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Broadcaster becomes dental assistant

by Curt Cole

“**Y**ou want me to assist the dentist?” It was a good question. After all, I had volunteered to take a break from radio and help on a one-day HCJB mobile medical clinic. But a dental assistant? I hate going to the dentist!

My attempts at helping on a medical caravan had left me wondering--was it one of those things never meant to be? My first attempt ended within two hours of Quito, at the base of a huge mudslide completely blocking the road. The next attempt didn't even begin. Our trip was canceled due to a workers' strike and a fear that rocks might bombard the windshield.

But this time was different. No strikes were scheduled, the rainy season had passed, and we were going just a few kilometers out of Quito.

The morning was cool as we left Quito heading north. Jeremiah, a converted bread delivery van, wound slowly up a narrow, cobblestone road, leaving the high-rises of Quito far behind. We arrived in a poverty-stricken *barrio* that had some electricity but no municipal water. Dusty, unpaved streets surrounded us with piles of sewage in the ditches. Pigs and chickens ran loose, and we could hear the braying of donkeys in the distance. I spent



Experienced and efficient, HCJB's mobile medical clinic team are committed to what they do. Their desire is to minister physically as well as spiritually.

most of the day sterilizing dental instruments and helping the dentist in her portable “office” in the back of the van. I learned the Spanish names of many of the instruments and got into a routine of washing and rinsing. But I never got used to the sight of a tooth being pulled. That's when I usually found an excuse to leave!

We had lots of children in the dentist's chair that day. Their large eyes widened when they saw the huge needle. Most of them were very brave, except little Joselito. Completely oblivious to his mother's encouraging words, he screamed so loud that we decided he

should wait till another day.

As the sun sank behind the Andean peaks that night, we ate an Ecuadorian supper of noodles and beef in a rich gravy. After the requisite strong cup of coffee, we set up a video projector and showed a health film produced years ago by Walt Disney, and after that, an evangelistic Spanish video.

As I sat there in the chilly night air, I realized what a great day it had been. For me at least, the third time had really been the charm. And then it hit me ... I had even enjoyed being a dental assistant!
Curt Cole is a broadcaster in HCJB's English Language Service.

ECUADORIAN MUSIC AIRS TO JAPAN

by Nancy Donnelly

Can it be true? A shortwave radio program featuring Ecuadorian music, hosted in English by an Ecuadorian and translated into Japanese?

Believe it or not, it's true. HCJB missionary Jorge Zambrano is the host of *Música del Ecuador*, a program featuring haunting Andean music of Ecuador. Although of Ecuadorian birth, Jorge has been producing and hosting the half-hour program on HCJB in English since 1974, the same year he joined HCJB's broadcasting team. He also produces the program in Spanish. Lately *Música del Ecuador* has gained so much popularity that demand has cried out for availability in Japanese, targeting Japan. Kazuo Ozaki, director of HCJB's Japanese

Language Service, explains the seemingly strange request. "People who listen to shortwave have a natural curiosity about unknown countries. We receive many letters asking for more information about Ecuador. Therefore, we decided we needed a program with Ecuadorian flavor."

When *Música del Ecuador* first went on the air in English 20 years ago, it was listed as the 102nd "most popular" HCJB shortwave program out of a list of 103. But within the last 10 years *Música del Ecuador* has skyrocketed to one of the top 10 HCJB programs, and within the last four years it has enjoyed a spot in the top 10 shortwave programs in the entire world.

Since April 1988, *Música del Ecuador* has been airing to the Japanese-speaking world every Saturday. Jorge produces the half-hour program in English and turns it over to Kazuo Ozaki. Kazuo's wife, Hisako, then translates Jorge's words over the air. Response is overwhelmingly positive. In fact, Kazuo reports he's never had a single critical comment regarding the program. "They just keep asking for more!"

Why is a music program so popular? "*Música del Ecuador* owes its popularity to non-musical as well as musical characteristics," says Kazuo. "Jorge doesn't just introduce music, he talks about interest-



One of Jorge's talents is playing the charango, a 10-stringed instrument traditionally made from an armadillo shell.

ing places in Ecuador and also includes spiritual aspects relating to life."

Perhaps listeners also sense Jorge's innate musical talents extending beyond the realm of the broadcasting world. Jorge is an Andean musician himself, so he knows what he's talking about. His talents include the charango, requinto, bandolin and the bombo.

