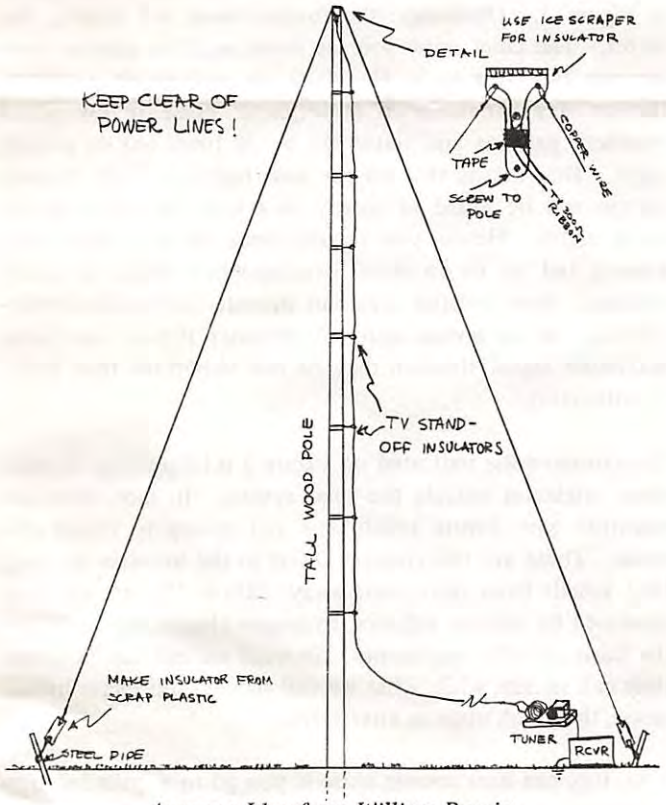
ANDEX

INTERNATIONAL

8

Vol. 11, No. 10 December-January, 1981-82

THE ANTENNA CORNER



Antenna Idea from William Burgin

This antenna design was submitted by William Burgin, ANDEX No. 75, of Omaha, Nebraska, U.S.A.

The drawing should be mostly self-explanatory. Exact dimensions are not critical (William suggests 60 feet tall), and a smaller version might be more practical in some locations. The use of a plastic windshield ice scraper for top insulator is a clever idea, but tropics dwellers will have to substitute. TV standoffs are mounted on the pole to allow feedline to come down to your radio shack.

This antenna will not be highly directional but try running the wires north-south or east-west for best results in different directions. Use of TV twin lead for the vertical feed wire will allow use of the tuner in last issue of ANDEX or you can work both lead wires against ground by joining them at the receiver.

Two guy ropes at 90 degree angles to the wires will help support the pole in high winds. The wires themselves will also act as guys. Incidently, hams use an antenna similar to this and call it an "inverted V". William has also constructed a rotating version of this antenna.

Thanks, William, for sending this idea a long time ago. We finally pulled it out of the files for THE ANTENNA CORNER.

ANDEX CALL BOOK???

A suggestion from Charles C. Letzerich of Los Angeles, California, ANDEX No. 105 has caused me to do some thinking. Charles said in his letter, "I wish ANDEX would put out a Call Book giving names, addresses and member numbers, with updates as new people join. It may be expensive to the member, but I feel most would like this kind of book.

Well, what about it? Do you think this is a good idea? Before I would start on a work project like this, I would need to know your reactions, your suggestions as to how to do it . . . by countries? by numbers? by alphabetical order of names? Which would be most convenient to you, the members? And what about price? What do you think would be a good price? What price would you feel you could afford? And style . . . should it be just loose leaf and mimeographed? Should it be printed? And how should the additions and deletions be handled?

Please think with me about this idea and let me know what your suggestions are!

THIS 'N THAT

Don't be afraid to take a big step, you can't cross a chasm in two small jumps.

A ship in a harbor is safe, but that is not what ships are built for.

When you are at peace with yourself, any place is home.

