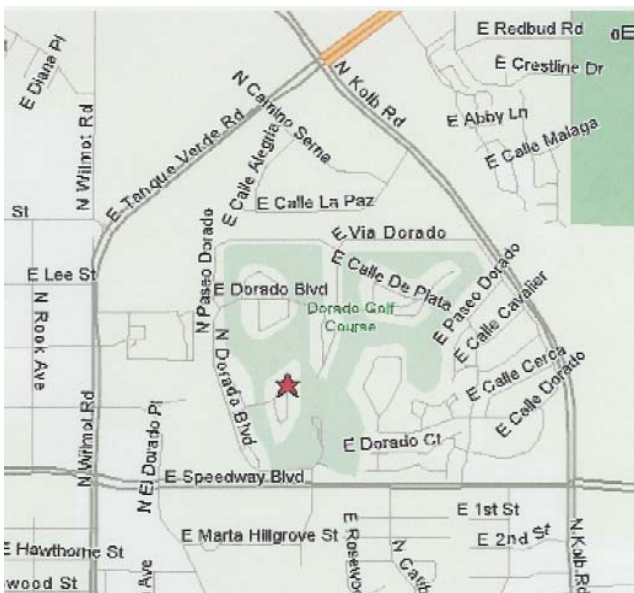
This month's meeting will be at 10:00 AM on October 16, at the home of

Jan and Lew Sleeper
6636 E. Villa Dorado
Tucson, AZ 85715

The telephone number is:
751-9628

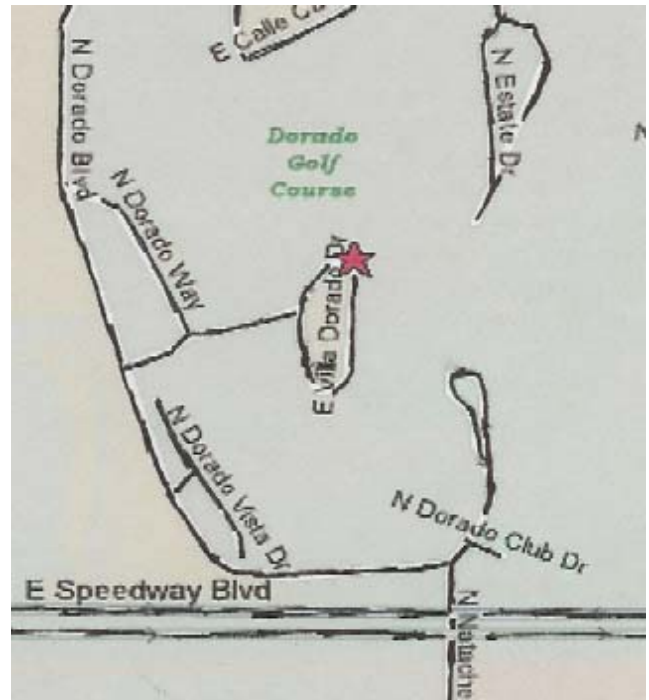
Driving Directions

On Speedway, between Wilmot and Kolb, take the west entrance into Dorado Country Club (If driving west from Kolb it's a right turn at the second entrance. If driving east from Wilmot, it's a left turn at the first entrance.).



General Area Map

After entering through the arches, take a sharp left onto Dorado Boulevard, continue and cross over two speed humps, and then turn right onto E. Villa Dorado Place. Continue to the T junction that is E. Villa Dorado Drive. This is a circular road. Follow it around to number 6636. Park anywhere except on the grass and be careful not to park where someone might back into you.



