



Tucson Garden Railway Society's

Time Table

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

Editor e-mail: dizen@aol.com

November, 2004

Meeting This Month

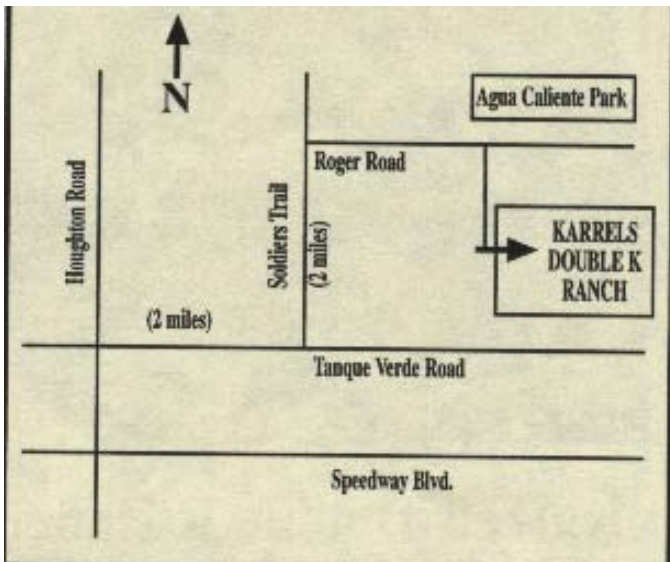
This month's meeting will be at 1:00 PM on November 20, at the home of:

Ken and Mary Karrels
3930 N. Smokey Topaz Lane
Tucson, AZ 85749

Telephone 520-749-5345

Driving Directions

From Houghton and Tanque Verde Roads go east 2 miles on Tanque Verde to Soldiers Trail. Turn left, north, onto Soldiers Trail and go 2 miles to Roger Road. Turn right, east onto Roger Road and go about a quarter of a mile to Smokey Topaz Lane. Agua Caliente Park will be on your left as you turn right, south, onto Smokey Topaz. The Karrels ranch is number 3930 and will be on your left.



The Railroad

The Karrels' have several hundred feet of track in what amounts to four separate track powered layouts. As you enter the property you will see the full size bay window caboose which they have converted to a guest room for their bed and breakfast.

Near the caboose is the 1880's theme figure eight layout which is powered by old time steam, either a mogul or a Shay. Ken tells me that most of the structures in this area were scratch built by his father.

As you enter the covered patio look up and you will see the trolley loop running overhead.

The last two loops are set in a more modern era of the 40's through the 60's and may have either modern steam or diesel engines at work. One of the loops, with a mid western theme, remains on the lower level while the other circles all the way around the upper level pool.

Featured on the layout are many buildings and scenes equipped with sound and rarely seen operating color signal lights. There are a number of bridges both wood and steel including a 20' curved steel trestle. The newest areas include 'a touch of Sweden', Pebble Beach and the Chicago Railroad Fair. Sounds like the Karrels have been busy.

Next Year's Busy Schedule

As we approach year end it is time to think of signing up to host a meeting. As things stand now we have only a couple of meetings scheduled and have a very busy period through the beginning of the year.

In December we will have the meeting and party at the Cooks and there will be the Children's layout at both Harlow's Garden & Bob Dirksen's church (dates TBD) and full modular and children's layouts at the VA Hospital in December 28-3.

There will be no meeting in January as we have three shows to display at in that month. These are the American Home Show the 7th through the 9th, the Toy Train Operator's Swap Meet on the 15th and the Great American Train Show around the 29th.

We need meeting hosts for February and March. We need to lock these dates up as soon as possible because in addition to our fund raising Rails in the Garden public open house, the visit by ABTO will be in late February or early March.