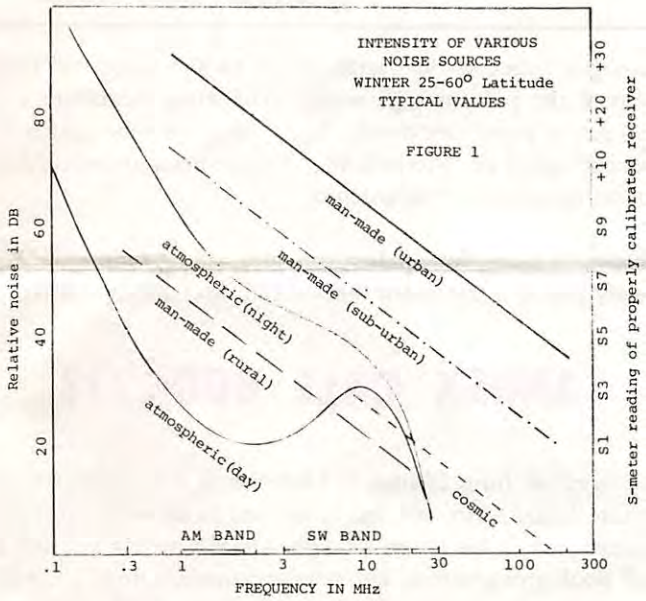
Our hope lies not in the man we put on the moon, but in the man we put on the cross.

In the light of Calvary, how can I speak of sacrifice?

FEARLESS FORECAST: DXING THE "N" IN "SINPO"

By John Stanley

Since noise is an inevitable fact of life for the DXer, he might as well make the most of it. I am going to tell you **how** to hear various types of noise so that you can learn how to hear the DX that is hiding in it. Knowing what you are hearing can be half the fun.



Study Figure 1. On it are several curves that indicate expected values of various types of noise. Depending on where you live and when you listen, these curves will indicate what noise you are most likely to hear.

Manmade noise is the most frustrating since it seems so unnecessary, yet our modern life style seems to produce lots of pollution, and spectrum pollution is part of it. If you live in an urban area you are truly a victim of pollution (spectrum and air). Don't expect to hear any other type of noise than manmade. For city dwellers, as Figure 1 shows, at any frequency, manmade noise is much stronger than any other type. Your suburban friends are 15 db better off, but they, too, will seldom hear any other noise than manmade, except in summer when local thunderstorms drive atmospheric noise to high levels.

Manmade noise can be identified by a 60 Hz buzz on it and is usually quite constant, peaking after sundown due to heavy power demand. If your location has lots more than shown on Figure 1, you might try complaining to the power company or setting out with a portable set to locate the worst sources (leaky insulators, electric motors, etc). Otherwise, your only hope is to buy a battery receiver and pray for a blackout.

Inhabitants of rural areas will enjoy a relative freedom from manmade noise that will allow them to hear other types. Note that the manmade (rural) curve falls below cosmic and atmospheric values at times. Incidently, if you live or visit places three miles or more from any power lines, you can ignore even the "rural" curve and should hear almost no manmade noise (except electric fences).

Atmospheric noise is the next great problem for DXers. It has great diurnal (day to night), seasonal, and geographic variations. In wintertime, it is at its yearly minimum, just when maximum darkness helps low frequency DX make it to your QTH. Daytime noise is much less, but daytime DX signals are much, much less so you are worse off, except for relatively short ground wave DXing.

The geographical variations in atmospheric noise are indicated in Figure 2. Obviously, the further from the tropics, the better. The chief noise sources move with the seasons since summer produces more thunderstorm activity than winter. Day to day variations in atmospheric noise follow global weather patterns and static can be 20 times less on a quiet night. That means that on the best nights, a 5 KW tropical station will be heard as clearly as a 100 KW signal on the worst nights. Hence, you should check the low bands each evening and try to do more listening when things are quiet. Antenna characteristics also can provide some noise discrimination, so try several different antennas, if you have them. Maximum signal strength may be less important than signal to noise ratio.

The cosmic noise indicated on Figure 1 is interesting. Cosmic noise originates outside the solar system. In fact, there are scientists who devote much time and money to DXing this noise. These are the greatest DXers in the universe for they hear signals from light years away. Those "broadcasts" are produced by pulsars, galaxies, hydrogen clouds, etc. and form the basis of radio astronomy. So what we call cosmic noise, they call signals, while what we call signals (shortwave broadcasts), they look upon as interference.