Detail Dorado Country Club Map

The Railroad

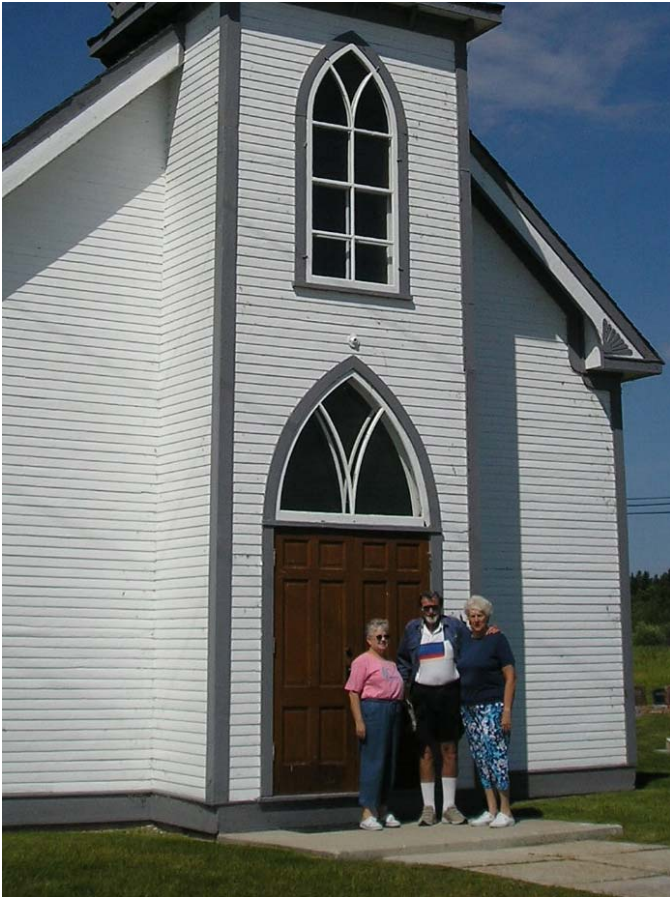
There is nothing historical about the Sleepers' railroads. From the time Lew bought his first Kalamazoo, Michigan Central RR, G-Scale train while sailing down in St. Thomas, it's been gondola cars for cocktails, and equipment to please little kids. The Sleepers welcome you all. Please come into the house first to see their trains and then go to the swimming pool area and ramada for the meeting. The Sleepers invite you to bring a swim suit and stay as long as you like.

Lake Winipeg

By Glen Mitchell

August 5, 2004; north of Winnipeg, Manitoba: The photo below is of Janet Mitchell and Phyllis & Bob Dirksen in front of the church in the village of Hecla on Hecla Island in Manitoba. Hecla Island is on Lake Winnipeg and is part of the former Republic of New Iceland established by the Canadian Government for exclusive settlement of Icelanders in 1875. The church building was built in the early 20th century and replaced the original 1880's

church which was destroyed by fire. The main attraction for the Icelanders was the fishing on Lake Winnipeg, farming and lumbering. The remains of the sawmill's boiler are still in the village. The sawmill was established in 1913 and operated until 1947 when it was destroyed by fire (the same old story!). Hecla Island and Village are now part of the Manitoba parks system.



Janet Mitchell & the Dirksens

Articulated Locomotives of the U. S. A.

By Pete Eggink

The following article first appeared in the South Eastern Pennsylvania Garden Railway Society's Newsletter. It is reprinted here with the kind permission of both the author and that publication.

As America's railroads grew over the years, trains got longer and locomotives got bigger. The longer the train the more productivity they could get out of each crew. In 1904, the **B&O** found a way to get twice the power in a single locomotive, by combining two engine mechanisms under the same boiler. This new type of locomotive was called a **Mallet**. It revolutionized mountain railroading by pulling longer trains up the hills with far lower crew costs. Before we get confused with terms, let's cover a few definitions:

Articulated means two or more sets of driving wheels, one of which can hinge on curves.

Compound means a system that uses steam twice, with one set of pistons larger than the other.

Mallet means a compound articulated locomotive.

Simple Articulated means an articulated locomotive that sends the same pressure to all cylinders.

Mallets

The first successful **Mallet** in the U.S., was **B&O's** 0-6-6-0 of 1904. Its success drove many railroads to order **Mallets** for pulling longer and longer trains. This was the "drag freight" era for railroads where speed was not as important as train length, and the **Mallet** fit in nicely.

