

NRC Article Reprints of Interest to Shortwave DXers A BIBLIOGRAPHY

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FT's **PROCEEDINGS 1988** contained a compilation of articles previously published in the pages of **DX Monitor**, the weekly publication of the International Radio Club of America. John Bryant selected 183 articles deemed relevant to SWBC DXing for inclusion in that 1988 Bibliography.

The National Radio Club, the pioneer MW DX club, began in York, PA in 1933. The and has published its weekly bulletin, **DX News** for over 55 years. It currently offers 209 reprinted articles, along with six special subject group manuals which collect the main articles of a particular interest area (receivers, etc) together. The manuals contain currently available articles, as well as reprints of older articles no longer available individually.

In preparing this compilation, I had the opportunity to examine a number of the reprints. I eliminated articles solely applicable to medium wave DXing. Where the NRC and IRCA reprints are actually duplicates of each other, the relevant IRCA reprint number is also noted. The number in parenthesis is the number of pages in that reprinted article.

●ANTENNAS●

- A7 THE FLORIDA BEVERAGE (3) Jerry Conrad. Discussion of results obtained from the use of a Beverage antenna, and a comparison to other antennas used by the author.
- A8 THE CARE AND FEEDING OF A WAVE ANTENNA (3) Jerry Starr. Practical construction hints for a Beverage antenna.
- A9 DOWN TO EARTH GROUNDS (2) Gordon P. Nelson. An explanation of making low resistance ground connections for terminating a Beverage antenna.
- A10 A CALIFORNIA BEVERAGE (2) Fr. Jack Pejza. An article similar to reprint A7.
- A11 THE SUPER SIGNAL SNATCHER (14) Dave Fisher. A detailed article concerning the theory, set-up, and operation of a Beverage antenna. It includes tables, graphs, and diagrams, including proper values for terminating resistors. Same as IRCA reprint A11.
- A16 MORE ON BEVERAGE ANTENNAS (2) Wes Boyd. An update on antenna theory and its practical application.
- A19 NEBE: THE NEBRASKA BEVERAGE (7) Dave Fisher, Carl Dabelstein, Robert Mitchell. A discussion of necessary materials, construction methods, termination, and results obtained from a Beverage antenna erected in October, 1972.
- A21 THE APT-2 ACTIVE ANTENNA TUNER (9) Mark Connelly. Complete construction details and use of an active parallel tuner with regeneration capability. Designed for use with antennas in the range of 150 khz to 8 Mhz. Same as IRCA reprint A50.
- A22 THE APT-3: AN IMPROVED DESIGN ACTIVE PARALLEL L-C TUNER (9) Mark Connelly. A companion article to reprint A21 that describes improvements to the APT-2 that simplify its use.
- A27 SEVEN PASSIVE TUNERS (11) Mark Connelly. Details the construction and use of seven tuners, two of which are designed for use at tropical band frequencies.
- A28 ANALYSIS OF THE BEVERAGE ANTENNA (26) Chuck Hutton. A lengthy article divided into two sections, 1) Basic theory; 2) Two-wire phased antennas. Filled with calculations, 35 diagrams, and a two page bibliography.

- A34 SOME ANTENNA EXPERIMENTS (3) W.R. McIntosh. A description of a "helical longwire" designed for use when space for a full-sized antenna is limited. Results of use with several different tuners is given. Same as IRCA reprint A60.
- A37 LOOP ANTENNAS-THEORY AND PRACTICE (9) Dallas Lankford.
A technical discussion of loop antennas used at MW frequencies. Full of formulas and principles that can be applied to other frequencies.
- A43 REMOTELY-CONTROLLED ANTENNA TUNER RT-1 (7) Mark Connelly.
Schematics, assembly instructions, and use of a remotely-controlled tuner for 140 khz to 6300 khz. Designed to use long and short wires, or loop antennas.
- A44 THE MINI MWDX-3, A SIMPLE, EFFECTIVE PHASING UNIT (21) Mark Connelly. Description and construction of a one-box antenna phasing unit. Information is included allowing the builder to adapt the unit to frequencies up to 6300 khz.
- A45 THE MWDX-4 FAMILY OF PHASING UNITS (25) Mark Connelly. Similar to reprint A44, offering units of improved operation.
- A47 TEST OF THE MITCHELL LEE LOOP AMPLIFIER (6) Mark Connelly. Construction and implementation of a low-impedance, three transistor, broadband amplifier, usable at lower shortwave frequencies.
- A48 YAD ANTENNA GIZMO (1) Jerry Starr. A simple two-antenna switch that allows the unused antenna to be grounded.

