

## HISTORY OF THE KCRA

(How it started.....Where it went.....where we are now)

**Updated: 11-01-2016 By: George, W8FWG**

*(Original Minutes –See below)*

### **DATE            ITEM**

**03/03/1983**    “ I, Jim Lienau (K9ANU) talked to George Thurner (W8FWG) about the possibility of establishing a 2-meter repeater at the existing Calumet Air Force Station in Keweenaw County.” Jim suggested a frequency pair of: 147.25/85 MHz. He has a complete system: A transceiver, feed line, antenna system and is willing to put it up if we could get permission to do so.

**03/04/1983** I Georg Thurner (W8FWG), talked to the Base Commander, Major Jeff Mogilewicz, at this site. He seemed receptive to the idea and will check it out and call us within a week.

**03/07/1983** I, (George, W8FWG) (own funds) ordered a Yaesu FT-208R from “AES” in Milwaukee.

**03/08/1983** Took a trip to Mt. Horace Greeley with Jim, K9ANU and we looked at four prospective antenna locations:

1.    The “Old” RECEIVER site (now a recreational area for children)
2.    The U.S. Coast Guard tower
3.    The TRANSMITTER SITE
4.    The TELCO (Telephone Company) Building [where W8FWG worked.]

We chose: THE RECEIVER SITE

No word from Major Mogilewicz this date.

Since Jim was leaving town and had a “9“ call, it was decided to use the call sign of “w8fwg/rpt” for this repeater.

The location is about 1520’ above sea level

Drew map per license manual to determine effective height. It is 952’

Transmitter strip is Motorola

Receiver strip is Motorola

Jim has feed line and antenna

Frequency to be: 147.78/18 MHZ with a positive split

Jim will be ordering the crystals tomorrow. He is going to Clam Lake, WI but will leave repeater and all equipment here! About \$800.00 minus the duplexers

Need Duplexers – Cost about \$500.00 (W8FWG will provide funds for ordering) Would like to form a “Keweenaw County Repeater Association.” –KCRA-

Looked over maps of Keweenaw County in TELCO Building and decided to place antenna to favor North Shore and EAST end of the Keweenaw Peninsula.

Jim has duplexers – but they are now on loan to “73” repeater in Winona. Their organization is thinking of buying them from Jim. (They already bought antenna from him.)

Our Chief engineer will be John Samuli, N8JS from Hancock.

### 03/09/1982

Call to Major Mogilowicz : says: “Matter is turned over to Sgt. Gallagher [Of Civil Engineering] – He will contact K.I. Sawyer – real estate division. Will call either at work or at home. Major says there are 9 towers at the receiver site. 3 active and the other 6 are going to be cut down. Also.....we notified Roy Peltoniemi at Michigan Bell, that we would not use the Michigan Bell tower on site.

Repeaters that are now in service as of **03/10/1983**

#### -146 MHz-

146.01 Newberry, MI  
.04 Iron River, MI  
.07 Herman, MI  
.10 Nationwide RTTY  
.13 Winona, MI  
.16 Marquette, MI  
.19 Manistique, MI  
.22 K.I. Sawyer. MI  
.25 Iron Mountain, MI  
.28 Hancock  
.31 (Not assigned)  
.34 Rhinelander, WI  
.37 Escanaba

#### -147 MHz-

147.00 Marinette, WI  
.03 Green Bay, WI  
.06 Canada  
.09 Fond du Lac, WI  
.12 Green Bay, WI  
.15 Escanaba, MI  
.18 Sturgeon Bay, WI  
.21 Sturgeon Bay, WI  
.24.Saginaw, MI  
.27 Green Bay  
.30 Rhinelander, WI  
.33(Not assigned)  
.36 Green Bay, WI  
.39 New Berlin, WI

**03/14/1983**

Call from Sgt. Gallagher saying: “Everything looks good, but we need the name of the organization putting up the station.” Told him it was a private enterprise – gave him name of James Lienau.

**04/08/1983**

Call from Jim Lienau, saying;

1. Antenna arrived
2. Letter received from Wisconsin repeater coordinating group saying the frequency chosen is OK with them.
3. Nothing from Michigan yet.

**04/09/1983**

George, W8FWG, ordered a set of 4-can, Sinclair Radio Labs duplexers. [#141439]

**04/14/1983**

Sgt. Gallagher called and needed to know:

1. Transmit frequency (147.330 MHz) [ New Frequency pair: “33/93”]
2. Power output (60W from xmtr, 3dB loss in duplexer, 30W into feed line -1db feed line loss, approximately 25 watts delivered to antenna)
3. Power consumption? (A.C.)
4. Physical size of equipment [72” high, 20” wide, 20” deep]
5. Antenna gain: 6 dB

W8FWG asked for:

1. Our own tower at the receiver site
2. Our own circuit breaker

The sergeant had not reached his contact a K.I. Sawyer because the man at Sawyer was on sick leave.

**04/28/1983**

Tentative agreement received by K.I. Sawyer AFB for repeater installation at the Calumet Air Force Station.

**04/29/1983**

Written license, good for 5 years received by Jim Lienau, K9ANU today.

