



CKFX - CANADA'S 10 WATT DX CATCH

reprinted from January 1983 DX Ontario

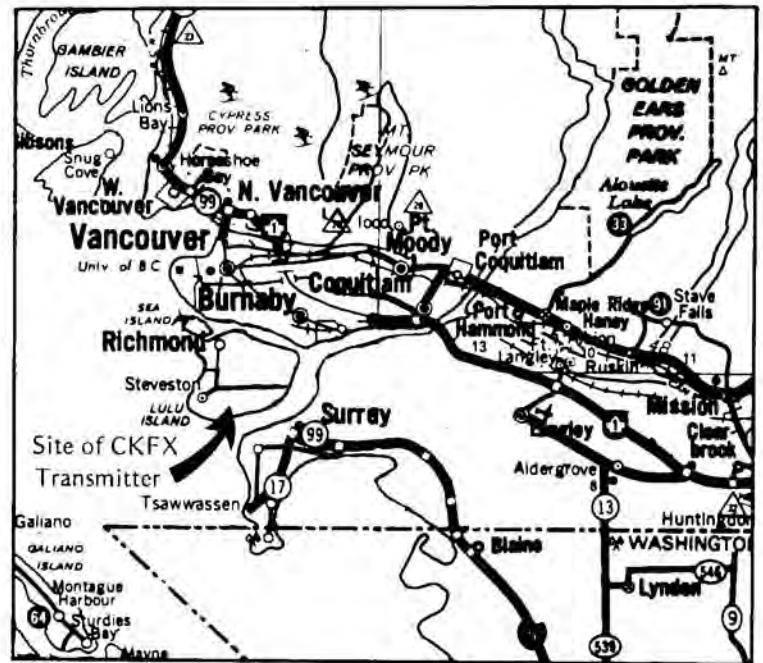
You say there is no DX in Canada? On a whole it is true that the elusive stations do not exist in this country. There is however, a rare find to be had on the West Coast of this vast land. CKFX. You've never heard it you say. It not there is a very good reason. Read on and you will find out the reason, but when conditions are just right you will be able to log Canada's DX catch.

CKFX shortwave, 6080 kHz on the 49 metre band, simulcasts the programming of the 50 kW AM standard broadcast station CKWX. Times of broadcasting are 24 hours per day, seven days a week. CKFX is not a relay or STL link. Power output is authorized at 10 watts! The antenna is a simple vertical, ground mounted with approximately 30 radials.

The original and specific purpose of CKFX(1940's) was to reinforce the coverage of CKWX along the B. C. coastline as well as to supply a source of news and information to these west coast communities of British Columbia where no local AM radio existed at that time. The region specifically in mind were the Queen Charlotte Islands and upper Vancouver Island. The lumber and fishing camps as well as the fishing vessels were normally equipped with receivers capable of receiving 49 metres but not the AM Broadcast Band. In addition to this, the mountainous terrain between Vancouver and the upper coast was such that transmissions on 980 kcs. are seriously attenuated whereas short-skip reception of 6080 kHz has proven consistently reliable. It was felt that 10 watts output directed in a north-westerly direction would be adequate to provide that service so badly needed. Thus CKFX transmissions, supplementing those of CKWX, assure coverage of points at which weather-reports, news and other program services were of particular value.

CKFX transmitter, which was designed and built by the engineering staff in the mid forties, and the antenna was re-located in the Spring of 1980 to the site of our new 50 kW installation. The precise location is Latitude 49 09' 22" North, Longitude 123 04' 00" West. This puts it on Lulu Island which can be seen in the map to the right. This is the same location as the CKWX transmitter (50 kW installation). The antenna was reduced to a single vertical element from its original two element directional array. The transmitter uses a single 807 final, and two 807's in push-pull for modulators.

Depending on high-frequency propagation conditions, the number of reception reports for CKFX can vary from three to four per week to as many as a dozen reception/QSL requests per week. Reception reports have come from as far away as Australia and Northern Norway, but for the most part come from U.S. shortwave DXers.



