May 6, 2007----

WAUKESHA, Wis. -- The train doesn't run by the site of Les Paul's boyhood home anymore, but the sounds they made still reverberate on our radios and iPods.

The sounds of Waukesha, a quaint borough 20 miles west of Milwaukee, forever changed popular music.

Lester William Polfus, a k a world-renowned inventor and guitarist Les Paul, lived in Waukesha (current pop. 65,324) from his birth on June 9, 1915, until 1928 -- and he never forgot his roots.

Speeding trains on the Chicago, Milwaukee & St. Paul line would rattle the windows of Paul's boyhood home along St. Paul Avenue (which has since been replaced by a strip mall). The trains and the sounds they made as they passed his window gave Paul primitive lessons in changing sound frequencies, stereo panning and the Doppler Effect.

"When the whizzy toots, Daddy comes," Paul said in a conversation from his home in Mahwah, N.J. "The train whistle meant Dad was coming home from work. That was one of the first things I said as a baby. The train whistle was part of me coming into this world."

As a youth in Waukesha, Paul designed and built one of the first solid-body electric guitars. His prototype was made with a piece of railroad track. In a short time, his invention brought the guitar from the back of the band to the front of the stage.

Les Paul guitars became works of art with lavish carved-top contours. Demand for their unique sound skyrocketed, and Gibson Guitars began mass producing the Les Paul model in 1952. Since then, Les Paul guitars have been the cornerstone rock 'n' roll sound of players such as Duane Allman, Jeff Beck, Eric Clapton, Jimmy Page, Hubert Sumlin and Pete Townshend, even Paul's godson, rocker Steve Miller.

At age 91, Paul still performs every Monday night at the Iridium Jazz Club in Manhattan. Among routinely sold-out crowds, musicians come to worship at the altar of St. Paul. Merle Haggard and Paul McCartney are among those who have caught Paul's shows. Every Monday, Paul is introduced as "The Wizard of Waukesha."

And Thursday night, the wizard himself -- and his trio -- will make a rare appearance in Waukesha. The sold-out concert at the Milwaukee Marriott West (W231 N1600 Corporate Court in Waukesha) will benefit the Waukesha County Museum's permanent exhibit "The Les Paul Experience," slated to open in 2010.

Paul is helping design the 5,000-square-foot exhibit. After all, in addition to being in the Rock n' Roll Hall of Fame, Paul is in the Inventor's Hall of Fame.

"I suggested to make the museum similar to my living room," he said. "That was my laboratory. That's where I created all these ideas. They came from the telephone. The player piano. The railroad tracks. There were so many things to learn in that living room instead of running out and ice skating on the river."

A few blocks from the railroad at Cutler Park, prehistoric Indian Mounds still exist. They are across the way from the Les Paul Bandshell, where he performed as a child. Paul was a newspaper boy. He would sit on the highest mound in the park and supplement the papers. One afternoon he noticed how another newspaper boy was wrapping copper and counting the turns around the core of a roll of toilet paper. That boy was working on a crystal radio set. Paul got some tips and began work on his own. He used the springs from his bed as a makeshift antenna.

"I was so fascinated, I would get on my bike and ride it to the WTMJ radio transmitter," Paul said. "It was halfway between Waukesha and Milwaukee. I'd park under the transmitter and listen to the hiss and the hum of the transmitter. I was fascinated with all these sounds and curious about all these things on this earth."

That was his first sonic exploration. There would be countless creative others.

"In our home, our bannister rails had different length boards. As I went up the stairs I hit a board and it resonated. It almost played a scale," Paul said. "So I got some sandpaper and filed down the sharp boards. My brother said to my mother, 'The kid is at it again.' I got it so I could tap out a tune like 'Barney Google' or 'Yes, We Have No Bananas' as I went up the stairway."

Paul was playing guitar by age 9, and the idea for his historic guitar came at Beekman's Drive-In restaurant in neighboring Brookfield, Wis. Paul was booked to perform as "Red Hot Red," so named because of his red hair. A customer passed a note to a carhop with the message, "Red, I can hear your voice and your harmonica, but the guitar is not audible."

Paul recalled, "The hollow-body guitar wasn't loud enough. I had problems with feedback and vibrating. I filled the guitar up with dirty socks, shorts and anything that would muffle the sound. It didn't work.

"But I found damaged railroad track by my house. We borrowed a wagon, and six of us pulled out that 2 1/2-foot long piece of track. We suspended a string across the length of the track. I was already into the magnet and coil from the telephone. I wondered what the magnet and coil would do if you put it under the string. The railroad track was so dense it didn't color the sound like a piece of wood did. It gave me the sound of the string -- and nothing else. So came the idea of a solid-body guitar.

