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> In an emergency, tune Into our repeaters, UHF 444.700 or VHF 147.390 or HF 3.755 LSB or Simplex 147.510 For coordination and assignments.



Radio Amateurs ﷺCanada

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VE3ERC-LUB



See page 3- "Work FM Satellites with Your HT". Here is a photo of a \$4.00 Satellite Antenna you can build. This article by Dave KG0ZZ is found at:

http://www.amateurradio.bz/4_dollar_satellite _antenna.html

Dave also has a Youtube video with detailed building instructions and demonstration.

THE PREZ SEZ!

This club is Radio-ACTIVE

President's Update for October 2019

The following is from

The RAC Bulletin regarding the World Radio Conference which is underway at this time. This conference is very important and affects the future of all radio amateurs.



For immediate release:

https://www.rac.ca/world-radiocommunication-conference-2019-is-underway/

The <u>World Radiocommunication Conference 2019</u> (WRC-19) is now underway in Sharm el -Sheikh, Egypt and is being held from October 28 to November 22, 2019.

Bryan Rawlings, VE3QN, the RAC Special Advisor at World Radiocommunication Conferences, will be providing updates via the RAC website and social media on the issues and processes that ultimately determine Amateur Radio frequencies around the world.

We will also be including a report on the proceedings and outcomes of WRC-19 in a future issue of *The Canadian Amateur* magazine.

Canadian Amateurs who wish to stay abreast of how all of these issues play out should subscribe to RAC bulletins, watch for news postings on the RAC <u>website</u>, and monitor RAC's Twitter and Facebook accounts during the Conference using the hashtag **#RACatWRC19**.

For more information about WRC-19 please visit: <u>https://www.rac.ca/wrc/</u>

Alan Griffin RAC MarCom Director Thanks to Mike VE3MKX for the website. This article is used with permission.

http://www.k6lcs.com/k6lcs/Docs_files/satbr27.pdf

Work FM Satellites with your HT!

Most hams already have the necessary equipment to work FM amateur satellites. This guide offers all the information you need to "work the birds."

All cited resources are available to you on one Web site:

http://www.work-sat.com

If you have 2M and 440 capabilities (either "split frequencies" in one HT, or two radios), you can work an FM amateur satellite! For example, in satellite SO-50's **VHF/UHF (V/U)** mode, the **UPLINK** frequency (**to** SO-50) for FM voice is 145.850 MHz*. The **DOWNLINK** frequency (**from** SO-50) is 436.795 MHz*.

First, you need to know **WHEN** and **WHERE** the satellite will be passing over your location. There are several commercial computer programs^[1] that will tell you. In the home office, I use **MacDoppler**. Outside, though, I use **PocketSat** on my Palm PDA or iPod touch/iPhone. On my netbook, **Nova for Windows** and **SatPC32** are amazing. But **free of charge** info is also available online at ...

amsat.org - or - heavens-above.com

Plug in your longitude and latitude coordinates on either or both of these sites, and you can access amateur satellite pass information.

The one "absolute" for success is to **open up your squelch**. We are talking about "weak signals" from 500+ miles away - so don't expect the satellite to be strong enough to break squelch like your local repeater. Sure, it's a little noisy - but that's part of the process: That noise is an aid in locating the satellite. When the frequency starts exhibit **quieting**, that's a sign that you are **capturing** the satellite's signal.

Improve your HT's stock antenna (most are rated at **NEGATIVE** 2-3 db!). For BNC connectors, **Pryme**'s AL-800^[2] will make the difference. For SMA, the **Diamond** SRH-320a or **Smiley** 270A are good performers. Using an **Arrow** dual-band^[3] Yagi is better. If you prefer to homebrew your antenna^[4], go to the work-sat.com Web site's ANTENNAS page for construction article links.