An interesting byproduct springing from the program's English/Ecuadorian/Japanese combination was a concert tour to Japan in 1991. Jorge traveled with Kazuo's son Michio, also an HCJB missionary and musician. The duo completed 80 Andean music concerts in 80 days. (If you are interested, ask for Jorge and Michio's cassette tape "*Serenata Andina*," featuring Ecuadorian music, by writing to: HCJB, Public Information, Box 39800, Colorado Springs, CO 80949-9800.)

Regardless of the reasons, people listen to *Música del Ecuador*. "I love Ecuadorian music," Jorge says. "It's a privilege to arrive at the point where people welcome what I do. And it's something I enjoy!"

Nancy Donnelly was a working visitor in HCJB's English Language Service for two months.

Hearing HC

by Rich McVicar

The Beverage Antenna--Part I

Beginning last May, several HCJB DXers began what they hope will become a tradition of test broadcasts on 690 kHz medium wave (MW). Their desire is to give radio hobbyists in other countries a better chance at logging HCJB via its local 690 kHz transmitter. While HCJB's shortwave transmitters are in Pifo, about 20 km east of Quito, the 50-kilowatt, 690 kHz transmitter sits high atop the slopes of Mount Pichincha, a volcano bordering Quito on the west.

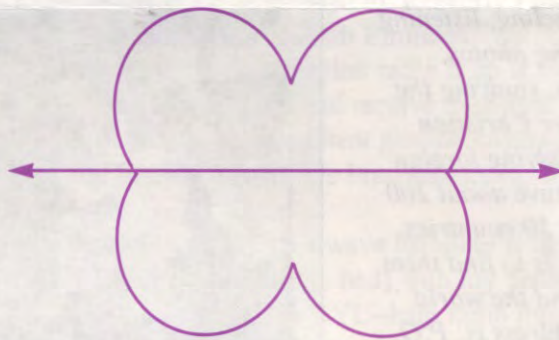
While hearing HCJB on shortwave is fairly easy from many parts of the world, DXing Ecuador on MW is another matter! However, it is possible from many countries. From your location, wherever that may be, it is possible to hear a number of foreign countries on the MW band (known as the AM band in the U.S. and Canada)--the familiar band that covers approximately 530 to 1600 kHz.

There are a number of important factors in DXing other countries on MW. One includes the **time of day**. As with the lower shortwave bands, you must have a path of darkness (or dusk/dawn) between the transmitter and receiver in order for very distant MW signals to propagate. (The only exception to this rule is strong ground wave signals that can sometimes travel more than 2,000 km under the right conditions. This type of reception is more

common with lower MW and longwave frequencies, especially if the propagation path is across water.)

Another factor is the **receiver**. If you're a short-wave DXer, chances are you already have a receiver

Direction Pattern for a one-wavelength Beverage (ungrounded)



Two-Wavelength Beverage (ungrounded)

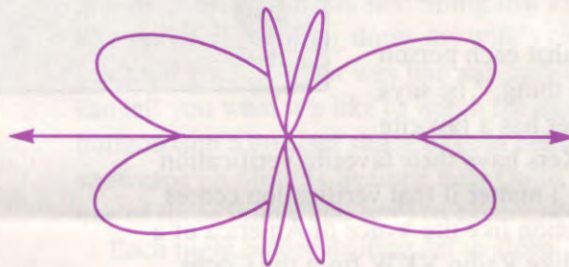


Diagram A

that is great for hearing a number of countries on MW. However, here we're concentrating on the **antenna**, a special kind of antenna. It's called the **Beverage antenna**, named after Harold Beverage, an experimenter from Maine, credited for discovering how it works. It is also known as the *Wave antenna*.

THE BEVERAGE--IT'S BIG!

Basically, the Beverage antenna is a very long and very straight wire. How long? Well, the idea is to

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have a wire that is **at least one wavelength long for the desired frequency on the MW band**. To determine that, a little math is involved. Suppose you wanted to construct an antenna specifically for the 13-meter shortwave band. The popular half-wave dipole would be only 6.5 meters (21'4") in length. These antenna lengths are often quite manageable within the limits of one's backyard or roof area. However, with MW frequencies, it's another matter.

