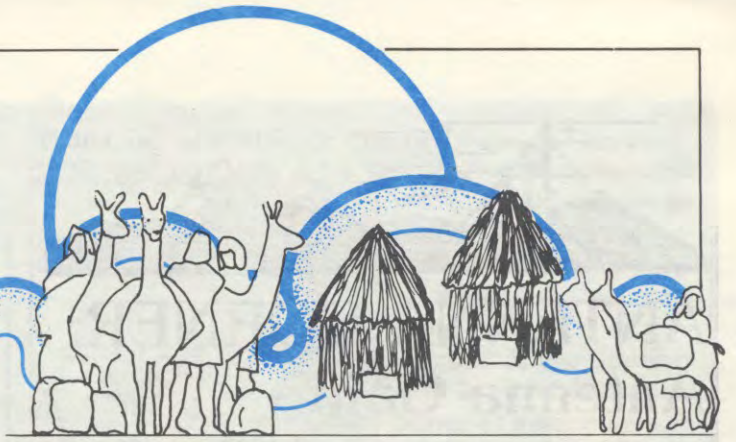


# INDEX

International

Vol. 13, No. 3

June-July, 1986



HEAR

# "UNSHACKLED!"

by Ken MacHarg



Jack O'Dell

When you enter the UNSHACKLED radio studio, you step back in time. All around the chapel/radio studio at the Pacific Garden Mission in Chicago are pieces of audio equipment you would have found in any radio station 35 or 40 years ago. To one side is a sound board, a table and control where all of the sound effects for the long-running drama are produced. From breaking glass to a slamming door, most of the sounds heard on UNSHACKLED are produced live in the studio.

Next to the sound table is the console of the organ which Lucille Becker has played on the series for years. With the format of a traditional soap opera, UNSHACKLED was first produced in Chicago as a public relations medium for the Pacific Garden Mission, an inner city street mission catering to the homeless of the "Windy City."

At the front of the room are the microphones, placed strategically to pick up the voices of professional actors who step up to them as the script calls for their particular character. To the right rear, a glass panel allows visibility to the control room.

Just before the dramatic production begins, around 5:00 p.m. each Saturday evening, a short, older gentleman steps forward to address the tour group which has just been through the mission.

As soon as he opens his mouth, the regular listener to UNSHACKLED knows this is Jack O'Dell.

Although he has been writing scripts and announcing for UNSHACKLED for over 30 years, Jack O'Dell has not always been behind a mike for a Christian cause. In his own words, he was at first an atheist or an agnostic, a radio actor who was drunk on the air and off, someone who did not know where he was going.

But then, through a confrontation with himself and Jesus Christ, he became a Christian, put away those things which were ruining his life, and moved into work with the UNSHACKLED program, first as an actor, later as an announcer, and in 1955 as its chief writer and director.

UNSHACKLED actually began in 1950, with the story of the famous evangelist Billy Sunday. Eugenia Price wrote the first 250 scripts, then turned the program over to O'Dell who has written almost all of the 1,500 programs aired since then.

With the exception of occasional holiday programs, the UNSHACKLED stories are all true, O'Dell says. "If possible, I interview the story subject in person, but if that is impossible, I get the story any way possible, by cassette tape, letter or by reading a book."

Preparing just one program takes hours, O'Dell says. First he must listen to a tape and take notes—normally a five-hour task. Then he must block out the script, write it, time it, and get it to the professional actors who appear on the program.

"The hardest part is writing the first six lines of the script," O'Dell says. That portion of the program characterizes the whole story and must attract listeners to stay for the entire 30-minute program.

Just writing the story correctly isn't the only problem O'Dell faces. Dealing with the type of characters who appear on the program, he must be careful not to offend any of them, nor to run afoul of legal complaints. He says he tries to become fond of the central character, and attempts to represent them fairly.

"We must present the stories with good taste," he says. "You have to remember we are dealing with some pretty disorderly lives." O'Dell is also aware that sensitive material must be presented carefully because the listening audience includes families and children. "But," he says, "we are dealing with human sin."

O'Dell is a man who obviously enjoys his work with UNSHACKLED. "It's probably the only redeeming

*continued on page 3*





# ANTENNA CORNER: Antenna Gain

By Don Hastings

In previous issues we considered the basic way in which currents in an antenna generate the fields in space that carry radio signal power from the transmitter to your radio receiver. Now we can begin to explore some antenna properties which will help you judge the performance capabilities of different types of antennas. In this article we deal with the meaning of antenna gain and the way in which it is produced.