There will probably not be a meeting in April as we have the 11 days of operations (plus the set up time) at the

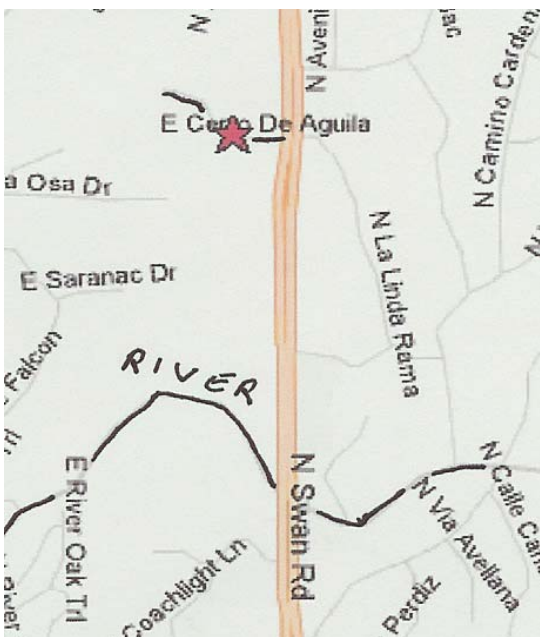
Pima County Fair. May (the Mitchells) and June (Buchholz) have been spoken for. Then, in July there is the convention in Chicago. The remaining months of the year are also open.

We need hosts signed up for all of the open months but February and March are critical. If you would be willing to host a meeting please contact secretary Ellen Stoesser.

Open Houses Nov 6 & 7

As reported in last month's news letter both the Martin's and the Duda's are hosting open houses to which club members are welcome.

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.



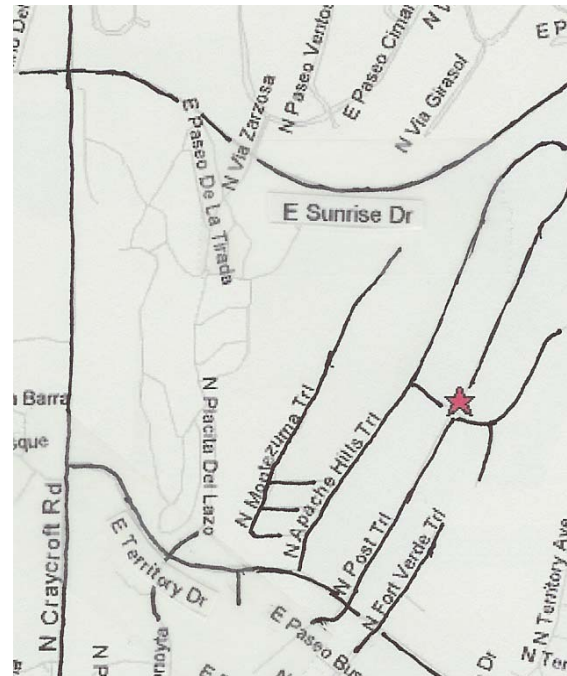
The Duda's will be holding an open house on November 6 and 7. On Saturday the 6th they will be open 4 PM to 6:30 PM and on Sunday the 7th operations will be from 10 AM until noon.

The Duda'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.



Map to Dolly & Joe Duda's home

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

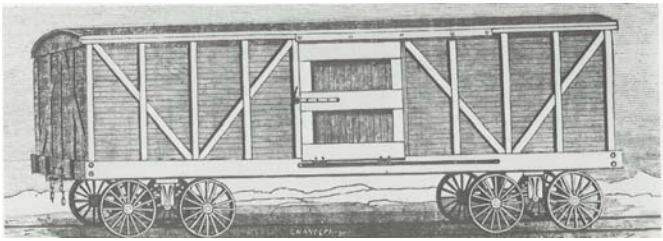
Box and Refrigerator Cars Part I – The Box Car

By Dick Izen

I have always liked watching a long train of box and refrigerator cars. Perhaps it was because I grew up in Chicago where so many railroads met and interchanged cars, or perhaps it was just that my impressionable years covered the period when wood, composite and steel freight cars all were represented on the track. Even today, my favorite model trains are those with strings of house (box and refrigerator) cars representing many railroads with their colorful logos and reporting marks. This month lets take a look at the development of the once ubiquitous box car.