Meeting set for Wednesday, May 4, 1983 at 8 pm with Sgt. Gallagher of CAFS with Jim (K9ANU) and myself (W8FWG) at Building #3 [Civil Engineering Building]

**05/01/1983**

Permit for operation of repeater station located in Building 70 at Calumet Air Force Station. (CAFS).

License issued Dated: May 1, 1983

**05/03/1983**

Duplexers arrived – (Still need crystals)

**05/04/1983**

Lease discussion

Meeting with Sgt. Gallagher

John Samuli.....Jim Lienau.....George Thurner

Looked over installation Plan for installation on Wednesday May 18.

**05/05/1983**

Called FCC in St. Paul. MN – No paperwork needed for the new repeater.

**05/10/1983**

Crystals received

**05/16/1983**

Signed approval from Omaha, received by Jim, K9ANU

Verbal approval from Major Mogilowicz to go ahead with repeater and antenna installation.

**05/18/1983**

Repeater installed Time on air: 11:48am

Frequency: 147.93 Input [Receive]

147.33 Output [Transmit]

Details:

W8FWG repeater installed and turned on, this date. At 11:48am at the Calumet Air Force Station, Keweenaw County, MI. Location: Building 70.

Hour meter reading at install: 1.5

47 watts out of duplexer

Reflected power: 1 watt

Coordinates of Latitude and Longitude:

47 Deg. 22 Min. 30 Seconds North Latitude

88 Degrees, 10 Minutes, 19 Seconds West Longitude

Site Elevation: 1480 Feet

Tower Height: 80 Feet

Antenna Length: 20 Feet

Total: 1580 Feet High

Installation Team Members:

Jim Lienau, K9ANU

John Samuli, N8JS

George Thurner, W8FWG

Roland Burgan, KB8XI

John Meyers, WD8SCR

Danny Miller, KB8W

Plate Power Input: (By computation)

$E_p$ : 660 volts

$I_p$ : 170 ma.

Input Power: =  $E \times I$  = 112.2 watts Input

Line Voltage: 113 VAC (Panel meter)

2-1/2" Timer

Contact: Sgt. Richard Gallagher 337-3864 [Res.] or 337-4200 EXT 311 [CAFS]

Major Mogilowicz 337-4200 EXT 301

-----AFTERGLOW-----

1. The 147.330 MHz repeater was really started by one person. He is Jim Lienau, K9ANU
2. Because he knew that George Thurner (W8FWG), who worked at the Calumet Air Force Station, he enlisted the aid of George, to get the ball rolling and get a repeater installed in Keweenaw County
3. Why Keweenaw especially? Because of the varied terrain in that county, it was felt there was a need for a HAM radio repeater up there.
4. George (W8FWG) knew “the lay of the land” as he worked for Michigan Bell Telephone co. at this site for some 15 years from 1957 to 1972.
5. Through the kindness of the Keweenaw County Commissioners, and also the help of Sheriff Ronald Lahti, and the generosity of the U.S. Air Force, a repeater was started up there, and here is “The Rest of the Story.”
6. The “Association” as it was first called, was started on June 15, 1983 in Laurium.
7. We started with 16 Charter members.
8. We originally were just an “Association” but later became an affiliated club.
9. We are an affiliated club (with ARRL), and our freq. pair is coordinated by UPARRA of the U.P. of Michigan (We pay \$5.00 to them, annually as dues.)
10. We became an Incorporated club (Corporation) on May 22, 1996
11. Originally the repeater had the call sign W8FWG/RPT, later we got a club call sign of KB8ZHB, and still later got the vanity call sign of K8MDH in memory of one of our members, Peter Englund, with permission of the Englund family.
12. We started with no capital, only donations, so the repeater, feed line, antenna system, power supply, cabinet...the entire repeater was all donated. The purpose is spelled out in 6 items in Article 2 of our K.C.R.A.'s Constitution.
13. We had permission of the USAF to use one of the buildings on base (Building 70) the old “Receiver site” .....and we got it rent free, and heat was paid for by the Air Force, and no antenna rental fee was charged. Later we moved up to the “27 Tower” or Building 154, our present location on the first and fourth floors of that building. (147.315MHz on first floor, and 443.150 MHz on the 4<sup>th</sup> floor).
14. (New Yaesu DX-1 Repeater on the fourth floor in the year 2015)
15. We were on two teleconference loops ...one to Barry Goldwater’s home in Arizona,(K7UGA), the other to a world-wide one out of Chicago.