So concludes a very brief look at CKFX, a low powered DX catch right here in Canada. If you have not had the opportunity to hear this station you may note the following suggestions. While we don't guarantee you will be able to hear them the chances of doing so are better. First of all be prepared to cope with a lot of atmospheric noise, weak signals and a constant fading of the signal. Secondly, the time that seems to be the best for reception of CKFX here in Ontario is in the Spring or Summer around 0700 - 0800 GMT. Be patient, listen frequently if you are really desirous of hearing this lowpowered west coast station and your patience will be rewarded. Last, but not least, you can always move to British Columbia and be assured of receiving CKFX's signals.

Quite a few members of ODXA have been successful in monitoring CKFX and you can be too. Good DX and may your patient efforts to hear Canada's 10 watt DX catch be rewarded with a QSL from Super Country.

EARLY HISTORY OF VE9CS & CKFX VANCOUVER

1929 - Mediumwave station CKFC moved to Chalmers United Church at 12th and Hemlock and also started a shortwave station, VE9CS, with an output of only 2 watts. It carried church services intended for reception in the interior of southern BC and even south all the way to California.

CKFC and VE9CS remained under the control of the United Church until 1936, when they were leased to the Standard Broadcasting Company. Church services were still carried, but extra airtime was sold to sponsors. It was around this time that the shortwave outlet adopted the call CKFX.

Engineer Laurie Irvine described the transmitter as a simple breadboard, constructed from a design in the Amateur Radio Relay League handbook. He thought the shortwave audience was nil.

In 1937 Standard Broadcasting was taken over by the Sun Publishing Company. CKFC and CKFX moved to the Sun Tower building.

In 1940 CKFC had to give up its licence, as the government tried to organize the cluttered airwaves in the Vancouver area. Station CKWX took over the church broadcasts and also CKFX shortwave. CKFX thus became the shortwave relay of CKWX. CKWX was located in the Hotel Georgia until 1941.

above from Imagine Please: Early Radio Broadcasting in British Columbia, by Dennis J. Duffy, 1983.

Closure of World's Smallest Station

by Arthur Cushen, August 1996 *New Zealand DX Times*


Regarded as the world's lowest powered shortwave transmitter CKFX Vancouver, which operated on 6080 khz with 10w and relayed CKWX has closed. I first heard this station in August 1940 and the verification letter [see below] indicated they had just erected a 'V' beam type antenna. In 1956 the aerial was replaced by a two element vertical array and in 1979, it was replaced by a quarter wave omni directional.

When I visited the station in 1986, the Chief Engineer indicated that in the early days the station was broadly beamed in a north east direction and the whole purpose of the transmitter was to cover the small fishing villages on the British Columbia Coast. In the 1940's and 1950's these towns and villages did not have their own radio station. Since then radio has moved into the area and there is very little purpose for keeping CKFX on the air except to serve DXers. The transmitter remained at 10w throughout its entire

broadcasting life and listeners will regret the ending of this broadcast which was a challenge world wide to hear this world's lowest powered radio station.

LETTER MACHINE 1144 REGISTERED 1923
HOTEL GEORGIA

CKWX
(AND SHORT WAVE STATION CKFX)
WESTERN BROADCASTING CO. LTD.
801 GEORGIA STREET WEST
VANCOUVER B.C.

 October 25th, 1940.

Mr. Arthur T. Cushen,
105 Princes Street,
Invercargill,
NEW ZEALAND.

Dear Mr. Cushen:

Many thanks for your recent letter reporting reception of our short wave station CKFX on August 28th, your date.

You were certainly tuned in to this station and this will serve to verify your reception of same.

With regard to the power of our short wave station, we are still using 10 watts. The fact that we have changed its location from the centre of town to outside the city limits may account for the change you have noticed. It may interest you to know also that, since receiving your letter, we have erected a new antenna system, now using a "V" Beam type.