The first railroad cars in America were built in the early 19th century and were 4 wheel cars built of wood, often by local coach and wagon makers. The railroads began hauling freight on flat cars or in low sided gondolas but soon freight cars evolved to the all weather protection of the box car. After the financial panics of 1837 and 1839 there was a strong resurgence of the national economy and a commensurate demand for transportation. The railroads found that the small four wheel cars could not be run at the higher speeds demanded by the new economy. Two four wheel trucks under somewhat

longer cars solved the problem. By 1845 the dual truck box cars were about 24 feet long and had a capacity of around 12 tons.



Early single sheathed wood car built from 1845 through 1860

Even at that short length, box cars were built with an internal truss for strength, very like a bridge, and then covered or sheathed to keep the weather off the contents. A need for smooth clean interiors to protect the freight led to a second layer of sheathing being placed over the truss structure on the inside of the car. Sometimes this sheathing was only part way up the car sides, sometimes it covered the entire interior. These were called, for obvious reasons, double sheathed cars.

Construction was still wood, however, and wood bodies gradually distorted or sagged over the years. The railroads solved this problem with long metal truss rods which ran from each end down to posts under the floor beams. When the car began to sag the railroad would tighten the nuts on each end of the truss rods pulling the ends down and pushing (through the posts) the center up until the floor was level again. With the aid of these truss rods, box cars grew to 34 feet in length and 25 ton capacity by the 1880's. By the 1890's car length had increased to about 36 to 40 feet and capacity had grown to 30 or so tons. Construction was basically still wood with metal truss rods.

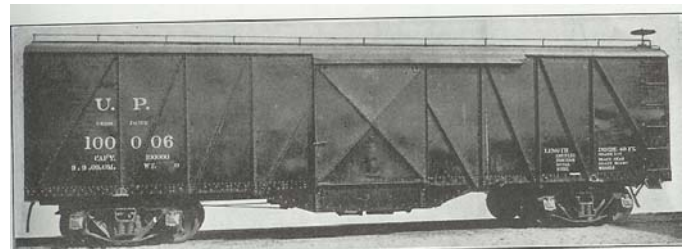


Southern Pacific, double sheathed, all wood, truss rod car built around 1890

Around 1900 railroads began using steel for underframes. These early steel underframes were deeper in the center of the car and then sloped up to a shallower depth at the ends where the trucks and bolsters were. The shape of these early steel underframes gave them the name "fish belly"

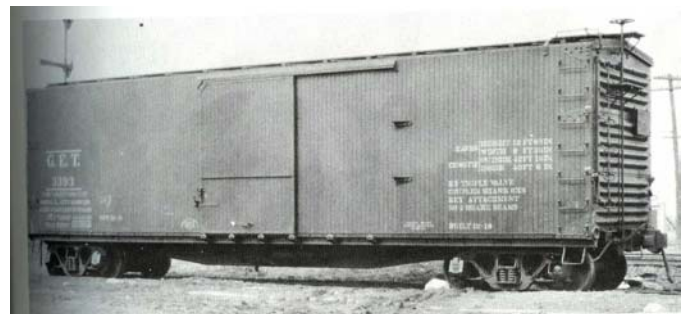
underframes. Car length remained about the same but the elimination of truss rods reduced maintenance and more importantly (labor was pretty cheap back then) the stronger steel underframes increased the capacity of the box cars to 50 tons. Some railroads experimented with substituting steel for the wood bracing to lighten the empty weight of the car. They also left off the exterior sheathing creating a single sheathed, outside braced composite car with wooden siding and ends but steel underframes and external bracing.

As early as 1909 the Union Pacific began to experiment with all steel box cars. Several of these were built in the U. P.'s Omaha shops. This trend was interrupted by the 'War to End All Wars' (WW I) which created shortages of steel as armament production increased. The demands of war also created demand for more transportation capacity and the railroads were placed under the authority of the United States Railroad Administration (USRA) which dictated what and how much the railroads could build.



