



# AMICA International

## Automatic Musical Instrument Collectors' Association

### Honor Roll

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## HI BABIT

See [video](#) of this Hall-Of-Fame Member

### PIANO ROLL RECORDING ARTIST and AMICA HONORARY MEMBER

By Dorothy Bromage

*Hi Babit is an Honorary Member of AMICA, as of September 1993. At the age of 76, Hi (real name Herman B. Babich) is living in Florida with his wife, Marilyn. They have four children and four grandchildren. Those AMICAns who have his rolls will find the following first-person account especially interesting.*



I became involved with making piano rolls about June or July of 1963. At that time I was teaching music privately to students, both young and adults. I also had my own trio in a restaurant in Yonkers, NY, where I was playing for parties (weddings, etc.), and I did a lot of piano tuning during the early part of the day. So you can see that I was quite busy.

Now to explain how and why I got started with the piano roll making business. I am a bit of an inventor, and I had designed a toy player piano to help teach the kids about music. I had an idea of how a player piano worked, but I always wanted to see it actually being made. In May or June of 1963, I saw an ad in the *New York Times* asking for a "Pianist-Arranger" for a company called Imperial Industries. The previous Christmas, I had seen an article in the colorfoto section of the *New York Sunday News* about how piano rolls were made, and I remembered the name of the company. I figured one day I would find an excuse to go and see how it was done. That ad became my excuse.

I made an appointment and went to the South Bronx, NY, where the factory was located. There I met with Herman Kortlander. He showed me the arranging room, and I met Dick Watson. I was intrigued with the machinery and the old monster piano roll making machine itself. I did some piano playing, by request, and Kortlander asked me to work there during the afternoons, because Dick Watson could only work mornings.

It took me a whole hour to figure out how to make the rolls, and I decided to do a lot of experimenting with musical arrangements. I had been doing arrangements for singers and musicians, before this, so this was a new field of music arranging for me.

This is how the rolls were made at that time. The arranger does not do any playing, but merely uses the piano that has a live keyboard and above it a corresponding set of drawbars that I call a dummy keyboard. For the long-sounding notes you use the drawbars, and for shorter notes you use the live keyboard. Next to the piano is a punch-press machine which has the same type valves you find in the old players, and they are connected by stiff wires to dies, much the same as cut penny nails, and are lined up like the tracker bar on the players. On the floor under the piano is a long bar that is connected to the punch press to activate the punchings. You place your hands or fingers on the chord or single melody that you want, and while you hold those keys, you step on the bar to start the punchings. You hold it down for an amount of punches you deem necessary.

I better explain that to get the rhythm on a piano roll, each beat has to have a certain length of punches, or a certain amount of punches. For instance, for the average selection you see marked with a 70 tempo, you would use what we call a 12 punch count. If you know about music values, the 12 count is like a quarter note; therefore, an eighth note would be six counts, a sixteenth note would be three counts, and triplets could divide the twelve count to four punches. So you see that making music is all math.

I tried to institute new incentives to promote more sales of player pianos. For instance, I was the one who started the Play-A-Long series, but they only let me make two rolls: "Down at Papa Joe's" and "Chopsticks." From the recent catalogs, I see that they have finally come out with that oldie, "Heart and Soul." Incidentally, for "Chopsticks," I wrote seven stanzas of lyrics, only because they like to see words on the piano roll. I'll have you know that I get two cents royalty (sometimes) for each roll, and I make about five or six dollars a year from that. Great isn't it?

I also designed a rack, or stand, to hold the piano rolls. I made two sizes, and it really was a very useful device. The small unit held 29 rolls, since five regular rolls was the same width as four large rolls ( $25 + 4 = 29$ ). The large unit held 83 ( $75 + 8 = 83$ ). I had offered the idea to Ms. Kortlander, but they didn't want to bother with this, so I became HI WIRE INDUSTRIAL CO and sold Stak-Raks!

When I went to work for the Aeolian Company, I approached them to promote a program I designed called "The Constant Companion." This was the "Music Minus One" idea, where I would arrange a piano roll to be used as a substitute for a piano player, for schools or churches that had no available or capable piano player to accompany glee clubs or other musical groups. I thought that this would also help stimulate the sales of player pianos, which would lead to more ideas.

I did a lot of experimenting to make my rolls different from the older rolls. Since these rolls are mechanically made, and are not normally played, I tried lots of tricks, mainly because I get bored with sameness. If you listen to the old rolls, you will hear that most of them have the same arrangement or chorus repeated two or three times to make up a two to three minute roll. This was easily done, because you mechanically made an eight bar phrase that could be copied from the first master to the final master as many times as necessary. In most of my rolls you will find two or more different stylings, to get away from the boredom of sameness.