It is always a pleasure for us to receive your comments on our station and its reception, and we hope we may have the pleasure of hearing from you again.

Again thanking you, we are,

Yours very truly,
WESTERN BROADCASTING CO. LTD.

Per *A. Fowler*

HF:RG

As indicated in my discussions with the Chief Engineer in 1986, the life of the shortwave outlet was very much a promotion for radio listeners, giving them a challenge to hear this long established broadcaster, and it seems that the station, with replacement of the transmitter required, has decided to end the days of CKFX.

DXer's Report

Ben Krepp, Massachusetts, October 1997

During my vacation in Washington State and BC, I planned to try and hook up with Jack Weibe, CE of CKWX, to get an update on plans for reactivating their SW service. About a year and a half ago the DX community got word of some possible goings-on as a result of a visit to Jack by a DXer (I think it was Guy Atkins, but I don't recall for sure). I called Jack and learned the fate of their SW service. Sadly, what I learned on the phone rendered an in-person visit meaningless: the mgmt of CKWX's [from this point on, Mr. Krepp means CKFX when he says CKWX - Harold Sellers] AM 'parent' decided not to reactivate the SW service, and has let CKWX's licence lapse. The CKWX xmtr, which used a single 807 tube, ran 10 watts, and dated from the period 1945-1947, gave up the ghost in the late 1994/early 1995. At that time, Jack Weibe explored the possibility of getting the SW svc back on the air using a modified ham xmtr running arnd 100 watts. The estimated cost of doing this was approximately \$100. Unfortunately, this approach didn't pan out: the xmtr would have to be 'type approved' by Industry Canada, and the cost of doing this ranged in the many thousands of dollars. This was deemed unacceptable. Jack then explored getting the SW svc on the air using a new SW xmr. A new xmtr of arnd 1 kw would cost the stn between \$20,000 and \$30,000. Given that the original motivation for the SW svc -- to serve remote fishing communities on the BC coast -- was no longer relevant, the stn mgmt deemed the expenditure unacceptable. The decision to allow the SW licence to lapse followed from this. There are no longer any plans whatsoever to reactivate the CKWX SW svc.



1275 BURRARD ST., VANCOUVER, BRITISH COLUMBIA V6Z 1Z8 TELEPHONE (604) 684-5131

October 8, 1982

Mr. Harold Sellers
Chairman
Ontario DX Association
3 Camrose Crescent
Scarborough, Ontario
M1L 2B5

Dear Mr. Sellers:

Please accept my apologies for the long, and totally unnecessary, delay in my reply to your letter of inquiry regarding CKFX shortwave station of May 25, 1982. In this case, your letter was routed to the wrong person here at CKWX.

CKFX shortwave, 6080 KHz on the 49 meter band, simulcasts the programming of our 50 KW AM standard broadcast station CKWX. Times are 24 hours per day, seven days a week. CKFX is not a relay or STL link. Power output is authorized at 10 watts. The antenna is a simple vertical, ground mounted with approximately 30 radials.

The original purpose of CKFX (1940's) was to supply a source of news and information to the west coast communities of British Columbia where no local AM radio existed at that time. It was thought that 10 watts output directed in a north-westerly direction on the 49 meter band would be adequate to provide that service, especially during short skip propagation periods.

At present, there are no plans to increase power. CKFX transmitter, which was designed and built by the engineering staff in the mid forties, and the antenna was re-located in the Spring of 1980 to the site of our new 50 KW installation. The antenna was reduced to a single vertical element from its original 2 element directional array.

.....2

Depending on high-frequency propagation conditions, the number of reception reports for CKFX can vary from three or four per week to as many as a dozen reception/QSL requests per week. Reception reports have come from as far away as Australia and Northern Norway, but for the most part come from U.S. short wave dx'ers.

I would appreciate receiving a copy of the magazine in which you feature our station. Again my apologies for the long delay in replying to your letter.

