



**Three Lakes Model Railroad Club
Volume 3, Number 6**

**1st 100% Club in Wisconsin
June 2012**

Red Cap Roy

an interview of Roy Stuart by R.G. Blocks

We start many mornings walking the Racine Mall. This is 2012: our memories and keeping our youthful bodies in the game of life is where we focus. Roy always has a good parable and this morning starts with one regarding the fact that, “Boys should work and have adventurist fun.” One needs a reason for work beyond mere food for family. Flying and rail adventures seems to have contributed to reaching that goal throughout our lives.

Roy began today’s story by describing life in 1935 or 1936 before WWII. He described a period back when we were thinking peace in our time. Business was picking up a bit; yet, all was not smooth. Then, in 1937 we had a mini recession before the major recovery as we started manufacturing war material for the world. The lend lease of 1940 helped end the great era of depression for good. What excess manpower it failed to employ, the draft that began in 1940 accomplished.

Single guys up to age 38 initially were drafted in early 1940. Then, without entry into the war, they discharged some of the older guys. However, locally they redrafted some as manpower to fight was in short supply in some states when we actually went to war after the “the Day of Infamy”. Every draft board in the USA was on its own; hence, some states didn’t draft all their young whereas others failed to meet quotas. This was not the adventure one sought.

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Hence, let's talk about that prewar period when we had fun. Boys of Sturtevant all learned to swim at the Herzog Farm. It was down the Milwaukee Road mainline roughly a half-mile south of and west of the mainline tracks. Never deeper than six foot it was skinny dippers paradise. It would be west of where 96th Street is now.

Roy became a Red Cap in 1936 at age twelve. Red Caps helped folks disembark from trains arriving from Chicago that desired to travel west at Western Union Junction. It was about a city block walk to make the train-to-train transfer. Red Caps helped carry folks luggage. A dime was the norm to tote a big trunk. A quarter for the load was a real treat. These were the days before luggage had rollers. Women were interested in vacationing on Lake Lawn and Lake Geneva in those years. Those lakes were out in the sticks.

The gals would go out, mostly for a week and generally not foresee a requirement to make a train transfer or the need for help to carry their bags. The gals had enough money to tip the Red Caps when going heading outward bound but generally had little or nothing for luggage assistance on the return trip. Hence, the boy Red Caps would not often be asked for help on the gal's return trip.

Roy said the supply of the very stiff, very proper, 'official' Red Caps came from a Conductor friend who showed up with a half dozen for the young entrepreneurs. Roy's young pals, from ages 12 to 15, wore them around the village with pride.

These were the days where any way to make a buck was appreciated at home. Sturtevant tallied 731 people in the 1930 census. Roy delivered the Sunday Bulletin, a free Sunday Racine Newspaper, to everyone in the village. He regularly sold Liberty and Saturday Evening Post Magazines door to door. Roy also dug dandelions at West Lawn Cemetery in Sturtevant on Highway 20 and 90th Streets.

One of the highlights of the summer was the Hiawatha coming through. Local pilots from Air City, located at Hwy 11 and 90th Streets would get their OX-5 driven Waco 10's wound up and chase the afternoon Hiawatha that went north to south at about 6:30 PM.

Waco 10's were the most popular airplanes at the time. The reason for popularity was simple. The engine, a 90 HP, water-cooled, 6 cylinder, was WWI surplus and available for \$150. These cheap and reliable engines competed well with anything freshly built. Cheap and thrifty are topics we're familiar with.

Air city pilots would fly along at about 2000 feet. Then they'd dive on the Hiawatha. It didn't take very long and the train would slowly pull away. It never lost. The Waco would do about 75 in cruise and only a bit more in a dive.

Hundreds of folks would stand along the Milwaukee Road mainline tracks to get a good look at that Hiawatha. It was an oil burner, not coal and had nice modern cars.

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The Milwaukee Road's passenger competition was the CB&Q Silver Streak and the C&NW's 400. The latter had that memorable swinging Mars Light. You could see a 400 train coming for miles; what a deal!

