



One of Dejan's turnout control servers is delivered by heavy-duty flatcar. Photo by Dejan Suskavcevic

Turnout control using RC servos

by Dejan Suskavcevic

Model railroad turnouts come in two flavors: those like Peco or Kato Unitrack that are fully self-contained and operational out of the box, and the other kind that requires additional engineering and expense to switch and keep in position. Several options are available for turnout control, both

manual and remote. Remote control is typically done via fascia buttons and switches, and with additional DCC stationary decoders, turnouts can be thrown using DCC throttle and computer programs such as JMRI. Tortoise machines have been traditionally used as a reliable solution for remote

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"GREEN EYE" - CLEAR BLOCK

by Vincent Walker, President

A lot going on - join in the fun!

Club members recently voted down a motion to pay someone from outside the club to complete certain projects on the layout. I know that the layout has areas that need to be worked on, but in all the time I have been with the club, scenery and wiring issues have not been contracted out that I know of. The layout still has wiring issues, the BLMA bridges need to be leveled, and we have some electrical dead spots and bad turnouts on the layout that need to be addressed before any scenery work is undertaken on some parts of the layout. I understand the need to get these things done, and we will. Let's each take time and get the basic items done first; we have the money. We need folks with time to take on the work; remember, this is a club, and your participation makes a difference!

Eight members participated in the August BC&G operating session, which went a little smoother than the June session. We had some of the usual problems, including locomotive troubles and cars leaving the yard on the wrong train, but it was all good fun! Operating sessions are temporarily suspended while bridge repairs are underway on the BC&G.

On another subject, thanks to VP Samuel Townsel for stepping in for me at the August meeting while I set up for my painting clinic. Everyone should take advantage of our clinic series. Dejan Suskavcevic will have held his clinic on hand-laid track and servo-controlled switches by the time you read this. On Saturday, Oct. 11, the

club is invited to N'Crowd founding member Greg Johnson's layout for a scenery clinic starting at 1 p.m. At the Oct. 15 membership meeting, Ray Byer and Gordon Bliss will demonstrate use of the BC&G DCC programming track. Closing out the year, Richard Bartlett will discuss lighting and other electronics at the November meeting.

Finally, we need your help in November to run trains on the BC&G during the San Jacinto Model Railroad Club's annual layout tour program. Join us at our Oct. 15 membership meeting for more information about our opening dates for the San Jac tour. And remember, you can run trains, yours or the club's, any Saturday at Papa Ben's! We have a lot going on - get involved!

Vincent



Left to right, Samuel Townsel, Dejan Suskavcevic and Rick Townsend at the June BC&G operating session.



N'Crowd Wednesday Membership Meetings:
September 16 / October 15 / November 19

BC&G Operating Sessions:
TBA - Suspended due to BC&G bridge repairs

Most activities take place at Papa Ben's Train Place, 4007-E Bellaire Blvd. Our monthly membership meetings start at 7 p.m. The BC&G Wednesday operating sessions start at 7 p.m. Come earlier to join us for dinner.

**Houston N'Crowd
Membership Meeting Report
July 16, 2014
Prepared by James Senneff, Jr. - Secretary**

President's Report: President Vincent Walker called the meeting to order at 7:16 p.m. The next meeting is Aug. 20, 2014, at Papa Ben's at 7:00 p.m.

The door prize winners were James C. Senneff, Jr., building; Joe Kingsberry, center flow hopper; Gordon Bliss, building; Eddie Aycock, car; Al Hague, tank car; Richard Bartlett, building.

Treasurer's Report: Treasurer Eddie Aycock reported the club has \$10,695 in the checking account and a little more than \$4,800.00 in a CD that continues to earn minimal interest. The club received three new membership applications.

Secretary's Report: Treasurer James C. Senneff, Jr. recorded 13 members in attendance: Dejan Suskavcevic, Tom Wayburn, Amy Wayburn, Richard Bartlett, James Senneff, Jr., Ted Davis, Gordon Bliss, Vincent A. Walker, Al Hague, Joe Kingsberry, Eddie Aycock, Samuel Townsel II and Justin Coder.