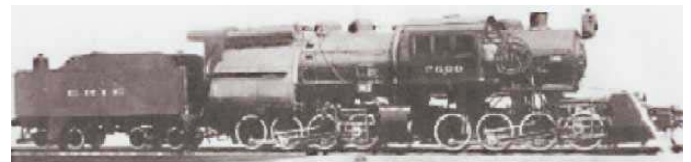


The B&O's "Old Maude." This 0-6-6-0 was the first successful Mallet locomotive in America

Several ideas were tried to increase power, efficiency, and speed. The **Erie** tried a 2-8-8-2 and the **Santa Fe** tried flexible boilers. Neither idea worked.

In 1919 the **Virginian** ordered a set of 2-10-10-2's that was very successful, and had the highest starting tractive force of any steam locomotive ever, 176,600 pounds.

Even with large and efficient **Mallets**, the railroads found a few drawbacks: 1) back pressure caused the front cylinders to lose efficiency over 15-20 mph, 2) the large cylinders and small wheels limited counterweights to balance wheels at lower speeds, and 3) the huge front cylinders meant the railroads needed larger tunnel clearances. Therefore the Mallet was best at pulling and pushing long trains at low speeds.



Yes, there were Camelback Mallets. The Erie had 3. The huge firebox required two firman and the engineer was very close to the loud smokestack.

The **Norfolk and Western** had plenty of need for high power low speed locomotives, so they continued to develop their **Mallets** into successively better locomotives right up to the late 1950's. One version, the Y-3, was chosen as the basis for **Aristocraft's** new **Mallet** locomotive.

Simple Articulateds

In 1919 the **Pennsylvania Railroad** designed a large **Simple Articulated** that was ahead of its time: when it was used at the front of a train, it broke the couplers far too often. A few years later, in 1924, a tunnel clearance

problem convinced the **C&O** to try a **Simple Articulated** with the same basic size of a **Mallet** but with smaller front cylinders. The concept worked well.

Then the **Great Northern** built a **Simple Articulated** with larger drivers that could run at much higher speeds. Now the true value of a **Simple Articulated** was recognized: high power and faster speed. Several railroads, including the **Reading** and **B&O**, converted their existing **Mallets** into **Simple Articulateds**. Others developed new designs that were larger and faster.

The **Southern Pacific** had a problem with smoke and fumes choking engine crews in tunnels. It solved it by building **Simple Articulateds** with the cab in front (Cab Forwards). The quest for high power and high speed culminated in the **Union Pacific's** Big Boy, a huge 4-8-8-4 that could run 70 mph with heavy trains.

Four Cylinder Non-articulated Engines

In the 1940's the **Pennsylvania Railroad** experimented with the idea of building engines with four pistons instead of two, so that the reciprocating machinery could be lighter and thus capable of higher speed. They were huge and powerful and looked like articulated engines, but actually had a rigid wheelbase. The freight version was the Q-2 4-4-6-4, the longest and most powerful steam locomotive in the world. The passenger version was a 4-4-4-4, known as the T-1, a handsome and fast engine, easily capable of 100 mph. They were not considered a successful design because of maintenance problems and they were all retired within six years.



The Pennsylvania Railroad T-1 class 4-4-4-4 "Duplex" locomotive. All drivers were on the same rigid frame, so it was not an articulated locomotive even though it had four cylinders.

Steam Turbine Locomotives

Several coal hauling railroads attempted to develop new types of locomotives to use coal as fuel. The **Pennsylvania Railroad** tried with a locomotive that had a turbine mounted directly to the running gear. The **Norfolk and Western** tried with the "Jawn Henry" in which the steam turbine powered a generator which sent power to traction motors at the wheels. The **C&O** designed a small fleet of similar steam-turbine-electrics. None of these designs worked well enough to compete against the diesel-electric locomotives that were already replacing steam.

Famous Articulated Locomotives

Union Pacific's Big Boy is often called the largest locomotive ever built, but even if it wasn't the biggest, it

was one of the best. Several are on display, including one at Steamtown, PA.

Union Pacific's Challenger 4-6-6-4 was just as fast, although not quite as large or powerful. Challenger #3985 is still running specials for the **Union Pacific**, and is based in Laramie, WY.

Norfolk and Western's class A 2-6-6-4 was a fast, powerful, efficient locomotive used for both freight and passenger trains. Number 1218 ran steam specials until a few years ago. The **Norfolk and Western's** Y-class and A-class locomotives were featured in many fine photographs taken by O. Winston Link in the 1955-1960 era.

