

ANDEX

International



Vol. 15, No. 5

Dec.-Jan. 1988-89

New Year's Eve: Ecuadorian Style

by Ruth Ann De Flon

Makeshift platforms framed by eucalyptus branches representing the "old man's" shack line the Ecuadorian streets, and an illusive joy permeates the air. Tonight is one of the year's biggest celebrations, with grotesque costumes, dancing, eating, singing, drinking and making merry.

A new year is about to begin. A new year of what? Hopes, dreams fulfilled, good luck? And there will be a hoped-for, new beginning, a fresh start for the human heart. The "old year" will burn to nothing, and only its ashes will remain, in people's memories.

The "old year" is symbolized in Ecuador as an adult-sized dummy, or effigy. These effigies, enhance street corners, homes and businesses every Dec. 31, a waiting their "death" at midnight. Overused, sawdust-and-firecracker-stuffed shirts, jeans, socks and shoes, accompanied by faces, frequently resembling an acquaintance, a comic book character or maybe even an object, like an airplane, all await their doom.

A resident of the capital city of Quito said, "We often go up on our balcony at midnight." "and watch the entire city, smelling like eucalyptus, light up as multitudes of 'old years' burn to the ground."

"I like to walk down Amazonas Avenue in Quito on New Year's Eve," comments another. "That's where the most detailed

'old men' compete in a contest. Fascinating entire scenes--groups of 'old men'--represent political struggles or recent incidents in the country."

And we can't forget the "old man's" widow, represented by costumed children, blocking streets and begging for a few coins from passers-by to help defray the cost of their "old man's" funeral.

During those last critical moments of each year, some Ecuadorians linger by their radios awaiting the countdown. Some dramatically stand on a chair or table. "10..." Now is the moment to make a New Year's wish, some believe. "4, 3, 2, 1." A big leap to the ground punctuates the birth of the new year! And some add to the momentous event by turning off the lights at "0" while others pull on a new shirt or sweater. Hugs for everyone and a wish for a happy new year, usually embellished with tears, create a warm, fresh start.

And now everyone dashes out to the middle of the street to burn the "old man," along with his shack, torn down only minutes before.

A new life. A new beginning! The origin of bringing to life the "old year" with all of its trials, struggles, ventures, mistakes and temptations... which perhaps will dissipate and somehow bring emancipating, exhilarating release.



Political satire of public figures.



"Widows" begging alms.

Person to Person

John Beck
DX Partyline Host



By now the tree is gone--the ornaments and lights have been carefully stored away; the furniture returned to its original location and the batteries in the toys are exhausted (one reason we invested in rechargeables years ago). The Christmas carols have already faded.

But where now is the Christ whose birthday we have just celebrated? Do we call on Him only when we need Him? Or has He been crowded out entirely? The Christmas season serves to remind us that Jesus was sent to earth by a loving God. But for what purpose?

Isaiah answers that question: "All of us like sheep have gone astray, each of us has turned to his own way; but the Lord has caused the iniquity of us all to fall on Christ (Isaiah 53:6).

During this new year of 1989, may all of us rededicate ourselves to rearranging our priorities so that Jesus Christ truly has preeminence in every area of our lives.

ANDEX NOTES

A note of thanks to those who have sent in the necessary fees to renew our sponsored members. We still have about half a dozen applications awaiting sponsors.

We do enjoy your letters and endeavor to answer your questions either in the ANDEX bulletin or on the *DX Partyline* program.

Because of pending program changes, the new English Schedule will not be out until March. It will be mailed to each ANDEX member as soon as it is off the press. Please listen to your favorite English program to keep up with some of these changes.

Understanding SW Radio

International Broadcast Bands

Have you ever noticed that most international broadcasting stations tend to group together on your shortwave radio dial? It's because these stations are not allowed to pick just any frequency and start broadcasting, but must broadcast within certain frequency bands allocated for international broadcasting. In fact these frequency groups are called the international broadcast bands. They are governed by the International Telecommunications Union through periodic World Administrative Radio Conferences (WARCs). The bands were initially fixed at the conference in Mexico City in 1948. WARC 1979 modified these bands somewhat. Currently eight bands are allocated for use, referred to by frequency coverage and wavelength in terms of meters.