Union Pacific all steel car built 1909 at Omaha shops.

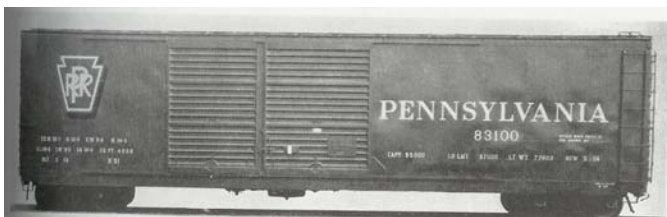
In order to save material the USRA designed two types of box cars. They returned to the 40 foot, double sheathed, all wood (but steel underframe) car which they rated at 40 ton capacity. They also designed a single sheathed composite car with wood sheathing on the interior supported by steel bracing on the outside of the car. This car was rated at 50 tons of capacity. By good design, this outside braced car managed to save substantial quantities of lumber while making relatively small use of steel. Both the double sheathed USRA wood car and the single sheathed USRA composite cars used steel underframes and ends for strength.



USRA 50 ton double sheathed car. Note the steel ends and (steel) fish belly underframe.

With the end of the war and the return of railroads to private ownership, box cars continued to grow in size and capacity. It is worth noting, however, that while the railroads had grumbled about the USRA's constraints, they continued to use the USRA designs for many years. In particular the single sheathed, outside braced, wood and steel composite box car continued to be built into the 1930's and continued in service into the 1950's.

Some modifications were made to the single sheathed cars. Some railroads built them with wood ends instead of the USRA pressed steel ends. In 1925, the Delaware, Lackawana and Western strengthened the car by returning to double sheathing while retaining the steel truss members. This managed to increase the capacity to 55 tons. Wood construction had pretty much reached it's limits, however and by the mid 1930's railroads were again building all steel cars. It was around that time that box cars standardized at about 40 feet and 50 feet.



50 foot double door all steel car designed to load large auto parts such as frames. Built in 1956 by the railroad's shops at Altoona Pa.

The later often had double doors for loading bulky cargo that needed protection along the route such as rolls of news paper, automobiles or large automotive components such as auto and truck frames. The double doors allowed either autos or fork lifts to easily be driven into the car. When loading autos, they would be driven into each end of the car. Once positioned at the ends of the car the end of the automobile nearest the doors would be lifted creating enough space for another automobile. Similarly cars of this type were used to ship components from manufacturing to assembly plants. Heavy components were easily maneuvered into the car through the wide double door openings.



Modern, post WW II, all steel, 40 foot box car

Box car production was again curtailed by WW II and then surged in the post war years. Gradually specialized cars came into being reducing the need for box cars.

Auto carriers, which were double and triple deck racks on flat cars, for example, made the 50 foot double door automobile box car obsolete. Shifts in shipper needs, specialized cars and the growth of Trailer and Container freight have pretty much ended the need for new box cars on American railroads.

Next month we will take a look at ventilated and

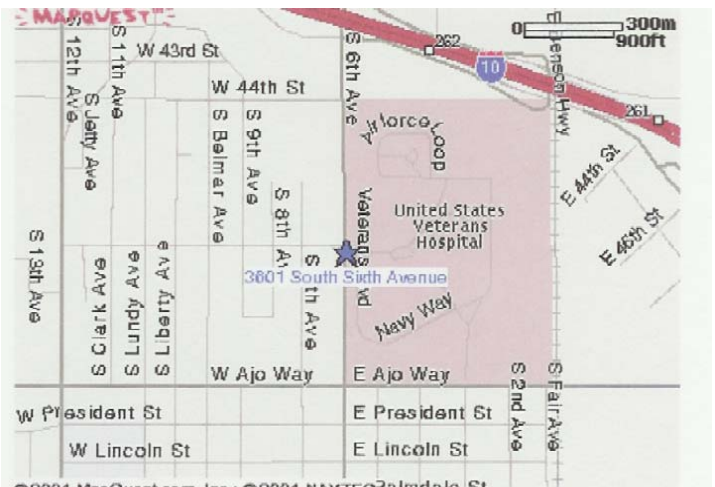
insulated boxcars and how the need to temperature protect the cargo led to the refrigerator car.