Set up your radio to tune for the **Doppler effect** on the 440 downlink. Start listening **above** the center frequency^[5] - you will **acquire** the satellite sooner and clearer. When the downlink gets scratchy or fuzzy, tune down 5KHz at a time, and reception should be clearer. Only transmit when you can **clearly** hear the satellite. Follow the signal down in frequency as the pass continues.

Don't hold your whip antenna upright. Held in a vertical position, your transmitted signal is hitting land-based receivers. You need to tilt your HT's antenna so that it is **perpendicular** to the airborne satellite. Very few of the ham satellites are land-based (grin), so you must **TILT** your antenna about the same amount as the satellite's **ELEVATION**. You'll quickly get the hang of it - and hear the difference! You'll have better results with a modest beam or Yagi.

Ideally, we should all be working the satellites in **full duplex** mode, where we can simultaneously listen to the downlink as we are transmitting. Although this method is preferred, it is not mandatory: Carefully monitor the downlink, and wait for a break in the conversations to announce yourself. You might find it helpful to record your sessions for later review. Even if you don't make a contact during a pass, a recording can help you recognize the callsigns and voices of other operators. Pocket recorders or smartphone apps are great for this. If working fullduplex, use an earpiece or headphones to monitor the downlink.

Knowing your grid square - and having a grid square map - is a quick way of identifying locations of what you will hear. The **ARRL** and **Icom** have grid square maps: Icom's is free and available at better ham radio stores^[6].

It just takes a little preparation and planning for working amateur satellites. Not every pass is workable with an HT — don't go after the sub- 10° elevation passes

as you start "working the birds." Choose your passes wisely: Working higher elevation passes will give you better results.

When you clearly hear others, listen for a break in the action, and use the ITU-approved phonetics^[7] to announce your callsign, grid square, and op mode:

"KILO-SIX-LIMA-CHARLIE-SIERRA, DELTA-MIKE - ONE-THREE, handheld."

Check work-sat.com for the satellites' home Web pages – to make sure the sat is in the mode you can work with your setup!

Ask questions! Find an elmer in your club for support, or use the Work-Sat.com YahooGroup for any questions.

Clint Bradford, K6LCS NASA / ARISS school technical support

www.work-sat.com clint@clintbradford.com

Skype, Twitter: clintbradford

Updated 08/13/2013

<u>Notes</u>

Access this Web site for all citations, links, resources, and updates:

http://www.work-sat.com

Links to Nova for Windows, PocketSat, MacDoppler, SatPC32, HamSat DROID, SATme, GoSatWatch. GPREDICT – and more – available on the Tracking page at work-sat.com.

The Pryme AL-800 telescopes to 34" and collapses to 10". It is packaged with a 9" rat tail - which you can use for everyday use. Use caution with this massive, heavy antenna: It has the potential of placing a lot of stress on your radio's BNC connector.

Arrow's Model 146/437-10WBP is a dual-band cross-Yagi design, with a diplexer built into the handle, with 3 elements on 2M and 7 on 440. See it in action in the December, 2007 issue of CQ Magazine. Links to Arrow – and others – are on the Antennas page at work-sat.com.

Alex Diaz' Yagi-Uda plans, AMSAT's "Cheap and Easy" sat antenna articles, a tape measure beam construction article – and LOTS more – are all on the Antennas page at work-sat.com

For example, here's how I have programmed my radios for **AO-27***:

Ch #	Name	TX Freq	CTCSS	RX Freq	CTCSS
101	27 +2	145.850	None	436.805	None
102	27 +1	145.850	None	436.800	None
103	27 MID	145.850	None	436.795	None
104	27 -1	145.850	None	436.790	None
105	27 -2	145.850	None	436.785	None

And here's how I have programmed my radios for **SO-50***:

Ch #	Name	TX Freq	CTCSS	RX Freq	CTCSS
201	50 +4	145.850	67.0	436.815	None
202	50 +3	145.850	67.0	436.810	None
203	50 +2	145.850	67.0	436.805	None
204	50 +1	145.850	67.0	436.800	None
205	50 74	145.850	74.4	436.795	None
206	50 MID	145.850	67.0	436.795	None
207	50 -1	145.850	67.0	436.790	None
208	50 -2	145.850	67.0	436.785	None
209	50 -3	145.850	67.0	436.780	None

A .pdf copy of Icom's grid square map is available on the Shack Aids page at work-sat.com.