Yours truly,



Tricia M. Rattenbury
Executive Secretary

TMR

Encl.

CKFX 6080 kHz Vancouver, British Columbia

The following photocopied pictures and diagram, were supplied by CKWX/CKFX, possibly in 1982.

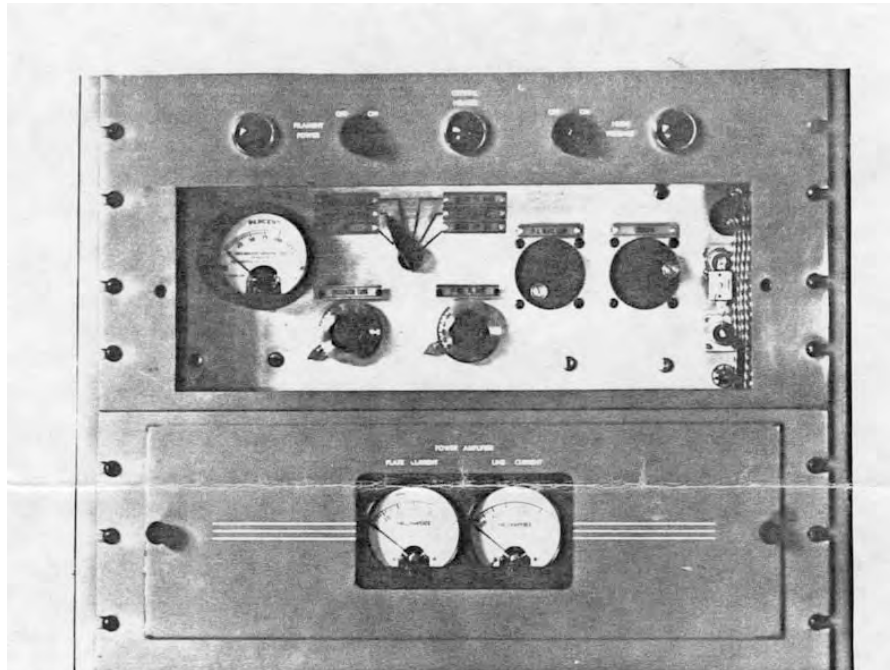


Fig. 1a



Fig 1b

Figures 1a and 1b: CKFX transmitter front panel

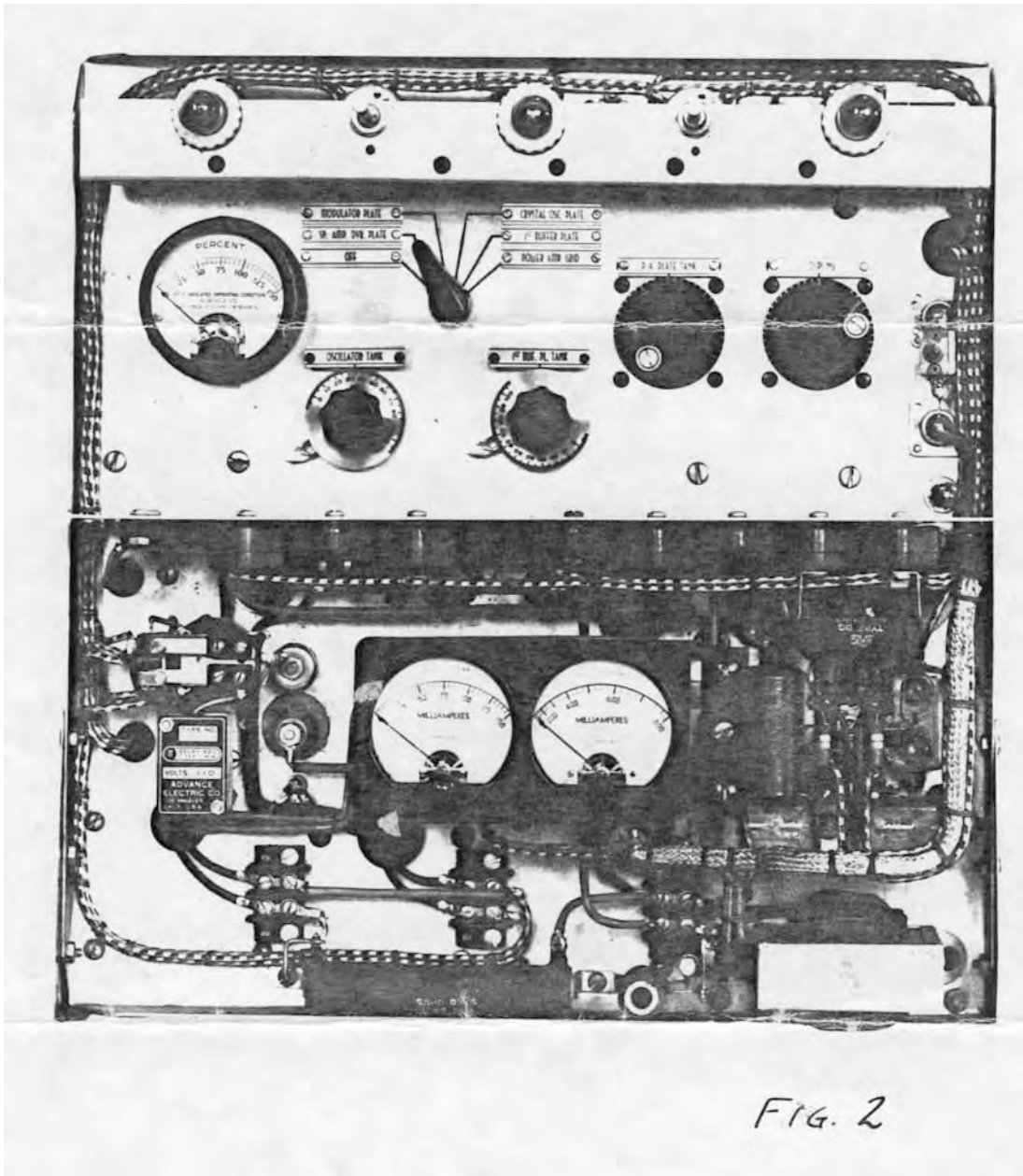


