

The Semaphore, The Official Publication of Land-O-Sky, Division 15, Southeastern Region, NMRA



# The Semaphore

LAND-O-SKY  
DIVISION 15, SOUTHEASTERN REGION  
NATIONAL MODEL RAILROAD ASSOCIATION

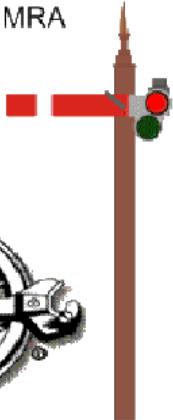
JOHN WILLIAMS, SUPERINTENDENT

FRANK PEARSALL, ASST. SUPERINTENDENT

KEN GRANZIN, COMPANY CLERK JIM FIQUA, PAYMASTER



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## November 2009

### VOLUME 39 NUMBER 3

Our next meeting is on November 5<sup>th</sup> at 7 PM.

Send comments about and contributions to this newsletter to [editor](#).

Please keep us informed of changes in your address, phone number or email address.



**MIKE DEVORE KEEPS TRACK OF THE TRAINS  
OPERATING AT *FALL BY THE RAILS*  
AT BLACK MOUNTAIN.**



## NEWS FOR OUR MEMBERS

### OUR NEXT MEETING

Our next meeting will be starting at **7 PM** on **Thursday November 5<sup>th</sup>**.

**Clinic:** Small Layout Operations: Hard work in a small space. **Joe Norris** will present a power point presentation that will explore ways to increase operational complexity with little trackage. The possibilities can apply to large layouts as well. .

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**Raffle Tickets:** We have reach a 100 tickets sold. We need more sales, please join in the fun. Contact [Fred Coleman](#) for more info.

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### BRIEF SUMMARY OF THE DIVISION MEETING, THURSDAY, OCTOBER 1, 2009

Ken Granzin, Company Clerk

The meeting was called to order at 7:07

**John Williams** reported on **Bill Siebert's** improving health; he's doing well.

Unfortunately, **Kent Roberts** is not doing well.

**John** reported on the G-scale layout that was set up by club members at the Western North Carolina State Fair. We won the blue ribbon for the best non-commercial display. Those who oversaw running of the layout passed out 653 flyers.

**Fred Coleman** reported that the building we will use at the fairgrounds for our 2010 annual show looks good. He has some raffle tickets for club members to sell. Several items will be available for raffling, including a 3' by 5' N-scale railroad. The person who sells the most tickets will get a prize.

The Grove Arcade has an empty storefront and would like us to set up our railroad at Christmas time. **John** will look into the matter.

**Fred** spoke of our scheduled showings of our railroad at Hendersonville's Farm-City Day on 3 October and at Black Mountain on 17 October. He encouraged members to participate.

**Dan Lang** reported that the Apple Valley Club intends to dismantle that section of their railroad that has existed for some time, with intentions to replace it via a project taking perhaps three years to complete.

**John** said the project at Lake Junaluska is proceeding well.

**Ken Granzin** reported on our work with the *Eliada* students in the new room in the barn we now use for that purpose. He said the transition to our new quarters went well and he again encouraged members to participate in this aspect of our club's outreach efforts.

**Joe Norris'** spokesman corrected an earlier report by saying that *Railroad Model Craftsman* magazine is not going out of business. He wanted the record corrected that the *Light Iron Digest* was in financial trouble and in talks with Carstens Publications, or possibly cease publication if talks fail to find a new publisher.

**Frank Pearsall** spoke about his Narrow-Track conclave to be held 10 October.

**Jim Fuqua**, Paymaster, reported there is sufficient money available in our checking account and in CDs to

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fund our train show in March.

**Rob Bell** has resigned as Assistant Superintendent and has been replaced by **Frank Pearsall**.

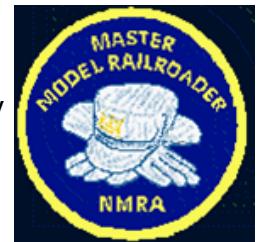
There was no clinic presented at this meeting.