The **Southern Pacific** owned more articulateds than anyone else, 207, including 195 Cab Forwards.

Chesapeake and Ohio's tough looking Allegheny 2-6-6-6 was possibly the most powerful steam locomotive ever built. One is on display at the **B&O** Museum in Baltimore, MD.



Chesapeake and Ohio 2-6-6-6 Allegheny, at 7,500 hp, one of the heaviest and most powerful locomotives ever built. It is a simple articulated locomotive.

G-Scale Models of U.S. Articulated Locomotives

1:22.5 LGB Uintah "Mallet" 2-6-6-2T #50 and 51. Prototype 3 ft. gauge, not technically a **Mallet**.

1:22.5 LGB Sumpter Valley "Mallet" 2-6-6-2. Prototype: railroad modified **Uintah** engines.

1:32 MTH Challenger 4-6-6-4. Prototype **Union Pacific** Challenger.

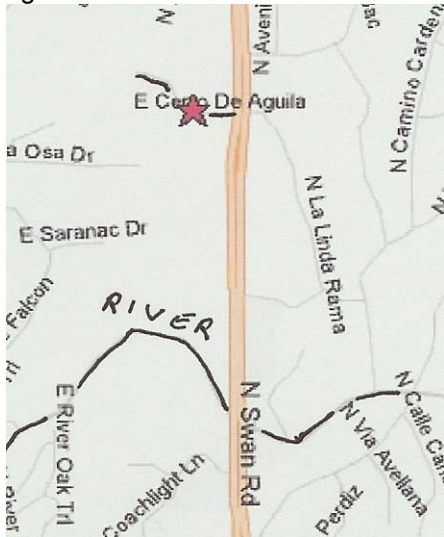
1:29 Aristocraft 2-8-8-2 **Mallet**. Prototype **Norfolk Western's** Y-3 class.

Open Houses

Club members are hosting two open houses in early November. As previously announced Peggy and Gary Martin are hosting several groups on November 6, from 10 AM to 4 PM. Club members are welcome to attend.

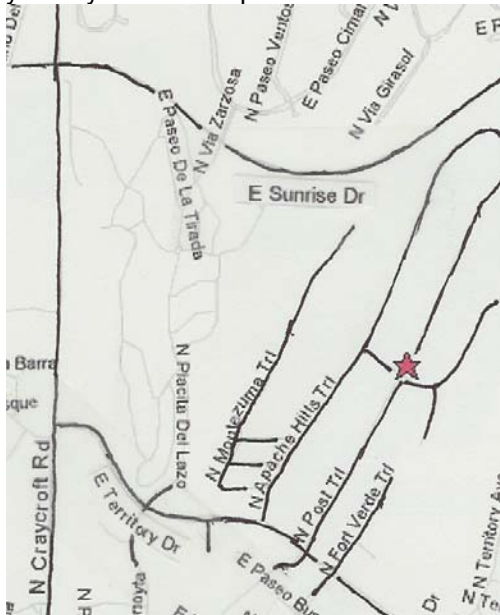
The Martin's live at 4625 E. Cerro de Aguila. Cerro de Aguila can only be reached from the west side of Swan between Sunrise and River. There are small green and white warning signs in the median on Swan. Once on

their street, the Martin's are the second home on the right.



Map to Peggy & Gary Martin's home

Dolly and Joe Douda will be holding an open house for the Pacific Southwest Region of the National Model Railroad Association on November 6 and 7. On Saturday the 6th they will be open 4 PM to 6:30 PM and on Sunday the 7th operations will be from 10 AM until noon. Both the HO indoor layout and the G gauge backyard layout will be open.



Map to Dolly & Joe Duda's home

The Douda's live at 5220 N. Post Trail. From Sunrise, turn south on Craycroft and go to the traffic light at Territory Road. Turn left (east) onto Territory Road.

From River Road, go north on Craycroft to Territory (which has a traffic light from this side as well) and turn right (it's still east).

Once on Territory Road go 100 feet past the 5th speed bump (about ½ mile) and turn left (north) onto Post Trail.