Figure 2: Transmitter with front panels removed

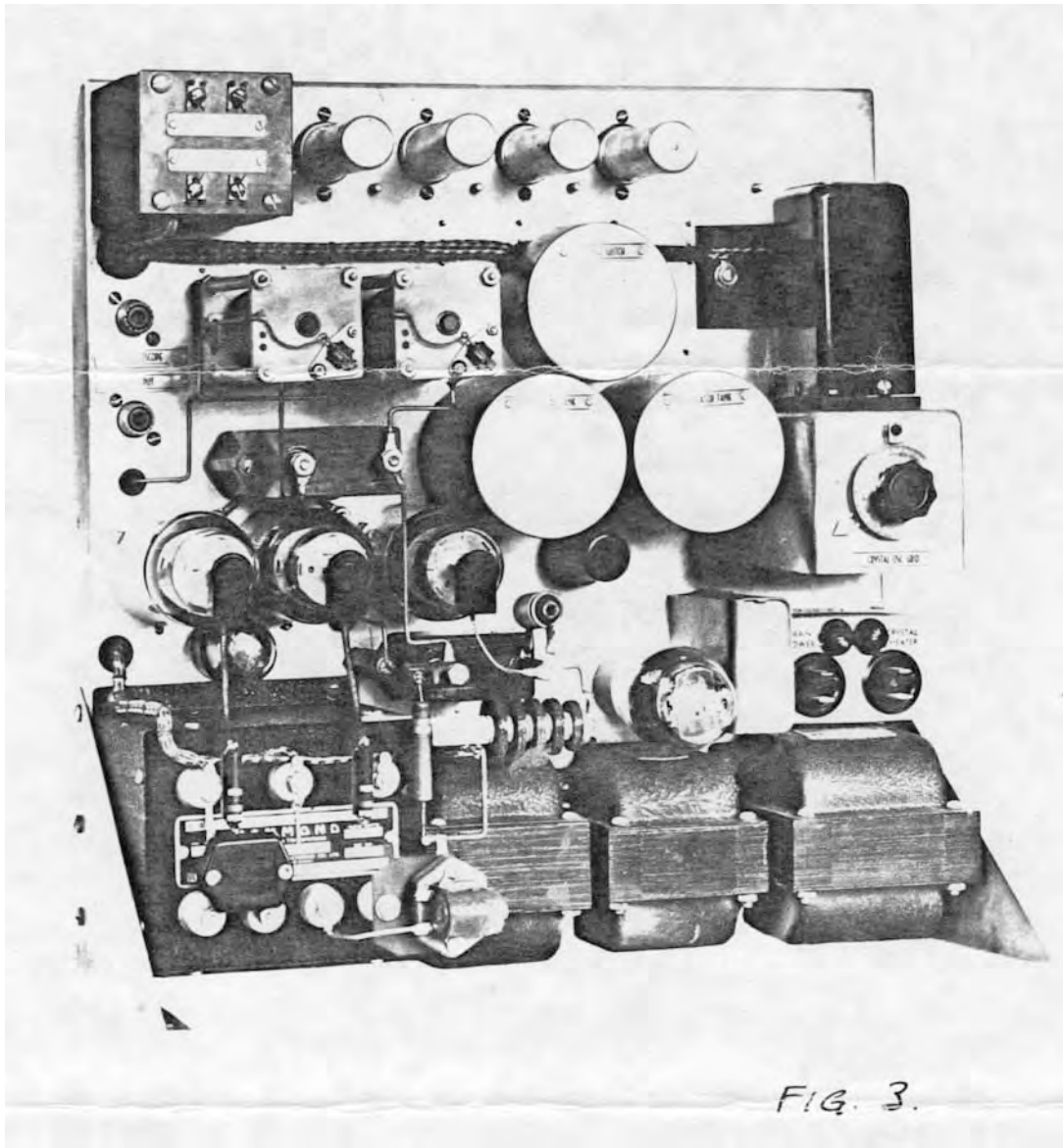
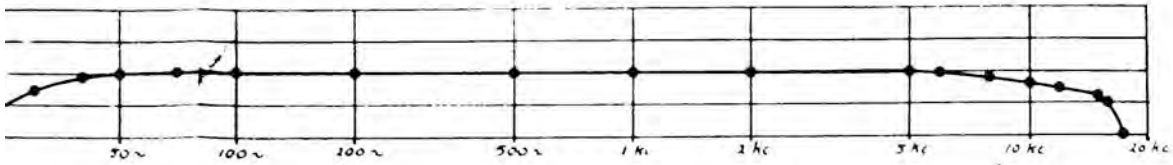
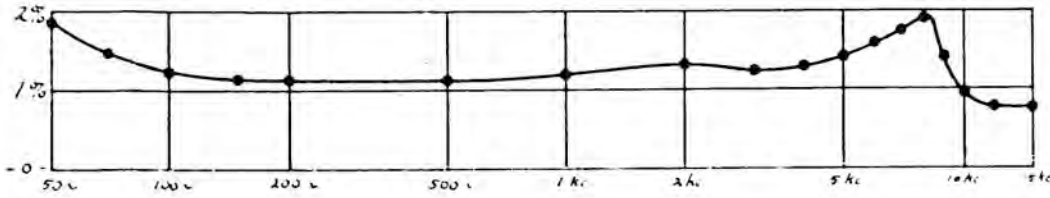