New Business: Members present agreed to add a bus terminal to the layout. Joe Kingsberry agreed to build it. Steve Lancaster will install the fast food restaurant buildings in a vacant spot on the layout. Discussion held concerning detailing the back wall behind the yard. Al Hague will clean the switches for the next operating session. Eddie Aycock noted that the next operating session is scheduled for Aug. 6 (first Wednesday).

Richard Bartlett reported that N'Crowd founder Greg Johnson invited club members to his place for a scenery clinic possibly in October. He lives in Friendswood. The proposed date is Saturday, Oct. 11 at 1:00 p.m.

Big Texas Train Show is on Saturday, Sept. 6 and Sunday, Sept. 7. Ted Davis has agreed to put together the club display table and test track for the show. Tickets for adults are \$9. Club items can be sold at the table. Everyone 16 and under, and Boy Scouts and Scoutmasters in uniform will be admitted free. The club needs to let Papa Ben's know if there will be anyone at the shop manning the layout room during show times.

Eddie Aycock has generated a BC&G locomotive inventory.

Upcoming Clinics: Vincent Walker will present a custom painting clinic in August, after which Joe Kingsberry will discuss what to do after the painting is completed (decals, dull coating, etc.). Dejan Suskavcevic will do a clinic on hand laid track September. Greg Johnson is tentatively scheduled for a scenery clinic in October. Richard Bartlett's electrical clinic will take place in November.

Events and Other Business: Gordon Bliss made a presentation on Santa Fe passenger operations at the monthly meeting of Gulf Coast Chapter - National Railway Historical Society. Northwest Crossing Model Railroad Club is having a swap meet at their clubhouse in Northwest Mall on Saturday, July 19. Tables are available.

A special thanks to the guys coming to the operating sessions and running the layout on Saturdays. Gordon commented that Kato is coming out with the UP 844 excursion locomotive and related cars.

Motion to adjourn made by Vincent Walker, seconded by Gordon Bliss; meeting adjourned at 8:54 p.m.

**Houston N'Crowd
Membership Meeting Report
August 20, 2014
Prepared by James Senneff, Jr. - Secretary**

President's Report: President Vincent Walker called the meeting to order at 7:07 p.m. He is setting up for the painting clinic after the meeting is over. The next meeting is Sept. 17, 2014, at Papa Ben's at 7:00 p.m.

The door prize winners were Dejan Suskavcevic, beer can tank car; Justin Coder, 50-ft. boxcar; Daniel Shaw, 50-ft. boxcar.

Vice President's Report: VP Samuel Townsel II will chair tonight's meeting while the president is setting up for his painting clinic.

Treasurer's Report: Treasurer Eddie Aycock reported the checking account is at \$10,814.96, and the CD is \$4,818.53.

Secretary's Report: Secretary James C. Senneff, Jr. recorded 18 Members in attendance: Tom Wayburn, Amy Wayburn, Tom Marsh, Richard Bartlett, "Doc" Moore, Dejan Suskavcevic, James Senneff, Jr., Kyle Senneff, Ted Davis, Gordon Bliss, Vincent A. Walker, Joe Kingsberry, Eddie Aycock, Samuel Townsel II, Justin Coder, Ray Byer, Daniel Shaw and Thattaya Shaw .

New Business: Richard Bartlett noted that the annual San Jacinto Layout tours will take place in November. He wanted to know if the club wanted to participate; members present voted to participate. Richard will send our info to the San Jac club for inclusion in the schedule.

Ray Byer mentioned that Papa Ben's had signals and drivers on sale two for the price of one of the type needed for the club layout. They can be used at both ends of the Austin passing siding and/or off the short show loop. A motion was made and passed unanimously to purchase the available signals. Ray will install the signals when other construction is completed in the same area of the layout.

Ray Byer also noted that the BLMA brass bridges need to be removed so the roadbed on the approaches and the bridges can be leveled. Ray estimates that the project will take several weeks to complete. While the bridge is out, Ray also wants to fix issues with the track going from the lower staging to the main level in the area of the bridges.

