

ANDEX



INTERNATIONAL

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April-May, 1982

A PERSONAL WORD

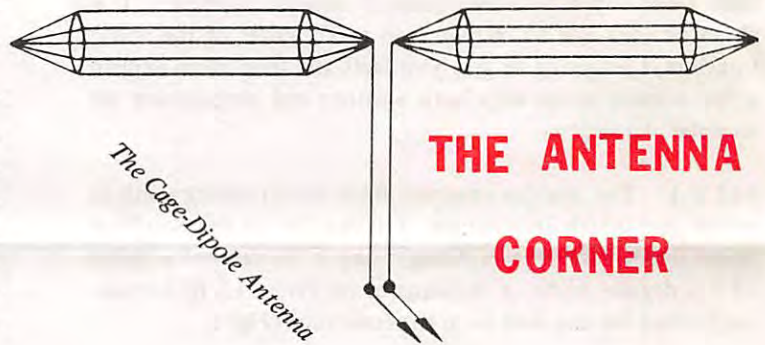
This April-May issue of ANDEX should have arrived at your house a few weeks earlier than usual and upon opening it, you may have felt a little cheated because some QSL cards that you expected to come were not in the envelope. The reason for the early delivery is that John, I and our son, Andy, expect to be in Panama from April 5-28 and I thought that you would prefer to receive your ANDEX bulletin a few weeks early rather than a few weeks late so we mailed them before we left.

Since we mailed them a few weeks early, the QSL cards that would normally have been processed during the first two weeks of April did not get included with this mailing. I am sorry about that and will put them in with your June-July mailing. Also, if you sent me a letter that needed an answer and you still haven't received one, I will tackle the stack of letters on my desk when we return.

Now that I have made all the apologies, let me tell you why we are going to be in Panama for most of the month of April. HCJB has a sister radio station in Panama, HOXO, and they need some engineering help. Several HCJB engineers have taken turns going for 3-4 weeks at a time to help the station there with various aspects of the operation. April was John's turn to go and we decided to make it a family affair with me supplying some technical help to John as he works on installing some antenna filters and to gather some information about HOXO that I can include in a future ANDEX issue. Andy worked very hard doing double school assignments in March so that he could go along and he will do a special study of Panama for his Social Studies course while there. He also wants everyone to know that he will be spending his birthday (April 5) in Panama and that not every nine-year-old gets to take a trip to Panama as a birthday present!

I would also like to tell the ANDEX members in Panama that we can be reached through Radio Station HOXO and would like to see you if you have some time available.

We'll plan to have the June-July issue of ANDEX in your mailboxes at the regular time. By the way, the "regular time" is usually around the 22nd day of the first month listed . . . that is, the June-July issue should be at the post office here ready to go out on the 22nd of June.



Several ANDEX members have expressed interest in the Cage-Dipole Antenna (also called the Weir-Basket or the Double-Basket Antenna). Andre Tatter, ANDEX member 3768, of the German Democratic Republic, has written to say that he has seen it used as a transmitting antenna. Frederick Heppenstall, ANDEX member 92, of England, has been using one for 11 years and suggests that it can point in any direction and you can make several and join them all together in the middle with a circular clip.

The construction is more or less as shown. Several wires (6-8) are formed into a cage by placing spreaders near the ends. The spreaders can be either conductive or non-conductive. The diameter is not critical, but the larger the better . . . 50 centimeters or one foot would be reasonable values.

The length of the dipole should be a half wave at the center of the frequency range. The antenna will work well from one-half the design frequency to about twice that frequency. Thus if the dipole is made 12 meters long, 6 meters each half, it will work from 49 meters to 13 meters. It will work over a greater range, but not necessarily as well.

The advantage of this type of dipole is that it does work well over a large frequency range, and it will do so without the need of a tuner. The two halves need not stretch out in a straight line. They can form an angle as little as 90 degrees. The feedline ideally should be 150 ohm open line or twin lead to maintain maximum wide band performance, but other lines can be used. Two 50 ohm coaxial cables with the center of each going to one half of the dipole and the shield unconnected at the antenna, but connected to an earth ground at the receiver would work well. The two "hot" leads, either twin lead or coax, should be connected to the receiver in various ways to see what works best.