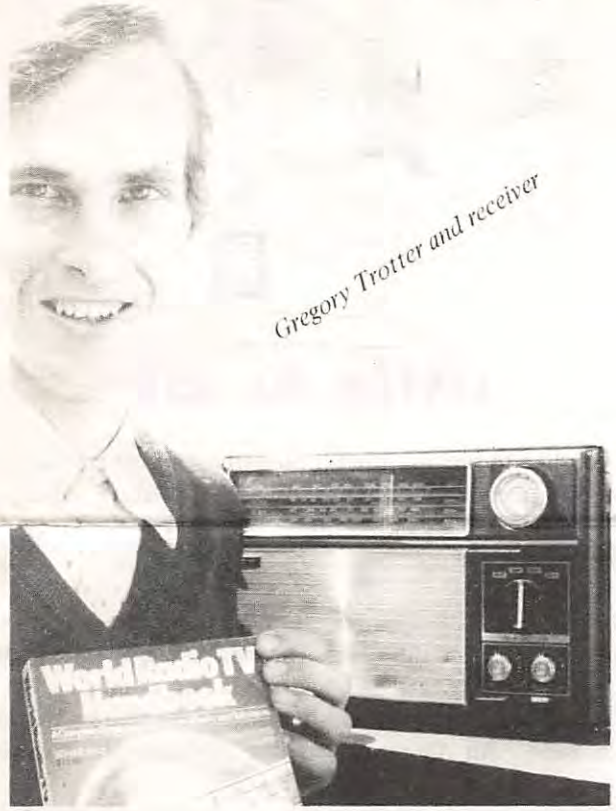
You, too, can hear cosmic noise if you go to a quiet location and tune above the MUF with a sensitive receiver. The increase in hiss you hear as you disconnect and connect your antenna may be from another galaxy! If you add a directional antenna you have the beginnings of a crude radio telescope. Cosmic noise is relatively constant and sounds like a smooth hiss unlike atmospheric noise with its multiple crashes or manmade noise with its 50 or 60 Hz buzz.

So, noise, like broadcast signals, provides a variety of program fare . . . local manmade noise from your neighbor's electric razor; atmospheric noise from a Central American thunderstorm; cosmic noise from our sun or even our galaxy. Noise can be almost as much fun to DX as signals but be prepared for one big disappointment. Noise sources DON'T QSL!

● ● ● ● ● ●

NEXT ISSUE: More about high MUF DXing plus some projections for future sun spot activity.

DXer OF THE MONTH



Gregory Trotter and receiver

This month I have chosen a young fellow from New Zealand to be the DXer of the Month. Sometimes I choose a person to be DXer of the Month by the amount of equipment he has, or sometimes by the impressive listening record he has built up over the years. This time, I was convinced to list Gregory Trotter as the DXer of the Month because of the beautiful description he wrote of his city.

Gregory is a 23 year old labourer who lives and works in Christchurch, New Zealand. He started shortwave listening back in April of 1978 and the first station that he heard was HCJB. He has been a member of ANDEX since September of 1978 and his membership number is 3040. He is also a member of the New Zealand DX Radio Association.

Gregory has a Sanyo RP4500 radio receiver which has a built in whip type antenna. The frequency ranges are MW 530-1600 kHz and SW from 1.6 – 26.0 MHz. He says that the overall reception is excellent and he can pick up most shortwave broadcasters. Gregory does his DXing between the hours of 0430-1100 GMT and has QSL cards from HCJB, FEBC in Manila, Radio Australia, Radio New Zealand, VOA, Radio Nederland and Spain to name some of the most well known.

In addition to SWL, DXing and QSLing, Gregory enjoys reading and writing. He probably also enjoys Christchurch because these are a few of the things that he wrote about it. Christchurch is in the South Island of New Zealand, in the province of Canterbury. It is the biggest city of the south with about 300,000 population. Christchurch is very similar to Christchurch in England, with the beautiful Avon River winding through the centre of the city, with a beautiful cathedral right in the heart of the city, Hagley Park. There are many beautiful old buildings preserved near Hagley Park as well as a lot of old trees near Hagley Park as well as in other parts of the city.

Gregory also told me that the population of New Zealand as a whole is just over 3,000,000 and Auckland is the biggest city of New Zealand with other big cities being Wellington, Christchurch and Duredin.

So, Gregory, congratulations on being DXer of the Month and also, congratulations for being a happy citizen of Christchurch, New Zealand!

