

From: THE NORTH SHORE
AMATEUR RADIO CLUB
P.O. Box 171
Oshawa, Ontario L1H 7L1

First Class Première classe

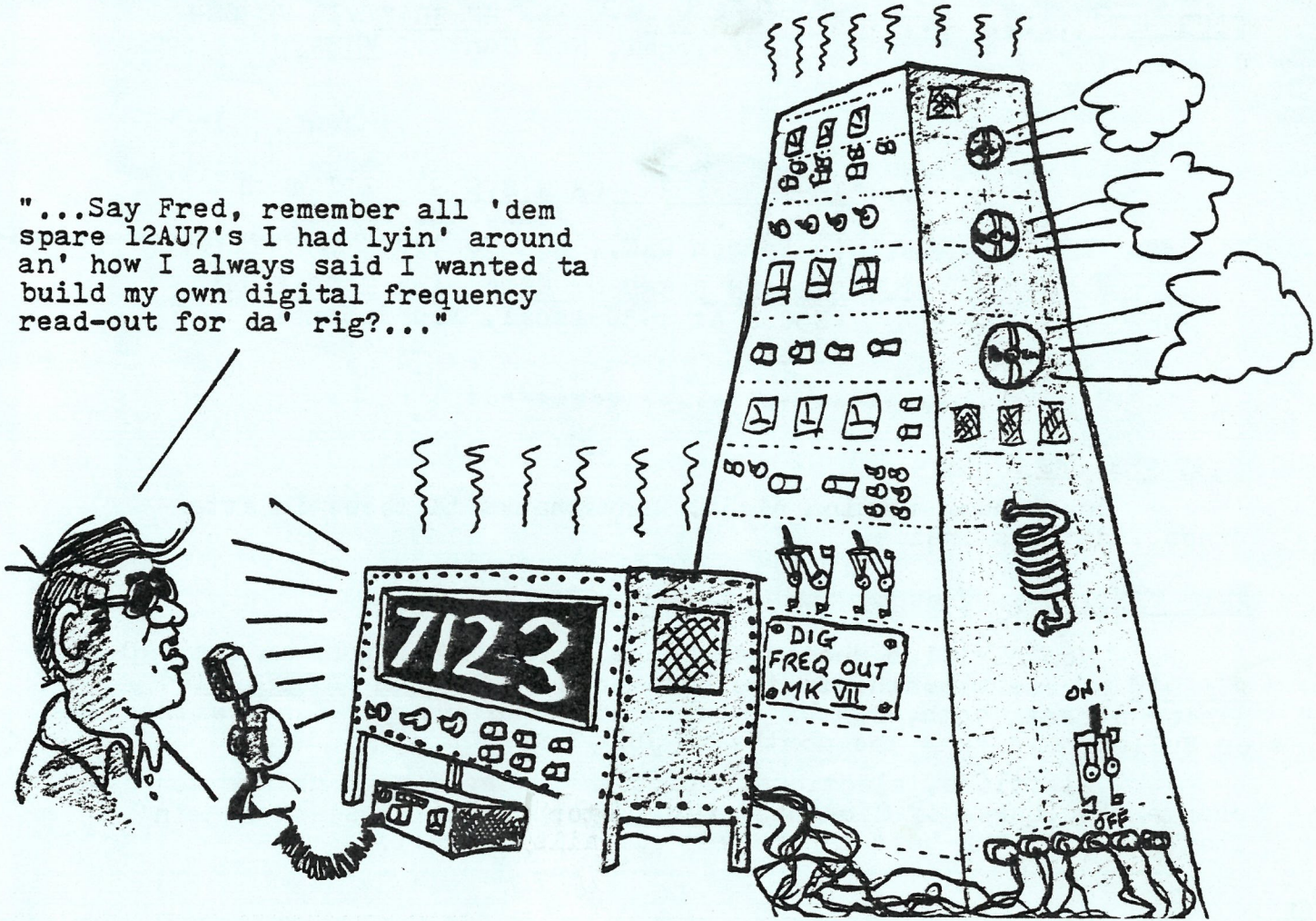


TO:

VE3CRK
DAY RALPH
454 HOLCAN AVE.,
OSHAWA, ONT.
L1G 5X6

First Class Première classe

"...Say Fred, remember all 'dem spare 12AU7's I had lyin' around an' how I always said I wanted ta build my own digital frequency read-out for da' rig?..."



SPARKS

The Official Organ of
THE NORTH SHORE AMATEUR RADIO CLUB, INCORPORATED.