FEARLESS FORECAST: SUMMER LISTENING

By John Stanley

If I were predicting the weather instead of radio reception conditions, I would tell you that summer in the northern hemisphere will bring long days with stronger sunshine than you had this winter. But that forecast would hardly bring me any credit as a weather prophet because it is so obvious to anyone who has ever lived through a summer.

And if I told you that radio reception will be worse overall this summer than it was this winter you would also give me little credit if you have ever listened through a summer. It is all so obvious and so, rather than make either of the above forecasts, I am going to give you facts and from them explain a few reasons about why both weather and propagation are seasonal phenomena.

FACT 1: The sun (as observed from earth) moves south in winter and north in summer. (If you live in the Southern Hemisphere, reverse everything I say.) It reaches a point 23 1/2 degrees north of the equator on June 21. Its latitude can be read for any date from the analemma (Fig. 1).

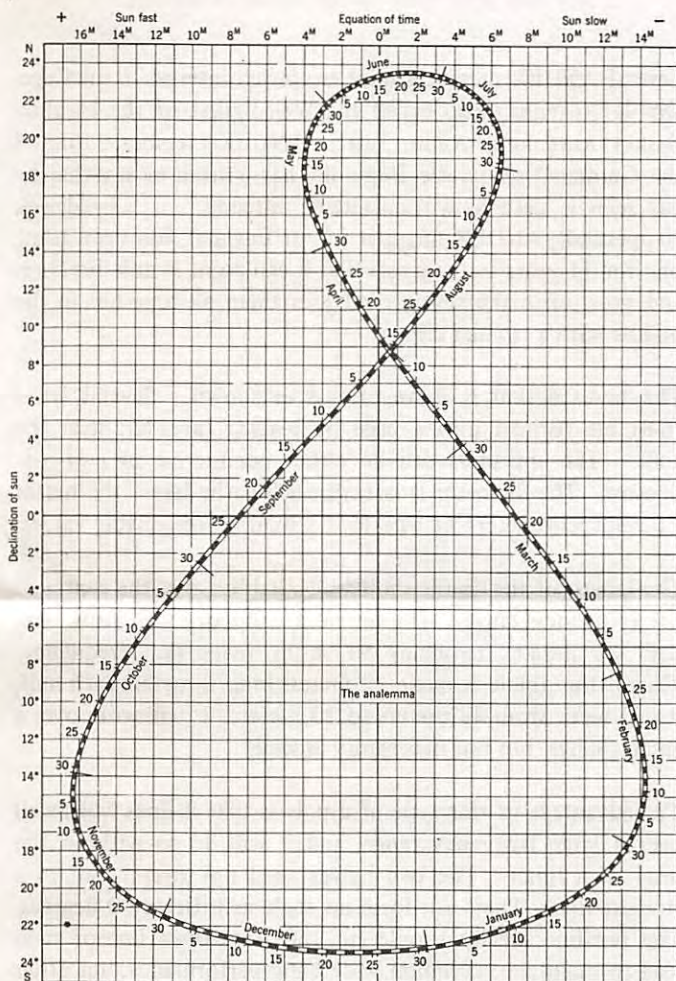


Fig. 1 The analemma is a graph which gives both the declination of the sun and the equation of time for every day of the year.

FACT 2: The sun is furthest (yes, furthest) from the earth on July 4. It is closest to the earth on January 3. This variation of distance causes the earth to speed up and slow down in its orbit which causes the sun (as seen from the earth) to rise and

set later or earlier which is also seen in the analemma. (If you don't understand this, don't feel bad. It is pretty involved understanding why.)

FACT 3: Energy from the sun drives the various cycles of heat, wind and water that make our weather. Thus it rains more in summer.

FACT 4: Energy from the sun also forms the layers (D, E and F) which we call the ionosphere and which is responsible for shortwave radio propagation.

Because of the above facts, we can make the following generalizations about shortwave reception during the summer.

A. Daytime signals will be weaker. Absorption of radio waves in the D layer is related to the angle that the sun makes with the horizon. The higher the sun, the more signals are absorbed in passing through this layer. This problem is compounded by the shielding effects of the E layer which is worse in summer. (The effects of the E layer are quite complicated and we will devote the entire next issue to its behavior.)