MOST PRIZED QSL

MARLIN FIELD, a charter member of ANDEX, No. 202, has this to say about his most prized QSL.....

"My most-prized verification is not a beautiful QSL card. It is an 8 X 11 inch sheet of paper with some parts mimeographed with space to type in the name and address of the listener, date of reception, etc. It was one of my first verifications with a reception date of March 11 and 12, 1961. The time was a little before 0400 GMT. That is not the reason I consider it my best. It wasn't my hardest to obtain as the verification is dated March 23, 1961. It took me twenty-nine letters to obtain a confirmation from La Voz de El Tigre operating on 3,255 kHz in Venezuela. It took nineteen years to hear from Radio Cuzco in Peru."

"My most-prized verification is from a station no longer in operation, the Mount Kenya Regional Station, in Myeri, Kenya. Even that is hardly a reason to prize it above my 816 other QSLs. The station was heard on my first shortwave radio, a five-tube portable Roland receiver that we had purchased for about sixty dollars from Aldens, a Chicago mail-order house. The first night I was roaming the 49 meter band when I heard the station in English on 6,170 kHz. I made it a point to listen the next night before writing to the station. The antenna I was using was an old piece of television antenna tied to a tree branch. As I recall, it was about fifty feet from our house in Benton Harbor, Michigan. A personal note typed at the bottom of the letter of verification states that the station's power was 250 watts!"

What is your most-prized QSL? Why not write and tell us all about it?

Looking through my file of photographs and information from members who would like to be chosen as DXer of the Month, I realized that some of the entries are getting to be quite old and perhaps the information is out of date, not to mention the picture of you may have changed a good bit. So, if you are still interested in being an entry for DXer of the Month, why not write again with new information and picture, especially if you originally submitted your entry several years ago.

REQUEST FROM ENGINEERING

Radio Station HCJB is considering adding a small transmitter which would operate in the single sideband mode. Some people feel that we should use the upper sideband with suppressed carrier and operate on 21480 kHz in the 13 meter band.

To determine if the HCJB listeners will be able to tune in to the SSB broadcasts, please send a note and answer the following:

1. Is your receiver equipped to receive SSB mode?
2. What bands or frequencies does your receiver cover?

Write to: Herb Kinard
Engineering Department
Radio HCJB
Casilla 691
Quito, Ecuador

He will appreciate hearing from you.

METEOR LISTENING

Did you know that any SW receiver is capable of listening to meteors? As these particles of metal or rock enter the atmosphere of the earth, they ionize the atmosphere around them to a higher temperature than the sun. For best results, tune in to a station coming in faintly, at about 2 or 3 S units, put the volume down low, and turn off the automatic noise limiter if your receiver has one.

You should preferably be tuned to a frequency above 15 MHz. (A station in your skip zone is best for this purpose, so try to find a station quite close to you, but high enough in frequency so as to be weak.) If a meteor enters the atmosphere around the particular area where you are, ionization of the atmosphere will cause a rapid increase in signal strength.

Naturally, the period of time that the signal strength is increased will depend on how long the meteor is in the area. It is usually a matter of two seconds or less. On nights of high meteor activity you should "hear" between ten and twenty meteors an hour. This depends on the antenna and receiver you have.

I have found "meteor listening" to be a fun experience. It's helpful to watch for the meteors you hear.

Thank you, Robert Tessier, ANDEX No. 2831, of Unionville, Canada, for sending us this article. We'll all go out and watch **and listen** to meteors next time a shower of meteors is predicted.

LISTEN TO SSB

So you like to find out what those garbled signals are that you have been receiving. You have tried to tune them in but you can't make any sense out of them. What you are listening to is SSB (single sideband).

SSB is a mode of communication in which the transmitter sends out only one sideband. The carrier and other sideband are suppressed. The signal doesn't take up as much space as an AM signal, and more stations can use the frequencies in a given band. An AM signal has two sidebands plus a carrier.

In order to unscramble the signal on a receiver without a BFO, you will need a second receiver. Very likely you have a table model radio around the house. This will act as a BFO and here is how it works.