Download the ARRL's Handy Ops Guide (FSD-220) at - you guessed it - work-sat.com.

[*] Always consult the sats' control team pages for possible frequency changes and updates (and problem reports). **As of April, 2013, AO-27's V/U mode is inoperable.** What's your single source for links to the ops schedules for the easily-worked FM birds? **work-sat.com** !

CONTRIBUTIONS TO VE3ERC-CLUB NEWSLETTER

Do you have an article you'd like to submit? Or photos? Do you have any comments you'd like to make?

Perhaps you'd like to share a photo of your shack, a special project you are working on or a special

> interest! SEND THEM TO: Bob bobve3ixx@gmail.com (519-787-2279)

So I bought a new transceiver and she asked...



"Are you going to sell any of your old ones?"

WEDNESDAY NITE NET CONTROLLERS

SEPTEMBER 11 - REG VE3RVH SEPTEMBER 18 - FRANK VA3FJM SEPTEMBER 25 - M E E T I N G OCTOBER 2 - BILL VA3QB OCTOBER 9 - TOM VE3DXQ OCTOBER 16 - WES VE3ML OCTOBER 23 - M E E T I N G OCTOBER 30 - PAUL VE3PVB NOVEMBER 6 - BRIAN VA3DXK NOVEMBER 13 - BOB VE3IXX NOVEMBER 13 - BOB VE3IXX NOVEMBER 20 - TED VE3TRQ NOVEMBER 27 - M E E T I N G DECEMBER 4 - AL VA3TET Tom submitted this story of his journey which started as a young boy in his native Hungary. Part Two completes the story to the present day.

My (Radio) Hobby

PART TWO

by

Thomas Daniel (Dániel Tamás)

I bought my next receiver in preparation for some contract work in Pakistan and overseas delivery of airplanes (known as ferrying). I always took my ICF-2010 with me wherever I went. It was my anchor and kept me informed of home and the rest of the world. I spent some time in Iraq, back when Iraq was at war with Iran and were "the good guys." They confiscated the batteries from my receiver, but at least left me the radio. There were no batteries available anywhere in the country and I was left with only a power supply which actually worked on 220 volts, but was not much good when they turned the power off for entire cities at night in fear of air raids by the Iranians. I was popular among my expatriate colleagues and they'd congregate in my room to listen to the radio whenever there was power. Even in the 90's, radio gave people a sense of security and comfort, especially while we were away from home in hostile surroundings.

That era of my career ended and I got a job with a company that was contracted to provide airplanes and crew for the Swiss Red Cross to carry out humanitarian aid in Africa, namely Angola and Mozambigue. There would be no entertainment available except what you brought with you and I would again be out of touch with the rest of the world, this time for two moths at a time. Since both of those countries were war zones, I thought it would be good to have a radio with me in order to keep informed about current events, including what was going on in the country that I was in as the local news would be full of unreliable propaganda and would be broadcast in Portuguese, which I didn't understand. I took the ICF-2010 with me. As it turned out, it proved to be the best receiver I could have chosen for my purposes. This time I hid my stash of batteries in the airplane that I brought in and retrieved them later. I had no problem picking up the BBC, Voice of America, Radio Netherlands as well as Canada. For the first time, I was able to listen to Radio Budapest too. I also picked up many other broadcast station as well as hams. My antenna consisted of a single wire arranged to lay flat on the tile roof of our residence with a lead-in down to my balcony. That's were I spent most of my evenings with my fellow Pilots, mechanics and a couple of Red Cross nurses who were also eager to hear of news from home. Beer was flown in from Switzerland weekly by the Red Cross.

