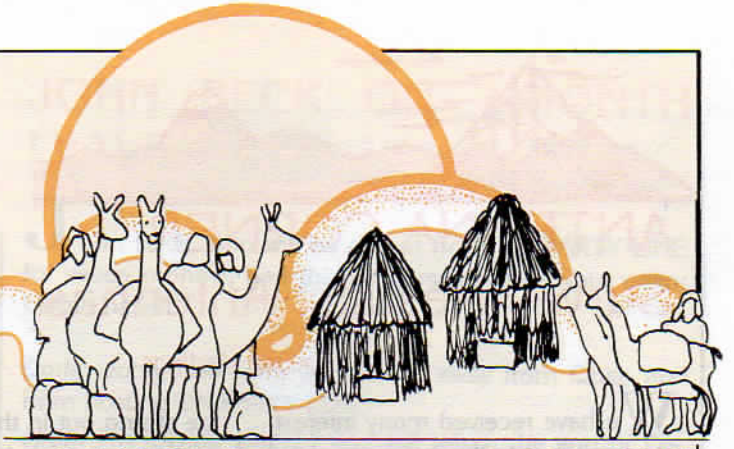
ANDEX International
Vol. 13, No. 2 April-May, 1986



SURVEY RESULTS: RECEIVERS

In August 1985 questionnaires were sent to the 1130 members active in ANDEX at that time. 559 or 50 per cent were returned.

A. Equipment

The questions about receivers asked for identification of the receiver and a rating of the receiver. To rate the receiver respondents were to check excellent, good, fair, or poor in each of three areas—sensitivity, selectivity, and frequency readout.

A total of 668 receivers were listed. Ratings are listed here for models that were rated by four or more owners. Listed here without ratings are brands owned by four or more people.

Remember, this is based on the ratings all of you sent in so is necessarily subjective and not based on laboratory tests of the units. Also, fewer responses for any given model lowers the statistical reliability of the rating.

Ratings have been converted to a scale of 1 to 10. Excellent - 7.5 to 10; Good - 5 to 7.5; Fair - 2.5 to 5; Poor - 1 to 2.5.

The receivers are listed alphabetically by brands.

Model	how many	Sensitivity	Selectivity	Freq. readout
ALLIED/RADIO SHACK - total of 112				
DX 400	30	7.6	6.9	9.3
DX 360	8	5.7	6.1	5.4
DX 302	15	7.5	6.8	9.3
DX 300	8	8.1	7.8	9.4
DX 200	11	7.5	6.5	6.7
DX 160	7	6.7	6.7	4.0
DX 150	4	8.3	9.2	7.5
DX 100	11	6.6	5.9	4.3
DX 66	7	5.7	6.1	4.5
SX 190	7	8.1	8.1	7.5
2 other models - too few to rate.				
BEARCAT - total of 5				
DX 1000	5	8.5	9	9.5
DRAKE - total of 14				
TR 7	6	10	9.4	10
4 other models, total of 8 - too few to rate.				
GRUNDIG - total of 36				
Satellite				
600	7	7.9	7.5	9.6
1400	5	6.5	7.0	8.5
2100	5	6.9	8.1	8.3
3400	8	8.1	7.2	9.4
7 other models, total of 11 receivers - too few to rate.				
ICOM - total of 35				
R 70	10	9.5	9.5	10
R 71A	15	9.7	9.7	10
5 other models, total of 10 - too few to rate.				
KENWOOD - total of 78				
TS 430S	4	10	10	10
GR 59DS	4	7.5	6.9	8.1
R 600	9	7.2	7.8	8.8
R 1000	26	8.2	8.2	9.4
R 2000	29	8.6	8.5	9.7
3 other models, total of 6 - too few to rate.				
NRD - total of 7				
515	7	10	9.6	9.6
PANASONIC - total of 62				
RF 2200	15	7.1	6.9	6.7
RF 2600	5	6.5	7.5	8.0
RF 2800	6	7.5	6.7	10
RF 2900	6	7.0	7.0	9.5
RF 3100	7	8.3	7.5	9.6
RF 4900	5	7.5	7.0	9.0
DR 49	7	8.2	7.9	9.3
8 other models, total of 11 - too few to rate.				

