# TRAIN ORDERS

OFFICIAL NEWSLETTER OF THE NEW JERSEY DIVISION,
MID-EASTERN REGION. NATIONAL MODEL RAILROAD ASSOCIATION

SEPTEMBER 17 2016 VOLUME 27 NUMBER 4

# Work in Progress is Back!

The September meet of the New Jersey Division will be in the "Work in Progress" format at the M. Jane Pearson Elementary School, 1301 Burlington Ave, Delanco.

Many of you have attended the "WiP" format clinics previously, but for those who are new to the division or haven't taken the opportunity, here's how it works:

We have eight to ten clinics running simultaneously. Some will be one long clinic and folks can join in or step out at any time, and others will be 30 to 40 minute clinics that will be repeated as time allows.

The complete line up of clinics has not been formalized yet, but here are a few samples to whet your appetite: We'll have Ron Baile showing his techniques for building models with styrene, Mike Prokop on Making Coal Hopper and Other Loads John Gallagher on Building O Scale Interurbans and Wood Passenger Cars using modular Components, and Mike Mosher

will be doing a follow up on the Arduino clinic we held in July. Several others are yet to be determined.

Of course, there will be the New Jersey Division standard activities in process at the same time, the model contest, the sales tables, the door prize drawing, and the raffle. Also included will be the coffee and doughnuts, and best of all the chance to catch up with friends or make a few new ones.

The afternoon will feature several home railroads for you to visit.

Finally, we will start off with the annual division business meeting where you'll get to meet the board of directors for the 2016-2017 year and ask any questions you may have about the division.

We'll try to keep the official part short so you'll have more time with the clinics and other good stuff! Come! Enjoy! We look forward to seeing you there!

# **NEXT DIVISION MEET**

Saturday, September 17, 2016 9:00 AM to 12:00 M. Jane Pearson Elementary School 1301 Burlington Ave. Delanco, NJ 08075

### Contest:

Detailed/Weathered Mail and Baggage Cars

### Clinics:

Work in progress format with eight simultaneous clinics. Come and go as your interest dictates!
Layout Tour: 1:00 pm to 5:00 pm
Swap tables:

Contact Bob Clegg 856 696 0463 BobcatCS@comcast.net

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TRAIN ORDERS

Official Newsletter of the New Jersey Division, NMRA

# TRAIN ORDERS

Official Newsletter of the New Jersey Division Mid-Eastern Region, NMRA P.O. Box 8694 Trenton, NJ 08650

### www.NJDivNMRA.org

*Train Orders* is published 5 times per year for the NMRA members and friends of the New Jersey Division. Online newsletter always available at NJ Division website. Mailed hardcopy newsletter is \$7.00 per year. The opinions expressed do not necessarily reflect those of the Division. Products and publications mentioned in *Train Orders* in no way constitute an endorsement by the Division.

### **Contributing to Train Orders**

Train Orders welcomes contributions from the New Jersey Division membership. Letters, articles, photos and other items may be emailed to the editor, Geert Marien, at njdiv.editor@gmail.com. Please include return postage if you would like materials returned.

Deadline for next issue: October 14, 2016

### Board of Directors 2016 - 2017

Superintendent		Asst. Superintenden
Bob Clegg		and Clinics Chair
856 696 0463		John Gallagher
BobcatCS@comcast.ne	et	856 228 2239
Treasurer	Secretary	Director

Treasurer	Secretary	Director
Bill Grosse, Jr.	Tom Lavin	Mike Prokop
609 585 4616	856 824 1405	609 586 9818
Director	Director	<b>Division AP Chair</b>
<b>Director</b> Chuck Higdon	<b>Director</b> Michael Mosher	<b>Division AP Chair</b> PJ Mattson, MMR

### **Membership Information**

Any person who is a member of the NMRA and lives within the boundaries of the NJ Division as defined by the NMRA is also a member of the division. Non member guests are welcome to attend three of our meets, after which they will be asked to join the NMRA.