By the way, when I say that I was "flying," it was actually more a question of sharing the available airspace with a lot of bullets. My airplane was hit once with sixteen bullets going through my left wing. Luckily the Twin Otter doesn't have any fuel in its wings and we didn't explode. How it was that none of the flight control cables or push-pull rods were damaged I don't know, but I was able to land without any difficulty. In fact, I was able to fly the airplane out the village that we were visiting, with the bullet holes taped over with "thousand-mile-an-hour" metal tape, later that afternoon. The official conclusion of the subsequent investigation said, "The Red Cross airplane flew through the path of the soldier's bullets." Clearly, I should have anticipated the path of the soldier's bullets and should have refrained from flying through it. "How careless of me," I thought. As it was, the soldier in question was trying to impress a girl by writing his name in the sky using tracers.

However, he had been twice decorated by the President of the country and could not possibly be found to be at fault. To calm the waters and in order to get back to feeding the starving folks who were waiting for us to bring them food, medicine and Red Cross nurses in the villages, I promised not to fly through the path of any more soldiers' bullets.

I don't know when the second incident happened. All I know is that during our customary morning pre-flight walk-around, five pairs of eyes, including mine, inspected the airplane and it had no holes in it. We were very scrupulous because most of the shooting in the country happened at night and it was advisable to check each airplane very carefully. The locals would sneak onto the airport and steal fuel from our airplanes via the drain valves and use it to heat their homes and cook their food. That would not have been a problem because the drain valves were very small, just big enough to drain any accumulated water in the tanks, but they were very conveniently located on the belly of the airplane. The problem was that they were afraid of getting caught and they would replace the fuel they'd taken with water so that we wouldn't notice on the gauges that there was fuel missing. We had to put padlocks on the fuel filler caps to prevent them from doing that.

I had not been more than a hundred yards from the airplane all day and I heard no gunfire. Yet in the evening as we walked away from the airplane, the setting sun was shining through five holes in the vertical stabilizer. To top things off, a few weeks later I taxied over an anti-personnel mine which split the left main wheel in half. No one was ever hurt during these incidents. On the other hand, four people died in my airplane while airborne. They were the results of various injuries and illnesses from which people were suffering. There were an estimated eight million mines laid by both sides in the conflict and, contrary to The Geneva Convention, no one had bothered to make a map of where they had been placed. Many pigs and cattle did not require butchering because they were often blown up in the fields where they were being pastured. The tragedy though was that about half of the children in the country walked around on one leg, some of them so young that they thought that having one leg was normal. Hence Princess Diana's visit to Angola in an effort ban anti-personnel mines. I also assisted with two births that occurred while we were airborne. Back to radios.

We had HF radios in our airplanes and sometimes they even worked, but we were not supposed to use them due to an agreement that the Red Cross had made with both sides of the hostilities as a condition of allowing us to operate in their country. This was probably a result of their suspicion that we might transmit troop positions to the opposite side or inform the outside world of the true progress of the war. In spite of this prohibition, we sometimes made calls to Berna Radio in Switzerland who would connect phone patches so that we could call home. We, that is the Red Cross could not afford for either side to triangulate our position and find out that we were breaking the conditions that allowed our operations in the country. Berna Radio had antenna arrays that could be aimed and they required us to tell them our position during our initial call-up. Therefore, we had to keep our position vague like "east Africa," or "nine thousand feet." By prior arrangement Berna knew that when they received such an inane position report, it was either from Angola (east Africa) or Mozambique and could then aim their antennas accordingly. These short conversations were enough for parents, wives and girlfriends to find out that we were still alive.

The situation was much less dangerous than it sounds. Nevertheless, it was the highest paying job that I ever had, almost the same as a senior Captain flying for an airline. Alas, there was an incident involving a colleague and then my wife asked me not to go back to Africa. Having survived three strikes already, I didn't need much convincing and since I usually have the last word in these conversations, my reply was, "Yes dear."