Ted Davis brought up the Big Texas Train Show on Saturday and Sunday, Sept. 7-8 at the George R. Brown Convention Center. We have committed to having two tables, and will run our test track and sell N'Crowd items. Volunteers are needed; current volunteers are Ted Davis, Gordon Bliss (Sunday only), Eddie Aycock (when needed) and Samuel Townsell (Sunday after 2 p.m.). Volunteers get free admission to the show on the day they volunteer. Please let Ted know to schedule when you are volunteering. Also, all kids 16 and under are free. Tickets at the gate are \$9 for adults. Joe Kingsberry volunteered to man the layout during both the Big Texas Train Show and the San Jac layout tour dates.

Upcoming Clinics:

President Vincent Walker will conduct his custom painting clinic tonight, after which Joe Kingsberry will talk about post-painting activities such as decals and dull-coating. Dejan Suskavcevic will do a clinic on hand laying turnouts in September. Greg Johnson's scenery clinic at his layout in Friendswood is tentatively set for Oct. 11. Richard Bartlett will hold his electrical clinic in November.

Old Business: VP Samuel Townsel on behalf of Al Hague made a motion to have the club pay someone to do scenery and backdrops behind the main yard and the passenger loop.

Motion seconded, but was rejected by vote of the members present. Also on behalf of Al, Samuel reminded everyone that all track work should be done before doing scenery.

Tom Marsh volunteered to remove the cars and various buildings from around the yard so electrical issues can be identified and repaired, and additional consideration can be given to background scenery. Members present agreed.

Samuel Townsel reminded everyone that we need to get more participation by the members to help with the layout and teach and learn from others how to do all aspects of completing the layout so that the bulk of the work is not put on only a few members. Samuel said, "Everybody can do something!"

VP Townsel noted that nominations for 2015 club officers are supposed to be submitted in September to the nominating committee. Gordon Bliss asked who was on the nominating committee. Ted Davis said that according to the N'Crowd bylaws the past president (Gordon) needs to select two other active members to join him on the nominating committee. Gordon Bliss asked for volunteers to be on the committee, and Richard Bartlett and Samuel Townsel agreed to serve on the committee. The committee will proceed with the election process per the bylaws.

Other Business: Gordon Bliss is incorporating a part of Harry Daniels' layout into his own, and the addition will be on display during this year's home layout tours. Tom Marsh noted that due to various internal problems with the UP steam program, some people are predicting the railroad will



Ray Byer has taken on the task of realigning the approaches to the BLMA bridges and leveling the track and bridges for smoother, more reliable operations. In recent months, problems have arisen with trains derailing on the bridge and approaches, possibly due to jostling of the benchwork; the bridges are a favorite location for younger visitors to hang out (and hang onto the benchwork) to watch trains go by.

not run any more steam-powered trains this year. Gordon Bliss noted that the work in the steam program is slow due to the personnel being used for many different things, such as maintenance, manning the snow plow in the area, etc.

Vice President Townsel said that our president was ready to start his clinic. Motion to adjourn made and seconded; the meeting adjourned at 7:52 p.m.

**Houston N'Crowd
Membership Meeting Report
September 17, 2014
Prepared by James Senneff, Jr. - Secretary**

President's Report: President Vincent Walker called the meeting to order at 7:07 p.m. The next meeting is Oct. 15, 2014, at Papa Ben's at 7:00 p.m. The door prizes winners were Tom Marsh, TLCX plug-door box car; Kyle Senneff, beer can tank car; Charlie Aselin, Santa Fe caboose; and Joe Kingsberry, tank car.

Treasurer's Report: Treasurer Eddie Aycock reported the checking account has \$10,487.66; the CD remains at \$4818.53. We have one new member, Bill Belcher. The club sold one LSR NMRA yellow box car for \$10 via the website.

Secretary's Report: Secretary James C. Senneff, Jr. reported 17 members in attendance: Tom Wayburn, Corbett Legg, Tom Marsh, Richard Bartlett, Elmer Denubo, Dejan Suskavcevic, James Senneff, Jr., Kyle Senneff, Ted Davis, Gordon Bliss, Vincent Walker, Joe Kingsberry, Eddie Aycock, Charlie Aselin, Al Hague, Ray Byer, and Steve Lancaster.

