



FROM THE PRESIDENT

My 'boss' says Thanks to the Executive of the Kingston Amateur Radio Club and members for all their help over the past year. The club did well this year. It was sad that we lost a lot of good friends and hams but the club will carry on remembering them and their contributions.

AND A VERY MERRY CHRISTMAS AND HAPPY NEW YEAR

VA3ZE Tom

President, Kingston Amateur Radio Club



Editor's Note

Since this is the last opportunity I will have to extend Christmas wishes to you all –

MERRY CHRISTMAS AND A VERY HAPPY NEW YEAR!!!!

My thanks to you all for being so supportive in my new venture and also all the wonderful articles you sent to help make it a newsletter the members would enjoy reading.....Sincerely, Joan



Every **TUESDAY** at 7:30 p.m. **K.A.R.C. Net VE3KBR**

SCHEDULE OF NET CONTROL STATIONS:

December, 2006	January, 2007	February, 2007
5 Dec VE3JPW	2 Jan VE3NFU	6 Feb VE3IDW
12 Dec VE3IDW	9 Jan VE3RPF	13 Feb VE3CLQ
19 Dec VE3CLQ	16 Jan VA3ZE	20 Feb VE3NFU
	23 Jan VE3VJF	27 Feb VA3ZE
	30 Jan VE3JPW	

If there are any conflicts please contact Bill at ve7cvq@rac.ca and we'll juggle a few things.

A new net script has been posted on the Website



Every **Saturday** - Breakfast at Smitty's. Starts at 8:00 a.m. but come early, chat and mingle.



The **Third MONDAY** of every month at 7:00 p.m. is the A.R.E.S. REGULAR MONTHLY MEETING at the Woodbine Firehall, second floor.

There is a now a repeater, VA3FOY 147.285(+) at Bancroft. Licensee is Doug Peckhover.



KARC Web page designed and maintained by:

VA3KGB, Chip

<http://www.ve3kbr.com>

Publication Schedule of the KARC Newsletter will be December 27, 2006

Malcolm, ZS4SM will also operate the station at night from 5pm UTC on 20m and sometimes on 40m. Please would you let every one know so that they can try and work us. More info on the station is available on the South Africa Radio league website at sarl.org.za A very cool QSL card will be sent if stations that work them, send a QSL card with a self-addressed envelope to them.

HF WIRE ANTENNA INSTALLATION

W8AD - Don Tyrell W8AD

This article is for those who are new (and not so new) to HF and need good HF wire antenna installation information, for best performance and lowest SWR across the HF bands.

Problem Solvers for Wire Antenna Installations

Of the many questions we get concerning HF wire dipoles and slopers, many deal with the same common issues of antenna installations and performance problems. Indeed, many of the problems turn out not to be problems at all when we are provided with additional information about the situation, SWR "runs" across each band and the installation "site" itself. Additional information from the customer provides useful clues in helping to solve the problems.

The questions we get seem to follow a fairly consistent pattern from those new (and not so new) to HF. Proper installation and operation of VHF/UHF antennas can be VERY different from proper HF antenna installation and that's where the "rub" can come in for those new to HF.

Due to the wavelengths of the VHF/UHF bands, coupling to surrounding objects is usually minimized by placing these antennas only a few feet or so from things in the close-in environment (roof tops, attics, gutters, other antenna, etc.). Now, here's where things greatly change when installing HF wire antennas.

The wavelengths of the HF bands are MUCH longer than those of the VHF/UHF bands, and coupling (and therefore antenna de-tuning) to surrounding objects can and does occur when HF antennas are placed close to surrounding objects that would not have affected VHF/UHF antennas. As an example, consider a 40 meter dipole (about 66 ft. Long) installed close to aluminum gutters (40-80 ft. long) along the side of your house and you'll see what we mean. Or consider this same dipole placed close to a roof top and within a few feet of attic wiring and HVAC ducting which can be "part" of the wavelength on HF. Installation SITE factors, therefore, are where most of the problems seem to lie with HF antennas, compared to VHF/UHF antennas, unless proper installation guidelines are followed.

Using fundamental antenna theory, and installation experience we have gained over many, many years of dealing with HF antennas may provide the answers you are seeking. No engineering formulas and complex theory here, just practical information gained from customers themselves, in addition to our own test results and operator knowledge as hams.