NJ Division annual activity fee: \$10.00 (optional and includes 5 meets) or individual meets \$5 at the door. First time guests, no charge!

P.O. Box 1328
Soddy Daisy TN 37384-1328
www.nmra.org

# **SCHEDULES**

### NEXT BOARD MEETING

Tuesday, October 25
Host: Tom Lavin
westvall@aol.com
609 230 4734
All members are invited.

Please let us know if you plan to attend.

### TRACKS TO THE TRIANGLE

2016 MER Fall Convention
October 20 - 23, 2016
Marriott at Research Triangle Park
4700 Guardian Drive
Durham, NC 27703
www.mer2016.org/

### NJ DIVISION NOVEMBER MEET

Saturday, November 12, 2016 (tentative pending confirmation) St. Charles Borromeo School. 76 Stagecoach Rd. Turnersville, NJ 08081

# GARDEN STATE DIVISION OCTOBER MEET

Saturday October 1, 2016
Hillsborough Township Municipal Building
379 South Branch Road
Hillsborough , NJ
<a href="http://www.nergsd.com/">http://www.nergsd.com/</a>
(Also see Page 4)

# NJ DIVISION AREA HOBBY SHOPS

# Sattler's Hobby Shop\*

14 Haddon Ave. Westmont, NJ 08108 (856) 854-7136

# **Jackson Hobby Shop\***

2275 West County Line Rd. Jackson, NJ 08527 (732) 364-3334 www.jacksonhobby.com

### The Train Room\*

715 Arnold Ave.
Pt. Pleasant Beach, NJ 08742
(732) 892-5145
www.thetrainroomNJ.com

### Yankee Dabbler - Track 33

101 W. Kings Hwy. Bellmawr, NJ 08031 yankeedabbler@aol.com

\*Offers 10% discount to NMRA members

You may wish to pay the optional (it's a great deal) \$10 NJD annual activity fee at the September meet

Let us know if there's a clinic you would like to see... or see again!

# VIEW FROM THE CAB

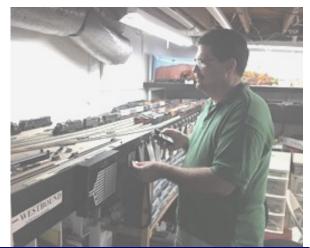
# **Bob Clegg**

### **Arduino Clinic**

This past July we had a "Mini Meet" consisting of one extra fare clinic, Introduction to the Arduino Microprocessor." Thanks go to the members who attended and helped make this event a success.

Special thanks go to Assistant Superintendent and Clinics Chairman, John Gallagher. John worked tirelessly to coordinate this event including securing the venue, keeping track of the registrations, and procuring the supplies required.

Of course, thanks go to Kurt Thompson of the Chesapeake Division who was our clinic presenter. Kurt arrived Friday afternoon and after dinner we took part in an operating session on Rick Bickmore's railroad. Kurt and



Kurt Thompson operating at Rick Bickmore's

I thank Rick for extending the invitation and showing us the hospitality for which the New Jersey Division is known.

### Election?

Well, it looks like we'll have a change to your Board of Directors. Chuck Higdon has joined the board and Bill Howard will be retiring. Since that's a one for one change, no election is necessary.

Please thank Bill when you see him for over ten years of dedication to the smooth operation of the division. You'll know where to find him since for this meet he will still be setting up and handing out the door prizes and raffle prizes as he has for the past seven years.

My personal thanks go to Bill for his service and friendship which I know will continue even though he has chosen not to run for another two year term on the board. Bill was not only my right hand in planning and running the 2010 Princeton Junction MER convention, but has been there whenever wherever I needed him.

# **Speaking of Elections...**

You should have received a hard copy version of *The Local* with the accompanying ballot for MER officers. The ballot also includes four revisions to the region's bylaw. If you have not already sent your ballot back, I encourage you to do so, and strongly encourage you to vote "DISAPPROVE" to the first three bylaw changes. I find them to be vague at best and

worse, ambiguous.