## DEFINITION:

The term "gain" refers to the measure of an antenna's ability to direct the power delivered by the transmitter toward a specified target area of the world. Gain is closely related to the directivity of antennas. Gain is a technical term referring to power delivered, whereas directivity refers more to concentrating the power in a given direction without regard to losses or inefficiency in the antenna system.

To understand gain and directivity it will be necessary to consider more closely the way in which power is conducted outward from an antenna by the electric and magnetic fields described earlier.

## CURVATURE OF ELECTROMAGNET WAVE FRONTS:

Our earlier example of a pebble dropped into water provides an excellent example of the way in which wave fronts propagate. The wave front is easily seen as the front edge of the wave which spreads out in a perfect circle around the point at which the pebble was dropped. The energy stored in the falling pebble is transferred to the water where it forms concentrated power at the point of impact. This power then tries to dis-

sipate as rapidly as possible, and the fastest way is to spread out along the circumference of a circle of ever-increasing radius. The density of the power can be seen to reduce rapidly as it spreads over the growing circumference by observing the reduced wave height.

The very same phenomenon occurs when electromagnetic waves leave an antenna except that it occurs in three dimensional space rather than the two dimensional water surface. The concentrated power near the antenna tries to spread out and dissipate as rapidly as possible and it does this by the wave front expanding out to form a spherical surface of ever expanding radius. The power density of the radio wave front drops at a rate proportional to the square of the radius of the sphere.

**the antenna must  
control the spread  
of power  
and concentrate it...**

## CONTROLLING WAVE FRONT CURVATURE:

It is readily apparent that the antenna must control the spread of power and concentrate it on a small portion of the spherical surface if it is to provide directivity. The concept which best describes this control is that the antenna must provide a flat wave front, i.e. a wave front with small curvature and slowly-spreading power density. This is achieved either by a large array of many dipoles all

radiating in phase to produce directly a flat wave front, or by a small antenna focusing by a reflector or lens which flattens the curved wave front.

## MINIMUM ANTENNA SIZE:

To help understand what configurations and sizes of antennas are needed to achieve a flat wave front and directivity it is necessary to consider the basic minimum antenna size. This is not so much a function of physical size of the antenna structure as it is the volume of space that structure must fill with electric and magnetic fields.

You may recall that the propagation fields reverse direction every half wavelength. Similarly the smallest volume of space into which the antenna pumps its power is approximately a half wave in dimension. For that reason the most common antenna is the half-wave dipole which is resonant and couples its power most readily into space. Its size matches the size of the space needed for the fields.

Smaller physical antennas may be used but it becomes more and more difficult to force enough current into smaller sizes to fill the minimum space with fields. To achieve much gain and directivity an antenna must be larger than the basic half-wave size. In general the larger the antenna the greater the gain, although size alone doesn't guarantee that gain will be achieved; the design must be correct as well. This size rule holds also for focused antennas, since the reflector or lens elements must be large if much directivity is achieved.

In the next issue of *ANDEX International* I plan to describe how some common types of antennas function to provide gain. This application of the theory presented here should help you better understand limitations of these antennas and to spot exaggerated claims when encountered in advertisements.



# UNSHACKLED

thing I have ever done," he says with a chuckle. The veteran broadcaster who also produces industrial and educational movies broke into radio on such famous dramas as "Sky King" and "Backstage Wife" during the "Golden Age of Radio" in the U.S.

Today he compares UNSHACKLED to those live dramas of old. With this production, a drama is produced in front of a live audience, using professional actors, live music and live sound effects. The only difference, O'Dell says, is that UNSHACKLED is taped and edited to remove any mistakes.

How did the Pacific Garden Mission, producer of UNSHACKLED, get its name?

"It's an interesting story," says Jack O'Dell, who writes and hosts the program. It seems that the famous skid-row mission in Chicago (where famous evangelist Billy Sunday became a Christian) was located in a building which was formerly known as the Pacific Beer Garden. However, it was becoming known on the streets by the name of the man who ran it. The operator approached Sunday with the dilemma, and Sunday suggested that if he dropped the word "beer" and added the word "mission" every drunk in the city would know where it is and come for help. So, the famous inner-city mission became known as the Pacific Garden Mission.