Let's pick HCJB's relatively low MW frequency of 690 kHz as our example. Its wavelength is **435 meters**. Therefore, a full-wave antenna for this frequency is 435 meters, or 1,427 feet. An even better two-wavelength antenna would be $435 \times 2 =$ **870 meters long, or 2,854 feet!**

Why would you want an antenna *that* long? Is there really an advantage? On MW and the lowest shortwave bands, the answer is, "Absolutely!" On the higher shortwave bands, the answer is "no," as the antenna would be too long.

Not only is the Beverage antenna capable of picking up more signal, but this type of antenna is **directional** off its ends. That is, a Beverage running north-south will favor signals from the north and south. Grounding a Beverage, however, will cause it to be directional in only one direction. The end of the Beverage that is grounded is the end that is directionally favorable; that is, grounding the south end of a north-south Beverage will make this antenna favor signals from only the south.

The longer a Beverage antenna is, the more directional it is. A two-wavelength Beverage will be much more directional than a one-wavelength model (see diagram A).

A simple, reasonably effective way of grounding a Beverage antenna, thereby making it favor signals in one direction only, is by soldering the end to be grounded to a 560-ohm resistor. The other end of the resistor should be soldered to a wire that is either buried in the ground itself or, better still, grounded through a grounding rod one or two meters in length.

A CASE EXAMPLE

Now, let's put all these factors together into one

scenario. Suppose a DXer living in Pembroke, Ontario, Canada, wants to try to DX HCJB on 690 kHz. By using a globe or atlas, he sees that Ecuador is directly south of him (180 degrees). Fortunately, he has an uncle who will let him use a number of fields on his huge farm for an antenna--enough space for the desired two-wavelength Beverage.

This DXer knows that to favor signals coming up from due south, a two-wavelength Beverage should point south-southwest, or south-southeast. Either will mean that the major lobes of the antenna pattern are pointing directly south. He uses a reliable compass to determine due south on the farm.

A two-wavelength Beverage antenna for 690 kHz will be 2,854 feet (870 meters) in length. That's more than half a mile, but possible on this big farm. In order to favor signals from the south and to sharply reduce signals from the north, the antenna will be grounded. The south end of the antenna will be soldered to a 560-ohm carbon resistor. The other end of the resistor will be soldered to a thick, copper wire. That thick wire will, in turn, be attached to a 4-foot (1.3-meter) grounding rod, driven into the ground at the south end.

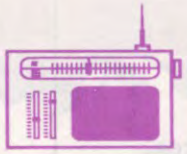
The type of antenna wire used, as long as it's copper, is not too important. The wire should, however, be quite thin and therefore light. Wire in the 20-gauge range has been used quite successfully.

Now, should the wire be insulated? Insulation can be a negative factor. (The major problem I've found with Beverages is that the heavy, insulated wire breaks due to the weight.) However, insulation can be a positive factor. If one erects an antenna in a wooded area, the insulation can provide protection against the antenna's being grounded during wet weather conditions--that is, *undesirably* grounded at points other than at the end.

The wire could be stored on a large reel, perhaps obtained from electrical company retail outlets.

(to be continued next issue)

Rich McVicar, former editor of ANDEX, is HCJB's frequency manager and an English programmer.



DXer of the Month

Congratulations to DXer of the month **John Teale** (ANDEX 8835), a Britisher, who hails from Silverdale, Washington, U.S.A. Peppered with humor, his letter reveals a lot about himself: "I served in the British Army, Corps of Royal Engineers, and even managed to sneak in six months of wartime service (Second World War) which afforded me a medal. I was slightly wounded, too. If I had been in a Yank outfit I would have gotten a Purple Heart, but the British aren't so generous. 'Can he still walk?' they ask. 'Then give him a couple of aspirins and put him back on duty.' We British keep a stiff upper lip."

Later, with the U.S. service, John served as a construction inspector in southern California. "I was there when the airlift flew in thousands of military and civilian escapees from Hanoi.



"Hope you like the photograph I took of myself!" John says.

"I've been interested in shortwave radio since I was about four years old. My father introduced me to radio when he bought a Cossor Blue Spot radio in the early '30s. My contribution was to recharge the accumulator from time to time." The accumulator was a square glass bottle, with gray plates inside, used as a wet battery. "Now I have a radio with digital frequency dialing. If I want to listen to HCJB at 1 a.m. I punch in 9600 kHz, and there it is! This morning HCJB's 'What's Cooking in the Andes' program with Karen Schmidt prompted me to go out and buy a mess of quinoa.