OFFICERS & EXECUTIVE:

PRESIDENT.....DOUG SMITH.....VE3MKC.....786-2086
VICE-PRESIDENT.....RALPH DAY.....VE3CRK.....576-8738
TREASURER.....MAC McFARLANE...VE3XI.....723-8484

SECRETARY.....COLIN BELL.....VE3CEU.....723-7842
REGISTRAR.....KEITH WYARD-SCOTT...VE3GDF.....723-5758
EXECUTIVE ASSISTANT...DON DEWEY.....VE3GEN.....668-0577
GET-WELL-CARDS.....TED BRANT.....VE3ADD.....668-3561
EDITOR.....EDDY SWYNAR.....VE3CUI.....723-4326

--NOVEMBER 1983--

CLUB STATION.....VE3NSR

CLUB REPEATER.....VE3OSH 147.72-MHz IN,
147.12-MHz OUT.

CLUB NETS....."2-METERS NET" each THURSDAY via VE3OSH
at 1930-local, Net Control VE3AAF;

..."10-METERS RAG CHEW S.S.B. NET" each
SUNDAY at 1000-local, 28.200-MHz
(± Beacon QRM), Net Control ??????????????????????????????

..."BARGAIN BASEMENT NET" each MONDAY via
VE3OSH at 1930-local, Net Control
VE3XI.

LAST MEETING :

Our annual auction night. Many thanks to those in attendance...details inside.

NEXT MEETING ...Tuesday 8th November 1983...

Monthly Club meetings are held at 2000-local, on the 2ND-TUESDAY of every month, in the cafeteria of O'NEILL COLLEGIATE, Simcoe Street North, OSHAWA (note that there are no Club meetings or Bulletins during the months of JULY and AUGUST).

Elections, elections, elections. Here's your chance to change the course of Club history...stop moanin' & start runnin'. That, or pick the best man to win (details inside).

FROM THE EDITOR...

Something about Amateur Radio in the past few years really has me feeling "down" about the whole works....I think the straw that broke the camel's back came in the form of a recent two-part (count 'em folks, two!) "new products review" article of the latest-&-the-greatest-rig from Japan Inc., in the pages of one of the "big 3" Amateur Radio magazines.

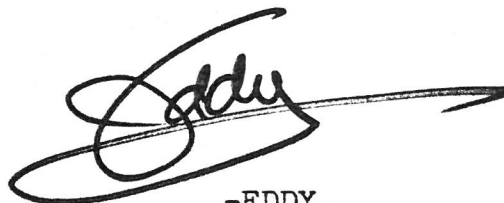
Have we as Amateurs truly submerged ourselves to such a new low that we must now hale the "generosity" of Appliance Manufacturers with multi-chapter equipment reviews? I can remember the day not too long ago when such honours were bestowed upon new receivers/transmitters/s.w.r. studies, homebrewed in the basements of enterprising self-styled "tinkerers & experimenters"---in short, dear reader, true Radio Amateurs in the finest sense of the word.

Face it, gang: when we thumb our noses down on home made gear because of its "looks"---when we consider ourselves to be state-of-the-art "experimenters" simply because the new "Banzai XR-1000" in the shack contains i.c.'s---when we willingly dole out two-hundred-dollars-plus for commercially-built multi-band verticals rather than trust our senses & ingenuity with wire & solder---well, when we do that, we cease to exist in the image of "The Compleat Ham", an image which we ourselves so fondly perpetuate in the public mind at almost every opportunity.

Where are the O.T.'s to guide the novices---who are probably much too busy comparing warranty outlines of the major transceiver manufacturers to pound-out "CQ's" on 40-meters anyway---and remind one & all of the fact that "ohms" do not equal "farads"?...They're doubtlessly tinkering with their imported plug-in computers, these seasoned all-knowing veterans, hooking-up automatic code reading/sending programmes in their own personal experiments in futility (when was the last time you were on c.w., OM?).

The Amateur Radio Service as it exists to-day can not even pretend to approach those aspirations sanctioned by charter of the I.T.U. What will be the ultimate fate of this once-proud heritage of ours? Will there even be such a thing as a "Ham" in 1993?....

....Does it even matter....?

A handwritten signature in black ink, appearing to read 'Eddy', with a long horizontal flourish extending to the right.

-EDDY
VE3CUI

NOTES REGARDING ELECTIONS...

The upcoming November meet is a "Biggie"...yes, time again for nominations and elections. In addition to all of the political hoopla & charisma, our own irrepressable Tony (IAT) will divulge more deep & dark secrets to the gang in attendance regarding antennas and such. BE THERE!