"It raised a lot of eyebrows in Waukesha."

With a mind like this, conventional school was clearly of little use to Paul. He dropped out of Waukesha High School to join Wolverton's Radio Band on clear-channel KMOX in St. Louis. In the 1930s, he migrated to WJJD Radio in Chicago, where he ventured into jazz. His first two records were released in 1936 -- one was credited to "Rhubarb Red," his hillbilly alter ego. "Rhubarb Red" did the morning shift on WJJD.

"I would do my hillbilly show in the morning, then turn to Les Paul and do my jazz shows around noon," Paul said. "I'd go home and lie down. Then at night, I'd go to the South Side of Chicago and play with Coleman Hawkins, Art Tatum and all the jazz cats."

In the 1950s, Paul began recording with his wife Mary Ford (Colleen Summers). Together, they pioneered another sonic trick that is the bedrock of today's musical recording: the art of overdubbing and multi-tracking vocals. They used the technique to score their biggest hit, "How High the Moon," which led to their hit television show between 1953 and 1960. Ford died in 1977 of complications from diabetes. She was 53.

Ford made her debut as a guitarist at the Club 400, which still stands at 322 Williams St. in Waukesha. If you can't get into Thursday's benefit, the Club 400 is the best place to take in all that is Paul.

The neighborhood bar was built in the 1890s as the Northwestern Hotel because -- another train connection -- the Chicago & Northwestern railroad line ran across the street. It became the Club 400 because it took 400 minutes to travel from Chicago to Minneapolis by train on that line. In 1948, Paul's father and brother Ralph bought the tavern and renovated it.

"That club is where Mary and I started," Paul said. "We were booked there, but when I arrived I said 'Where's the bass player and where's the guitar player?' My brother said, 'I didn't hire them. I figured you beat your foot loud enough.' I called my bass player, who lived on Route 59 going to Milwaukee. But I needed a guitar player. I knew Mary played some cowboy songs Gene Autry introduced her to Paul, and I always carried a spare guitar in the car. So we sat on the first step of the stairs in the Club 400 and played. Our light was a floorlamp. That night I said, 'Here's the girl I'm looking for.' I had worked with Doris Day, Rosemary Clooney and Kay Starr, but I knew we could be an act just like Amos 'n' Andy.

"We were so excited, the next day we went into my dad's basement in Waukesha and recorded our first song. I headed to Milwaukee with our song and went down National Avenue. I found a club that had just rolled over and died. I told the owner that Mary and I would play for nothing. Within two months they were lined up around the block."

And what was the song that launched their success?

"Sentimental Journey," the theme of an American musical giant.

AND HERE IS Les Paul commenting on two of his landmark recordings -- including how those passing trains influenced his experiments -- recorded with his wife, Mary Ford:

'BRAZIL,' 1948

Paul deployed at least six guitar parts on "Brazil," which gave birth to multi-track recording. Paul worked without a sonic net -- no equalizers or echo.

"'Brazil' was all done on lacquer discs," Paul said in our interview. "There was no tape. I locked myself in the garage studio in Los Angeles. That was my first studio, where you had to climb in the side window. We boarded up the door where you drove in the car. When Mary came over, we had to lift her through the window to get her in the studio. She thought it was all a hoax.

"Anyway, with 'Brazil' I wanted to make sounds that were never heard of before, but sounds I always thought about. Like the train, the vibrating pane on my childhood window. Those were sounds you didn't hear with a musical instrument. I laid them down with rhythm first and the other parts back and forth between two cutting recording lathes. I built those, too. I built them from Cadillac flywheels, which was a perfectly balanced turntable. My drummer was a dentist, who got me dental belts. I could fasten those to the motor and isolate the vibration of the motor from the flywheel.

"A friend came over and he sat on a swing outside the garage. He was the first to hear what I was doing. He listened to it and said, 'You sound like an octopus. You have fingers where no one else has fingers.' It was W.C. Fields. "He was my first fan."

'HOW HIGH THE MOON,' 1951

"The first time I met Paul McCartney I was at his home," Paul recalled. "I asked if I had anything to do with the Beatles. He told me the story where John Lennon and himself auditoned at a pub. The owner told them to go home and listen to Les Paul and Mary Ford, and learn a couple of their songs. They did and they got the job."

"How High the Moon" was the first song Lennon and McCartney performed together in public.

"They just altered the ideas I had," Paul said in modest tones. "Like Jeff Beck plays the same runs I play, but he puts it in a different song with a different beat. So it's

rock 'n' roll."