16. John Sincock was the first President, and W8FWG, was the first Sec-Treasurer. John Samuli (N8JS), was the first Engineer and Jim Lienau was working with him on the T/A Committee. Paul Smigowski became President with the death of John Sincock. He was succeeded by Lee J. Royce, KC8DYG . With passing of Lee Royce, Gary Hansen, K8YSZ became President.
17. We had an Technical/Advisory group of just two people (Jim Lienau and John Samuli) Later we added more members (3 more)
18. Our Base Commander at the Calumet Air force Station was Major Magilowicz and he approved our installation.
19. Later when it came to the addition of a controller we didn't have enough money to buy it, \$1,381.00).....so members chipped in whatever they could afford, and we bought the ACC RC-96 controller. (ACC is now out of business.) The original controller was home-brew by Jim Lienau, and provided the time-out timer, and CW ID only.
20. We did pay for the antenna (to Jim Lienau)...the sum of \$287. The four-can duplexers were paid for and donated by W8FWG.
21. There were no dues for the first few years, and dues came into being in Sept 1, 1991, or 8 years after its inception.
22. Telephone connections discussed. It was decided that only those person using the autopatch and or autodial system would fund it. Dues would later become \$5.00/year and autopatch subscriptions would run \$10.00/Year with autodial slots going for \$5.00/slot/year. (and one could have as many autodial slots as they wanted at \$5/slot/year.) New Dues: \$13.00/Year Individual and \$18.00/Yr for Family Membership Later: All autopatch and autodial slots (2) maximum were FREE. Originally AT&T was our telephone provider, and in 2015 Pasty.NET became our telephone provider. Thank you Jonathan and Charlie Hopper for your generosity. Pasty. NET also supplies FREE power to us! Thank you to the Hopper Family.
23. When the government left (Calumet Air Force Station).....it was taken over by Keweenaw County and later leased to a group called "YSI" (Youth Services International.) When they left, the gates were closed, and it is said that a new youth group may be moving in there soon, but no time frame was given.
24. We never had the need for a VP, and our Constitution was a simple one, yet, in looking it over, I see that a few changes were necessary. A VP was added later.
25. We had a number of transmitter and receivers over the years, and we received many donations,also.

26. Our present balance in the bank is Positive and we have no debts incurred.

27. We had only two meetings per year, (Spring and Autumn), and originally met at the First of America Bank in Laurium, later at the clubhouse of the CCRAA, and then at the Keweenaw Pines Apartments in Mohawk. Later 1108 Bumbletown Rd

28. We now have four meetings per year, JAN-APR-JUL-OCT. The second Wednesday of each quarter at 7 pm at the home of Gary Hansen, 1108 Bumbletown Rd, in Keweenaw County.

An E-Mail message notifying us of the resignation of Paul Smigowski, N8ILY as President , and Article 7 of our Constitution calls for the vacancy to be filled at a special meeting called for by the officers. Paul's resignation came to us via E-Mail on Monday , October 11, 2004. Lee Royce became President with the resignation of Paul, N8ILY.

29. In addition: Article 9 says that these articles may be amended by a  $\frac{3}{4}$  vote of the governing body of this organization.

30. Present Offices of the club are:

31. President: Gary, K8YSZ

Vice Pres. Bill, KD8JAM

Secretary: George, W8FWG

Treasurer: Bill, KD8JAM

23. Web Page: [www.kcra-mi.net](http://www.kcra-mi.net)

24. A UHF Repeater at 443.150 MHZ with a PL tone of 100.0 Hz was added in 2014

It is operational on the fourth floor of this building

25. To save some climbing of stairs a small 8 X 8 foot enclosure was built on the first floor by KCRA Members and the new Motorola MSR-2000 repeater is installed there.

It is run by battery power at all times, with a small battery charger/maintaining floating the battery. The RC-96 controller allows voice commands to be turned off and on remotely by telephone and a group of six people act as control operators performing this function.

-----**IN CONCLUSION**-----

From the very begining, and up to the present time we have been blessed many times over. Have a look at this:

1. We received a building for our equipment rent free
2. We received FREE power, courtesy of the U.S. Air Force
3. We received rent-free space on an existing tower
4. We received a free tower
5. When we were forced to move from Bldg 70 to Bldg 154 we had help of our members

6. We helped move Keweenaw Co Road Commission and Keweenaw Co. Sheriff radio installation from one building to another at no cost to these agencies
7. We started with zero capital, and now have over one-thousand dollars in operating revenue
8. We needed a controller that cost over \$1300.00 and the membership came up with the money
9. We were able to supply FREE autopatch service to our members after we got on our feet.
10. We are able to supply two FREE autodial slots to our members
11. The Peter Englund Family allowed us to obtain a Vanity Call sign of K8MDH for our Club
12. We have provided Community Service in the way of bike races, dog-sled events, Cross Country ski races, and other Marathons throughout the years, at no cost to the sponsoring organizations
13. We were especially blessed to obtain an entire spare repeater,. Complete with duplexer and antenna systems.
14. A high-capacity alternator was donated to the club by one of the members
15. With the expertise of Bill LaBell we had Echo Link installed with a computer connection from his house on a separate link to the base, at no charge to our club.
16. With advanced technology, I am not at all surprised to hear of a digital repeater being donated by Howard Klann, KD8ABP (Thank you, Howard!)
17. To the wives and friends who gave of their time in supplying food at the conclusion of our meetings we are eternally grateful.

By the Grace of God, we have built tested and improved our radio system over the years, with at least five different repeaters, at little cost to our organization.

Thanks to the membership.....it is you.....through God, who made all of this possible.

Respectfully submitted,

George R. Thurner, W8FWG  
Secretary, K.C.R.A. Incorporated