To make the music sound faster or slower, I used the simple trick of using more or less punches for each beat. As I have explained, we use a certain amount of punches for one beat. For a slower ballad, we may use 16 or 18 or more punches for one beat. For a fast selection, I might use 8 or 10 punches to make the song sound faster. By varying the amount of punches, I can, by adding a couple of punches to each beat, make the song sound like it is slowing up, even though the roll is still going at the same speed as before. Conversely, taking away punches from each beat will speed it up - in sound.

I also tried to get a long playing roll in the standard size roll by using a short count. That was in Roll #10000, "Roumanian Rhapsody." I believe you would need a good piano playing at about a 30 or 40 tempo. I stretched a two to three minute roll size to eight minutes!

A lot of my arrangements contain musical jokes, because I have a slight sense of humor. I'm afraid that only a musician with a good knowledge of classical and pop music will catch what I did. A few rolls that come to mind are "Comes Love" from QRS; and from Aeolian, "Riders in the Sky" and "Ramblin' Wreck from Georgia Tech." I can't remember all, because it's been a long time since I made rolls.

Because I used two keyboards to mechanically make music, I was able to make four-hand style arrangements and get some wild effects that could not possibly be done with two hands. If you listen to some of the Celebrity rolls, you will hear that they are strictly a two-hand arrangement and cannot possibly compare with a four-hand arrangement. The artist or celebrity who was asked to make a roll had to use a piano connected to a Marking Machine. This was a machine that had a moving blank roll of paper on which pens or a stylus marked whatever was being played on the piano. After the artist was finished, the roll of marked paper was given to a worker, who then took an Exacto knife and cut out each marked line. After this was done, it was put on the master making machine to get a first master, to be further edited before the final master was made. When I made the roll master on the initial start-up, it was actually a first master, but still made in sections, which could then be either copied or sequenced in the proper order for a finished master. It was much quicker than the artists' marked originals.

To go back to the QRS Factory in the Bronx, here is a bit of nostalgic history. Dick Watson worked mornings, and I worked the afternoons. Since I was mechanically inclined, I learned to work the master making machines so that I could, as soon as I made a new master section, run it to a first copy to be able to hear what I had done. That was how it was easy and quick for me to figure out the tricks I devised and sounds that pleased me. Dick didn't want to work with those master machines, so either I would run it for him or he would have one of the workers do it, and if I'm right, that worker was none other than the present arranger for QRS, Rudy Martin. When Ramsi Tick bought the company and moved it all to Buffalo, NY, Rudy Martin moved with them, but Dick and I declined. I showed Rudy some of my tricks before he left, because he had also wanted to learn how to do the piano roll arranging.

Watson continued to make arrangements for QRS by writing them at home and then sending them to Buffalo, where Rudy would put them on the machine. When I was asked to make a roll arrangement, I usually went to Buffalo, because it was easier for me to sit at the machine and figure out the arrangements than to sit at home and hand-write them. My other motive was a chance to get away from the everyday routines, and I had friends there that I could visit.

There is a photo of me with a box of rolls and an airplane. I've been a pilot for about 30 years, with a few ratings, and I owned an airplane for 17 years, because of my airplane patents. I used the plane to go to Buffalo a number of times, when the weather was good, and at other times, I either drove or took the airlines. I also took out-of-state piano tuning jobs as an excuse to do some flying.

I was interviewed a number of times - in the Bronx Factory by the Eyewitness News and also at the Aeolian Hall on 57th Street in New York City, and on the Joe Franklin Show, where I played live. I played "Granada," which is on a QRS roll.

After QRS moved to Buffalo, the Aeolian Company asked me to make piano roll arrangements for them. At that time, they were both in the Bronx, only a few blocks from where the QRS Factory had been, and on West 57th Street, on the sixth floor, where they had a master piano roll set-up similar to what QRS had. Finally, I got to meet the old piano roll maker, and we also worked two shifts, Cook on days and me on the night shift. For me it was handy, because it left my daytime work available and gave me a chance for arranging new selections. I had a better chance to pick what I would like to work on there. Incidentally, Mr. Kortlander also worked for Aeolian as a piano roll consultant.

Larry Givens ran the Melodee Roll Line, but he was out near Butler, Pennsylvania. I met him once or twice, either at a music show or in New York, and he asked me to make a couple of rolls for him. I finally got a chance to go out there - and an excuse to do some flying. I rented an airplane, flew out, and did "Finian's Rainbow"

medley. At another time, I did "The Theme from the Apartment" (movie). I liked his roll making machine better than the other two monsters. It was a much easier machine and more reliable than the QRS or Aeolian machines. I had a lot of fun making the rolls - even though it was a very boring mechanical job - because the end result was the satisfaction of an idea being transferred from the mind - to paper - to sound. By the way, on some of the classical rolls, like "The Nutcracker Suite," you may see `Played by Herman B. Babich.' That's the real name of yours truly, and that is why you may see my signature of HBB written the way it is.