●RECEIVING EQUIPMENT●

- R2 SINGLE SIDEBAND RECEPTION ON THE BCB WITH MECHANICAL FILTERS (22) Gordon P. Nelson. Explains how to fit mechanical filters to an existing receiver, for the ultimate in adjacent channel rejection.
- R4 THE IC-R70 PBT & PREAMP MODIFICATIONS (2) Don Moman. Instructions for increasing the performance of Icom's version of pass band tuning. The second modification enables the onboard preamp below 1600 khz. Same as IRCA reprint M37.
- R6 ELECTRONIC VERNIER TUNING (4) Ray Moore. Detailed instructions on how to fit a varactor to a receiver, to provide a fine bandspread control.
- R7 MECHANICAL FILTERS FOR THE HQ-180 (6) Jerry Starr. Detailed description of the conversion of this popular receiver to mechanical filter operation. Reprint R2 offers valuable background information.
- R9 RECEIVER/ACCESSORY INTERFACES MADE SIMPLE AND CHEAP (6) Russell J. Edmunds. How to interface various Dx equipment.
- R11 PRECISION FREQUENCY MEASUREMENT (3) Ron Schatz. How to use the frequency counter in frequency measurement.
- R15 REVIEW OF THE HEATH SB-620 SPECTRUM ANALYZER (32) Robert Foxworth. A comprehensive analysis of the unit and its use in displaying received signals on a cathode ray tube.
- R17 BUILD YOUR OWN AUDIO FILTERS (6) P. Sullivan. A technical theory and construction article about homebrew audio filters for the DXer.
- R19 A BRIEF REVIEW OF THE AUTEK QF-1 AUDIO FILTER (2) Chuck Hutton. A non-technical review of this noise and interference filter.
- R20 A FREQUENCY COUNTER FOR RECEIVER TUNING (13) Robert Foxworth. A thorough article on digital readouts. The article discusses technical theory and provides circuitry to enable the experimenter to build a counter for use as a "digital dial."

- R23 DIVERSITY RECEPTION (1) Chuck Hutton. How to use more than one antenna and receiver to reduce fading and interference on one frequency.
- R24 TIPS ON REMOTE TAPING (2) Russell J. Edmunds. This article explains several ways to turn on your receiver and recorder, while you are otherwise occupied. Useful with reprint R9.
- R25 STRONG SIGNAL HANDLING (6) Chuck Hutton. A technical article that explains that sensitivity and selectivity are not the only specifications to be considered in a receiver. Same as IRCA reprint T50.
- R26 RECORDING JACKS FOR RECEIVERS (1) Dave Arbogast. A step-by-step procedure is outlined for adding a recorder jack to almost any receiver.
- R27 TAPE RECORDING HINTS (4) Mark Connelly. A complete method of radio-to-tape interfacing for portable radios is outlined. Schematics and parts lists are included in the article.
- R28 CONVERTING THE R-390A POWER SUPPLY TO SOLID STATE (7) Charles Taylor. Outlines the conversion process from tubes to diodes. Includes numerous diagrams to aid the constructor. Same as IRCA M23.
- R29 R-390A ALIGNMENT CHART (5) Charles Taylor. Optimize your R-390A performance. Same as IRCA reprint M9.
- R30 MC KAY-DYMEK DP-40 PRESELECTOR (2) Robert Foxworth. A non-technical review of this accessory with modifications to improve its performance.
- R31 THE SUPER HQ-180 (4) Dallas Lankford. A discussion of results obtained by adding a mechanical filter to this receiver.
- R32 HQ-180 ALIGNMENT WITHOUT A 60 khz SOURCE (4) Dallas Lankford. How to align the HQ-180's 60 khz IF strip with a 455 khz RF source.
- R33 R-390A/URR PTO ALIGNMENT (3) Dallas Lankford. The alignment procedure to achieve exact end-point alignment in the R-390A PTO is detailed. See reprints R28, R29, R34, & R35.
- R34 INSIDE THE R-390A PTO (4) Dallas Lankford. An in-depth article that explains the R-390A PTO tuning system and shows how to improve its performance. See reprints R28, R29, R33, & R35.
- R35 THE R-390A ON LONGWAVE (2) Craig Healy. A simple and inexpensive method to modify this receiver to tune below 500 khz.
- R36 THE BBA-1 BROADBAND AMPLIFIER (11) Mark Connelly. A construction project suitable for beginners which is used to increase the output from a loop antenna to your receiver. Same as IRCA reprint A55.
- R37 THE GENERIC HQ-180 IF ALIGNMENT (4) William Marvin. The non-technical DXer can peak HQ-180 performance without the use of test equipment
- R38 VARACTOR DIODE APPLICATIONS FOR DXERS (10) Mark Connelly. Covers the advantages and disadvantages of substituting a varactor diode for the variable capacitor in various DX projects.
- R39 A "KNOCK-YOUR-SOCKS -OFF " REGENERATIVE PREAMP (1) Ray Cole. A simple-to-build project adaptable to frequencies from longwave to shortwave.
- R43 CERAMIC FILTERS (9) Marc Bergman. A listing and description of commonly available ceramic filters, with test data from the author. Same as IRCA reprint T60.
- R44 THE HQ-180 SERIES RECEIVER SENSITIVITY TEST (1) Dallas Lankford. A simple test to pinpoint weak or bad tubes.
- R45 REPLACING THE R70's PBT FILTER (3) Gerry Thomas. Step-by-step instructions to install an improved ceramic filter in the PB tuning circuit. Same as IRCA reprint M46.