What followed was two years of virtual unemployment and finally a job as a Mechanic at Canadian Airlines in Vancouver. After a year of living apart with only monthly visits back to Ontario, and motivated by Vancouver real estate prices, we decided that I'd transfer back to work in Toronto. Unfortunately, it was to work a perpetual midnight shift, 9:30 p.m. to 8:20 a.m. - airplanes fly during the day and get fixed at night. The shift was four nights on, four nights off and of course each day was preceded by an hour and a half drive from Fergus to the airport and followed by an hour and half drive home in the morning. In 2000 we were bought by Air Canada and our maintenance operations were moved from what was the Wardair hangar, which was subsequently torn down and sold with the corporate part of the building becoming the office of the GTAA (Greater Toronto Airport Authority). In all, I worked sixteen years on a midnight shift, with a couple of notable exceptions.

For two years I worked for AC Jetz, the charter part of the airline, inherited from Canadian Airlines. It was company policy that a Mechanic accompany every charter flight. There were four airplanes involved country-wide in doing charters. Mostly, we flew all of the Canadian and three America hockey teams to their out-of-town games, their road tours. We in Toronto also flew the Raptors and did executive charters for large corporations. One of my charters sent me to Exuma in the Bahamas for twelve days in February. The airplane was needed elsewhere and left me with nothing to do except soak up the sunshine. AC Jetz was the best gig that a Mechanic could have. There were no supervisors looking over our shoulders, trying to micro manage our every move. We had to reply on our knowledge, wits and creativity to troubleshoot and repair the airplanes in our charge. On the road, we were the managers of the operation and Pilots had to come to us to ask if they could fly our airplanes. We took real ownership of the hardware with which the company entrusted us. Mind you, all Mechanics consider the airplanes on which they work to be their personal property. After all, their fami-lies will probably fly on them sooner or later. The responsibility really hits home though when there's a billion dollar sports team riding on your handiwork. This assignment also meant that we got to work on all parts of the airplane. Normally, only Avionics worked on electrical and electronic components, by union agreement. However, out on the road we got to work on everything. I enjoyed that.

The teams we were flying didn't play during the summer and we were sent back to our night shifts. However, I was asked to join STOC (Station Operations Center) for the summer. This was more or less daytime work on one of two shifts, early morning to mid afternoon and mid afternoon to midnight. However, we usually got to go home at 10 in the evening after the last airplane left Toronto when the evening Ramp and Hangar shifts took over. The work in STOC involved taking radio calls from Pilots in the air or on the ground. These calls would be to report faults that they were experiencing or had experienced during their flight. It required a reasonable knowledge of the systems of all of the aircraft in the fleet and being proficient at troubleshooting. On average, we could diagnose and repair faults successfully about half of the time. Most faults were due to the amount of computerisation in modern airplanes. I am grateful for the people who designed these computers into aircraft systems because they paid for my house... A lot of faults could be cured by resetting circuit breakers and the black boxes to which they were connected. The art was in knowing the various switch and control positions the systems were required be in, which circuit breakers should be pulled and reset and in what order. If that didn't work, we would be the folks who told the Pilot to come back to the gate for repairs. We were not popular with either the passengers or the company for turning a flight around to one that may end in a cancellation. We had to be pretty confident of what we were doing at times like that and we were often taken to task for our decisions. We also had to dispatch appropriate Mechanics to fix the reported faults and order parts from Stores, as required. What was most challenging was having to justify our decisions to Management who were often unfamiliar with the aircraft systems. They would expect us to give them an estimate of when an airplane would be ready for flight again. With the airplane still taxiing back from the runway, this was an impossible task. Often I would have to get silly with managers and answer, "I'm looking into a black hole and you want me to tell you precisely how deep it is. How reasonable is that?" I was not very popular in STOC, yet they kept asking me to come back.

I worked an extra two years after I became eligible for retirement just to make up for the four years that I was unemployed during my career. I retired on December 1, 2015.