You're looking for the "how, why and what to do"! Some of the following points will be very basic for some of you, but in talking to many hams of all levels of experience, we hope you will find these points and suggestions useful and time saving.

A. Slopers (quarter wave) have a unique set of installation requirements compared to the typical half wave dipole. Basically, they require operation on a support/tower (35 feet or higher) with an HF size beam on top to act as a "capacity hat", sort of like an upside down vertical where the beam elements are like the radials of a ground mounted vertical. Also, there needs to be a good ground return path down the tower, and the sloper

needs to be "in the clear". Metal guy wires that are not "broken-up" with insulators, and other wire antennas on or near the tower can cause serious problems (SWR and tuning). SWRs are most likely going to be a problem if these precautions are not considered. Sometimes, an external wide range tuner can help. It has been written that it's a lucky thing for a sloper to work correctly at all, since the support tower, guy wires and other attached antennas are a part of the sloper circuit. And, that can be true. However, with proper installation, a quarter wave sloper can be a very effective low band 160/80 meter DX antenna for those with limited space and lower height capabilities. We have many reports of multiple DXCC awards on these bands with quarter wave slopers.

B. Dipoles are a relatively simple design and usually easy to install and tune with good SWR, but they too require some thought for proper operation. Dipoles operating on 20 through 10 meters should be at 30 feet, or more, in the air. Dipoles operating on 160/80/40 meters should be at least 40 feet in the air for good SWR and at least average performance. Of course, there are exceptions to these numbers based on the customer "site". Higher heights on the low bands significantly improve performance. We have many customer reports of good operation at lower heights, but that depends on how high the "site" is electrically above ground at what's under the antenna. We can't predict that. Even at decent heights, both slopers and dipoles need to be in a clear "site", electrically uncluttered. See " Location" below.

C. Site Location. These antennas need to be as far as possible from any surrounding metal objects. Our tests, and those of customers, show that any antenna wire should be at least 15-20 feet from gutters and metal house siding or fascia. Metal guy wires should be "broken-up" with insulators at non-resonant lengths. Odd as it may seem, attics have a certain capacity characteristic (attic wiring and HVAC ducting) and antenna wires should be no closer than 10-15 feet from any roof top, even if it's a nonconductive roof material. Antenna wires should be at least 20 feet from other similar frequency HF antennas, even verticals.

Power lines must be avoided at all costs, and any antenna that may fall as a result of a storm or support failure must be positioned to NEVER fall across a power line. To reduce power line noise pick up, the antenna must be as far as possible from a line run. 30 feet, or more, is preferable.

A low frequency dipole (80/40 meters) can be put up to within 10 feet or so under a higher frequency (20/15/10 meters) beam with little if any problems. In an inverted-V configuration, the end of the wires should be about 8-10 feet, or higher, from the ground. The center feed point of an inverted-V should be offset from a metal support or tower leg by about 18 inches, on a nonconductive arm, to minimize coupling and thus higher minimum SWR. It is also IMPORTANT to note that antenna wires should not touch, or come closer than about 4-6 feet from any tree branch/limb or leaves. This may not be readily known but they can really upset resonant frequency or SWR.

If a dipole is fed with balanced line, the balanced line itself should be at least 6 feet from any metal objects, throughout the length of its run. It should never touch any metal, like window or door frames, as it enters the property. Of course there are exceptions, but this is generally the case. Close coupling of any metal to balanced line can significantly upset the system. Also, balanced line running down along side a metal tower leg or mast can cause serious coupling problems. If the balanced line is feeding a tower mounted dipole, it should come away from the tower at about a 45 degree angle and not near any guy wires or other wire antennas.

D. Attic installations. We have many successful customer reports of attic installations. HOWEVER--and this is a BIGGIE! Attic installations and performances (SWR) are unpredictable due to the fact that attic wiring and heat/air ducting being nearby can upset HF antennas in attics. Also, metal gutters and roof/wall material can be a factor. The height above ground (single story, multistory) is also an important consideration as with any "site" conditions.

(At year's end, a Remembrance of one of our Hams who is very much missed, VE3NB - Bernard.Ed.)