VA Hospital Show

By Lew Sleeper

The Tucson Garden Railway Society exhibition at the Southern Arizona VA Health Care System will run from December 29th through the 31st. Our setup will start at 9 AM on Tuesday, December 28, and then the actual show will run from 8AM to 4pm. Teardown will take place on the afternoon of December 31.

The VA address is 3601 South 6th Avenue. Our trains will be set up in the Lindsey Auditorium. The auditorium is most easily approached using the main, South Sixth Avenue entrance, using the parking lot you see on your left after you enter. The VA is open to the public, thus you will have no problem entering the premises.



Map to VA Hospital at 3601 South 6th Avenue

The room we are using is 36' by 57', and with about 6' to walk around the outside, the big layout could be 24' by 44'. The children's layout may go up on the stage.

A planning session will be held following our regular meeting on November 20, at the Karrels, using Joe Duda's magnetic board. The concept of this meeting is to decide beforehand how all of the modules are to be utilized so that every module will be used, to achieve our best flow of scenery, and to be sure that every member has a chance to show their stuff. It is hoped that everyone will come to the meeting if they wish to contribute to a module: people like Winnie & Neal. Lee &

Alan, and Jim & Madelyn. Perhaps some of our members will have a new module to enter. Finally, if there is not room for every member's display, we will have to democratically decide what to use.

Naturally, we will need volunteers for setup, running the trains, and tear down. We will have a sign up sheet at the Karrels.

For the benefit of our veterans to whom we owe so much, let's put on a typically great show!

Rails in the Garden Tour

The second annual TGRS Rails in the Garden Tour will be held from 10 A.M. to 4 P.M. on March 5 and 6, 2005. The committee is asking members to volunteer their layouts for this event. Packets of tickets will be distributed to the membership at the Christmas party on December 18th. This event, more than any other, show who we are and what we do to our communities. Let's all get together and support it.

Editors Note: I spoke with Bob Dirksen, chairman of the 2005 Rails in the Garden and learned that in addition to the timing discussed above, the planning committee has decided that the prices will be the same as last year. They have decided to rent a dedicated cell phone so that there will be a single number for interested parties to call. Unlike last year there will also be a starter set door prize awarded.

Flyers and posters are being prepared and should be available by the November 6th open houses. In addition to being mailed you the list of interested people from last year the group plans to distribute flyers at the VA set up in December and the Home Show, Swap Meet and GAT show in January.

Krylon Camouflage Paint

By Glen Mitchell

As Large Scale modelers, our model painting needs cover a range from delicate dry-brush or airbrush techniques to painting a relatively large item such as an entire boxcar or structure. When working on larger items or, for course, weathering projects, some of us prefer to use that old standby can of spray paint, if the correct color is available. It's relatively inexpensive, easy to use (although not as precisely controlled) and easy to clean-up.

A few months ago I found a new (to me) line of Krylon paints called the Krylon Camouflage Paint System. This line of "ultra-flat" paint is aimed at users that want to camouflage vehicles, decoys or equipment. Fortunately for us, the colors and flat finish of camouflage paints are useful for certain railroad modeling projects.