Today, in addition to producing the world-known radio program UNSHACKLED, the mission provides a place of refuge for street people and other homeless of Chicago, as well as an active ministry to military personnel and others needing help in the Chicago area.

Visitors to Chicago are encouraged to tour the mission on Saturday afternoons, and to sit in on the taping of UNSHACKLED. Further information may be obtained by writing to the Pacific Garden Mission, 646 S. State Street, Chicago, IL 60605, U.S.A. or by calling 312/922-1462.

Unshackled is broadcast on HCJB to North America Monday, Wednesday, and Friday at 0200 and 0500 UTC; to Europe Saturday at 1900 UTC; and to the South Pacific Sunday at 1000 UTC.

O'Dell is modest about response to the program. "We get only about a thousand letters a month," he says, "plus other mail which comes directly to the Pacific Garden Mission." He says the audience is strong and consistent, and the program has always been an audience builder. Soon after the program premiered on WGN in 1950, the station asked permission to move it to an earlier hour because it was attracting an audience. Today, 36 years later, the program is still on WGN, but has expanded to cover 750 additional radio stations worldwide. Most of the international Christian missionary stations carry UNSHACKLED, including HCJB.

O'Dell attributes the success of the program to God. "All we ever did was to make one more program one more week," he says. "The scheme was all God's, not mine."

Asked if the program changes lives, O'Dell replies, "If not, it ought to be taken off the air. The program is not written for Christian listeners, although I'm glad if Christians listen. I'm talking to the guy out in the street, not a convinced constituency."

"If ever there is a tribute to the grace of God and the power of God it is UNSHACKLED," O'Dell says.





# SPECIAL DXers



## *Franz Wallisch*

Our Special DXer from Austria, Franz Wallisch, has been interested in radio listening since he bought his first shortwave receiver in 1955. Working for many years as a service manager, his interest in shortwave grew when he introduced radio communication to his technicians making service calls. He spends his holidays in a motorboat on the Mediterranean Sea and finds it essential to use shortwave to receive a daily sea-weather report. Franz says DXing became his favorite hobby in 1983.

His radio equipment is shown in the photo. In the lower center is an ICOM IC-R 71E communications receiver. On the left is an ITT RC1000 tape recorder and to the right is an Alpha 40 FM CB transmitter. On the top beginning from the right side is a measuring unit for SWR, power, modulation and frequency. Next is a power supply for 13.8 volts DC, an ICOM IC SP3 external speaker, a receiver for two-meter-band 144-146 MHz DAIWA SR 1000, and finally a quartz clock for UTC. Franz has another receiver not in the photo for outdoor listening, a Grundig Satellite 3400. With this equipment he has logged about 100 stations in 70 countries on all the continents.

On his roof are two antennas for TV, a half-wave antenna for CB, a half-wave antenna for two meters and an active BC Dressler antenna for 200 KHz to 40 MHz.

ANDEX member 5181, Franz has been listening to HCJB since 1984. He is a member of the German DX association ADDX, Radio Budapest Shortwave Club and Radio Tashkent Salom Aleikum Club.

We trust that becoming an ANDEX Special DXer will add to Franz's enjoyment of DXing. You can write to him at Taglieberstr. 19, A-1230 Vienna, Austria.

John Vockeroth, our Special DXer from the United States, is proud of his number 126 charter membership in ANDEX. He says, "My first QSL came from HCJB which I've been listening to for over 25 years, first hearing you in Philadelphia on my father's Blaupunkt receiver." Since John is 38 years old, that means he started listening when he was about 13.

His hobbies include golf, pen pals, collecting stamps, QSLs, pennants, stickers and matchbook covers. John and his wife Michelle are active members of four matchcover clubs. John is also a member of quite a few shortwave clubs-Speedex, Radio Berlin International, Radio South Africa, and BRT-Brussels. He serves as a monitor for several radio stations, including WYFR in Oakland, California U.S.A. and Trans World Radio in Bonaire, Netherlands Antilles.

His equipment is a Panasonic RF-2200, SX-190, and Uniden CR 2021. He uses the Uniden most often, and says, "After getting a digital I wonder how I did without one for so many years. I feel in love with the Uniden."

John works in the computer field as a production technician at the CIGNA Corporation in Voorhees, New Jersey. His home is at 10 Murray Hill Drive, Atco, New Jersey 08004.