B. Maximum MUFs will be lower. This seems to be a contradiction as one would expect longer and stronger sunlight to make greater ionization. However, as the summer sun both heats and ionizes the F layer, expansion takes place so that the ion densities are less even though the percentage of air molecules ionized is greater. Since ion density is what causes bending of radio waves, this bending is less and hence, higher frequency waves are not returned to earth. The fact that the sun is further away in July than January also helps make summer peak MUFs lower than winter MUFs.

C. Minimum MUFs are higher. This is due to the short summer nights which do not allow time for ionization to decay so completely as in the long winter nights. And the fact that as the hot, low-density F layer cools, it becomes more dense, partly off-setting the decrease in percentage of ionized molecules. As a result, the MUF curves are more constant in summer and the sharp drop in winter MUFs just after sunset is absent in the summer. This is quite obvious on all four of the MUF plots included in Figures 2-5.

D. Noise levels are higher in summer due to local thunderstorms. This provides a limitation to weak signal reception on the lower frequency bands.

FEARLESS FORECAST PAST... If you get this issue in mid-April, you still have a week or two to try for intercontinental TV via the F layer. (See last ANDEX bulletin.)

FEARLESS FORECAST FUTURE... This summer we will sponsor a "Sporadic-E Contest". Details in next issue.

DXer OF THE MONTH



AUSTRALIA

Edward Albert Schiel, Box 70, Broadbeach, Queensland, 4217, Australia, has been chosen as our DXer of the Month for places outside the USA. I don't think anyone will have to check a map this month to remember where Australia is. As there are 60 ANDEX members living in Australia, it is a name of a country that I type out often.

Edward is 65 years old and is a retired builder. He joined ANDEX in July of 1981 so hasn't been a member yet for one year. He got started in SWL when a friend of his asked him to try to hear Deutsche Welle on his radio in January of 1981. Well, as Edward says . . . "I did try, but I didn't stop there because as I was playing on the radio knobs, all of a sudden I heard the Voice of America, then Radio Portugal, Moscow and so on and from there it just snowballed."

Edward started his listening with a DX-60 shortwave monitor, then a Sanyo M 9930 K and is now working with a Sony ICF-2001. He uses a simple long wire for an antenna. He also uses a Kenwood ham clock and a pair of MD-3 MS earphones for his listening times which can be morning, noon or night since he has no regular working hours now that he is a pensioner.

Besides being a member of ANDEX, Edward belongs to the Denmark DSWCI, the Australian Radio DX Club, and the DX-Club Radio Berlin International as well as being a monitor for Deutsche Welle.

He does not just belong to radio clubs, however, but gives some of his time to being vice president of the German Club Gold Coast, and to being a member of the Lions Club and the International Association German-Speaking Media.

We are honored to present Edward Schiel, ANDEX member 4065, as DXer of the Month-Australia.

DXer OF THE MONTH-USA

The last time that we featured a female member of ANDEX, it started a friendship that developed into marriage for Nan Hawthorne and Jim Tedford so let's see what happens this time as we feature another ANDEX member who is a female.

The DXer of the Month from the USA for this issue is Rose Alice Akers, Route 1, Urbana, Indiana, 46990. Rose is ANDEX member 2749, having joined in January of 1978. It is a good thing for Rose to be chosen for this honor for the April-May issue because she celebrates her birthday in April also. Happy Birthday on April 28, Rose!

Rose started her interest in shortwave listening about seven years ago and spends quite a bit of time at her hobby. She has logged 50 countries on two receivers. They are, left to right in the photo, a GranPrix APW-217 and a Montgomery 1475. She bought a Realistic DX-40 after the photo was taken. She uses a CB antenna and it is hooked up to the Realistic DX-40. All of her radios are multiband portables.

Besides SWL, she does a lot of MW DXing and has logged 28 states, seven Canadian stations, plus one Mexican and two Central American stations. Rose also handles a lot of TV DXing and has logged 21 different stations in nine states including four from Cuba, Mexico and Colombia. Hope you get to log Quito, Ecuador before too long!

Rose lives with her parents on a farm and helps them both on the farm and in the house. She is interested in photography and manages to squeeze in some time for talking on the Citizens' Band.