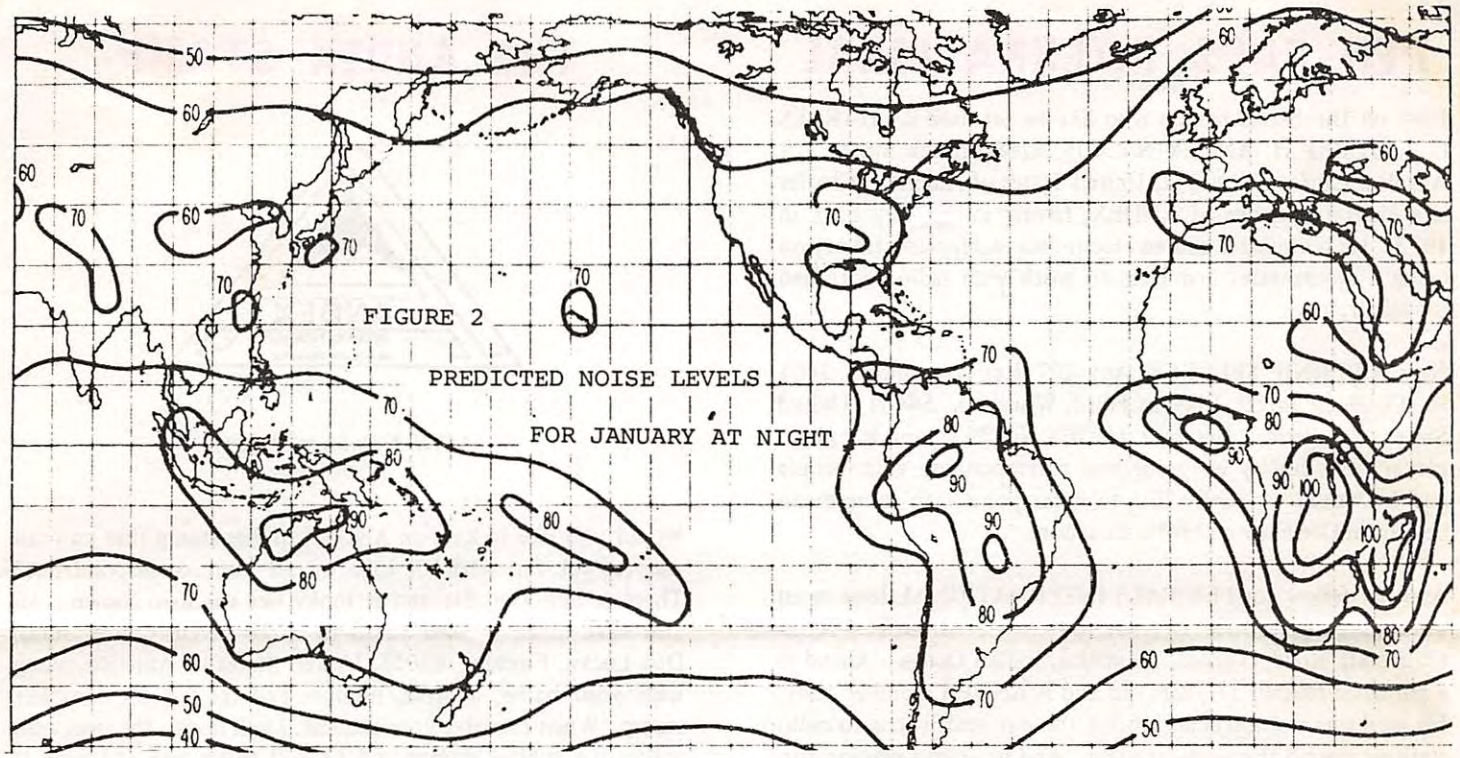
Turn the band selector to the AM position of the second receiver and set it next to, but not touching, your shortwave radio. Now, turn your AM radio on but don't turn up the volume. Now, turn on your shortwave radio to normal volume and tune in an SSB signal. Now, tune the AM radio until a beat crosses the SSB signal. Tune very carefully! And have some patience. You will be able to hear the SSB signal and understand it. The second receiver restores the missing carrier that an AM mode shortwave receiver must have. I use a cheap radio as the second radio.