Congratulations, John, on being chosen a Special DXer after all these years of membership in ANDEX. We hope you receive many letters from ANDEX members.

## *John Vockeroth*





# andexing

**A CHALLENGE** - We at HCJB who deal with correspondence were perplexed upon hearing that the Ecuadorian postage rates have been doubled. We want to avoid raising the price of ANDEX membership if at all possible, and we have been doing some hard thinking about what course to take.

Most of you received your last mailing (April-May) in two envelopes. The new postage rates are such that sending two letters under 20 grams costs less than sending one that weighs more than 20 grams, so we tried the double mailing. However, we found that the process of two mailings is more than we can handle, so we'll probably not do it again.

There are other things we can do such as end the privilege of including in the ANDEX mailing QSLs and other things you ask for so that the ANDEX mailings would not weigh over 20 grams. You would then have to send IRCs or stamps when you send for QSLs, and you would receive your QSLs sooner since they would not be held for the ANDEX mailing.

We have decided to wait for a few months and see how it goes with income from the \$5.50 (U.S.) fee. In the meantime, we would appreciate hearing your opinion. Is the mailing of QSLs via ANDEX an important part of ANDEX membership? Would an increase in the cost of ANDEX membership discourage you from renewing? Let us know.

REMEMBER, FOR NOW WE ARE DOING NOTHING DIFFERENT, AND WE WILL LET YOU KNOW IF AND WHEN WE DO.

## More Survey Results

In the last issue of *ANDEX International* we featured the ANDEX survey responses about receivers and antennas, and here we will continue with responses to other questions on the survey. Fifty percent, or 559 questionnaires were returned.

We asked, "Do you own a personal computer?" and "How have you used your computer, if at all, with your DXing hobby?"

Thirty percent of the respondents own a computer. This 30 percent use their computer as follows:

54.4% - do not use their computer in DXing	4.6% - frequency data
10.1% - loggings	2.8% - QSLs and reception reports
7.8% - RTTY	1.4% - propagation
	1.4% - schedules

We asked, "What publications in the radio/electronic/broadcasting fields do you read regularly, excluding club bulletins?" The response:

33.6% - no other publications are read	8.9% - <i>Practical Wireless</i>
25.9% - <i>Popular Communications</i>	7.5% - <i>QST</i>
	6.6% - <i>Amateur Radio</i>

**HCJB CO-FOUNDER** - Dr. Clarence Jones, co-founder of HCJB, died peacefully in his sleep April 29th at his home



in Largo, Florida, where he lived with his wife Katherine. Dr. Jones was 85 years old at the time of his home-going.

Dr. Jones, together with Dr. Reuben Larson, pioneered missionary radio broadcasting on Christmas Day 1931 when HCJB had its first broadcast. Dr. Jones served as president of WRMF for 28 years, and continued serving as an honorary member of the board of trustees after his retirement in 1970.

Dr. Jones was a great visionary, missionary statesman, musician and the founder of Awana clubs. In 1975 the National Religious Broadcasters in Washington, D.C., named Dr. Jones "The Pioneer Missionary Radio Statesman" and he became the first inductee into the "Religious Broadcasting Hall of Fame."

We at HCJB admired and loved him, and we will miss him.

**DX PARTYLINE NEWS** - In the last ANDEX bulletin we announced that Clayton Howard would fill in on DX PARTYLINE while John Beck is on home ministry assignment. However, a week before the Howards were to leave for Quito, Clayton was diagnosed as having large cell lymphoma. Since he needs to stay in Florida for treatment, he and Helen will not be coming to Quito.

ANDEX members, let's encourage Clayton by sending greetings and notes to him at 20 Westlake Drive, Orange City, Florida 32763 U.S.A.

As of this writing, various HCJB staff members will be filling in for John Beck on DX PARTYLINE. In June DX PARTYLINE will probably be cut back to two programs per week.

**ANDEX RUBBER STAMPS:** We lost contact with the person who makes rubber stamps for ANDEX. We will have the stamps made here in Quito from now on. Those of you who ordered a rubber stamp and have not received it yet, please hold on for awhile and you'll receive one made in Ecuador. And our extreme thanks for your extreme patience!