The 49-meter band covers 5,950 to 6,200 kHz. The 41-meter band (7,100 to 7,300 kHz) is not supposed to be used for broadcasting in the western hemisphere since it is allocated exclusively for that area's amateur radio operators. The 31-meter band covers 9,500 to 9,775 kHz. The frequencies of 9,775 to 9,900 kHz are presently assigned to fixed service, but will convert to broadcast service in 1994. The 25-meter band (11,700 to 11,975 kHz) also will be expanded in 1994 on both ends to eventually cover 11,650 to 12,050 kHz.

Broadcasters will get a new band in 1989 with the range of 13,600 to 13,800 kHz, converting from fixed to broadcast service. This will be called the 22-meter band. The 19-meter band (15,100 to 15,450 kHz) will also be expanded on both ends in 1989 to cover 15,045 to 15,600 kHz. The 16-meter band (17,700 to 17,900 kHz) will be expanded in 1989 on the bottom end to cover 17,550 to 17,900 kHz.

The top two bands will remain as they presently are: The 13-meter band, covering 21,450 to 21,750 kHz, and the 11-meter band, covering 25,600 to 26,100 kHz. While these are the official band designations, you will already hear a lot of stations utilizing out-of-band frequencies.

Special DXers



Chris Ifeanyi

Our congratulations to Chris Ifeanyi of Port Harcourt, Rivers State, Nigeria, for being our Special DXer for Africa this month. Chris, ANDEX 5184, is a 20-year-old student of international politics and administration.

His interest in DXing began 1982 when his father asked him to tune shortwave for news. He continued listening after the news and heard the results of the World Cup in soccer. This is his favorite sport, and his delight at hearing those results started him on the road to making shortwave another enthusiasm.

Since he started DXing in 1986, Chris has obtained some 153 verified QSLs from more than 50 stations. His second station in this impressive list was HCJB. With his present Grundig Yachtboy 450, he can receive approximately 60 stations.

Of shortwave, Chris said, "Listening to SW has made me the chief informer on events here. I get information firsthand about any international event. People come to me daily for results of international events."

Chris also numbers among his hobbies sports, photography, philately, letter-writing and music. He holds memberships in Radio Prague Monitor Club, Radio Berlin DX Club and Radio Budapest Shortwave Club. He concludes, "Any day I don't listen to SW, I feel sad, cheated and as if the world has passed me by."

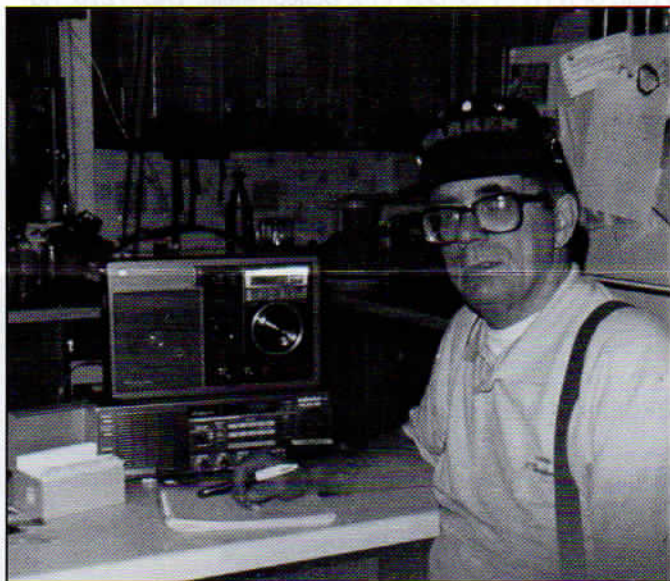
You can write Chris at P.O. Box 2637, Port Harcourt, Rivers State, Nigeria. We encourage you to write him with your congratulations.

Carbondale, Ill. is home to special DXer Warren Meinhardt, ANDEX 5582. His interest in radios dates back to boyhood days when he built crystal sets.