The first would allow the board to determine which version you will receive.

The second sounds good, but is too vague to be of any help.

The third is completely ambiguous. Will the information be in the January issue, or the August issue?

These changes need to be defeated until they are reworded so that the intent matches the text

If you would like to discuss any or all of these, call or email me. My contact information is on page 2.

### 2016-2017 Division Meets

We have some of the meets for the year planned already, some, not so much. As you can see from this *Train Orders* our September meet will be in Delanco on the 17th and will be a "Work in Progress" format meet. The January meet will be the traditional joint meet with Philly Division tentatively at Haddon Twp. HS on the 14th, and the March meet at Switlik Park Hamilton Twp. On March 11.

The November meet is still open, but will probably be in the southern part of the division, perhaps in Millville, planned for the 12th.

Of course, final details will be forthcoming in future issues of *Train Orders*.

Start making plans now and we'll see you there!

# **NEW JERSEY DIVISION MODEL CONTEST NEWS**

Bill Grosse, Jr. Contest Chairman

At our May meet in Wall Township I presented a Contest Winner's Certificate and a NJ Div. Dues Voucher to Mike Prokop. Mike was the winner of the Railroad Structure Contest at our January meet in Hamilton Township.

The Contest at the May meet was Detailed/ Weathered Milk Cars.

This category does not appear to be popular and not likely to be repeated. There were no entries until one late arrival to the contest table.

The winner by default (and by popular ballot

votes) was Entry # 1 by Bill Howard with his Dairy Products Milk Car entry (Photo below).

### **Upcoming Contests**

Our next contest will be Detailed/Weathered Mail and Baggage Cars at the September 17, 2016 meet.

The November meet contest will be Detailed/ Weathered Livestock Cars.

If you would like to suggest a contest category, please feel free to let us know. Do Try to bring a model to a meet to show off your skills, and maybe win the contest.

# **Bill Howard's Milk Car Contest entry:**



# New Jersey Division Book Store

(Mike Prokop)

The New Jersey Division bookstore is ready for another season. These books, donated to our division from the estate of a fellow model railroader as well as other local sources will be available for sale at all of our upcoming division meets. Many great titles are available and the books are priced at 50% off of the cover price, WOW! These are quality publications in excellent condition with a wide variety of great railroad subjects! Don't forget to bring a couple extra bucks or a check and buy some to supplement your railroad book library. The proceeds directly help offset the operating expenses of our division. See Mike Prokop at the NJ Division Bookstore table for friendly sales and service!

# GARDEN STATE DIVISION MEET

(Jim Homoki)

After 1 1/2 years the GSD returns to the Hillsborough Township Municipal Building for our fall event. Hillsborough is in Somerset County with the Municipal Building located 10 minutes south of Somerville and the Route 202/206 circle. The address is 379 South Branch Road, off of Amwell Road and only a few minutes from Route 206. A Works in Progress format will be used to take advantage of the large meeting room. With this format several mini-clinics are run at the same time for a duration of not more than 20 minutes. After a very short break, the presentations are repeated for several more cycles. Attendees can choose the presentation they wish to attend each time. As usual, sales tables and model judging will be available. Maps for nearby lunch spots and self guided tours to four layouts in the afternoon will be available at the meet.

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# MAY GSD-NJD JOINT MEET AWARD PHOTOS



Above: Meet Clinician Chuck Diljak with Bob Clegg.

Right: an award winning Group Photo:

From Left To Right:

Alexis Nowatka Mark Lutz Andy Rubbo John Vogler Charles Higdon **David Albertson Robert Dennis** 



All photos on this page are by Jim Walsh



Right: Mike Prokop Contest Award from Bill Grosse, Jr.