During the last couple of months I've revived my interest in radio and decided to finally get my Amateur Operating Certificate, now that Morse code is not required. Although, I'm becoming interested in CW for some strange reason. For now I'd just like to get on the air. In the meantime, my Sony ICF-2010 receiver needs some attention and I've started boning up electronics again. My conclusion is that for starters, I should recap the entire radio. There are also a couple of modifications that I could make to improve performance, according to the internet. Another thing that is kind of related to my renewed interest in electronics is board-level repair of smart phones and laptops. I'm hoping to make some beer money by repairing iDevices.



HAM? HAM radio? ham radio? Amateur Radio? amateur radio!

By Dan Romanchik, KB6NU

On the ARRL PR mailing list, we've been discussing the proper way to refer to amateur radio. What brought this up was an email from one list subscriber, Richard, WB6NAH, who was (rightfully) proud of the work that his club—the Skagit Amateur Radio Emergency Communications Club—was doing. He noted that they were even featured in the police department's emergency preparedness brochure:

[[download image from http://www.kb6nu.com/wp-content/uploads/2017/09/skagit-arc-768x1024.jpg]]

As you can see, the brochure refers to "HAM radio" and "HAM radio operators."

Referring to amateur radio in this way just drives me crazy. "Ham radio" is just a nickname for amateur radio, and "HAM" is certainly not an acronym for anything. I congratulated Richard on getting his club included in the brochure, but noted, "...it's not HAM radio! It's either 'amateur radio' or 'ham radio' (ham is not an acronym). I hate to be nitpicky about this, but as a professional writer, this usage just drives me crazy." He replied, "I agree on Amateur Radio, that was the city's call."

That kicked off the discussion.

One ham replied to me privately, "Thank you...I am continually trying to explain that it is not an acronym or abbreviation."

Another replied to the list:

The most correct term is "amateur radio" or alternatively "ham radio", both written in normal case. If using "ham radio", it is a best practice to first write "amateur (ham) radio" in the first non-header/non-title occurrence.

Some will write "Amateur Radio" in proper noun format (first letters in caps) and while this may be acceptable to many and in certain venues, anyone using a style handbook will say it is incorrect. Less correct is to write "Ham Radio" in proper noun format as this is a slang term, albeit a popular one. Of course either term may be written as proper nouns when part of a title or name of an organization.

Least correct is to write "HAM" in all caps; as stated by others, ham is not an abbreviation or acronym. Writing it as "HAM" is completely wrong, will drive many people bonkers, and should be avoided at all costs.

Ward, NOAX, offered this explanation:

To clarify where the capitalization originated, there is a long-standing ARRL Board Directive, decades old, stipulating that the words "Amateur Radio" be capitalized in ARRL publications and documents. Most non-amateur publications return it to the lower-case style that is used for non-proper nouns.

One guy got a little miffed that we were wasting our time discussing this at all:

You know, I've been reading this thread and I think people are getting too hung up on very minor details. The bottom line they got PR. So something wasn't spelled right or capitalized, so what. The message got out and IMHO that's the bottom line. Let's not waste any more bandwidth on this. ___

I agreed that it was great that they were included in the brochure, and that we were probably beating this topic to death, but I don't think these are minor details. I said that PR professionals pride themselves on getting the details right. So should amateur radio PR people.

I'll give the final word to Dan, AI4GK. He wrote:

I don't think that standardizing what we call ourselves qualifies as getting hung up on minor details. If we don't have a standardized way of referring to us, how can we expect a public, who already is confused, to understand who we are?

I don't think that you can argue with this. Let's avoid confusion by using "amateur radio" when writing about our hobby/service. I'd even urge the ARRL to rethink their use of "Amateur Radio." Sometimes, it may be OK to use "ham radio," but it's just not correct to use "HAM radio" or just "HAM."

Dan, KB6NU, is the author of the "No Nonsense" amateur radio license study guides and blogs about amateur radio at KB6NU.Com. When he's not picking nits about the name of our hobby, he teaches ham radio classes and operates CW on the HF bands. You can email him at cwgeek@kb6nu.com.