Metal wheels painted with Krylon Military Brown

This paint comes in 12 ounce cans in the following colors (as seen on the shelves at 22nd Street Ace Hardware):

- Black
- Dark gray
- Light gray
- Brown (a dark brown)
- Medium brown
- Khaki (nearly tan)
- Sand Dune (another tan)
- Olive Drab
- White



Painted wheels mounted on (under) car

I have used the black and brown and I am happy with the result. I tried this paint because I was looking for a flat, dark brown paint for rolling stock wheels to get an "old rust" look. (To my eye "old rust" as seen on prototype wheels is basically brown. I guess it's the

combination of the reddish-brown rust and darker dirt and grim that combine to look dark brown.). The accompanying photos are of wheels – alone and mounted on a car - painted with the brown paint

The paint seems to be good quality with lots of pigment so it covers well. It's not the least expensive spray paint at \$4.99 per can (again, at Ace Hardware) but in my judgment it is worth it because it covers so well and goes on so nicely.

A suggestion for changing our monthly meetings-

By Jerry Tulino

Several assumptions...

- We need meetings to perform club business
- We need meetings to determine club direction
- We need meetings to learn of (and sometimes approve of) decisions made by the Board of Directors
- We like meetings because we get to see what other members' layouts can teach us
- We like meetings because we like to see other members' layouts
- We like meetings because they are social events

Although most of our members attend each monthly meeting, I believe that there are several issues that should be addressed...

- Parking is often a problem
- Seating is often a problem
- It is difficult for everyone to hear
- Meetings can only be held at members' homes that can accommodate a group of our size
- It is not convenient to bring friends, family, grandchildren, etc. to the meeting
- It is not polite to visit just to see a layout and then leave before the meeting

My suggestion, although not new or originally my own, since a similar idea has been discussed before...

Have 2 layouts open for 1 hour each month. For example, 1 layout is open from 10 am to 11 am and the second from 11:30 am until 12:30 am (allowing travel time so that 1 layout could be on the northwest and the other further east). Members could come and visit either

or both layouts, bring friends, socialize, etc.. Then, at 12:30 at the site of the 2nd layout, have the business meeting (maybe business meeting are only needed every other month). Members who wish to attend the business meeting can and those who, for whatever reason, do not wish to do so this month do not. This would allow members with smaller layouts the ability to "show off" their work (we never get to see them now!). It would make it easier to bring guests who just want to see what we can do. It would make the time dedicated to the monthly "event" more flexible for everyone. It would also allow members more time for discussion of each layout with the owner because they would have an hour rather than the few minutes they now have between the time they arrive and the time the meeting starts.

Although this is probably not the only possible solution to the issues discussed, I hope it stimulates a conversation on the topic and that we do make some changes to the current procedure.

Minutes of the October 16, 2004 Meeting

Respectfully Submitted by Ellen Stoesser

The meeting was held at the home of Jan and Lew Sleeper. President Nick Buchholz thanked the Sleepers for hosting. There were 46 attendees. Frank Trunzo had two guests with him.

The **minutes** of the September meeting were approved.

Treasurer's Report

Willis Fagg reported:

1. A current balance of \$ 2,754.39.
2. Revenue to date for the fiscal year 2004-05 are \$1,832.50 and expenses are \$597.97, for a net increase of \$ 1,225.53.
3. The current account balance includes a \$1,000.00 loan from Gary Martin to specifically cover our near term obligation to the 2008 convention.
4. Total membership to date is 76.

Editor's Report

Dick Izen desperately needs articles for the news letter. Dick is working on a few "kinks" with the snail mail. If you are having problems with the e-mail copy, please contact Norm Ulmer.

Vice President's Events Report:

In Norm's absence, Nick gave the report:

1. Dec 28-31 Set up, operate, and tear down at the VA Hospital
2. Jan 7-9 Home show at TCC
3. Jan 15 Toy Train Operators Swap Meet

4. Jan 29-30 GAT Show at the Fairgrounds, with set up Friday the 28th. They will give us \$100.
5. There will not be regular meetings in January, April & July. If you would like to host a regular meeting, please contact Ellen or Dick.