Westbound trains that departed from Sturtevant's Western Union Junction Wye and bound for the lakes were typically Atlantic (and later some Pacific) types. None were large engines like the beautiful 4-6-4 Hudson Hiawatha. Westbound, it was just a mail car and a couple passenger cars typically. The westbound would sit for an hour or so when it arrived.



The above photo, July 2011 shows the Western Union Junction Wye and branch to Lake Lawn to the left (west). The old Milwaukee Road mainline runs north south and the station was inside the Wye along the west side of the mainline. Today, the WUJRRC museum sits just east of Wisconsin St, immediately east of the Wye.

The Station Agent that both ran the depot and did Teletype communications also hauled mail over to the westbound rail express car for the journey on a big-wheeled

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cart. There was a ‘self-serve’ place at the station for package pickup. Railroad Express also had its own truck to handle local package and fast-freight deliveries.

Roy remembered an empty Prince Albert Pipe Tobacco stuck next to the bell of the Teletype machine to amplify sound. An inexpensive, improvised and effective speaker system based on a now past tense pleasure. Trains and pipes no longer produce aromatic smoke as once they did.

Westbound passenger trains were loaded on a spur that came up along the north and west side of the Sturtevant Depot. The depot itself was located on the west side of the Milwaukee Road’s north south main.



Roy K Stuart, reflecting upon his boyhood fun, May 1, 2012. As luck would have it he’s standing next to a watercolor done by Thomas H White in 2007 for the 100th Anniversary of the village of Sturtevant, WI. Clearly, we see the Milwaukee Road mainline, station and coal tower at Western Union Junction.

Roy remembered the day his buddy Franklin Heeden climbed onto the waiting westbound train and used the toilet. He didn’t realize the product of the toilet would drop right onto the platform immediately below the car. The Conductor scolded the boys and swept the boys output onto the tracks. That bathroom was on the end of the car that all passengers boarded!

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Weekend fun for Roy and his pals was to visit the westbound engine that would sit alone on a siding on the north side of the Western Union Junction Wye. Passenger cars were not left at Sturtevant on the weekend. But the engine sat, with fires banked for the entire weekend.

Pushing the big Johnson bar forward would cause the engine to creep ahead; pull the bar back and she'd back up. It never moved more than twenty feet with the boys at the helm, but it was fun! Once in a while the agent would yell and all would run like the dickens.

The local coal tower had a home-built ladder inside. We'd climb up that tower and could see all over the village. We had to be home when the streetlights came on (yes, they were electric). When we arrived home we were coal black.

Roy and I finished our walk and enjoyed this reflection of his boyhood. Coffee and work were to be next. Naps won out. We were still boys.

Written by Roger G Blocks after walking with his pal Roy K Stuart on May 1, 2012. It was another fine day of trains and planes. Thanks to Google Earth who provided the first photo above and last below. First photo elevation was 927 meters and the scaling bar measures 162 meters if you'd like to model the junction.



To the left is a second Google Earth photo of Western Union Junction. It was taken in 2005 before the old Sturtevant Station was moved to Caledonia.

The station (with a black roof) is to the left (West) of the mainline that is heading N-S (up and down) and at about the mid

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point of the 'Y' in line with the track heading westerly. Below, a photo taken from the author's airplane March 2010 looking east shows Western Union Junction with the mainline running from left to right (N-S). The track heading due east (upwards and leaning right in this view) heads directly toward Racine, WI.



Mars Lights: extreme illumination

by R.G. Blocks

Jeremiah D. Kennelly, a Chicago fireman who drove an aerial ladder truck had trouble in heavy city traffic. He thought that oscillating lamps would better signal the arrival of fire trucks and be a great warning system. Folks would see them a long way off and have time to react. A core idea found by experimentation was to have light(s) oscillate in a figure 8 pattern.

The cost of such a device appeared too much for a fire truck; hence Kennelly approached Charles Longham, Chief Safety Official of the C&NW. His prototype was mounted on E2A a 4-6-2 Baldwin Pacific, number 2908. The lamp assembly was the design of Grant V.W. Roth. A 32-volt bulb was chosen for its strong filament. Actual road use began in 1936 in and around Proviso Yard (in Chicago-land).