Warren graduated from crystal sets while in grammar school. His principal gave him a box of used radio parts. And he used them to build a simple one-tube receiver. But it wasn't until the 1960s that he built his first shortwave set from an Allied Radio Kit. That began his interest in the hobby, although he has become serious about it only in the last few years. His current stable of receivers includes a Realistic DX-66, a Panasonic RF-B3000 and Kenwood R-2000.

Warren, 56, has four grown children and is grandfather to three. He teaches Spanish and Latin American literature at the School of Law at Southern Illinois University in Carbondale, where his wife is a librarian.

In addition to ANDEX, Warren is a member of SPEEDX. He would be happy to correspond and exchange information in English or Spanish with other DXers. His address is P.O. Box 2205, Carbondale, IL 62902, U.S.A. Congratulations, Warren, on being chosen to be a special DXer this month!



Warren L. Meinhardt

Ambato--The Second Link

By Janice Shober & Marian Houghton

Ambato sits in the heart of Ecuador and provides vital produce for the country. It has been called Ecuador's garden and orchard. And now it's the site of HCJB-FM's second repeater station--a second link in HCJB's effort to remain a media leader in Ecuador by providing 10 repeater stations to cover the major population centers and multiply the talent, effort and expense of program production at HCJB-FM Quito.

HCJB-FM provides a different sound than other FM stations in Ecuador with easy-listening format. Yet its real distinction is the same as that of HCJB shortwave: excellence, friendliness, a willingness to promote the cause of Christ without offense, and a desire to gain the confidence and trust of its audience--in this case, the nation of Ecuador.

In Ambato, HCJB-FM was granted the 11th license in a city where the government had originally allotted just 10 permits. No other permit was for an evangelical station, so Ambato--city of fruits and flowers, provincial capital and agricultural heartland--now has a new sound.

The idea first got serious consideration about 18 months ago. An Ecuadorian "titled engineer" began to work full-time on the complicated government application. The government needs details on area coverage, power output and signal strength. This, of course, is a difficult computer problem since Ambato is surrounded by mountains.

Late last spring equipment for an operating system finally arrived from the U.S. By September the system was completed, and early October was pinpointed for installing the transmitter. No tower would need to be erected since one had been placed there in 1980 for VHF communications with HCJB's jungle hospital in Shell.

The location of the tower and transmitter is a mountain near Ambato name Pilisurcu, a Quechua name that probably dates back to the Incas. In addition, 20 other huts are located there for military radio, ham radio and other radio and TV stations. Simply put, it's the best location near Ambato, providing the best line of sight to the city and surrounding area. This 13,600-foot mountain is also in direct line of sight with the Pichincha towers above Quito at 12,000 feet, making the transmission simple--small antenna to small antenna.

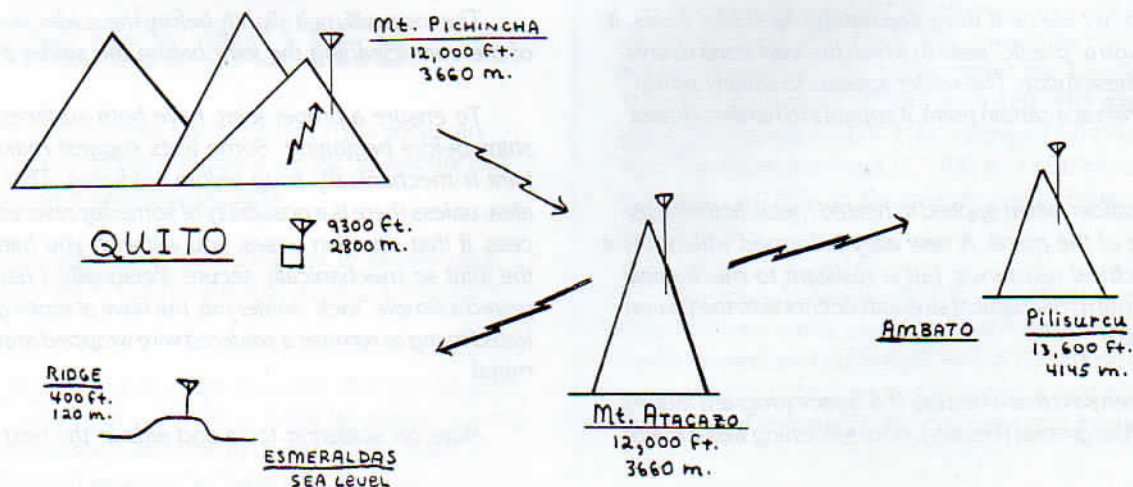
Dave Shaw, one of the engineers assigned to this project, said the installation was no easy task. The trip to Ambato with two vehicles, the antenna and a 14-by-48-inch rack with equipment, took five hours. The last 500 feet is a near vertical climb--on foot with the equipment. As they were well into the job, sleet began to fall. Says Dave, "By the time we got to the top of that hill, my chest was heaving and my only thought was 'Have I made my will? Who did I last name as executor?' And when we were climbing the tower, I couldn't last more than 10 minutes because my fingers would freeze."