Figure3: Rear of transmitter



OVERALL FREQUENCY-RESPONSE - Constant Input Modulation Factor at 1 kc = 0.95

Load - Dummy Antenna - Resistive - 72 Ω - Output Power - 10 watts



DISTORTION - Conditions as Above

FIG
5b

9/16

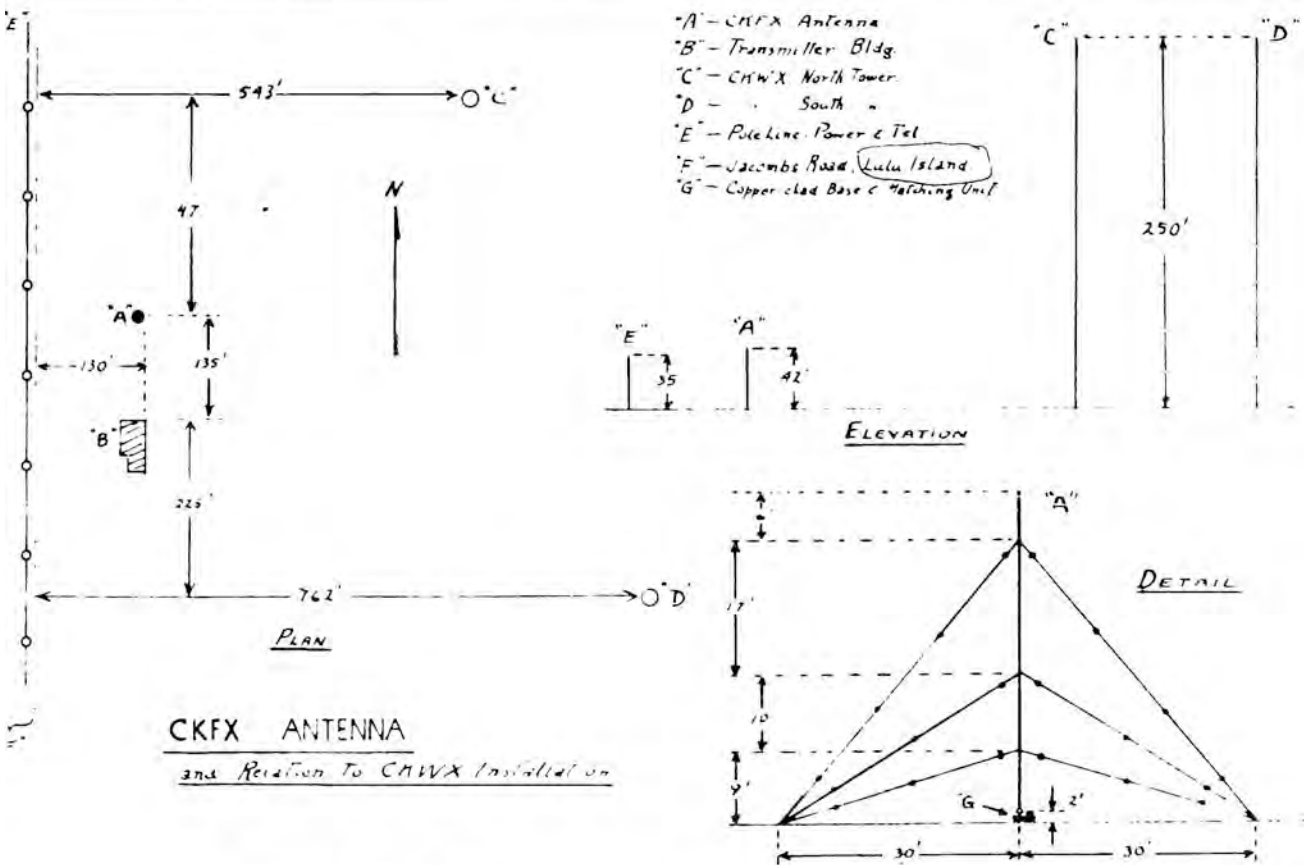


FIG. 5c

FIG. 5

Fig. 5: Antenna Installation Diagram

1989 Photographs
by Harold Sellers



above: CKFX vertical antenna



above: Transmitter building on Lulu Island, CKFX antenna at left, one of CKWX 1130 kHz towers at right

The CKWX/CKFX transmitter site was located near the junction of Blundell Road and No. 6 Road.