Membership Committee

Ibby Ulmer has a new roster of members available

Modules

Joe Duda reported that the modules were all ready to go and he thanked the members for having helped with the repairs. He is having an open house on the weekend of November 6 & 7. The hours on Saturday are 4:00 to 6:30 PM and on Sunday from 10:00 AM to noon. He will be showing both his Garden and HO layouts and all members are welcome.

Education Committee

Janet Mitchell would like to hold a clinic day in early spring. She would like to know what sort of clinic's members would like. There could be Jane Dorgan and how to make people and Dean Newman also has a different way to make people.

New Venues Committee

Lew Sleeper would like to have a meeting of the committee to discuss the 44' by 24' layout at the VA Hospital. The hospital will have Christmas trees on the stage, this will need to be taken into account. Directions to get to the hospital will be given at a later date.

There was a children's layout at the Davis Monthan Air Force Base on October 2, for their Octoberfest.

Harlow's Gardens would like a set up for their nursery. This would also be the children's layout which would be set up under a covered patio by the Harlow's workers. This was approved with no dates or how long it would be up. Lew Sleeper will troubleshoot the project. Membership forms would be available there.

2008 Convention

Things are moving along nicely. A bank account will be needed to deposit the ABTO's \$1,000 and TGRS' \$1,000. Our T-shirts with the convention logo created a lot of interest at the Denver (2004) convention.

Old Business

Rick and Sue Gast were presented with a billboard for having hosted an open house at the 2004 Rails in the Garden Tour.

New Business

The members approved letting Norm start planning for a visit from the Phoenix club (ABTO) in late February or early March. We will need to budget for the money for lunch. The tour would be a series of 6 or 8 layouts.

Bob Dirksen got approval to start working on the 2005 garden tour. January is already too busy so Bob is thinking of February or March. He will contact the

Chamber of Commerce about what else is going to be going on in town. He will also be looking at combining the ABTO visit with the Garden Tour.

(Editor's note: Although the above was accurate as of the October meeting, the dates for the 2005 Rails in the Garden tour have now been set. They are March 5 & 6. See the separate story in this issue)

Christmas party, December 18th. Madelyn Cook passed around sign up lists for everyone to indicate what they would like to bring to the party. She asked that members bring card chairs and 6-8 foot tables. Nick will bring two propane space heaters. The members approved having the club purchase the beverages (water, soda) and table service. Viewing of trains, Madelyn's miniatures and the Christmas trees will start at 4 PM and we will eat around 6 PM.

(Editor's note: If you didn't sign up at the meeting, please call Madelyn Cook to discuss what you can bring. Her number is on the roster. It is important that we ensure the right balance of main dishes, salads and deserts. Main dishes should serve eight and deserts should serve ten.)

Alan Lathram would like some assistance to help a man with a spectacular Christmas display at Shannon and North Ranch. They would get his trains operating again.

Alan thanked Jan Sleeper (who volunteers with the Red Cross) for helping him contact his Aunt in Florida during the recent hurricanes.

Frank Trunzo wanted everyone to know about the Christmas set up in Green Valley.

Next Regular meeting –Ken and Mary Karrels on November 20 at 1:00 PM.

Next BOD meeting – November 16th at 7 PM at Nick's house.



Teddy Bear train heads towards waterfall on Lew & Jan Sleeper's main layout. The Sleepers also have three back and forth, point to point, indoor lines.

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 prorated 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 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

- Nov 6** Open house at Peggy and Gary Martin's house - 10:00 AM to 4:00 PM
- Nov 6-7** Open house at Dolly and Joe Duda's house - 4:00-6:30 PM Sat & 10:00 AM to Noon Sun
- Nov 16** BOD meeting at Nick Buchholz's home – 7:00 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 ??** Kids layout at Dirksen's Church
- 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)
- Jan 29-30** GAT Show at Pima County Fairgrounds (Set up on January 28)
- Feb (?)** Meeting Open
- Mar 5-6** Rails in the Garden public open house
- Mar (?)** Meeting Open

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

Tucson Garden Railway Society
12356 North Mount Bigelow Road
Oro Valley, AZ 85737