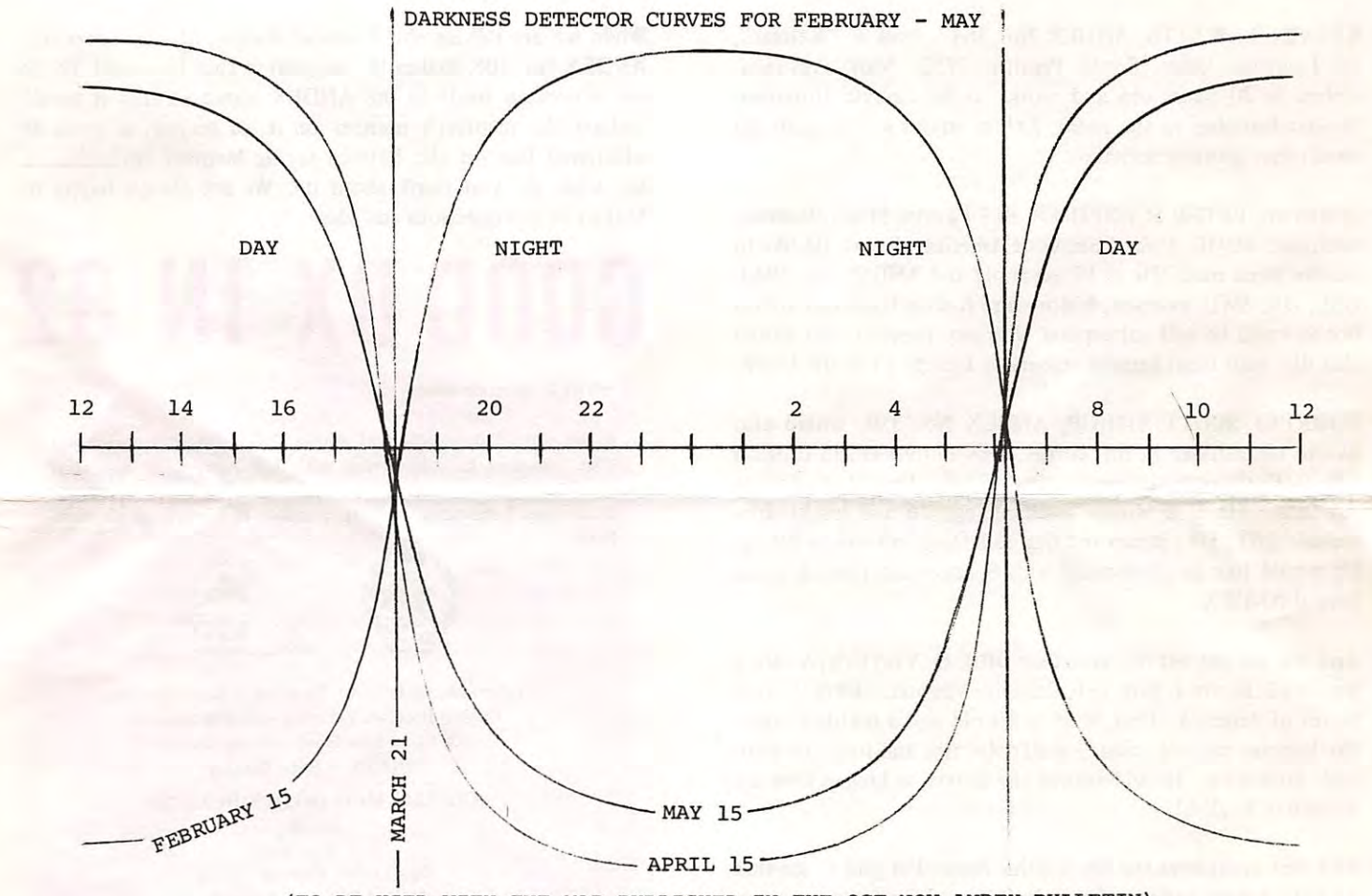
What frequencies to tune? Try these for starters. You may have to make adjustments and you won't unscramble every signal.

To unscramble 160 meters, try AM frequency 1350-1400 kHz. For 40 meters, try the same frequency as for 160 meters. To unscramble 2 MHz ships, tune to 1550-1650 kHz on the AM frequency. And for 80 meters, try 1400-1550 kHz.

This will offer you a way to listen to sideband signals. My shortwave receiver is a multi-band portable and this has worked for me and I hope it will for you.

Our thanks to Rose Akers, ANDEX No. 2749, of Route 1, Urbana, Indiana, 46990, United States of America,for sending in this article.