**Our next meeting will be on Thursday, November 5, starting at 7:00 pm.**

The meeting adjourned at 7:44 p.m.

## DIVISION AP UPDATE

**Joe Norris** has received his *Civil Engineering Achievement Program Certificate* by completing all the requirements as of September of this year. Come to the meeting and congratulate Joe on this achievement.



Keep up the good work! *We would like to see your name in a future update.*



**Mike DeVore and Penn Bullock** get the trains running at "Fall by the Rails" at Black Mountain on October 17



A good turnout at a Autumn Rails train show in Hendersonville on October 10.

**T**hanks to the "Fall by the Rails Festival" crew of **Boyce Brown, Mike DeVore, Penn Bullock, Jim Fuqua, Ken Granzin, Cy Miller, Clint Smoke, and Tim Wagner**, who on a cool October 17<sup>th</sup>, set up and operated the club's modules at the depot in Black Mountain.



**T**hanks to the crew of **Fred Coleman, Penn Bullock, Ken Granzin, Maureen Riggins and Wally Brown**, who set up and operated the club's modules at the town's "Farm City Days" in Jackson Park, Hendersonville on October 2<sup>nd</sup>.



**Fred Coleman and guests at "Farm City Days" at Jackson Park, Hendersonville on October 2**



A good stream of spectators at a Farm City in Hendersonville on October 2.



## FEES, FEES, FEES

### TIME TO FOR OUR ANNUAL FEES FOR THE LAND O'SKY DIVISION 15

Again after much discussion, the fees shall remain at \$12.00 and are due September 1, 2009 Collection of dues began at our September 3rd meeting. See Jim at our next meeting or please mail to:  
Jim Fuqua, 2813 Hampton Drive, Hendersonville, NC 28791



## NS Unveils Experimental Electric Locomotive



ALTOONA, PA. With U.S. Dept. of Transportation Secretary Ray LaHood and Congressman Bill Shuster in attendance, Norfolk Southern today unveiled the latest in alternative energy locomotive technology at its Juniata Locomotive Shop in Altoona, Pa. NS 999 is a prototype 1,500-horsepower switching locomotive that relies solely on rechargeable batteries for power.

"At Norfolk Southern we strongly subscribe to the view that sustainability and reducing our carbon footprint are solid business objectives that also provide enormous benefits to the communities we serve," said CEO Wick Moorman. "By utilizing re-

generated kinetic energy of the train and with no diesel exhaust emissions, NS 999 achieves those goals. This prototype locomotive was developed by Norfolk Southern, with the help of an incredibly creative partnership, including the U.S. Dept. of Energy, the Federal Railroad Administration, and The Pennsylvania State University, for which we are grateful. We must also recognize Congressman Bill Shuster, as without his active interest and participation in this project NS 999 would still be merely a concept."

"Today, the transportation sector currently accounts for just under a third of U.S. greenhouse gas emissions, more than half of nitrogen oxide emissions, and almost three-quarters of our petroleum consumption. We need to change that," said Secretary LaHood. "By working together to develop alternative energy sources and innovative technologies like this electric locomotive, we will make transportation more sustainable and energy-efficient."

"Historically, Pennsylvania has had a tremendous history in railroading, and it remains my belief that our state can still have a bright future in rail if we take advantage of dynamic partnerships between the private and public sectors like the one that produced this locomotive," said Congressman Bill Shuster, the Ranking Republican on the Railroads Subcommittee. "What Norfolk Southern and Penn State are doing with Congress and Secretary LaHood's support is truly significant and will help usher in a new generation of green locomotives fueled by American ingenuity. Let's not forget about the great work done by the Juniata Locomotive Shop employees who did a superior job producing this engine. I am proud to have worked to secure funding for this project, and I look forward to seeing it working the rail lines soon."

Congressman Shuster secured \$1.3 million in federal funding for the NS 999 project.