Follow Post Trail for about another ½ mile to number 5220. It is the third house on the right past the stop sign.

The Douda's advise that parking and turn around space is very limited and ask that you park in the street reserving their driveway for handicapped.

LGB 2004 Tours

Marty Hart sent along the brochure for the 2004 LGB Tours. The "Christmass Magic" tour will be November 26 through December 2 with an option to extend through December 7.

The basic tour is \$3,254 per person, double occupancy with air fare from Dulles (Washington D.C.) and includes the Nuremburg Christkindlesmarket, the Nuremburg Toy Museum, a steam train ride, the LGB factory, a streetcar museum and a tour of Nuremburg via a chartered historic trolley. In addition there will be visits to Franz Grund's layout, the Deutsche Bahn Transportation Museum, and an ICE ride to the medieval city of Wurzburg where a different Chritmass Market will be explored.

For more information on the tour or the optional extension (\$1,250 per adult) contact the Naperville Travel Bureau at 1-800-967-0152.

Minutes of the BOD

Respectfully submitted by Ellen Stoesser

September 14, 2004-7:00 P.M at Norm and Ibbey Ulmer's House. Members of the Board present at the meeting were Nick Buchholz, Norm Ulmer, Ellen & Joe Stoesser, and Dick Izen.

2004-2005 Budget: The revised budget was presented to the board and a motion was made by Norm to approve the budget. It passed by a unanimous vote. It will be presented to the members at the September 18, meeting and be printed into the October newsletter.

2008 Joint Venture: The contract has been amended and is ready to be signed by Norm for TGRS. When the agreement is signed a club member will lend the Club \$1000.00 and the Club will write the check. More information will be available at the September 18, meeting.

New Business: Lew Sleeper has the dates for the set up at the Veterans Hospital. We would set up the 28th, run the 29th, 30th, and tear down or run Dec 31. It has very good access and a very large hall, so the lay out could be as large as we like. Gary Martin still has not heard from TBG.

Work Session: On October 2, there will be a work session at Jim Cook's house to do legs, numbering and repair of the modules.

Trailer Title: Anyone with knowledge of where the "old trailer" title is, please contact Norm.

There was no date set for the next board meeting.

TGRS Approved Budget Fiscal Year 2004-2005

Revenue

Dues	\$ 2,700
Shirts	600
Raffles	1,500
Group Equipment Sales	600
TBG expense reimbursement	200
Home Tour	4,000
Total Revenue	\$ 9,600

Expenses

News Letter	\$ 540
Membership	100
Modules	2,000
Raffle Expense	450
Hats and Shirts	600
TBG	200
Insurance	610
Group Equipment Purchases	600
Misc	350
Trailer	1,150
Tools	500
Rolling Stock	500
Home Tour	1,000
2008 Convention Joint Venture	1,000
Total Expenses	\$ 9,600

Note: Though shown as an expense, the \$1,000 of investment in the 2008 Convention was advanced by a club member and will not impact the TGRS cash flow.

Minutes of the Meeting

Respectfully submitted by Ellen Stoesser

September 18, 2004. The meeting was held at the home of Mike and Jane Dorgan.

President Nick Buchholz thanked the Dorgan's for hosting. There were 48 attendees. One of our newest members, April & Michael Bidon were welcomed.

The minutes of the July minutes were approved.

Treasurer's Report: Willis Fagg reported a:

1. Current account balance of: \$1676.06.
2. Revenues to date for fiscal year 2004-2005 are \$688.00 and expenses \$550.50 for a net increase to date of \$117.20.
2. 74 members to date, with 16 members needing to renew.
4. That the Board had approved the 2004-2005 budget.

Editor's Report: Dick Izen would like members to send him articles on new things they are making for their railroads.

Membership Committee: Ibbly Ulmer would like members to check out and sign up for the new email system. The pictures would be in color and would be more enjoyable to see.

Modules: Joe Duda is looking for about 10 people to do module repairs at Jim Cook's house on October 2&3. They will start at 8:00A.M.