Continued on page 3

ANTENNA CORNER: Survey Results: Antennas

By Don Hastings

We have received many interesting responses to the questions about antennas in the ANDEX survey. Most of you have made your own antenna and many have more than one to choose from. The responses cover a large number of different antennas so for convenience we have grouped similar antennas to compress the list into eight general categories. These categories are listed in the chart in order of the number of users, and I will comment on the quality rating and how to get the best performance from that type antenna.

A total of 581 antennas were rated. The ratings have been converted to a scale of 1 to 10. 1-2.5 is poor, 2.5-5 is fair, 5-7.5 is good, 7.5-10 is excellent.

Antenna type	No. Mentions	% of total	Rating
Longwire	245	42%	7.0
Built-in	110	19%	6.5
Dipole	91	16%	7.8
Active	50	9%	7.9
Random Wire	44	8%	6.4
Vertical	24	4%	5.9
Directional Beam	12	2%	8.4
Loop	5	1%	8.1

I LONGWIRE ANTENNAS

The most frequently used antenna is some variation of the longwire. The average rating of all antennas in this category came out just below the center of the good rating. Many rated their longwire as fair, quite a few as excellent and a few as poor. Many gave helpful information on the height and length of the antenna. Generally, the longer and higher the antenna the better its performance. However, in locations near strong local stations, any effective antenna could overload the receiver with the local signal and cause objectionable mixing products in the receiver. The best course is to try it and see if it works. If there is overloading a shorter wire might be better.

A true longwire should be 60 to 100 or more meters long. It should be strung out in the direction of the station you wish to receive. Shorter "longwire" antennas (10 to 30 meters) should be strung out at right angles to the station for best results. The longer and shorter lengths intercept the incoming signal in quite different ways.

Some mentioned building a longwire in the form of an inverted V. To be most effective the legs of the V should be long and the angle of the V about 25 degrees directed toward the station. If the V is short (10 to 15 meters per side) it will perform better if the angle is greater than 90 degrees and the two legs are separated by an insulator at the apex of the V to form a dipole antenna. In this case a wire must connect from each leg of the V to each antenna terminal.

II BUILT IN ANTENNAS

The second most common type antenna used is that which is built into the set. (Almost all radios have these, of course.) The average rating of these antennas is in the upper fair region. Performance of built in antennas is quite mixed because it depends so much on the specific local conditions. If you live in a wooden farmhouse far from man-made noise and listen from your second-floor room, you can expect excellent performance from a built-in. If, however, you live in a basement apartment of a steel-reinforced concrete building in the inner city, you can expect poor performance.

III DIPOLE ANTENNAS

Though these antennas are a bit harder to build than a longwire, many of you use them and with definitely better results. These antennas perform in the upper part of the good category. Some use folded dipoles and a few have trapped dipole types. For best results the dipole must be strung at right angles to the direction of the station and should be 20-to 30-meters long in all and as high above the ground as possible. A coaxial cable or two-wire line should bring the signal from the sides of the center insulator of the antenna to the two antenna terminals of the radio.

IV ACTIVE ANTENNAS

A good number report using a commercial active antenna. These antennas' average rating fell in the upper end of the good category near that of the dipole type. The active antenna is basically a short antenna (but substantially longer than the built-in on a radio) attached to a solid state amplifier. Some got only fair results with their active antenna which is no doubt caused by their particular location. These antennas are subject to the same problems of noise and locations within buildings as the built-ins and some of you have improved the performance by mounting the antenna outside a window.

V RANDOM WIRE ANTENNAS

A fair number of you use a random wire antenna. It consists simply of a wire of random length strung in whatever space is available. It is

Continued on page 6

Receivers, Continued from page 1

SONY - total of 104

ICF 2001	26	7.5	7.7	9.4
2002*	25	7.5	7.7	8.6
2010	11	8.4	7.8	9.7
6700W	4	6.9	6.3	9.4
6800W	13	8.3	8.5	9.3
7600A	11	7.0	6.5	6.0

10 other models, total of 14 - too few to rate.
*2002 and 7600D are the same receiver.

UNIDEN - total of 15

CR 2021	15	7.8	7.5	9.4

YAESU - total of 61

FRG 7	27	8.3	8.1	8.1
FRG 7700	28	7.7	8.3	9.4
FRG 8800	4	8.8	8.8	9.4

2 other models, total of 2 - too few to rate.

RECEIVERS BY BRAND NAME NOT RATED:
Eddystone - 4, GE - 10, Hallicrafter - 13, Hammerlund - 11, Heathkit - 6, Philips - 7, Racal - 4, Sanyo - 5, Vega - 7, Zenith - 9, miscellaneous - 46, unidentifiable - 13.