**SEPTEMBER 17, 2016** 

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OFFICIAL NEWSLETTER OF THE NEW JERSEY DIVISION, NMRA

# **ARDUINO WORKSHOP A SUCCESS**

John V. Gallagher

**Assistant Superintendent & Director of Clinics** 

As announced during the May 2016 NJ Division Members watched a few YouTube videos on The final problem of the workshop was a signalon July 23. The subject of the workshop was an Arduino programs. introduction of the Arduino microcontroller board and its potential for applications to model railroading. Kurt Thompson of Maryland, an NMRA member for many years and former superintendent of the Chesapeake Division presented this workshop to Maryland area NMRA members last fall. He currently applies Arduino boards to signaling systems on an area club layout.

Thirty members from our division, the Philadelphia Division and the Garden State Division registered with 26 attending the workshop. Members brought personal laptop computers for the hands-on activities programming their clones of Arduino "UNO" boards and setting up test circuits using workshop supplied breadboards, test leads, resistors, LED's, and photo resistors. Workshop members paid \$10 for the workshop and received their UNO's by mail prior to the workshop. I provided guidance via emails assigning them "homework" assignments where they downloaded software from the Arduino web site and began playing with their UNO. Members learned at home to set up and connect their UNO with their laptop and go through several programming assignments.

Meet and in the July special edition of *Train* Arduino boards learning its anatomy/features ing circuit controlled by the UNO. The circuit is Orders, a workshop took place at St. Charles plus some initial applications. They also began still under development so members problem Borromeo Church's School in Turnersville, NJ simple programming using "sketches" that are solved and worked on possible solutions. It is a

> At the workshop, members began with a caffeine and sugar fix with coffee and doughnuts and socializing. Workshop kits were distributed including the parts described above. Members set up their work stations.

> Kurt presented a PowerPoint lesson that introduced the Arduino and its potential for model railroading applications. Since members did homework and were initially oriented to the UNO, he was able to move to initial applications. Terminology was discussed as well as areas for future post workshop study. The workshop moved along at a reasonable pace with members setting up circuits and working on prepared sketches, loading them into the UNO, testing, and modifying the sketch to change performance and then testing again. The key to quick applications of programming through sketches was the large free libraries of sketches available that members can use. Rather than start at the beginning of programming in C++ computer language, members learned to find and adapt already developed sketches and to modify them, cut and paste computer code lines, and make the sketches work for the modeler's needs.

three signal circuit with red/yellow/green aspects for each signal head [simulated with LED's on the breadboard]. The signals are triggered by the photo resistors that change resistance when there is a light change These photo resistors can be placed in the gauge of the track flush with the ties so a train passing over them will cause the photo resistor to change resistance. That change can be recognized by the UNO and its sketch through the circuit. The sketch will then change the green aspect of the first signal head to red, protecting the train from following traffic. The sequence is repeated with the second photo resistor being "covered" and then the third. Depending upon the sketch, when the train completes passing the first photo resistor, the first signal LED turns yellow, and so forth. All of this can be modified with changes to the sketch, such as requiring two signal blocks showing red aspects for more restrictive protection of the train.

The workshop formal presentation ended about 1PM but a number of members remained until almost 3PM working on their setups and sketches. All received a copy of the PowerPoint presentation to review at home plus some

(Continued on page 7)

sketches.

I set up a mailing list of workshop members for communications about our work on the UNO's. Members sent communications to all offering links and other resources to further our learning. We became a learning community. I included Kurt in the mailing list and he participated in conversations before the workshop.

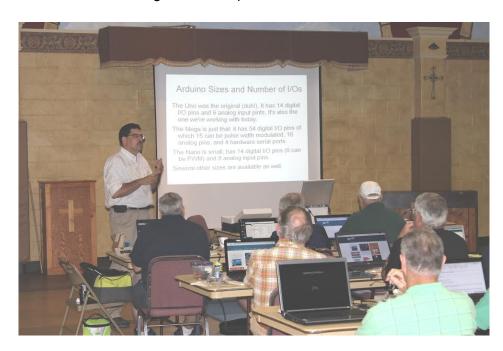
Post workshop communications included positive and constructive feedback. My thanks go to many members that personally thanked me and the Division for setting up the workshop. Ron Baile, MRR, stated: "Thanks for setting up the Arduino clinic. Though it wasn't quite what I ex-