New Business: President Vincent Walker commented that scenery work behind the yard and the passenger loop and in the area of the BLMA bridges will need to wait until after the wiring issues are addressed and the track leveling project at the bridges is completed. He also said that a club-wide discussion on what the scenery will look like will need to take place prior to starting any scenery.

President Walker also reminded all members not to pull up any push-pins on the layout unless you are the one that put the pin in. Push-pins should be treated like blue flags on a real railroad. The placement of a push-pin on the BC&G usually marks a problem in that area of the layout.

Al Hague asked if any N' Crowd members were going to participate in the fall layout tour. Gordon and Al currently

seem to be the only ones. The listing of layouts on the November tour will be completed Oct. 7.

Al Hague reviewed the cars that are for sale to N' Crowd members. Five autoracks at \$10 each are available; sales to be made after the meeting.

Gordon Bliss, for the nominating committee, reported that Eddie Aycock will run for treasurer and James Senneff, Jr. will run for secretary, but nominations are needed for president, vice president and open board member positions. Richard Bartlett was nominated for the board position.

Gordon Bliss reported that the Galveston Island Railroad Museum ex-SP F units that are painted in the Santa Fe Warbonnet paint scheme will power a special train from Galveston to Rosenberg on Saturday, Sept. 20, as part of the Rosenberg Rail Fest. The train is scheduled to leave Galveston at 10:00 a.m., arrive Rosenberg at 11:15 a.m., then depart around 12:15 p.m. to 12:30 p.m. for the return trip. Great photo opportunities are at the Hitchcock and Alvin Santa Fe depots.

Richard Bartlett confirmed that the club will participate in the November layout tours organized by San Jacinto Model Railroad Club.

Ray Byer said the trackwork and wiring modifications around the BLMA bridges are in progress.

Richard Bartlett will give a brief overview of use of the new Broadway Limited DCC address changer after tonight's meeting.

Upcoming Clinics: Dejan Suskavcevic is conducting a clinic tonight on handlaid turnouts and the use of RC servos for turnout control. Greg Johnson's scenery clinic has been confirmed for Oct. 11 at Greg's home. Richard Bartlett will present an electrical clinic in November.

Other Business: Gordon Bliss showed photos of the UP Steam Shop in Cheyenne, Wyoming. Gordon also noted that he is making progress on incorporating the stockyard scene he acquired from Harry Daniels into his own Santa Fe - All the Way layout. Tom Marsh reported that a PTR locomotive had derailed and overturned at low speed in the South Wayside area.

Motion to adjourn made by President Vince Walker and seconded by Tom Marsh. Meeting adjourned at 7:38 p.m.

WANTED!

Your contributions to *The Orderboard*.

As with most aspects of your club, this only works if you participate.

Turnout control using RC servos *continued from page 1*

turnout control. An alternative that is becoming increasingly popular is borrowed from another hobby: servo motors for radio control (RC) airplanes.

Compared to Tortoise machines, RC servos are much smaller and quite inexpensive, although they do require additional electronics to generate the pulse-width modulated waveform signal that governs the servo arm position. A feedback circuit embedded in the servo senses the position of the arm, and turns the motor in the required direction.

The pulse-width modulated signal can be generated with simple timer circuits, or with more versatile microcontrollers, as are found in most commercial products. Some modelers have successfully used Arduino boards (an open-source, single-board microcontroller) to drive servos not only for turnout control, but also for animating objects such as crossing gates, signals, lighting, and other things.

As fun as electronics as a hobby can be, most model railroaders will prefer a commercial product. Tam Valley Depot (www.tamvalleydepot.com) makes servo driver boards that control one, four, or eight servos. Each board supports input from momentary or toggle fascia switches and from signaling systems, and they provide outputs for signals and lights. The single and quad units include onboard DCC decoders, while an add-on decoder is available for the eight-servo unit.



Dejan discusses RC servos for turnout control during a clinic at the Sept. 17 N'Crowd membership meeting. Photo by Tom Marsh

Adding DCC control provides additional benefits such as routing, where multiple turnouts can be set simultaneously with a single command. For instance, selecting a destination track can align the entire yard throat. Automated scenarios are possible using free JMRI (www.jmri.org) or Railroad Automation (<http://www.perecli.com/rrauto>) software.