LIVES LIVED

(This article appeared in the October 26, 2006 issue of the Globe and Mail)

Bernard Henry Burdsall

DAVID MORRIS

Husband, father, radio amateur. Born Oct. 2, 1920, in Stony Stratford, England. Died April 23, in Kingston, Ont., of congestive heart failure, aged 85.

Had you asked Bernie in his younger years, he would have described himself, with a twinkle in his eyes, as a male war bride.

He was conceived in a passing moment of joy -- post-First World War homecoming -- and raised an only child in a household he would later describe as emotionally barren. By his own measure, he was a somewhat obstinate youth, who took refuge from the harshness of home and school in voracious reading and learning -- habits he maintained the rest of his life.

Bernie quit school at 16 to take a job as an office "tea boy," but soon landed a technical apprenticeship position with the General Post Office telephone service. About the same time, he earned an amateur (ham) radio operator licence. His early duties with the GPO focused on wiring England for war readiness. He put his radio skills to use copying intercepted Morse code radio transmissions for the Bletchley Park code-breakers. In the early 1940s, he enlisted with the RAF and was shipped to Guelph, Ont., for training as a wireless operator/air gunner.

Bernie never tired of telling the story of one fateful moonlit evening in 1942 on a ferry from Port Dalhousie to Toronto. "Do you have the time?" he asked the gorgeous redhead. "Oh, are you English?" she asked in return. One month later, on her 21st birthday, Bernie and Margaret Ferguson were engaged. For evermore, *Moonlight Becomes You* was his song for her.

Bernie spent the first three years of married life as wireless operator/air gunner on a Wellington bomber, 40 Squadron, stationed in Italy. At the age of 23, he was a veteran of 37 sorties. Through 1945-46, he was stationed in Egypt and Palestine.

He and Margaret reunited in England following the war, and Katie, the first of five daughters, was born in 1947. The family emigrated to Ottawa in 1948, where Bernie was hired as a technician with Bell Telephone Co. of Canada. Daughter Liz was born in Ottawa. Anne, Marian and Jane followed after Bernie's transfer to Bell's Kingston operation.

The girls love telling stories of growing up with Bernie as disciplinarian (or would-be disciplinarian), shaping the good character of his brood. Such was his reputation with the young men of Kingston's Strathcona Park, that his "no boys in the backyard" policy stood unchallenged.

Bernie wanted his daughters to grow up to be the fine, independent women that they are, so tools and toolboxes were provided. The girls' prowess as drivers and, by extension, his prowess as a driving instructor, remained for him a source of great pride. (Away from the girls, Bernie was quick with a colourful joke or a story involving a far-off relative of Margaret's.)

As boyfriends gave way to sons-in-law, Bernie opted for early retirement from Bell. He continued his long-time involvement with the Kingston and national amateur radio organizations, but also lent his unfaltering energy, commitment and talented hands to the benefit of numerous Kingston community organizations, most particularly the Marine Museum of the Great Lakes. In his quiet time at home he traced both sides of the family tree and penned his wartime memoirs.

Bernie and Margaret, his "first wife" of 63 years, presided over Easter dinner one week before his mercifully quick departure. Liz, daughter No. 2, asked him to comment on his 85-year journey from only child to patriarch. Surrounded by four generations of family and with a look of peace clearly in his eyes, he described himself simply as a lucky man.

David Morris, one of three Burdsall sons-in-law named David, is married to Marian, daughter No. 4.



(For those of you who might have missed it.....Bernard's Obituary)

BURDSALL, Bernard Henry (Bernie), (VE3NB), retired Bell Canada, RAF Officer WWIT 40 Squadron, volunteer at the Marine Museum and many other organizations.) - Peacefully at Kingston General Hospital on Sunday, 23 April, 2006, aged 85. Beloved husband of Margaret (Ferguson) and loving father of Katie Burdsall, Liz Ellwood (David), Anne Lombard (David Bell) , Marian Burdsall (David Morris) Jane Pinco (Maurice). Grandfather to Josh Lombard (Jada), Jody Lombard (Beth) Jim Ellwood, Suzie Ellwood, Levi Morris, Ben Morris, Matt Bumstead, Jacob Bumstead, and Abbey Pinco. Great-grandfather to Presley and Bailey Lombard, and Lauren and Avery Lombard.