you have to start somewhere! That's why I modifications to the sketches and seeking rewished he [Kurt] had dwelled more on starting sources. I hope they continue for I am a beginsketches and the various functions... I will tell ner in this so my learning curve has been steep you that what I absorbed today is more than all too. Kurt continues to participate in the workthe articles I have ever read about the sub- shop, commenting on workshop member comject..." Bill Lupoli wrote: "Thanks for setting up munications and offering strategies and soluthis class. This is the first time I've 'bread- tions to sketch problems. boarded' something, and it's nice to see the UNO in 'Action." Pete Suhmann commented: "John the clinic was one of the best things we have done and I thoroughly enjoyed it and learned lots. I was intimidated by the programming but the cut and paste approach makes it doable for this old codger."

pected it to be, it was quite informative and --- Members continue to email the group with

We offer Kurt many thanks for his hard work developing and presenting this valuable workshop to NMRA members and his sharing his PowerPoint and other resources. In the end, all the work setting up the workshop was worth it.





Workshop presenter Kurt Thompson introduces members to various models of Arduino microcontrollers.



Bob Clegg seems pleased with his work on a sketch. The other members' expressions may perhaps suggest different outcomes.

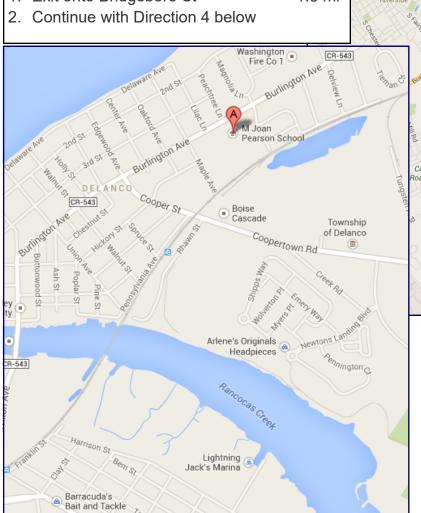
# MAPS AND DIRECTIONS FOR THE SEPTEMBER MEET

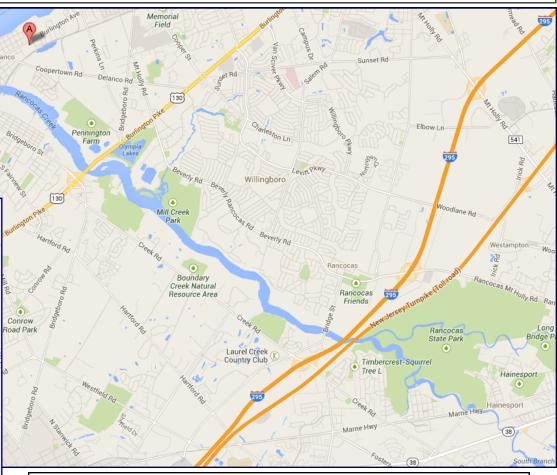
### From US130 North

- 1. Slight right toward Bridgeboro St 0.2 mi
- 2. Turn left onto Bridgeboro St 1.5 mi
- 3. Continue with Direction 4 below

### From US130 South

- 1. Exit onto Bridgeboro St
- 1.5 mi





### From I-295 South Exit 43A from I-295 N Exit 43

1.	Turn right onto Creek Road
2.	Head northwest on Creek Rd

- 2. Head northwest on Creek Rd3.6 mi3. Turn right onto S Bridgeboro St1.8 mi
- 4. Continue onto E Scott St 0.1 mi
- 5. Turn right onto S Pavilion Ave 0.5 mi
- 6. Continue onto County Rt 543/Burlington Ave 0.2 mi
- 7. Turn right to stay on County Rt 543/Burlington Ave 0.7 mi
- 8. Destination is on the right