The small size of RC servos makes it easy to place them on the layout, or, more typically, under it. Piano wire is often used to connect the arm to the throwbar through a fulcrum, as on a Tortoise machine. The wire can also be formed into a crankshaft, which works particularly well for retrofitting existing layouts, as it provides more freedom for servo placement, which then can be oriented in any direction. When building mechanical linkages, servo arm movement can be adjusted individually for each turnout, or one could use the full swing of

the arm and rely on the springiness of the piano wire to provide the required amount of force on the turnout points.

While working on my own practice layout, I originally intended to use only manual turnout control, but was soon intrigued by the possibilities of DCC-controlled layout automation. I decided to give RC servos a try given their very low per-turnout cost and small size, which I found very important given the low-profile of my modules. I experimented with different mechanical linkage methods, and while I still have to resolve some challenges in retrofitting my dense yard throats, I have had good results with caulking servos directly to the foam subbase and using styrene to make fulcrum points. For my next layout, however, turnout control, linkages and device placement will be part of the initial design before any track is laid.

Prez sez you can do it, too!

At the August membership meeting, N'Crowd President Vincent Walker demonstrated his techniques for masking and painting cars and locomotives. He made it look easy, and claims anyone can do it! A few of his recent efforts are shown here.

Everyone's eyes are on Vincent as he peels back the masking tape on a Santa Fe E-6 that he painted during the clinic. This is the second painting clinic we have had this year (the first was by Joe Kingsberry), so now you know how to do it yourself!

Vincent brought along several completed projects and some "works-in-progress" to show at the clinic. MoPac business car No. 8 is shown below as it appeared on Aug. 20, and also in a more recent photo. He is also kitbashing models of various other MoPac cars, and has had custom decals made for the project.





In their glorious guise as Santa Fe warbonnet-adorned units, Galveston Railroad Museum's ex-Southern Pacific EMD F-units return to the museum after a successful private excursion to Rosenberg. Photo by Gordon Bliss

F-units make a trip to Rosenberg

by Gordon Bliss; photos as credited

On Saturday, Sept. 20, the two "Santa Fe" F-units and three Budd streamlined cars owned by the Galveston Railroad Museum made a run from Galveston to Rosenberg and back in conjunction with the Rosenberg Railroad Museum's Fall Fun Fest. The F-units were placed on the front and the rear so as not to have to run around the train in Rosenberg for the return trip. This was the first time the former SP locomotives have been off Galveston Island since the museum received them last November.

I gave chase to Virginia Point and caught the train coming off the causeway. The dispatcher asked if they were going to run track speed, but the engineer replied that they could make more than 30 mph. I made it up to the old Hitchcock Santa Fe depot, where the train passed at about 50 mph. Speed issue resolved!

I was able to pass the train at Alvin as it was behind a westbound freight train. At Arcola, I got it banging across the diamonds and saw our president Vincent

Walker, then grabbed some grub. On the return trip, I caught the train at the former Santa Fe depot at Alvin, then grabbed shots at Tiki Island and on Galveston Island before the end of the run at the museum.



The special at Alvin; N'Crowd President Vincent Walker is at trackside to the left. Photo by Rusty Paulus



*Top, the train approaches Galveston. Photo by Gordon Bliss
Above, the special at Rosenberg. Photo by Brent Lamb
At right, the Warbonnets were a hit along the route. Photo by Brent Lamb
Below, passing Hitchcock. Photo by Gordon Bliss*



Accurate modern *Sunset Limited* consist soon possible in N scale

by Tom Marsh

Kato has announced a new model that will allow fans of Amtrak to put together more accurate Superliner train consists, including the New Orleans - Houston - Los Angeles Train Nos. 1 and 2, the *Sunset Limited*.

Kato will produce a model of the Amtrak Superliner II transition dormitory/sleeper as built by Bombardier in the mid-1990s. Kato is taking orders for the new model now.

Bombardier built 47 of the transition sleepers for Amtrak between 1993 and 1996. The cars have steps at one end leading down from the upper level to a low-level vestibule to allow train crews to access single level cars such as the Heritage Fleet baggage cars that Amtrak currently employs in many long-distance western Superliner consists.