Kennelly thereafter became a policeman and lost his hearing (in a shooting incident). Frank C. Mars, of the Mars Candy Company took an interest; and, helped

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Kennelly with the mechanical fixtures and Kennelly finally got a patent on the figure 8 movement. US Pat Des 99,286 was granted Apr 14, 1936.

You know Mars from its tasty products: Three Musketeers, Bounty Candy Bar, Dove Chocolate, M&Ms, Mars Bars, Milky Way, Snickers, Twix and Uncle Ben's Rice. I didn't know this private company was doing 27 Billion in business and now owns The Wrigley Company. Chewy and deliciously impressive and since we're talking about lights, and want to stay on track... tastefully enlightening.

Frank C Mars died (1933) and his wife financed the new MarsLite Corporation (which later became, Mars Signal Light Company). The company, in time was purchased by Trippe Light Co known as Tri Lite Mars and is currently called Tri Lite Inc, of Chicago, IL. The latter sells a 60,000-candle power Mars Lite with an option for 100,000-candle power, suitable for fire service among other things.

An excellent article on modeling (and the rationale for) Mars Lights can be found at the Chicago and North Western Historical Society, in their beautiful magazine, called Modeler, Vol 2, Issue 2, entitled Modeling Mars Lights on CGW F-Units by David Webb, pg 3. The link is: <http://www.cnwhs.org/modeling.htm> .

My simple take is that the original Mars RR lamps put out perhaps as much as nearly 300,000 foot-candles of light. The sun puts out about 10,000 fc of light outside on a clear day. A foot-candle is what a one- candela source would cast (illuminate) on the surface of a sphere one foot distant from the source.

A foot-candle is one lumen per square foot. A candela is thus one measure of luminous intensity in a given direction. In SI units (metrification) the unit of measure is the lux. One foot-candle is close to 10.764 lux. Since judgment of light intensity is difficult to measure, most lighting folks will be satisfied in knowing one foot-candle is about ten lux.

Don't get confused: "If you couldn't see the C&NW Mars light you were blind."

I was on the U.S. Metrification Committee for some time. I really hope I slowed that effort down. Things don't necessarily get better with change for the sake of change.

Don't get confused: "Things do measure up. How you do it I leave to you."

The gyrating 'Mars Lights' produced by Kennelly's Mar's Signal Light Co. changed color, clear to red, using a colored fluid (US Pat 2,571,894) granted October 16, 1951.

Competition came from The Pyle-National Company. It can be found by tracing the work of Albert E. Ganzert who seems to have worked for both companies. The Pyle-

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National patent on a similar Clear and Red Warning Headlight using colored particles is found at US Pat 2,515,406 granted July 18, 1950.

The Mars light has made a visual impact when employed. There are models with moving bulbs, moving reflectors and moving lens materials. Some are equipped to turn red to serve as a warning when things go wrong.

For an electronic model railroad project, a microcontroller and static mounted LEDs (light emitting diodes) is described at:

<http://www.trainelectronics.com/MarsLights/article.htm> .

Another model version is shown: <http://dansdrumheads.angelfire.com/Mars.html> .

Today, ditch lights seem to satisfy the need. Two lamps, each burning at a steady output of 200,000 candela , 36 inches above rail height and pointed outward at 45 degrees are intended to illuminate the dark ditch area. Two additional lamps, called “Crossing Lights” each of 200,000 candela, pointed nearly straight forward (within 15 degrees) either burning steady or flashing at a rate of 40 to 180 flashes / minutes serve to alert folks visually at rail crossings.

Names change but Jeremiah Kennelly’s wavering spark of light still reflects off rail.

Railroad Happenings: or Semi-local events...

June 16-17, 2012- Annual Strawberryfest Model Railroad Show- Waupaca, WI
Waupaca Recreation Center

Saturday June 16 10 AM to 5 PM

Sunday June 17 10 AM to 3 PM

June 28-July 1, 2012- Milwaukee Road Historical Assoc. Annual Convention Moscow, Idaho

Info at: www.mrha.com

July 21, 2012- Rail fair- Copeland Park- LaCrosse, WI

Info at: www.4000foundation.com

July 29 – August 4, 2012 it’s the 77th National Model Railroad Convention, Grand Rapids, MI. The host club is found at www.grmrhs.org a 100% NMRA club. For info on the convention: www.gr2012.org
Seventy fantastic layouts within one hour of the 12th best hotel in North America (Amway). Let’s all go!