CLASSIFICATION OF THE RATED RECEIVERS

By John Beck

I've divided the receivers that have been rated into a grid dealing with price/quality and size. While some of these receivers may have begun their model lives in one category, time and technology have moved them into another. Some might say that they would have put that particular receiver into another category. Admittedly, some of these are borderline decisions, and I would also place them into a different category. I have not had personal experience with some of the receivers and have had to depend upon the judgments of others. Here are some of the criteria I used for making the categorizations:

Portable: Small enough to carry in a small suitcase for air travel.

Medium size: Anything between portable and desk size.

Desk size: A large receiver that would not be feasible to use at any location other than one's home listening post, unless one is willing to be inconvenienced with size, weight, lack of AC power, etc.

Budget: Pricewise and qualitywise a choice only for those wanting a taste of shortwave. You could expect to pull in major international broadcasters, but weaker stations would be difficult to hear. Accurate tuning would be difficult. Stations will tend to be close together on the dial.

Serious: These sets will tend to be more costly than those in the budget category, but will offer better results overall. There is accurate tuning, especially on those available with digital readouts.

Semi-professional: Expensive, but offers improved selectivity (ability to separate stations close together) and sensitivity (ability to receive weak stations).

The numbers in parenthesis after the models are the number of that model owned by ANDEX members. The total and percentage of each block are at the bottom of the block. The numbers outside the grid show that 10% use portables, 51% use medium size, 38% use desk top, 25% use budget, 65% use serious, and 9% use semi-professional.

Some models that were rated are missing because information about them is not available.

	PORTABLE	MED. SIZE	DESK TOP	
BUDGET	Radio Shack DX 360 (8) Sony 7600A (11) 19--4%	Radio Shack DX 300 (8), DX 200 (11), DX 160 (7), DX 150 (4), DX 100 (11), DX 66 (7) Panasonic RF 2200 (15), RF 2600 (5) Sony ICF 6800W (13), ICF 6700W (4) 85--19%	Kenwood R 600 (9) 9--2%	113--25%
SERIOUS	Sony 2002 (7600D) (25) 25--6%	Sony 2001 (26), 2010 (11) Radio Shack DX 400 (30), DX 302 (15) Panasonic RF 2900 (6), 2800 (6), 3100 (7), 4900 (5) Grundig Sat. 600 (7), 1400 (5), 3400 (8) Uniden CR 2021 (15) 141--32%	Kenwood R 1000 (26), R 2000 (29) Bearcat DX 1000 (5) Yeasu FRG 7 (27), FRG 7700 (28), FRG 8800 (4) 119--27%	285--65%
SEMI-PROFESSIONAL			ICOM R 70 (10), R 71 (15) NRD 515 (7) Drake TR7 (6) 38--9%	38--9%
	44--10%	226--51%	166--38%	Total No. of Receivers--436

SPECIAL DXERS

Harry F. Alexander

Congratulations to Harry F. Alexander,ANDEX 4082,for his fine letter that resulted in his being chosen "Special DXer."

"I am a 67-year-old retired mechanical engineer and live with my wife, Beth, at 11 Shore Drive, Waretown, New Jersey 08758, U.S.A. I was born and brought up in Melrose, Massachusetts. When I reached my teens my father was transferred to the New York office of his company so my family moved to Upper Montclair, New Jersey, which is about 14 miles west of New York City. After my schooling I started working for the American Can Company where I spent 36 interesting years. A year after I started work I was drafted into the military service during the second world war in 1941.

During the service I was married. At the close of the service we moved to West Orange, New Jersey, where we lived until my early retirement in May 1967 due to a heart problem. We have four grown children who now have their own homes. The last few years of my working days I flew as a passenger about two million miles as a consulting engineer for my company. I covered North, Central and South America and Europe, although I never had the pleasure of visiting Ecuador.

Before I was a teenager I had built my first crystal radio. In 1947 I purchased my first communications receiver, a Hammerlund Pro. One of the earlier shortwave stations I received was HCJB and have been listening to it ever since. My present receivers are a Japan Radio Company NRD-515, a Kenwood R-2000, and a Sony ICF-2001. I have just turned in my Yaesu FRG-7700 and my ICOM R-70 on an NRD-525 to be sent as soon as the company starts shipping them. You can see I'm a real "radio nut."