SPECIAL NOTE---This year, members who will not be able to attend the election meeting may provide a SIGNED PROXY to any member who will be in attendance....this member will receive a ballot for the absent member. Nominations will be accepted only if the nominee is present at the meeting.

OCTOBER MEETING...

The auction held at the October meeting was a "small" success, mainly due to VE3's DYE, GEN, & IBO contributing all of their proceeds to the Club coffers. A net of \$33.00 was realized. Many thanks to Tony (IAT) for jumping into the breach and talking himself hoarse.

WINE & CHEESE PARTY...

This annual affair will be held on our regular December meeting night, Tuesday 13th December at 1930-hrs., in the "V.I.P. Room" of Branch 43 (Oshawa) Royal Canadian Legion. The room is immediately to the Right, inside the East entrance. There will be some awards to be presented, and an opportunity to meet your new directors.

CQ DX CQ DX CQ DX...

Few Hams that I've spoken to even realize that there exists a first-rate DX Club right under their noses. I'm speaking, of course, about THE CANADIAN DX ASSOCIATION, a.k.a. "CANAD-X".

A national association administered by the Toronto DX Club, Canad-x offers regular monthly meetings, a monthly bulletin (i.e. "Long Skip"), QSL cards, and an excellent outgoing QSL bureau. Additionally, the group sponsors a DX alert repeater (VE3TDX---147.930 input/147.330 output) located near Stouffville.

Dues are \$20.00 per year. For more information, write to

CANAD-X CLUB,
P.O. Box 717,
Station "Q",
Toronto, Ontario M4T 2N7.

For a faster response, talk to Tony (IAT) who just happens to be Canad-x vice president for 1983-84.

VE3IATopics 3

The key question in every healthy ham's head is how do I get more bounce for my bucks? The answer I believe has somewhat more to do with the angle of arrival (or departure) of signals at the antenna than with any other single factor. Stand by you grandmothers for another egg-sucking tutorial!!

What exactly is going on when we sit there at the rig hopefully heaving Hertz's siblings at the heavens? Well among other things we are spraying electromagnetic vibrations through an atmosphere that is, to a large extent electrically neutral in the general direction of a medium --- the ionosphere --- that is not. Solar radiation takes a great many forms but of most significance to radio are the ultraviolet wavelengths (UV). Now at lower altitudes the atoms of the earth's atmosphere are in electrical equilibrium with the positively charged nuclei balanced by contented orbiting electrons. Any aberrant free-thinkers taking off for heavenly Vancoovers are rapidly replaced by other eager beavers since close to earth air densities (and thus chances of atomic collision) are high.

As the altitude increases however the picture slowly changes. Electrons freed from orbit by high-energy incoming UV rays spend more time in free flight. With lower densities ionic recombination is slower and a conductive region of constant ionization created by separated and unsatisfied positive and negative charges is formed --- the ionosphere. It's a bit like a celestial ballroom with ghostly atomic dancers swirling in an eternal excuse-me foxtrot made up of ephemeral ionic partnerships. Or perhaps not depending on just how you feel about foxtrots. Myself I need a pretty big charge to dance one.

The ionosphere is of course not one region but several and we label these the D,E,F1 and F2; each representing a zone of peak ionic intensity at a different elevation and produced by the various atmospheric gases reacting to slightly different frequencies of radiation in the general UV range. Whatever! Here comes your 20m phone patch to Mavis in Moose Jaw swinging up and over Thunder Bay at 300,000 km/sec right into treacle town! Once an electromagnetic wave moves from a non-conducting to a conducting medium all the rules change. Here come the punk rockers gate-crashing their way across the ballroom elbowing and shoving and forcing their more staid elders to dance to their rhythm. If Mavis only knew. There is of course resistance. The dancers start moving in concert, the rockers are slowly deviated from their path and eventually ejected by the side door. This analogy may be getting out of hand! Refraction thus occurs because the intruding waves are moving into a conducting medium of gradually increasing ionic density. The portion of the wave-front furthest from earth thus moves fastest (higher density = higher speed) and the wave bends and deflects back towards earth --- lucky Mavis!

So much for normal behaviour. For more on that you'll just have to wait for a feature in the Sunday papers because I'm much more interested in phenomena other than the simple model of refraction outlined above and there's a lot more to solar radiation than UV to contend with. Finally I seem to remember that I was supposed to be talking about angles of radiation and the DX signal and that seems to have been hit by a giant metaphoric meteor this month!

73's,

Tony