NS 999 is an entirely electric locomotive that uses a lead-acid energy storage system comprised of 1,080 12-volt batteries to operate in railroad switching applications without the use of a diesel engine and with zero exhaust emissions. The plug-in locomotive also can regenerate dynamic braking energy through a system provided by Brookville Equipment Company. The recovered dynamic braking energy continually replenishes the energy storage system, and uses this recovered energy for tractive effort in rail operations. The batteries are carefully monitored and controlled through an elaborate battery management system to assure safety and maximum battery life, and when fully charged NS 999 is able to operate three shifts before recharging is required.

**For those wishing to model the new locomotive, it is built on a former GP-38. Good news: you will not need a sound decoder!**



## NS IS RAISING THE ROOF



Opening a new rail gateway for double-stacked containers is taking place across southern West Virginia 20 grueling feet at a time, according to the *Charleston Daily Mail*. Every weekday, Norfolk Southern shuts down a portion of its main line between the East Coast and the Midwest so crews can raise the roofs in the line's tunnels. It's part of the \$151-million Heartland Corridor project, which will allow the railroad to ship double-stacked containers between the port of Hampton Roads and Chicago. The project will cut 233 miles and more than a day's travel time for trains moving between the two locations.

"Big Sandy 1," near here, is one of the tunnels where work is under way. The nearly half-mile-long tunnel has a concrete liner. The sides and arched roof are smooth and, to the naked eye, seem perfect. "The workmanship is 104 years old," said Robert Billingsley, Norfolk Southern's director of structural projects. "It's pretty darned good!" But the distance from the top of the rails to the roof is 19 feet, 6 inches. Double-stacked containers are 20 feet, 3 inches tall. The railroad wants a 9-inch safety margin so it is having the height raised to 21 feet.

At 2 a.m. each weekday contractors enter the tunnel on rubber-tired aerial lifts or rail flatcars loaded with equipment. Wearing facemasks, helmets with lamps and coal-mining overalls with reflective stripes, the workers maneuver the lifts high above the tracks and start sawing the liner where the straight, smooth sides begin to arch. Billingsley said that when Heartland Corridor work began two years ago, workers didn't make much progress in one shift. Now they typically finish a 20-foot section in one shift.

Every time the workers move equipment, they blow horns to alert everyone. That's a good precaution because space between the flatcars and the tunnel walls is tight, it's pitch dark, and you can't easily be heard. The noise made by the equipment is magnified as it reverberates off the tunnel's walls. After the workers saw through a 20-foot length of liner, they use a machine called a "road header" - a drum encrusted with drill bits - to rip out the arched portion of the liner, raising the tunnel's height. Sometimes it rains grit in the dark. No wonder road headers have been featured in the Discovery Channel's "Dirty Jobs" television show. A fan is installed at one end of the tunnel to blow fresh air past the workers.

There aren't any cave-ins because another crew preceded the workers, drilling 20-foot-long roof bolt holes in a carefully laid out pattern: six bolts across, six feet apart. The bolts are installed as soon as the cutting crew passes. The sides don't collapse because they've already been reinforced with 8- to 16-foot-long bolts. The shift is finished after a crew sprays liquid concrete on the freshly cut roof to stabilize it. Instead of a smooth concrete arch, the heightened roof looks like a moonscape. The roof must be secured and the tunnel cleared by noon, when the rail line reopens. On a typical morning trains can be seen idling on tracks near the tunnel, waiting for the reopening.

Billingsley said a lot of preparation work is done before crews even begin to raise a roof. Ballast is spread over the tunnel floor up to the height of the rails so workers don't have to stumble over ties or through mud and rubber-tired vehicles as well as rail equipment can operate.

"Holes are drilled to determine how thick the liner is, whether there are any voids, and to determine the quality of rock," he said. "We put a camera up every hole and document what is found." Usually there's sandstone behind the liner but crews have found shale, a few coal seams and, occasionally,

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a void.

"In the Cooper Tunnel near Bramwell they discovered a 20-foot void over the roof liner," Billingsley said. "They're building a steel arch liner to secure the space." After a roof is raised, crews spray a thick finishing coat of liquid concrete on it. Then Norfolk Southern workers replace the ballast, rails and ties.