I have two "radio shacks," one in my office and one in my bedroom. The photo is of the latter. My antennas are an Eavesdropper trapped dipole, a Shakesphere vertical, and two smaller vertical amplified antennas.

I am a full member of SPEEDEX and a member of ASWLC."

We wish many more years of successful DXing to you, Harry.

We are happy to welcome Aboe Nawan Thaliep to the small group chosen to be an ANDEX "Special DXer." ANDEX 5504 and 26 years old, Aboe's address is P.O. Box 15, Batang 51201, Indonesia.

Aboe was trained as a plumber but has worked for five years at a textile factory in Batang. He has been a shortwave listener and DXer since March 1983. He now holds a position any DXer would be proud of, that of chairman of the Indonesia area listeners' club called "Radio Listeners' Club Indonesia (RLCI).

His receivers are a Telefunken P.I. 101 and a Kingsonic K-363. While listening with these he's received 100 QSL cards. He especially appreciates receiving RSA South Africa, BRT Belgium, Deutsche Welle, NHK Japan, Voice of Free China, Radio Nederland and Radio Australia. Since DXing is not very popular in Asia he gets help from DX programs of radio stations such as DX PARTY LINE from HCJB, MEDIA NETWORK from Radio Nederland, TALKBACK from Radio Australia, and SPECTRUM from the VOA. And he says joining ANDEX helped a lot too.

Aboe says he is very happy with the shortwave hobby, and his other hobbies are correspondence and writing poetry. With these hobbies Aboe would make an excellent pen pal, so we hope many ANDEXers will respond with a letter to him.

Aboe Nawan Thaliep

andexing

SPECIAL DXER CONTEST - Why not enter our Special DXer contest? Send a photo and information about yourself to ANDEX, HCJB, Casilla 691, Quito, Ecuador.

You are more likely to be chosen if you send lots of information about yourself and a good quality photo.

If you have entered in the past, update the information and send it in again - sometimes persistence brings results!

AFTER READING THE RATINGS OF RECEIVERS in this issue, you may be interested in a book called *Radio Receivers - Chance or Choice* by Rainer Lichte of West Germany. Extensive reports - write-ups, tests, and reviews are made on 50 top SWL receivers. Gilfer Shortwave offers this book for $18.50 plus shipping. Write to them at P.O. Box 239, 52 Park Avenue, Park Ridge, NJ 07656 U.S.A.

CLAYTON AND HELEN HOWARD, hosts of DX PARTY LINE for the 22 years between 1962 and 1984, are making a seven month comeback from retirement. They arrived at HCJB in May to fill in for John Beck while he is on home ministry assignment in the United States. All "old time" DXers, that is, all who've listened to DX PARTYLINE for more than two years, will be pleased to hear the Howards' voices again. They founded Andes DXers International (ANDEX) in 1974. Welcome back home, Clayt and Helen. May these few months be as great a blessing to you as we know they will be to listeners of DX PARTY LINE.

AROUND HCJB - *Glen Volkhardt* and family have returned from home ministry assignment. Glen has resumed his position as English Language Service director. While in the U.S. he made presentations at some DX club meetings, and wants to encourage ANDEXers to write to HCJB's headquarters in Miami if they would like to schedule HCJBers for a presentation.

Ruth Jordan and husband Gene have returned to Quito from representation in the U.S. Ruth works in the English Language Service correspondence office and is heard on HAPPINESS IS and MUSICAL MAILBAG.

DX PARTYLINE NEWS

Winners of 1986 Interval Signal Contest: (Out of 37 entries)

1. Eddie Scott, Toccoa Falls, GA - USA
2. John Watson, Mt. Eden, New Zealand
3. Mickey Delmage, Edmonton, AL - Canada
4. Nick Pacey, Auckland, New Zealand
5. Kraig Krist, Falls Church, VA - USA
6. Jurgen Bast, Remscrud, West Germany
7. Tony Legendre, Chateau-Thierry, France
8. Douglas Doull, Auckland, New Zealand
9. Bryan Marsh, Auckland, New Zealand

JOHN BECK ON 7-MONTH LEAVE

John Beck, who will be absent from DX PARTY LINE for seven months, had this conversation with your editor before he left:

Doris: John, how long will you be away from Quito and from hosting DX PARTY LINE?

John: I'm leaving May 21 and will return the end of December, starting back with DX PARTY LINE the beginning of January 1987.