In spite of the difficulties, they had installed a receiving antenna pointed to Quito, a transmitter overlooking Ambato and two transmission lines--all by 8:00 p.m. HCJB-FM was on the air with a basic transmitter of 30 watts. From this high site, the small signal covered Ambato and all areas in line of sight. However, 150 watts is the authorized wattage.

So in early December, Dave returned for the third time to attempt to get the amplifier to work. He finally found a measure of success, and the repeater now is operating at 100 watts. Some problems do remain. "Signals from other stations are mixing in with ours somewhat. I need to install filters to eliminate intermodulation products. The problem is natural since we're on site with so many other transmitters," Dave said.

One good thing, though, is maintenance. Once the site is in final working order, the equipment is virtually maintenance-free. Dave has not visited HCJB's other repeater site in Esmeraldas for more than a year. Sometimes unusual problems do crop up, though. In Atacaso, the antenna was stolen. A skilled design engineer with some good mechanics quickly constructed a new antenna--a five-element yagi of heavy-gauge aluminum tubing. At another location, local farmers burned old growth of elephant grass...and the antenna. That, too, was fixed with local material.

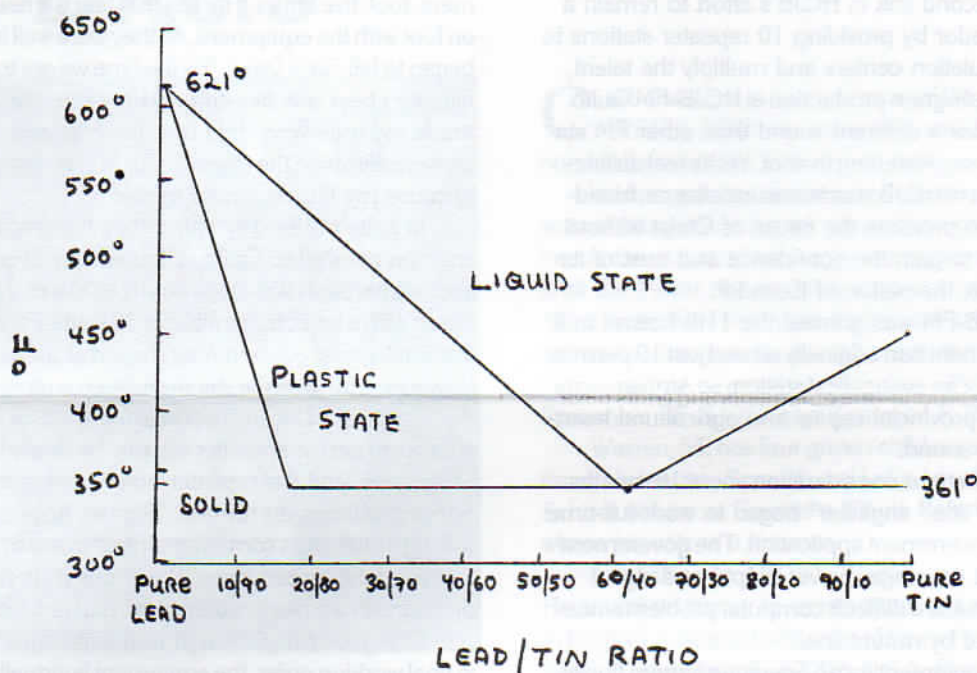
"We turn on HCJB-FM in the morning when we get to the office and leave it on until we leave at night," says Bill Moss, general manager of Apple Computers in Quito. Today, businessmen, farmers and the entire community of Ambato can say the same.