Some tunnels require special work. U.S. Route 52 runs atop one end of Big Sandy 1 and an abandoned portion of Route 52 runs across the top of the other end. Billingsley said both ends of the tunnel would be reinforced with steel to make sure the roadways above are secure.

A total of 28 tunnels - four in Virginia and 24 in West Virginia - are being modified. Workers have encountered a variety of issues. Two tunnels are lined with brick. One is natural rock. Most were drilled through sandstone but at least one in Virginia was drilled through limestone.

In some cases the track has been lowered instead of raising the roof. But this isn't common because the job shuts down the line for an extended period. In some of the tunnels the entire roof doesn't need to be raised. Instead, the side of the liner can be notched to provide adequate clearance.

Billingsley said safety is the railroad's top priority and there haven't been any serious injuries.

"During the two years there's been one accident that delayed a train," he said. "That was due to a rock fall - one rock."

The tunnel work began on Oct. 20, 2007, at the Cowan Tunnel near Radford, Va. The Williamson (Mingo) Tunnel was completed in December 2009. Four tunnels in the area are expected to be finished in 2010: The Cooper Tunnel in January, Big Sandy 4 in June, Big Sandy 3 in July and Big Sandy 1 in August.

LRL Construction of Tillamook, Ore., is working on the Cooper Tunnel. Johnson Western Constructors of San Leandro, Calif., worked on the Williamson (Mingo) Tunnel and is working on Big Sandy 1 and 3. R.J. Corman Railroad Construction of Nicholasville, Ky., is working on Big Sandy 4. The West Coast companies brought some managers to the projects but hired mostly local people, including many with mining experience, Billingsley said. A crew typically consists of 25 to 30 workers.

Robin Chapman, NS manager of public relations, said the company's line across southern West Virginia - "The N Line" - "was built to move coal." It handles less coal than in the past but also handles mixed freight and, currently, one single-stack train each day. "Double stacks will double our capacity," he said.

Funding for the Heartland Corridor includes \$95 million from the federal government, \$51 million from Norfolk Southern, \$5 million from the state of Virginia and \$800,000 from the state of Ohio. Norfolk Southern donated 78 acres at Prichard in Wayne County for an \$18 million terminal that is being developed by the West Virginia Public Port Authority. Ohio already has a terminal operating near Columbus. Proponents say the Heartland Corridor will provide an efficient alternative to trucks and will reduce highway congestion.

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## **MR. WASHING TING, A MOST VENERABLE (BUT SELDOM HEARD OF) ICON OF MODEL RAILROADING**

On the evening of September 23rd, 1990, after 50 continuous days of operation and the estimated equivalent of 23 years of normal use, a Life-Like Chesapeake & Ohio BL2 locomotive pulling six Athearn passenger cars faltered and then quietly expired its way into model railroading history. A

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lone security guard who witnessed the event in the basement of a former BF Goodrich building reported that the HO scale train began to "run funny" shortly before eclipsing the standing Guinness Book of World Records for endurance by roughly 343 hours.

That event would have passed unnoticed by all but a handful of industry insiders: that the creative genius behind the stalwart locomotive in question, the designer and manufacturer of the BL2, was one Mr. WaiShing

Ting, the most venerable icon of model railroading you've probably never heard of...and probably should. He's certainly the busiest, or was at least, until his recent retirement as the CEO of Sanda Kan, the Hong Kong based train maker to the stars of model railroading. Over a span of three decades and a trail of more than a million frequent flyer miles, WaiShing Ting took Sanda Kan from a fledgling enterprise to a manufacturing behemoth. His client list—the manufacturers he manufactured for—includes names like Atlas, Lionel, Aristo-Craft, Micro-Ace, S-Helper, Hornby, Brawa, Märklin and Tomix. They and many others came to Ting, more often than not referred by one another, because his achievements—his BL2s—were no accident but his trademark. "Frankly," says Dick Maddox, the former President of Lionel, "I don't know what we would have done without him. He was the best business partner we could have had and a wonderful man to work with."