A major spotting difference between Superliner I and Superliner II cars is the trucks, and Kato has made new tooling to accurately reproduce the Superliner II truck frames.

Kato is taking orders for the new model now; MSRP is \$30. Support your local hobby shop and Kato's efforts on behalf of modern-era modelers by ordering your Amtrak Superliner II transition sleepers today!

At right, an early production sample of Kato's new N-scale Superliner II transition dormitory/sleeper. Note the all-new trucks, accurate for Superliner II cars. Photo courtesy Kato USA.



Above and below, Amtrak Train No. 2, the Sunset Limited, departs Houston on time on Sept. 9, 2014. The second car in the consist is a Superliner II transition dormitory/sleeper, a mainstay on most of Amtrak's Superliner-equipped trains. Kato is now offering an N-scale model of these cars, which will allow N-scalers to assemble more accurate models of Amtrak's Superliner consists.



T&NO 982 prepared for new ‘life’ as half a locomotive

by Tom Marsh; photos by Al Dykes

These photos by Gulf Coast Chapter - NRHS Vice President Al Dykes tell the story: Former T&NO 2-8-2 No. 982, displayed intact for years in Houston's Hermann Park and later in downtown near Union Station, has been deeded to the new Nau Center for Texas Cultural Heritage and permanently separated from its tender for display inside the center's new downtown Houston facility. Ill-informed Nau Center officials reportedly said the tender was not needed because they wanted to display "only the locomotive."

The tender has been transferred to Utah's Heber Valley Railroad for use in converting one of the tourist line's locomotives from coal to oil.



LCL

Less than Car Load: a few notes from your editor

In our thoughts: Long-time N'Crowd member "Doc" Moore has been in the hospital for some time now. Please keep him and his family in your thoughts and prayers.

Most of you may remember that, aside from regular good humor, Doc provided the real gold golden spikes that were driven on the BC&G at Bennett when the mainline was completed at the current layout location.

Thanks again, Doc!

Elections: The Nominating Committee has generated the slate for the upcoming election of officers for 2015. The people railroaded into volunteering this year are:

For President: Vincent Walker
 For Vice President: Tom Wayburn, Samuel Townsel II, or Al Hague
 For Secretary: James Senneff, Jr.
 For Treasurer: Eddie Aycock

For Board Member (2017): Richard Bartlett

Elections will take place as provided by the N'Crowd bylaws.

What about next year?: If you have ideas for club events, clinics (either presented by you or someone else) or field trips for 2015, let us know. We need your input to help everyone get the most out of their club!

Houston N'Crowd 2014 Officers and Volunteers

President Vincent Walker
 Vice President Samuel Townsel II
 Secretary James Senneff, Jr.
 Treasurer Eddie Aycock
 Board Member (2014) Ray Byer
 Board Member (2015) Justin Coder
 Board Member (2016) Al Hague
 Layout Master Al Hague
 Editor & Webmaster Tom Marsh

HOUSTON N'CROWD 2014/2015 TIME TABLE

September 17

N'Crowd Membership Meeting at Papa Ben's Train Place, 7 p.m.

October 15

N'Crowd Membership Meeting at Papa Ben's Train Place, 7 p.m.

November 19

N'Crowd Membership Meeting at Papa Ben's Train Place, 7 p.m.

December TBA

N'Crowd Annual Holiday Party/Combat Gift Exchange

December 17

N'Crowd Membership Meeting at Papa Ben's Train Place, 7 p.m.

2015

Give us your thoughts on 2015 activities!

January 21

N'Crowd Membership Meeting at Papa Ben's Train Place, 7 p.m.

February 21

Greater Houston Train Show, Stafford Centre

THE ORDERBOARD *from Houston N'Crowd*

Tom Marsh, Editor

Published fairly regularly for members and friends of N'Crowd Model Railroad Society, Inc., Houston, Texas.

Send newsletter contributions to: tom@houstonNcrowd.org.

Please note: We reserve the right to edit submissions for clarity and length.

Visit our Web site:

www.houstonNcrowd.org

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