FM Links in Ecuador

SOLDERING

By John Beck



Solder in its liquid and plastic state

Soldering, one of the metalworker's oldest known arts, still has various industrial applications. It is also indispensable in electronics.

Solder is an alloy--a homogenous mixture of two or more elemental metals. Although the most common mixture is lead and tin, a few special-purpose solders of other materials are also made.

Solder melts at different temperatures, depending upon the tin-lead ratio. Interestingly enough, a ratio of 40% tin and 60% lead (referred to as 40/60 solder) melts at a lower temperature than either element does separately. As solder cools, it passes through a "plastic" state in which the lead starts to crystallize out of the solution. The solder appears to solidify slowly at first, and then at a certain point, it appears to harden almost instantly.

Molten solder, when applied to heated metal, actually dissolves some of the metal. A new alloy is formed which has a very low electrical resistance, but is resistant to mechanical shock. Maximum mechanical strength occurs with the tin content of 40-60%.

It has been said that when the U.S. space program attempted to get off the ground (literally), poor soldering was a major

cause of rocket failure. This points up the importance of properly soldered joints. The key factor is cleanliness.

To get a good mechanical and electrical connection, all dirt, grease and paint need to be removed from the joints. Flux aids this cleansing process by forming an oxide field which prevents contact with oxygen in the atmosphere. However, it's difficult to determine the exact amount needed. Therefore, many solders have a flux core. Only rosin flux should be used in electrical applications since the acid flux leaves a corrosive residue.

The rosin will melt slightly before the solder, and flow out of the core, cleaning the joint before the solder hits it.

To ensure a proper joint, have both surfaces bare and shiny before beginning. Some texts suggest making sure the joint is mechanically snug before soldering. That is a good idea, unless there is a possibility of someday reversing the process. If that situation arises, you will wish you had not made the joint so mechanically secure. Personally, I have never repaired a simple "tack" solder job, but have at times grown frustrated trying to remove a soldered wire wrapped around a terminal.

More on soldering tools and aids in the next issue.

Pen Pals

WANT PEN PALS

CHARLEY THOMASEN - 601 Deerwood, Longview, TX 75604 U.S.A. ANDEX 6379 - 46 years old - interests include music, stamp collecting and listening to shortwave programs. Will answer letters promptly. He is radio announcer at a Longview station.

RICHARD J. MICHAELS - 641 W. 21st St. (A), San Pedro, CA 90731, U.S.A. - ANDEX 6231 - would like pen pals from Germany, Austria, Switzerland, Italy, U.S.S.R. Korea, Japan or China, but must be in English.

DAVID PETIT - 2126 North D. Street, Elwood IN 46036-1635, U.S.A. - ANDEX 6134 - would like to write to anyone.

KEVIN JONES - 13005 8th Ave. W. B 304, Everett, WA 98204, U.S.A. - ANDEX 5554 - Some of his interests are photography, meteorology, computers, airplanes and radio DXing.

RUNE BERG - Herman Baggersgt. 5, N-3700 Skien, Norway - ANDEX 6206 - Rune is not quite 16 years old and would like pen pals from anywhere in the world.

PACIL SMYTH - P.O. Box 110, Beaconsfield, TAS. 7270, Australia - ANDEX 6565 - his interests are SWL and sports, both watching and playing.

DONNA JEAN HOPPER - 1636 S. Wenonah Ave., Berwyn, IL 60402 - ANDEX 6382 - is interested in all types of music, geography and is also a ham radio operator. Her call letters are KA9ZVN. She would like pen pals from the Caribbean, Central America and the Middle East.

RECEIVER QUIZ

Match up the manufacturer with the model for the following shortwave receivers. Answers next month.