## THE EARLY DAYS

WaiShing Ting did slow down just long enough in July of 2007 to accept the *model railroad industry's Hall of Fame Award*, "In Recognition of Outstanding Leadership and Contributions to the Model Railroad Industry." Lewis Polk, President of Polk's Model Craft Hobbies, was on the committee that nominated Ting for the award. "I knew just how much he meant to the industry. He cared about everybody, he was a loyal friend, and he was able to face any problem in business and resolve it."

It was always the pursuit of excellence, however, and not visions of fame that had driven Mr. Ting. "WS"—as his colleagues sometimes refer to him—was born in 1934, the first child of parents whom, he says, taught him the importance of honesty, practicality and concern for others. He was especially close with his paternal grandfather, who had retired early and then volunteered his time to the local poor who couldn't afford medical care. Not surprisingly, Ting's boyhood dream was to become an emergency room doctor and save lives. A career in medicine would have to wait: as the oldest of seven siblings, Ting felt an obligation to go to work as soon as possible to help support his large family. Three years later, he graduated with a diploma in mechanical engineering.

## A CAREER TAKES SHAPE

After working as an engineer for a company that made diesel engines, Ting moved to Hong Kong in 1962 to take a job with American-owned Shiro Precision Engineering. His timing was fortunate: the firm was phasing out their repair work on prop engines and focusing on the manufacture of plastic injection molds for small parts for the electronics industry - transistor radio cabinets, knobs and the like. It was Ting's first experience with making plastic molds and an important chapter in the education of a future model railroad manufacturer.

Shiro closed their doors for good in 1965, the same year that Roy Cox, a California toy maker, arrived in Hong Kong in search of a supplier of DC motors for his line of slot cars. Ting's former boss at Shiro knew Cox and had heard that he was unhappy with the quality of the motors he'd found in



**Similar BL2 locomotive**

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Hong Kong. So he arranged a meeting between the two. The most memorable thing about it, says Ting, was its brevity: after about 5 minutes he had convinced Roy Cox that he could in fact manufacture a superior motor. A deal was struck. Cox International was formed with Ting as the new managing director, a position he would hold for years.

## THE SANDA KAN YEARS

When Ting left Cox and moved to Sanda Kan in 1979, he was no stranger to the company. Indeed, he had helped start it 6 years earlier when he and Sol Kramer of Life-Like Products launched Sanda Kan as a joint venture. Kramer needed a supplier of motors and other parts for his model railroad company. Ting, who was looking for a fresh challenge, agreed to a partnership but had a change of heart - at least for the time being - when Cox decided to start their own model railroad division. It's hard to appreciate the depth and breadth of WaiShing Ting's impact on the model railroad industry without taking stock of just how large Sanda Kan would grow under his leadership.

So try to imagine, if you will, 10 factories with over 1.2 million square feet of space in Guang Dong, one of China's most prosperous provinces. Picture upwards of 10,000 employees (and their housing) including 60 designers, 275 product and production engineers, 50 business engineers and 400 highly skilled toolmakers. Now consider that every component for every locomotive, every piece of rolling stock, track, transformer and accessory that Sanda Kan makes is created and assembled, essentially, under one roof - and you're starting to get the picture.

Maybe it's just his calm, fireside-chat manner of answering questions that throws you. But looking back on WaiShing Ting's career at Sanda Kan, it's hard to decide what's more remarkable: the fact that he managed to create all this from a company of 200 employees making a handful of products for a single brand, or the fact that he makes it sound like it was almost easy, the natural result of some guiding principles that could fit on a couple of Post-it notes.

When he first started, did he have any sense of how big or how profitable Sanda Kan would become? "No, I didn't. My vision has always been to serve my customers and put them first. I knew if I did that, we would grow and make a profit." How did he manage to keep tabs on so many employees?

"I put trust in people. When I hired, I always valued loyalty over talent. I can teach someone to do a job, but I can't teach loyalty. I encouraged everyone to think like an owner of the company."

As for the ongoing challenge of honing Sanda Kan's competitive edge? "I tried to create a culture of continuous learning. We always looked for ways to innovate, improve and adapt new technologies. I often told my employees that what might have been a good product yesterday may not be a good product for today."