New Venues: Chuck Cook has new videos for members to check out. Listed below are the events the Committee is working on:

1. The Veterans Hospital would like us to do a layout between Christmas and New Years in the Olympia Auditorium. We would **set up on December 28**, and **run December 29&30** and maybe **run the 31** or tear down. The kids will be off from school and it will be open to the public and hopefully all interested will attend. They have assured us of very good publicity. Since the TBG is not planning on having a train layout this year, the members approved that we would set up at the VA Hospital. Any questions you can call Lew.
2. DM Airbase is still in its infancy.
3. Jerry Tulino would like an outside layout set up in April for the handicapped children when they get together to play baseball. It would be just one day, there would also be a fair and games.
4. Big Brothers & Big Sisters would like a layout to see. Jerry Springstead has offered to open up his house.
5. Chuck is also thinking of a brochure, for people who do not have layouts, that would encourage them to join the club. This would get more help with layouts and finances and in general everyone would have fun.
6. In the works is a battery operated garden layout in Green Valley.

2008 Joint Venture contract was amended as per TGRS Club request and has been signed by Norm Ulmer.

New Business: Dean Newman has the stagecoaches from Just Plain Folks. JPF has a new line of animals; Dean had a sign up sheet for members to order the ones they would like. Several vendors are raising prices because of the cost of raw materials. Starting in January, Aristo-Craft and Kadee will raise theirs; he feels that LGB, USA, and the others will follow.

Gary Martin is trying to help Pat Barnes to sell her railroad cars at 50% off. She has Open House on the weekend's from 10-4. If you would like directions see

Gary. Gary is also having a Open House on November 6; it is open to the public and free.

Jane Dorgan informed the club members that the General Store at Trail Dust Town will order horses for us.

Ian Shivack donated a lighthouse and this was sold to the highest bidder with the money going to the club. Dean Newman donated a stagecoach to the club.

Show and Tell: Frank Trunzo had a metal sheet of uncut cars and then he showed the finish product. Frank has been associated with Marx for many years.

The next meeting will be at Lew & Jan Sleepers on October 16 at 10:00 A.M.

The Tucson Garden Railway Society is a non-profit corporation incorporated in Pima County, Arizona. Society members are interested in all areas of garden and modular large scale railroading. We welcome new members and hope you will consider joining. Members help each other build layouts and learn about railroading and modeling. The TGRS dues are \$30.00 per year and are due on June 30th of each year. For new members dues are pro-rated at \$2.50 per month remaining in the year until June 30th plus a \$15.00 initiation fee, the first year. Additional name badges cost \$1.00 for each badge after the first.

If you are interested in the TGRS please contact one of the officers at the phone number listed in the Calendar section below. If you wish to join immediately, send a check and your name, address and telephone number and the names for any additional badges to:

Ibby Ulmer
4935 N. Craycroft Road
Tucson, AZ 85718

Calendar of Events

- Oct 2-3** **Module work session at Madelyn & Jim Cook's house – 8:00 AM Saturday**
- Oct 16** **Regular meeting at Jan & Lew Sleeper's home – 10:00 AM**
- Nov 6** **Open house at Peggy and Gary Martin's house 10:00 AM to 4:00 PM**
- Nov 20** **Regular meeting at Mary & Ken Karrels' home – 1:00 PM**
- Dec 18** **Xmas party & meeting at Madelyn & Jim Cook's home – RR Open 4:00 PM, Meeting begins 5:00 PM, Pot Luck Dinner 6:00 PM**
- Dec 28-31** **Set up,operate, and tear down at VA Hospital**
- Jan 7-9** **Home Show at Tucson Convention Center**
- Jan 15** **Toy Train Operators Swap Meet- Rodeway Center (I-10 & Grant)**

TGRS Officers and Board of Directors

President:.....Nick Buchholz.... 520-744-4932
V-President:..... Norm Ulmer.....520-299-9401
Secretary:.....Ellen Stoesser.....520-577-1210
Treasurer:.....Willis Fagg.....520-760-0147
Editor:.....Dick Izen..... 520-498-4634

At Large Board Members
Chuck Cook.....520-888-3264
Bob Dirkson.....520-742-9503
Bob Hoffman.....520-825-6967
Joe Stoesser.....520-577-1210

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12356 North Mount Bigelow Road
Oro Valley, AZ 85737