Hammarlund	RP-F11	Realistic	DR-22
Drake	ICF-5900	Yeasu	SSR-1
Kenwood	CR-2021	Panasonic	HQ-180
National	R-388	Toshiba	DX-150A
Heath	RF-2600	McKay Dymek	GR-78
Icom	R-11	Sony	IC-R70
Hallicrafters	FR-101D	Collins	SX-111
Uniden	HRO-500		

FEES FOR ANDEX MEMBERSHIP MAY BE PAID IN THE CURRENCY OF THE COUNTRIES BELOW BY SENDING TO THE ADDRESS GIVEN:

AUSTRALIA	A \$6.50	HCBJ—ANDEX, GPO Box 691, Melbourne, Vic 3001, Australia
CANADA	C \$6.50	HCBJ—ANDEX, 2110 Argenta Rd., Mississauga, Ontario, Canada L5N 2K7
FINLAND	FIM 25 to the bank	Send fee to: Radio HCBJ, Helsingin Sp/Helsingfors 5b, 405506-09630716. Send application form to: Radio HCBJ, PL-101, 15111 Lahti, Finland
ITALY	L 7.000	HCBJ—ANDEX, Via Cavallotti, 16, 41043 Formigine (Modena), Italy
JAMAICA	J \$25	HCBJ—ANDEX, Jamaica Office, P.O. Box 31, Kingston 6, Jamaica
NEW ZEALAND	NZ \$10	HCBJ—ANDEX, P.O. Box 82-296, Highland Park, Auckland, New Zealand
SWEDEN	Equivalent of \$5.00 USA dollars	Fees to: Postgiro 68 06 80-6 OR to bank giro 332-4407. Send application form to: Radio HCBJ, Box 110, 54201 Mariestad. Check the current exchange at your bank to determine the fee.
SWITZERLAND	SFr. 10	Send Fees through the postal system to: Radio HCBJ-Schweizer Arbeitszweig, Mannedorf, P.C. Glarus 87-3468. Send application form to: Radio HCBJ-Schweizer Arbeitszweig, Postf. 119, 8708 Mannedorf
UNITED KINGDOM	3 pounds 75 pence	HCBJ—ANDEX, 131 Grattan Rd., Bradford, West Yorkshire, England, BD 1 2HS OR send to Post Office giro account 625 2311 by using a transfer form from a members Girobank account or using the "Transcash" service available at all post offices in the U.K.
U.S.A.	US \$5.00	HCBJ—ANDEX, P.O. Box 553000, Opa Locka (Miami), Florida 33055-0401
WEST GERMANY	DM 12	Margot Stegmüller, Hebelstr. 32, D-6908 Wiesloch, Federal Republic of Germany Account Nr. 2074 15-675 Postgiro Ludwigshafen

EUROPEAN COUNTRIES WHERE THERE IS NOT A LOCAL OFFICE:

Applicants may use the United Kingdom post office giro account by sending the equivalent of three pounds and 75 pence.

IF YOU LIVE ANYWHERE ELSE, REMIT \$5.00 (U.S.A. dollars) to: HCBJ-ANDEX, P.O. Box 553000, Opa Locka (Miami), Florida 33055-0401.

APPLICANTS WHO HAVE DIFFICULTY PAYING THE MEMBERSHIP FEE MAY APPLY FOR OUR SPONSORSHIP PROGRAM.

THE AMOUNTS LISTED ARE THE FEES FOR A FULL YEAR OF AIRMAIL SERVICE. MAKE CHECKS/MONEY ORDERS PAYABLE TO HCBJ-ANDEX. INTERNATIONAL REPLY COUPONS MAY BE USED TO PAY THE FEE. WE REQUIRE TEN (10) IRCs PER MEMBERSHIP. UNUSED POSTAGE STAMPS ARE NOT ACCEPTED AS PAYMENT.



ANDEX International



is the official bi-monthly publication of Andes DXers International, a DX Club operated in conjunction with DX Partyline broadcast over Radio Station HCJB and sponsored by the World Radio Missionary Fellowship, Inc.

ANDEX Editors - John E. Beck and Marian Houghton

ADDRESS MAIL (NO funds) to: ANDEX International
Casilla 691, Quito, Ecuador