We have received many reception reports and other articles and letters from Rose and are pleased to announce this ANDEX friend as DXer of the Month-USA.

ELBOW

A couple of months ago, Roger Stubbe, DX PARTY LINE host, talked about a listing that was available of English Language Broadcasts. Since then several members have written asking where to send for this listing so I thought it would be a good idea to put the address in the ANDEX bulletin.

The listing of ENGLISH LANGUAGE BROADCASTS OF THE WORLD (ELBOW) is available from Panda Computers, David Snyder, 1137 East 12th Street, Brooklyn, New York, 11230, United States of America.

A QSL CARD FROM HEAVEN



Harold (Ring) Ringgenberg of 404 Sugar Maple Lane in Cincinnati, Ohio, 45246, USA, ANDEX member 3621, sent me this little drawing a couple of months ago and I would like to use it in this issue along with a few thoughts I've had.

As you can see from the sketch, the radio operator is receiving a QSL card from an angel delivery service straight from heaven. The motive of sending or receiving QSL cards is to make sure that a contact we've made has been confirmed.

Can we know that our pleas, our prayers, our cries to God, our Father in heaven, are heard? His word says in Isaiah 65:24, "Before they call I will answer, while they are yet speaking I will hear."

So you see, we do have a heaven-sent QSL card that is PERMANENTLY VALID!

AGAIN, THE STAMP

In the December-January issue of ANDEX, I asked for your suggestions regarding the addition of an extra line under the ANDEX rubber stamp which would give the member number. I am grateful that so many of you took time to write me. Since so many of you felt that the addition of the line was a good idea, I wrote to the man who makes the rubber stamps to ask if this could be done.

Here is what he has to say . . . for an additional dollar, he will be glad to put the extra line under the logo. The line will say Member No. 4500 or whatever your number might be. That

will make it real' easy for you to stamp all your correspondence with your number.

So, for all future orders of the stamp, please send \$2.00 if you want just the logo or send \$3.00 if you want the extra line and then, be sure to include your membership number. Send the money to HCJB-ANDEX, Box 3000, Opa Locka, Florida, 33055, United States of America. Since we are having some difficulty cashing checks written on other than USA banks, those of you living outside of the USA, please try to send either USA currency or an International Money Order. (I will write more about these currency difficulties in the next issue.) If it is impossible for you to obtain either the USA currency or the International Money Order, send what you can and we will do the best we can to cash it!!

Mr. Ogden, our rubber stamp man, also says that if anyone wants any other lines, he will add what you want at \$1.00 per extra line. The lines must be the length of the horizontal measurements of the stamp, although a couple of letters longer would be alright. This could be, for instance, your name or address, callsign or whatever.

We appreciate Mr. Ogden's willingness to handle whatever you, the members, might want, but, please, if you do order extra lines, be very careful about writing out the instructions and sending the extra money so that we can make this a cheerful business transaction for everyone concerned.

Mr. Ogden has several radio-related designs on rubber stamps such as towers, microphones, QSL PSE as well as AIR MAIL or SMALL PACKET already made up. If you are interested in something like this or if you have an idea that you would like to see in a rubber stamp for your own use, why not enclose your ideas with your ANDEX rubber stamp order and Mr. Ogden can give you a quotation.

So, there you are. I am glad that Charles Letzerich, ANDEX No. 105, made the original suggestion and that we were able to come up with this option for our ANDEX people.