FINANCIAL STATEMENT

KINGSTON AMATEUR RADIO CLUB

As of 17 Nov 2006

For period 14 Oct – 17 Nov 2006

<u>INCOME</u>	<u>Membership</u>	<u>\$120.00</u>
General	\$20.83	
50/50	\$18.00	

TOTAL INCOME **\$158.83**

EXPENSES

Gen(Club Caps) \$ 227.43

TOTAL EXPENSES **\$227.43**

BALANCES

KCCU \$4100.15
Dividend Savings \$10.00**
KCCU SHARES \$150.00

TOTAL CLUB ASSESTS **\$4160.15**

Terry Murphy, Treasurer, KARC.

17 Nov 2006

KARC AGENDA

Meeting Date: December 4, 2006

At Smitty's Restaurant, back room

7:00 p.m.

1. Introduction of members
2. Additions and/or deletions
3. Minutes of Monthly Meeting Errors/Omissions
4. Treasurer's Report
5. Old Business
6. 50/50 Draw
7. New Business
 - 1) Election of Officers
8. Reports:
 - a) RAC
 - b) Net Manager - VE3KFS
 - c) KARC Newsletter –
 - d) Web page - VA3KGB
 - e) Any other reports
9. **VE3RPF - Rob: Presentation**
10. **Adjournment**



MINUTES OF THE MEETING OF THE KINGSTON AMATEUR RADIO CLUB
November 1, 2006
At SMITTY'S RESTAURANT, PRINCESS ST.

The meeting was opened at 7PM by Chip, VA3KGB

1. All members were introduced

2. **MINUTES:** Moved that the minutes of October be accepted by Bill, VA3OL and seconded by Michael, VE3PRW. **CARRIED**

3. **TREASURERS REPORT:** Presented by Terry, VA3TRM. Moved by VA3TRM that the treasure's report be accepted. Seconded by Doug, VE3FFR. **CARRIED**

4. OLD BUSINESS

a) **Incorporation:** As of October 3rd the Kingston Amateur Radio Club is an not for profit corporation.

b) **Ham radio course:** we have only one person interested in signing up for the course so this years course is cancelled.

c) Ron, VE3IDW's motion to cancel the 2 meter net is withdrawn. We have had between 11 and 16 checkins each week. The net will continue on Tuesday nights. Controllers are needed.

5: NEW BUSINESS

1) Ron, VE3IDW and Tom VA3ZE participated in the Picton marathon. Hams from Lindsay, Peterboro, Belleville and Kingston assisted. Over 40 hams were involved in providing communications for the race.

2) Moved by Bill, VE3CLQ and seconded by Chip, VA3KGB that we have a joint meeting of the Belleville and Kingston clubs to be held in Napanee in the spring to celebrate the 60th anniversary of the clubs. Passed.

3) Terry, VA3TRM is taking orders for baseball caps embossed with the club logo and an individuals callsign. Cost is \$10.83. Also remember that 'club' jackets are available locally at Multideas Promotions Address : 492 Days Road, Kingston.

6: 50/50 Draw: Won by Rob, VE3RPF, the winnings were \$12.00

Elections will be held at the DECEMBER meeting.

Ron, VE3IDW will head up the Nominating Committee and Bill, VE3NFU will assist.

7: REPORTS:

- 1) **RAC:** Ron advised that Debbie has had a relapse.
- 2) The FCC (U.S.) has proposed that the 80-meter bandplan be changed to allow SSB down to 3.600 Mhz. Reasonable comments are welcome.
Our HF nets are always looking for controllers. Give it a try! Ontars (3.755), TPN (7.055) CJ (3.775)
- 3) **NET MANAGER:** See above (4 c) - participation is up.
- 4) **IRLP:** No report
- 5) **KARC NEWSLETTER:** Joan is always looking for your stories and articles.
- 6) **WEBPAGES:** Chip is looking for pictures, articles etc for the website.
- 7) **Hearts and Flowers:** Don, VE3KBN has been sent a card.

OTHER ITEMS:

Les, VE3KFS is considering another bulk purchase of powerpole connectors.

8. PRESENTATION: Unfortunately Dave was unable to give his presentation on NVIS antenna due to equipment failure.

ADJOURNMENT: Moved by Tom, VA3ZE; Seconded by Chip, VA3KGB. **Carried**

Bill Rumball, VA3OL
Secretary KARC



HAPPY HOLIDAYS!!!