## A REVERSAL SETS THE STAGE FOR A SALE...AND THE FUTURE

By the mid-1990s, bolstered by China's economic reforms, a growing client list and a deep labor pool, Sanda Kan was prospering. It seemed that nothing could slow them down when WaiShing Ting was dealt a devastating blow - a serious heart attack. Had it not been for the quick work of a son-in-law who drove him to a nearby hospital, Ting might not have survived.

His brush with death, says Ting, brought him face to face with Sanda Kan's vulnerability. And with no family successor to take his place, he knew he would have to find a buyer for Sanda Kan to protect the interests of his clients and his employees. It would be five years before a match was found, but in 2000 Sanda Kan was purchased by ZS Fund, a private equity firm. WaiShing Ting would stay on as director of day-to-day operations.

Sanda Kan would be sold twice more: in 2004 to the Hong Kong based JP Morgan Partners, and in January of 2009, after falling on difficult times, to Kader Holdings, the parent company of Bachmann

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Industries. Especially during Sanda Kan's most difficult times, says Frank Martin, Chief Executive of Hornby Plc, "WS Ting was there. He remained a tower of strength in the midst of the storm. His efforts saved the company. He was a source of inspiration to his colleagues and workers in Sanda Kan, and a trusted friend to many of his customers."

The recent sale came during one of the most uncertain economic periods of the last 100 years. But Kaders' business and manufacturing strength in China, combined with a company founded on the principles of quality and innovation, will continue to be a driving force behind the new Sanda Kan. Tom Haedrich, CEO of Atlas Model Railroad Co., who has worked with "WS" and the Sanda Kan organization for the past 18 years, says "The model railroading industry is always changing. We've now entered one of the most tumultuous periods ever seen.

A rare intersection of powerful local and global forces in technology, distribution, contract manufacturing, global economics and the resulting consolidations will change the face of model railroading for years to come. Thanks to the vision, hard work and dedication of WaiShing Ting and the strength of the company he created, the new Sanda Kan has an excellent opportunity to continue as the best example of worldwide model railroading production."

WaiShing Ting is similarly upbeat. "Kader is the oldest and leading toy manufacturer in Hong Kong. They're family owned and the third generation is now starting to run the business. I believe Sanda Kan is in the right hands and that this will be good for all parties concerned."

We can think of no one who is more qualified to make that call than Mr. WaiShing Ting, the most venerable icon of model railroading.

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## EVENTS FOR MODELERS:

### Piedmont Pilgrimage

Piedmont Division of SER hosts their 7th Annual [Piedmont Pilgrimage](#) a tour of Atlanta's Great Model Railroads , starting October 24th ending 28 November 2009. For a complete schedule check out [their website](#).

### Great Train Expo

The Great Train Expo will be at the North Atlanta Trade Center in Norcross, Ga. check out [their website](#).

### Planes and Trains Exhibit

The [Middle Georgia Model Railroad Club](#) will be part of the 'Planes & Trains Exhibit' at the Museum of Aviation at Robins Air Force Base located at Highway 247 and Russell Parkway. On November 21-25 & 27-29, 2009, from 9am - 5pm, free admission. Attractions to include multiple layouts and static train displays among 120 military aircraft. For more info check out the [website](#).

### Meridian Railfest

The Whistlestop Weekend begins on Friday with the Seventh Annual Soulé Live Steam Festival and Meridian RailFest. This year offers a full two-day event which opens on November 6-7, 2009 from 9 am - 4 pm in downtown Meridian, Mississippi. Admission to the event is FREE. For more info check out the [website](#).

### Fall Model Train Show

*Smokey City Rails Model Railroad Club* will have it's 2nd Fall Model Train Show and Sale on Saturday, December 5, 2009. Hours are from 9:00 AM to 4:00 PM at Zion Baptist Church, 1104 Gene Reed Road, Birmingham (Roebuck), AL 35235. Admission for Adults: \$5.00; Children 8-12 years old: \$2.00; Children younger than 8: FREE. For more info check out the [website](#).