NOT INCLUDED

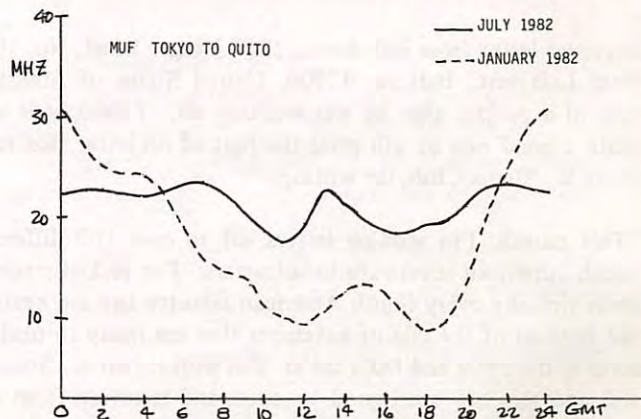
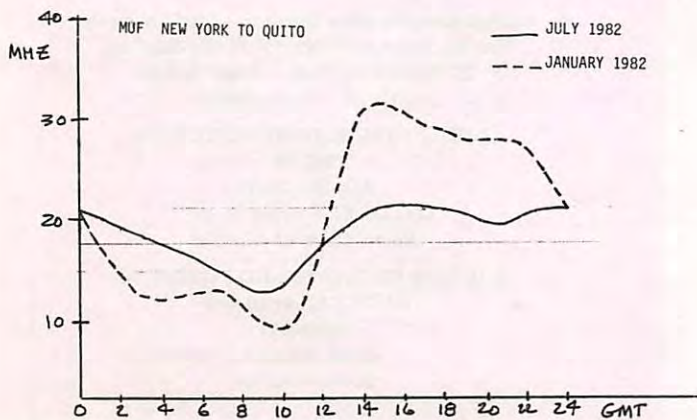
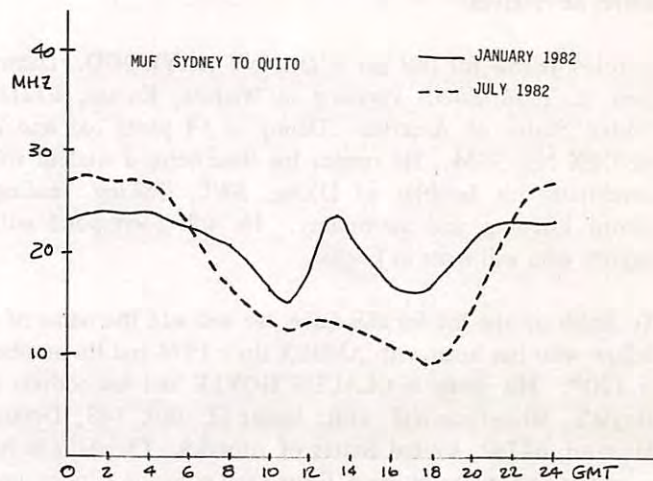
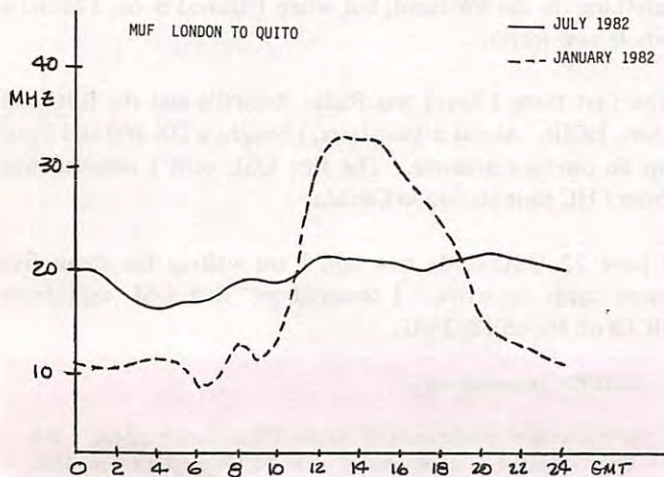
You have probably noticed that the little brochure HAVE A GOOD DAY has not been included with the mailings that have gone out the last two times. This is not a problem of simple oversight, or a decision to not use it anymore, rather we are having problems with receiving our standing order.

The order is mailed, via surface mail, every month from the United States, but I haven't received any boxes of brochures for several months now. We are checking to see just where the problem is and hope before long to have the brochures included with your ANDEX mailings again.

If you have suggestions for other types of enclosures, or know of some little pamphlet that has been a help to you, let me know about it. I am always happy to hear from you.

WHAT TO LISTEN FOR:

As summer approaches you should check the higher frequency bands first; 21 MHz, then 17 MHz, then 15 MHz, etc. Do some listening on the highest band that has signals present. As the darkness falls at your location you may notice a slight increase in signal strength rather than the sharp drop normal in winter. Keep listening . . . you will find that the bands will stay "open" late into the evening and some DX not heard in winter may be found. Avoid the lower bands with their high noise and crowded channels. Don't waste much time checking VHF either. Stick with the 13 to 19 meter bands and utility frequencies in the 15-20 MHz range. You might just turn up some real DX in spite of summer doldrums. And even if the DX is lacking, sit back in your lawn chair, drink a tall glass of iced tea, watch the sun go down and listen to BBC, Radio Nederland, or HCJB . . . at least until the bugs come out and start to bite. Relaxed enjoyment is a better goal than rare DX during the summer time when the living is easy.