●DOMESTIC DX●

- D6 MAKING THE BEST OUT OF PREPARED-CARD VERIES (3) Kelly Andrews. Ideas to show how to obtain verification card by using imaginative prepared cards. Examples are included.
- D19 DXING: HOW TO "UP" YOUR TOTALS (3) John J. Rieger. An anecdote for "DX burnout." Tips to help the experienced and good advice for the novice.

●FOREIGN DX●

- F3 PORTUGUESE FOR DXERS (2) Ron Schatz. Enumerates important and unusual features of this language.
- F5 HUNTING LATINS BY MUSIC (5) Ron Schatz. Covers LA music indigenous to various countries, and how to ID stations with this information.
- F8 STATION IDENTIFICATION (2) Author not listed. Tips on how to identify stations in nearly 50 languages.

●MISCELLANEOUS ARTICLES●

- M4 RF INTERFERENCE AND THE HOME COMPUTER (2) Bill Krause. Several solutions to computer-generated interference are discussed.
- M6 RF POLLUTION (2) Glenn Hauser. General article concerning radio interference and steps that can be taken to control it.
- M8 RETAIL ELECTRONIC PARTS SUPPLIERS (5) Compiled by Mark Connelly. A comprehensive listing of parts suppliers who sell in small quantities to the general public. Lists addresses, telephone numbers, and specialties of each outlet. Same as IRCA reprint G42.
- M10 SUPERMODULATION AND EFFECTS ON DXING (3) Steve Kennedy. Explains why there is overmodulation and why it will affect the DXing hobby for some time to come.
- M11 TERRAIN CHARTS FOR PROPAGATION PREDICTIONS (3) Mark Connelly. This article outlines a way to compose a chart of a DXer's surrounding terrain which may enhance or diminish reception. Same as IRCA reprint T48.
- M12 NOISE LEVELS AND USABLE RECEIVER SENSITIVITY (5) Chuck Hutton. A technical discussion of the effect of noise on receiver sensitivity.
- M13 GREAT CIRCLE CALCULATIONS REVISITED (4) Mike Tuggle. Explanation of how to figure distance and direction of stations. Richard Allen has written a computer program for use in calculating Great Circle paths.
- M14 HOME COMPUTERS AND DXING (5) Mark Connelly. An introduction to the use of computers as an aid to DX record-keeping and calculations, with programs for most popular computers.
- M17 SOME THOUGHTS ON INTERFERENCE (1) Skip Arey. A simple modification to light dimmers is outlined. This will help reduce the noise interference produced by the dimmer.
- M18 MANMADE INTERFERENCE ON THE BCB (3) Dallas Lankford. The author presents a method for evaluating a present or proposed DXing location from the perspective of man-made noise levels.

●PROPAGATION●

- P1 MEDIUM WAVE SIGNAL PATHS, PARTS I, II, III, AND IV (29) Gordon P. Nelson. Covers Great Circle Paths, seasonal absorption patterns, auroral effects, and the Mid-Winter Anomaly.
- P8 COMPARATIVE MEASUREMENTS OF GEOMAGNETIC INDICES (3) Russell J. Edmunds. A daily comparison, for three months, of various A-index measurements from several major observatories. Article explains how the indices are related.

- P10 A BEGINNER'S GUIDE TO THE IONOSPHERE (10) Fr. Jack Pejza. An explanation of how the ionosphere changes and the resulting affects on radio propagation. Same as IRCA reprint T2.
- P12 LIMITATION ON THE USE OF THE A-INDEX (3) Gordon P. Nelson. The article explains why the A-index can be misinterpreted.
- P14 SKYLINE BLOCKAGE (10) Fr. Jack Pejza. The technical information needed to determine the effect that terrain has on signal reception is presented in this article. Same as IRCA reprint T3.
- P15 SKYLINE BLOCKAGE, SOURCES OF UNCERTAINTY (9) Gordon P. Nelson. Discusses less common modes of radio signal propagation that can be blocked by the horizon.
- P16 HORIZON BLOCKAGE: CAN FRESNEL DIFFRACTION BE IGNORED? (10) Gordon P. Nelson. Tells why signals that should be blocked by the horizon can sometimes be heard.
- P26 ATMOSPHERIC AND GALACTIC NOISE ON THE BCB (3) Dallas Lankford. A technical article relating certain levels of noise to receiver sensitivity.
- P32 RELATIONSHIPS BETWEEN SOLAR ACTIVITY, THE EARTH'S MAGNETIC FIELD, AND MW DXING (15) Randy Seaver. The characteristic of these phenomena are examined using solar and ionospheric data gathered over a thirty year period. Applicable to SWBC. Same as IRCA reprint T64.
- P33 SEA GAIN (11) Randy Seaver. Discusses why Dxers living at a coastal location can have enhanced reception at LW, MW, and Tropical Band frequencies. Same as IRCA reprint T62.