(TO BE USED WITH THE MAP PUBLISHED IN THE OCT-NOV ANDEX BULLETIN)

Note: The S-meter values included in Figure 1 are for relative guidance only, and should not be taken too seriously. Apart from the wide difference in receivers, the type and size of antennas will affect your S-meter reading. Also, most receivers are deliberately made less sensitive below 3 MHz to avoid excess noise pick up. From 3-30 MHz, and with a dipole, the values will be most reliable.

PEN PALS INTERNATIONAL

First on the list of people who like to get mail is CHARLES C. LETZERICH, ANDEX No. 105, 6268 Church Street, Los Angeles, California, 90042, United States of America. Charles is a charter member of ANDEX, having joined way back in 1973. He is a printer and an electronics technician. He enjoys being a scoutmaster and likes to work with radio controlled model airplanes.

Next is BERNIE SEEBECK, Apt. 207, Key Apartments, 3401 Mc Coulloch Street, Stevens Point, Wisconsin, 54481, United States of America. Bernie is ANDEX No. 3938, and is a piano player. His hobby is typing and corresponding with people and he would especially like to correspond with some members from Germany and from Ecuador.

Another fellow for PEN PALS INTERNATIONAL lives in an interesting place. He is ANAND KAPIL NUNKOO, A123 Clairfonds Road, Vacoas, Mauritius, Indian Ocean. Anand is a paralytic fellow, 31 years old and is ANDEX member 4081. He works as a storekeeper during the day and listens to radio stations around the world at night. And he enjoys reading during his spare time.

KELVIN L. WATTS, ANDEX No. 3647, lives at "Kelmar", 16 Lowanna Drive, South Penrith, 2750, NSW, Australia. Kelvin is 30 years old and works as an aircraft storeman. Besides listening to the radio, Kelvin enjoys soccer, golf and most other sporting activities.

A student, PETER SCHNEIDER, 813 Fayette Street, Lansing, Michigan, 48910, United States of America, also would like to receive some mail. He is 17 years old and ANDEX No. 3943. QSL, DX, SWL, aviation, history and foreign languages are his hobbies and he will correspond with any member, but would also like mail from some members in Europe or in the USSR.

FORREST SCOTT BISHOP, ANDEX No. 350, would also like to be included in this corner. His address is 133 Crofton Drive, Pittsburgh, Pennsylvania, 15238, United States of America. He is a library assistant, age 26 and his hobbies include SWL, DX, stamp and flag collecting and weight lifting. He would like to correspond with Spanish and English members of ANDEX.

And last on our list this month is OBIE D. YEATTS, ANDEX No. 3882, Route 1, Box 181, Cascade, Virginia, 24069, United States of America. Obie is 55 years old and a textile worker. His hobbies include music, shell collecting and rock and mineral collecting. He will answer any letters, as long as they are written in English!

And that completes the list for this issue. I'm glad to see that we have a wide variety of members listed; from various countries, various membership numbers, and various ages.

HAPPY HOLIDAY SEASON

THE ANDEX STAMP

ANDEX Rubber Stamp

Would you like to have an ANDEX rubber stamp that you can use to put the ANDEX logo on all your correspondence? There is one available and it looks like the logo shown. All you have to do is send $2.00 to HCJB-ANDEX, Box 3000, Opa Locka, Florida, 33055, United States of America, along with your name, address, number and request for a rubber stamp. When I receive your request, I will notify the man who makes the rubber stamps and he will make one and send it to you.

While we are talking about rubber stamps, Charles Letzerich, ANDEX No. 105, makes the suggestion that he would like to see a revision made in the ANDEX stamp so that it would include the member's number on it, or maybe, at least, an additional line on the bottom saying Member No._____. So, what do you think about it? We are always happy to hear of your suggestions and ideas.

GOOD DX IN 82

ANDEX International –

is the official 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. It is mailed bimonthly to all members.

International Program Director – David Manney
English Program Director – Phillip Sandahl
DX Party Line Host – Roger Stubbe
ANDEX – Ruth Stanley

ADDRESS MAIL (WITH FUNDS) TO:
HCJB
P.O. Box 3000
Opa Locka, Florida 33055
United States of America

ADDRESS MAIL (WITH NO FUNDS) TO:
ANDEX International
Casilla 691
Quito, Ecuador
South America

Printed in Ecuador, S.A. by Imprenta Vozandes