PEN PALS INTERNATIONAL

First on the list for this issue is ROBERT J. STEVENSON, ANDEX No. 3981, from 3 Otway Street, South Ballarat, Victoria, 3350, Australia. Robert is 39 years old and he is a railway worker. His hobbies include ten pin bowling, running, listening to the radio late at night and early in the morning and getting mail from other ANDEX members.

Next is PHIL ALEXANDER, 11 Middlemont Avenue, Asheville, North Carolina, 28806, United States of America. Phil is ANDEX member 3998 and he is 17 years old. He lists his occupation as a student and part-time salesman. As for hobbies, he enjoys playing the bass guitar and listening to music. He would especially like to hear from DXers on the west coast of the U.S.A., but will answer all letters.

Our next fellow is another Phil. This time it is PHIL LESLIE, Post Office Box 1973, State University, Arkansas, 72467, United States of America. Phil is a college student, is 19 years old and is ANDEX No. 2375. He works part-time as a disc jockey and is interested in golf, bowling, and collecting record albums. He also lists as a hobby, people, which is why he would like to correspond with fellows about his age from England, Scandinavian countries, or Russia, but will answer all letters he receives.

Another fellow for our list is DANNY HAYWOOD. Danny lives at 2336 South Pershing in Wichita, Kansas, 67218, United States of America. Danny is 14 years old and is ANDEX No. 3834. He spends his time being a student and developing his hobbies of DXing, SWL, QSLing, reading, record listening, and astronomy. He will correspond with anyone who will write in English.

To finish up the list for this issue, we will add the name of a fellow who has been with ANDEX since 1974 and his number is 1209. His name is CLAUDE HOYLE and his address is Hoyle's Whip-Poor-Will Hill, Route 2, Box 148, Drexel, Missouri, 64742, United States of America. Claude is in his seventies and enjoys hunting, fishing and going on trips around the United States. I have enjoyed reading of his trips so when you write, ask him about them. Claude promises to write to anyone who writes to him.

A WORTHWHILE PROJECT

A recent letter from Bill Annis, 2367 Yeager Road, No. 102, West Lafayette, Indiana, 47906, United States of America, told of a project that he was working on. I thought it was quite a good one so will print the part of his letter that tells about it. Thanks, Bill, for writing.

"This month, I'm sending letters off to over 100 different South American shortwave broadcasters. I've picked stations from virtually every South American country and am nearing the bottom of the pile of envelopes that are ready to mail as soon as the letter and IRCs are in. I'm working on my Spanish still and this has been good practice, and in return from the

stations, I hope to learn more about them, collect any station souvenirs that they might have for their listeners, and receive their program schedules. As I've just started there hasn't been enough time to hear from any of them, but I hope to within the next couple of weeks. I have to mail them out rather slowly as the cost of postage and IRCs is rather high. It'll be fun though to see the different envelopes with their stamps, etc. as they start to come in."

How about writing us again, Bill, after you have heard from many of those 100 South American stations?

HOW I GOT STARTED IN SWL

By John Taylor, ANDEX No. 3983

Well, I had an AM radio kit that I built and that is when I got interested in radio. The AM radio was a crystal radio. It didn't have a speaker. It just had an earphone and a little piece of wire for an antenna.

Then, later, I got a radio that had a SW band, but I couldn't pick up anything on SW. A few years later, I received a multiple band radio made by Radio Shack. It received SW, AM, FM and police band. The SW band covered 6 to 18 MHz. When I got the radio I didn't think that I would find anything on the SW band, but when I turned it on, I found a whole new world.

The first thing I heard was Radio Australia and the BBC and then, HCJB. About a year later, I bought a DX-160 and I put up an outdoor antenna. The first QSL card I received was from CHU time station in Canada.

I have 22 QSL cards now and I am waiting for about five more cards to arrive. I received my first QSL card from HCJB on March 18, 1981.

ANDEX International -

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