●RECEIVER REVIEWS●

- RR1 RECEIVER COMPARISONS-WHAT DO THEY MEAN? (2) Russell J. Edmunds. Author explains how to compare product summaries and receiver reviews.
- RR2 QUALITATIVE REVIEW OF THE YAESU FRG-7 RECEIVER (3) Glenn Hauser. A non-technical review.
- RR3 DRAKE R7-A REVISITED (2) Craig Healy. General comments from a satisfied user. Contained in IRCA reprint R31.
- RR4 HEATH GR-78 (2) Ron Schatz. Review.
- RR6 SONY ICF-6500W-THE PERFECT PORTABLE? (4) Gerry Thomas. A comparison is made between this radio, the Realistic TRF, and the GE Superadio. See also reprint R8, Same as IRCA reprint R43.
- RR8 MC KAY-DYMEK DR-22 (3) John Clements. A detailed, non-technical preproduction review.
- RR9 ICOM IC-R70 COMMUNICATIONS RECEIVER (11) Vincent Pinto. A thorough and technical review. See reprints R4 and R45 for modifications.
- RR11 ESKA RX 12 PL (2) Rafael Calabulg(DSCWI). Review.
- RR12 REALISTIC DX-400 TEST REPORT (3) Bruce A. Conti. Receiver is compared to the TRF.
- RR14 THE ICOM IC-R71A RECEIVER (7) From "DX Calling" magazine. Thorough and technical review.
- RR15 UNIDEN CR-2021 VS. SONY ICF-6500W: A COMPARISON (3) Gerry Thomas. Comparison of performance of these under \$100 portables. A simple high-pass AF filter for the Sony is described. Same as IRCA reprint R51
- RR16 NRD-515 REVIEW (7) Bob Foxworth. A detailed review and commentary.
- RR18 SURVEY OF HAMMARLUND RECEIVERS (8) Dallas Lankford. Comparisons of the full line of receivers, modifications, and hints to consider when purchasing one. See also NRC Receiver Reference Manuals I and II.
- RR19 KENWOOD R-5000 (5) Don Moman. A complete review with a comparison to the Icom R71 and Sony ICF-2010. Same as IRCA reprint R56.

- ARM1 ANTENNA REFERENCE MANUAL-VOLUME 1 A compilation of articles on the subject of antennas for MW DXers which have appeared in the pages of DX News from 1969 through 1974. It includes data on air-core and ferrite-core loops, tuners for longwire and Beverage antennas, and coupling devices.
- ARM2 ANTENNA REFERENCE MANUAL-VOLUME 2 A booklet similar to Volume 1 containing articles published from 1974 through 1981.
- RRM1 RECEIVER REFERENCE MANUAL-VOLUME 1 Similar to the antenna manuals, but covers articles about receiver reviews, modifications, and accessories from DX News, originally published from 1969 through 1974.
- RRM2 RECEIVER REFERENCE MANUAL-VOLUME 2 A continuation of Volume 1, containing articles from 1974 through 1981.
- BLA BEVERAGE & LONGWIRE ANTENNAS-DESIGN & THEORY A compilation of DX News articles on this topic. All articles are available as reprints A-28, A-7, A-8, and A-11.
- LA LOOP ANTENNAS-DESIGN & THEORY A compilation of reprints A-37, A-4, A-5, A-6, A-1, A-24, and two others no longer available. Covers direction finding, open-core loops, and ferrite-core loops.

●PRODUCT SUMMARY●

PS1 DRAKE SSR-1 RECEIVER (1) Bob Foxworth.

●MANUALS●

The National Radio Club has produced six book publications in 5½ x 8½ inch booklet format. While the contents of these manuals are geared toward MW DXers, much is pertinent to other radio hobbyists.

To order any reprint, booklet, or other product offered by the National Radio Club, please do the following. 1) Make a list of desired reprints on a piece of paper with page counts for each item. 2) Total the number of pages wanted. 3) Multiply the total number of pages by the following rates:

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