CKFX QSL ALBUM

Thanks to Jerry Berg and the Committee to Preserve Radio Verifications for the following.

¹⁴¹⁰
CKFC ~~730~~ kc. VE9CS 6070 kc. VE9BZ 2800 kc.
50 watts ~~100~~ watts 100watts
operated by

RADIO SERVICE ENGINEERS
734 Davie St. Vancouver, B. C. CANADA.
Dear Listener,

Just a few lines as an acknowledgement of your communication, and to verify your reception of *VE9CS March 19-34. No power used only 2 watts*

Needless to say, without the co-operation of listeners we would be unable to estimate the extent to which we serve them.

Reports are valued and appreciated by us and we wish to extend our thanks to you for the trouble you have taken on our behalf.

We hope to have the pleasure of hearing from you in the future.

Yours Sincerely,
Norman Hill Cyril Trott ✓

P.S. Schedules announced during transmissions.

VE9CS, by Bill Sparks, 1934

CKFC **VE9CS**
1410 K.C. 6070 K.C.

DEAR SIR OR MADAM:

This is to verify your reception of Radio Station VE9CS
on the 11th day of November 1936

We thank you for your co-operation in assisting us to ascertain the coverage of our stations and we trust that we will hear from you again in the near future.

STANDARD BROADCASTING SYSTEM LTD.
1001-1004 STOCK EXCHANGE BUILDING
VANCOUVER, CANADA

VE9CS, by Bill Sparks, 1936

CKWX

1010 ~~300~~ KILOCYCLES 100 Watts

WESTERN BROADCASTING Co. LTD.

801 GEORGIA STREET WEST
VANCOUVER, B.C.

≡ November 3rd, 1934.

Mr. Sidney R. Steele,
3606 Homewood Avenue,
Toledo, Ohio.

Dear Mr. Steele:

We wish to thank you for your letter of October 29th, in which you state you picked up our station broadcasting a test program on Monday morning, October 29th, 1934, at 3:02 a.m., P.S.T.

You were certainly tuned in to CKWX and this will serve to verify your reception of the same.

Thanking you, and trusting you will be successful in tuning in on this station often, we are

Yours very truly,

WESTERN BROADCASTING CO. LTD.

Per *Nora L. Reed*

VLR-r

REC'D NOV 8 1934

TAILOW 5131

CKWX

DIAL 980

radio ltd.

S 43 SEYMOUR STREET, VANCOUVER 2, CANADA

MAY 9 1956
MAY 7TH, 1956

NA-46

MR. WILLIAM F. FLYNN
964 THE ALAMEDA
BERKELEY 7, CALIFORNIA
U. S. A.

DEAR MR. FLYNN:

THANK YOU VERY MUCH FOR YOUR CARD ADVISING US OF YOUR
RECEPTION OF OUR SHORT-WAVE STATION CKFX.

WE ARE PLEASED TO CONFIRM YOUR REPORT, WHICH CONCURS WITH
OUR PROGRAM LOG.

BEST OF LUCK TO YOU IN FUTURE DX-ING. ENCLOSED YOU WILL
FIND ONE OF OUR "980 FANS" FOR YOUR QSL COLLECTION.

SINCERELY,

CKWX RADIO LTD.

Eve Corrin

(MRS.) E. CORRIN
PROMOTION DEPARTMENT

/c
ENCL.

P.S. -- WE DO NOT HAVE ANY TROUBLE WITH INTERFERENCE HERE
FROM ZL7.

AN "ALL CANADA" STATION

CKFX, by Bill Flynn, 1956