KLEY DINI

ERC SILENT KEYS

Harry Eix VE3EIX Wallace Caughell VE3LCR Ralph Brubacher VE3EUC Ken Moore ? Syd Lennox VE3CQO Bill Graham VE3ETK Michael Dent VA3FTL Bing Harris VE3BAH Ross Mills VE3BZC

Wayne Peti VE3CWY Bob Naylor VE3AEE Fred Mosher VE3IXY Ted Bodman VE3CD Alan Ward VE3UTO

VE3ERC Elmira Radio Club Inc.

Minutes from October 23, 2019

Brian VE3DXK	Frank VA3FJM	Reg VE3RVH
Jim VE3JMU	Wes VE3ML	Tony VE3DWI
Bruce VE3QB	AI VE3DZZ	Marianne VE3MXT
Jim VE3JLC	Graham VE3BYP	Bill VA3QB
AI VE3AUS	Jack VE3WPJ	Kirk VE3KXS
Harold VE3CD	Ken VE3KCY	Paul VE3PDC
Bob VE3IXX		

At 7:30 pm Brian VE3DXK called the meeting to order.

The Roll Call followed.

Brian made a motion to adopt the agenda and this was accepted.

The Secretary's Report will be done in November as the Secretary was away.

Paul VE3PDC gave the **Treasurer's Report**. Bill VA3QB moved to accept the report and Tony VE3DWI seconded.

Brian thanked those who came to the Silent Key Dinner.

Report on the Alma Repeater: Bill VA3QB, Ken VE3KCY, Tony VE3DWI, Bruce VE3QB and Ted VE3DXQ are working to link the Alma repeater with our other club repeaters. This will not be a link through Echolink but will be a full time hardware link.

Ken VE3KCY gave a report on the **GREAT WHITE NORTH net** on six meters. It meets every Tuesday night at 9 pm on 50.170 MHz with Ken as the controller. So far they have had check-ins from as far as Midland.

Unfinished Business: The Silent Key Dinner was discussed. It was decided to keep this venue at the Crossroad's Restaurant. The food was to everyone's satisfaction and was close by.

Feed Mill Repeater Report: Brian met with the owner and was pleased to report that the owner was amenable to allowing us a location on ground level with an electrical connection. It was decided to wait until next spring to do the set-up. This will allow time for a review of all the details to be considered and give time to build a platform for the cabinets and attach a dual band antenna with good coax. Bill VA3QB asked if there was interest in linking with the Guelph Club repeaters to provide even greater coverage. It was decided to pursue this with the Guelph Club.

An order form for shirts and hats with the ERC Logo was sent around for those interested. Pricing and possible shirt colours will be checked out.

Harold VE3CD thanked all those who helped him get on the air remotely from his home. They included Bill VA3QB, Bruce VE3QB, Ted VE3TRQ, Paul VE3PDC, Tony VE3DWI, Wes VE3ML and Jim VE3JMU. Harold was thrilled to report that one of his first contacts was with Slovenia.

Christmas Party: It was decided to run our Christmas Party on December 17, from 6 to 9 pm. It will be a potluck spread at the Canadian Legion in the upper room. Reg VE3RVH and Jim VE3JMU will prepare the set-up and tea and coffee will be provided.

Bill VA3QB was in touch with the owner of the property which is used as a runway for small airplanes near the corner of Northfield Drive and Highway 86. The owner would allow our club and the Guelph Club to use the space for Field Day. It is a very convenient location for both clubs. A big thank you goes to Bill for all his efforts. Tony introduced a motion to run the ERC Field Day at this location and it was seconded by Al VE3AUS. Bill will proceed with the project.

A video presentation of "the Glass Age", part 2, followed.

Next meeting is Nov. 27. Bruce VE3QB moved to adjourn, seconded by Wes VE3ML.