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Sept. 13-16, 2012- Soo Line Historical Society Annual Convention
Thief River Falls, MN Info at: www.sooline.org

Oct 21, 2012 Model RR Show and Swap Meet – Circle B Recreation
6261 Hwy 60 – Cedarburg, WI
Info at: www.lammscape.com/cedarcreek

From the Tower

Another summer is starting in Three Lakes WI. The docks are in, the water is up, and the fish, well for me, they are still in the lake. It is time to get together and share ideas and greet our out of town friends.

I hope to see some of you at the Airport on June 23rd where we will have our On30 modules at the Fly-In. Roger Jack and I will be out there all day.

From reading over Roger's article on Mars lights and candy bars I noticed he seems to not have looked over my Electrical Engineering AP application published on the club Web Site. * In my work on the EE certificate I included the circuit for an operating Mars Light using a 2 filament lamp that looks like a Mars Light which adorned my Athearn F7. Also I guess he was asleep during our clinic #3 on DCC where I showed how to wire the headlights, marker lights, and the wiring of LED ditch lights. To help cover this gap in his work I have added a page on the club's web site as there are lots of photos and wire diagrams that would take many pages in this newsletter. www.tlmrc.org

I am working on a rather long article on the creation of plans and the adjustment of such plans in order to scratch build realistic buildings that will fit on a normal sized layout. This will be a compilation of a number of short web pages and sets of measuring notes along with my plans for a Prototype Scene. If you have not looked at the Projects To Come page on the web site please check it out.

Paul Wussow
President
Three Lakes Model railroad Club

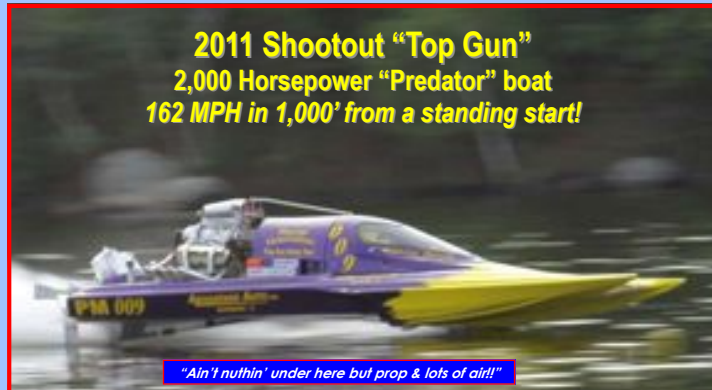
* **Editorial Note:** Sorry to have missed a reference** to Paul's EE Mars Light which is perhaps as good as it gets.

** *One of my many failings. Ed*

**5th Annual “Shootout” Radar-Run
Boat Races & Airport (40D) “Fly-In”
Three Lakes, Wisconsin
Friday & Saturday, June 22nd & 23rd, 2012**

Great family-friendly entertainment!

*Racing Boats ■ Tunnel Hulls ■ Jet Boats
Drag Boats ■ Hydroplanes ■ Snowmobiles*



ALL PROCEEDS go to the Three Lakes Fire Department



**Snowmobiles-on-water
pulling barefoot skiers!**

Model Train Exhibit at Airport Hangars

Vintage & light sport planes!

Airplane Rides at the Airport !



Friday: Race boats displayed (Bonnie’s Lakeside Restaurant) 5 to 8 PM

**Saturday: Racing + Planes + Snowmobiles on water 11 to 6 PM
at Anchor Marine / Sunset Grill**

Post Racing: Harbor Campground Beer & Music Tent 6 to 10 PM

Maps & You-Tube clips at **www.ThreeLakesShootout.com**

or info by email: **Info@ThreeLakesShootout.com**

Route 32 — 3 miles east of Three Lakes on Big Stone Lake — Follow the Signs

Free lunch for visiting Pilots, just show your license!

Free admission ■ Free parking & shuttle