For new orders, the cost will now be:

with ANDEX logo only	\$3.25
with ANDEX logo and your ANDEX No	\$4.00
with logo, number, and your name	\$4.75

13.1% - <i>International Radio</i> (formerly <i>The Shortwave Guide</i> )	6.4% - <i>CQ</i>
12.7% - <i>World Radio TV Handbook</i>	6.1% - <i>Monitoring Times</i>

Other publications received less than 5 percent response. *International Radio* and *World Radio TV Handbook* are the only ones devoted primarily to shortwave radio listening.



# Pen Pals



ROSANO MAGGIONI - P.O. Box 4, Cassano D'adda, Milano, Italy - ANDEX 5377 - 37 years old - married - one child - wants to correspond with friends of HCJB.

ROBERT FRANZIUS - 4636 Ridgewood Road, Dunwoody, GA 30043 U.S.A. - ANDEX 5035 - hobbies include exchanging cassette tapes and collecting stamps, postcards and coins from abroad.

WILSON YAP - 136 Jalan Midah Timur, Taman Midah, Kuala Lumpur 56000, Malaysia - ANDEX 5536 - 20 years old - hobbies include SWL,

photography, collecting stamps and coins, reading and corresponding - wants to correspond with anyone around the world.

BETTE DANIELS - 7400 Augusta Street, Box 161, River Forest, IL 60305 U.S.A. - ANDEX 5650 - she is studying nursing and interested in contacting other nursing students, missionaries or those interested in exchanging recipes.

DOVANI MOHAMED - Maire du Village Agricole de Chettia, 02-170 Chief (02), Algeria - 19 years old - a university student - hobbies include correspondence, DXing, SWL, and travel.

LEE YARBROUGH - 1510 Lee Street, Pine Bluff, AR 71602 U.S.A. - ANDEX 5614 - would like other women pen pals who have an interest in underwater swimming.

EMILY C. SMITH - 2545 N. Maryland Avenue, N<sup>o</sup> 312, Milwaukee, WI 53211 U.S.A. - ANDEX 5318 - 23 year old college student - wants to hear only from girls or women outside the United States.

WARREN MEINHARDT - P. O. Box 2205, Carbondale, IL 62902-2205, U.S.A. - ANDEX 5582 - 55 years old - married - professor of Spanish and Latin American literature - hobbies include reading, motorcycling, stamp collecting - wants to correspond in Spanish with those living in Spain and Latin America.

## TOMORROWS

I meant well. Back in October 1985 it was predicted that HCJB's new 100 kw Harris transmitter would be on the air by Christmas, and so we put in the ANDEX bulletin "the holiday season will be bringing HCJB listeners a joyful new sound." As I write this it is June 1986 and the transmitter still is not being used. Our engineers continue to work on problems, and we really do expect the transmitter will soon be on-line.

Then in the last issue of the paper, in anticipation of the Howards' imminent arrival, I said "They arrived at HCJB in May to fill in for John Beck...." If you've read the

ANDEXing column in this issue or heard recent DX PARTYLINE programs, you know the Howards did not come.

There are lessons here. As an editor I need to remember there is a risk in announcing something has or will occur before it really has. If it does occur my reason for announcing it is fulfilled - you get the news quickly. If it doesn't occur, well...I'm embarrassed, and you've been misinformed.

Scripture addresses this tendency we all have to "count on tomorrow." James 4:13-15 says "Come now, you who say, 'Today or tomorrow we shall go to such and such a city, and spend a year there and engage in business and make a profit.' Yet you do not know what your life will be like tomorrow. You are just a vapor that appears for a little while

and then vanishes away. Instead you ought to say, 'If the Lord wills, we shall live and also do this or that.'"

I know that as Clayton and Helen prepared and looked forward to being on DX PARTYLINE again it was with the prayer "Lord, if it is your will we shall do this." Knowing it is not His will, at least for now, let's make a special effort to support them with prayer. Clayton and Helen know that Jesus died to take away the one barrier to heaven, sin. They have a personal relationship with Him, and we know that God will continue to perform in their lives. Clay shared by phone over the May 17 DX PARTYLINE call-in program something for all of us to remember - "With God behind you and His arms beneath you, you can face whatever is ahead of you."

### ANDEX International



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



DX Party Line Host - John Beck

ANDEX Director - Doris Hastings

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

Write for a list of ANDEX offices in other countries for your payment convenience.

Printed in Ecuador, S.A. by Imprenta Vozandes