Doris: I remember interviewing you back in August 1984 when you first arrived at HCJB, and you were excited but awed at the prospect of hosting DX PARTY LINE. Has the work met your expectations? What do you know now that you didn't know then?

John: I did not anticipate the amount of correspondence and the time necessary to give to it that goes with hosting DX PARTY LINE. Some of the questions I had to answer were quite technical. Although the answers I gave were valid, I found that often I did not know the reasoning behind the answers—I didn't know "why."

Doris: What has been the most disappointing?

John: Not having enough time to squeeze into the programs all the information I want to.

Doris: What has been the most rewarding?

John: Getting to know the listeners through their letters and through speaking with them on the call-in programs has been very rewarding. But hearing that people come to know Christ through the programs is most rewarding of all.

Doris: What are your plans for the seven months you will be in the U.S.A.?

John: I'll visit family and friends and report to churches who support us. I plan to attend the ANARC convention hosted by Radio Canada International in Montreal, Canada July 18-20. I will also speak to SWL and amateur radio clubs. If any in the Kansas, Missouri, Illinois, Michigan, and Louisville, Kentucky areas would like me to speak, they should write to me in care of HCJB, P.O. Box 553000, Opa Locka (Miami), Florida 33055-0401.

Antennas, *Continued from page 2*

rated on the upper side of fair and may be helpful for those who have no space in which to install a regular antenna. Results with these antennas are mixed as they usually are used in the harsher environments of city apartment buildings. For best results try different locations or directions of the wire. Hook it to window frames or screens, water pipes or anything metal which could pick up some signal.

VI VERTICAL ANTENNAS

Several use their CB vertical antenna for SWL and these are usually purchased. The average rating of the vertical is about the same as that of the longwire, but the trap-vertical antennas give best performance. Generally, vertical antennas are not quite as good as horizontal antennas for shortwave reception, but a well-made vertical can work well.

VII DIRECTIONAL BEAM ANTENNAS

Not many have these antennas which are rather complicated and expensive to install, but they are the best rated of all types (good to excellent). They are directed toward the station to be received and usually contain trap-dipole elements for best reception on several bands. They are normally mounted on relatively high towers.

VIII LOOP ANTENNAS

The loop antenna can be easy to build and gives good to excellent performance, better than those with pure random direction. The best are a horizontal loop made of a long wire strung around the attic (where metal roof or metal-backed insulation is not present). Both ends of the loop need to be connected to the antenna terminals and for best results the connecting wires from the loop to the radio should connect to the side or corner of the loop toward the desired station. A double or triple loop (wires not touching) might be even better, but more than three is not recommended.

I hope this information will give you some ideas for improving your antenna and thereby your shortwave listening enjoyment.

SHORTWAVE LISTENING AND ONE SPECIAL STATION

By Gordon Starr, ANDEX 5221

Perhaps one of the most fascinating hobbies a person can become involved in is that of shortwave listening (SWL). Although relatively new to SWL, I have been an amateur radio operator for some time. Though no expert, I've learned a few things along the way.

Many people I have talked with are interested in listening to shortwave, yet are totally unfamiliar with what is involved in such a hobby. Several have acquired receivers, and then approach me saying they are unable to find anything. They hear a raft of signals yet cannot identify them, or simply use the "dial-hopping" technique. This, I believe, is the wrong approach to any radio operating.

As a ham operator I have worked many stations, but not a single one ever called me. I've learned that the most effective method of finding stations is to listen. Stations like HCJB are easy to work, but there are many broadcasts that are rare to pick up. The only way to get this is patient listening. And what's the last word of SWL? Listening.

There are many good books available which provide station names, frequencies on which they broadcast, and the time to listen. Even then, one often has to just sit and listen to ensure you've got what you're looking for. We cannot ask a station to be there when we want it. The biggest tip I can offer a beginner in SWL is to just learn to listen.

To the best of my knowledge there is only one Station available that does not suffer from QRN/QRM (bad atmospherics or interference.) Nor are books required to advise on changes of frequency or time, since this Station is available on all frequencies and at all times. Furthermore, it is available for two-way communication without a license. I'm referring to The Station with call-letters of CHRIST. Seek Him, call Him, and you will be answered. For all other shortwave, learn to listen.

ANDEX International

HCJB

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.

ANDEX INTERNATIONAL

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Printed in Ecuador, S.A. by Imprenta Vozandes