"I can't count the number of stations I've listened to. Recently I picked up the United Arab Emirates.

"My other radio is an ICOM. I use it to send and receive messages via Morse code. It also has excellent general coverage so that I can listen to shortwave broadcasts, too, if I feel the urge.

"Most of my shortwave listening is in the horizontal position (in bed) with my headphones on, so I won't wake the XYL--ham radio lingo for 'wife.' I'm the OM, of course--'old man.'

John's address is: John Teale, P.O. Box 2865, Silverdale, WA, U.S.A.

Person to Person



Len Kinzel, English Service broadcaster, with daughter Jennifer.

I started a new nighttime hobby on March 26. I wouldn't have guessed it could give me such joy. I use joy knowing it falls short of what I feel, but I can't come up with anything that's close to describing it. If you've shared the hobby, I suspect you'll nod and smile as this piece unfolds. If not, I hope someday you'll know what it feels like.

My hobby has a name. It is Jennifer Kathryn. I watched her come into this world, between glances

at tears of glee, pain and something that looked like satisfaction rolling down my wife's cheeks. I can't tell you what that was like any easier than I can tell you what it's like to watch the eastern horizon turn a brilliant shade of gold behind the snowcaps on Mount Cayambe near Quito. It's one of those things you have to experience.

Each night before drifting off to sleep, I pull on my quietest slippers and sneak into Jenny K's room. There, by the glow of a penlight, I watch her sleep. That's all. I know it's not much of a hobby, but it's my favorite. Anything she's done during the day is forgotten. I smile and suspect it's a smile that crosses only a father's face. She's my daughter. With her I'm very well pleased.

All the books in all the Christian bookstores in the world couldn't teach me a better lesson on how God sees me. Because I belong to Him, when He sees me, He sees His Son--the one He spoke of in the Bible: "This is my Son, whom I love; with him I am well pleased" (Matthew 17:5 NIV).

— Len Kinzel

My Favourite QSL

Twenty-one-year-old Dimitriy Ribolovlev (ANDEX 8387), from Siberia, writes: "My hobbies are communicating with pen pals, shortwave listening, stamp, coin and postcard collecting, listening to music, taking photos, reading books, studying the Bible and other Christian books, and studying foreign languages. I have about 200 pen pals from 50 countries, but my dream is to find them from all around the world." (Dimitriy's address is: P.O. Box 292, Biysk-15, Altayskiy Kray, 659315, Siberia, Russia.) And here's his favorite QSL:



"I have many interesting and remarkable QSL cards, but my favorite is still one I received from

HCJB. That card opened up a beautiful station--the Voice of the Andes--to me. I think I felt like Christopher Columbus when he discovered America! That's because I attempted to receive the signal for such a long time on my old receiver. Then, after almost two years, when I got a good receiver and antenna, I was successful in tuning you in here in Siberia--more than 16,000 km from Quito. Your first reception was a 'happy reception' because I heard the address of the Slavic Bible Institute in Buenos Aires. You can probably guess ... I'm now a correspondence student of that Bible Institute. And that's why HCJB's QSL card is my favorite.

"I end with a proverb from the Bible: 'As cold water for the soul, so is good news from a far country' (Proverbs 25:25)."

"I'm sure that each person has a favorite thing," he says. "As a gardener has a favorite flower, so DXers have their favorite verification card. It doesn't matter if that verification comes from a big station like the Voice of America or a small station like Radio VKW from the Cocos Islands. More important than that is the feeling one experiences when he receives the QSL card. It may be a modest card, with only two or three words, but if he's longed for it for eight years, it's an important QSL with a long history!"

CORRECTION: In our May-June 1994 bulletin we listed a number of shortwave supply companies in New Zealand. ANDEX member Roy Sargon (ANDEX 8385) has done some looking around and kindly sends us these updates: "Martin Electrical Sales & Service has a telephone number that does not exist and no one answers the door; Strait Communications has gone out of business; Com Centre has relocated to 195 New Windsor Rd., Blockhouse Bay, Auckland, N.Z. (Phone: 626-3213). They also have another store in Christchurch, called Mainland Communications."

Thank you, Roy, for your help!

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