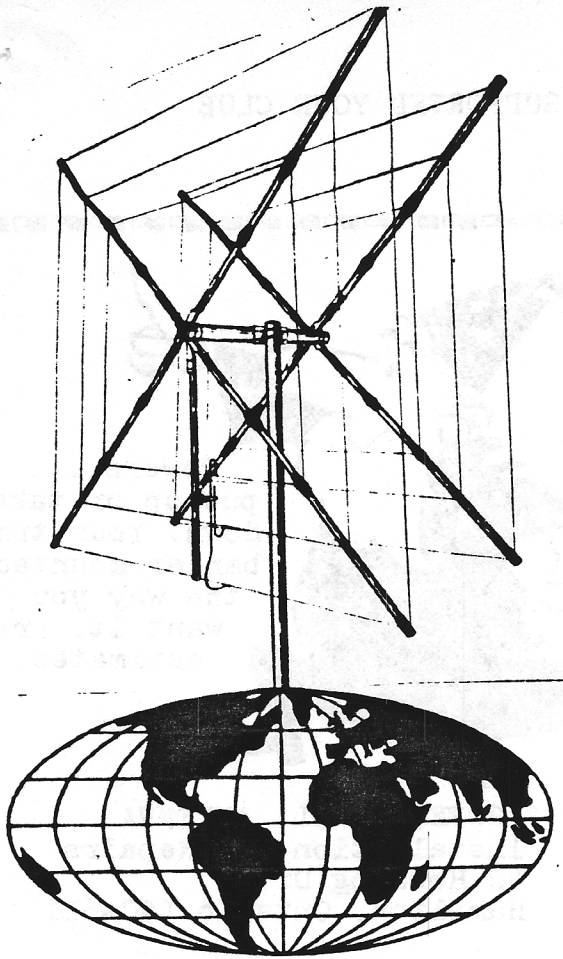
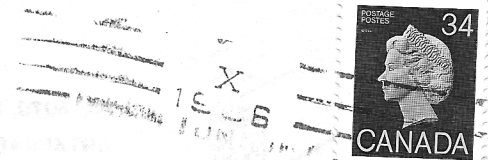


Oct. 186



# THE HAMILTON AMATEUR

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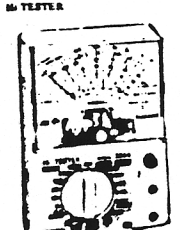
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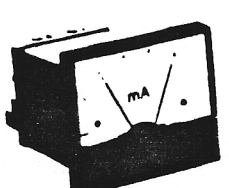

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MANY THANKS TO BORIS VE3ITY  
 FOR GETTING THE ADS

1986 MEETING  
THE HAMILTON AMATEUR RADIO CLUB

DATE: Wednesday, October 15, 1986  
TIME: 8 o'clock P.M.  
PLACE: Nash Auditorium, Chedoke Hospital  
SPEAKER: Paul Fleck from Bell Canada  
TOPIC: Cellular Radio-Telephone

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THE PRESIDENT'S MESSAGE

We had a good turnout for the September general meeting after the summer break. We were fortunate to have on very short notice VE3DVV John to give us an interesting talk on the development of packet circuit boards. Also our Flea Market Chairman, VE3NKW John gave us a rundown on help required from members on the big day, October 11th. We appreciate the assistance volunteered.

As mentioned by our Repeater chairman VE3DSP Glenn during the meeting, all going well, our repeater VE3NCF link will soon be tied to the VE3RPT 440 MHz hook-up, which will tie us to the VE3MUS Huntsville repeater and the VE3TBF (Black Fly) Haliburton repeater. At the November general meeting the new executive for 1987 will be elected so please give consideration to persons you are prepared to help elect and support during the following year in the operation of the club.

Compliments are in order for the smooth operation during the September 14th Pepsi Challenge 10km marathon to all who assisted, including VE3GCP Fred who acted as Head Marshall.

A reminder to those who work 20 meters, 14.140 MHz is where the Saturday and Sunday Trans Canada Net comes on at 18:00 UTC - local 2:00 p.m. in summer and 1:00 p.m. in winter. When the nets are over, the frequency reverts to the Canadian Calling Frequency where one can direct your call and then QSY clear of the calling frequency, once contact has been made. The Sunday Trans Canada Net has been in progress since 1965 and the Saturday TC Net since March 1972. The present regular net controls for the Saturday net are EGT Les, HPD Vic, DPC Frank and FHQ Glenn. The backup controls are presently FYQ Ward, HLI Gerry, CIB Bob and BLG George.

New mail box holders for your list are:

- 68 SJL Nick (Mississauga)
- 69 BLG George
- 72 MMH Bob
- 43 NYC Paul (correction)

73 Glenn VE3FHQ

## THE 1986 HOMEBREW COMPETITION

This competition usually ends in the presentation of the trophy at the May general meeting. However, the event was extended to the October general meeting for this year. The Crawford Trophy is awarded annually for the best homebrew device for use in amateur radio.

The device shall have been completed in the 18 months prior to competition night.

Although a limited number of operations in the fabrication of the device may be processed outside the home workshop, the majority of the work shall have been done in the contestants own workshop, or that of a friend, during his leisure hours.

The judges cannot be contestants and should preferably have experience in homebrew construction.

Each contestant is to be given an opportunity to explain the operation and any other details he may deem helpful to the construction of the device.

The winner shall return the Crawford Trophy on or before the night of the next competition.

## THE ART FERGUSON AWARD

The Art Ferguson Trophy is awarded annually by the Hamilton Amateur Radio Club in recognition of meritorious service to the public through amateur radio communications.

To be eligible for this award the person shall be a member, or past member of The Hamilton Amateur Radio Club.

Nominations for this award shall be submitted to the club executive, not later than the November regular club meeting.

The club executive committee will make a decision for this award based on the nominations received.

For more info. on these contests, contact Norm Smith VE3BK.

---

## ART FERGUSON TROPHY NOMINATION

Presented annually to a member or past member of The Hamilton Amateur Radio Club for meritorious service to the public through amateur radio communications.

I nominate \_\_\_\_\_ (name & call sign)  
for the Art Ferguson Trophy for the following reasons:

Dated this \_\_\_\_\_ of \_\_\_\_\_ Signed \_\_\_\_\_

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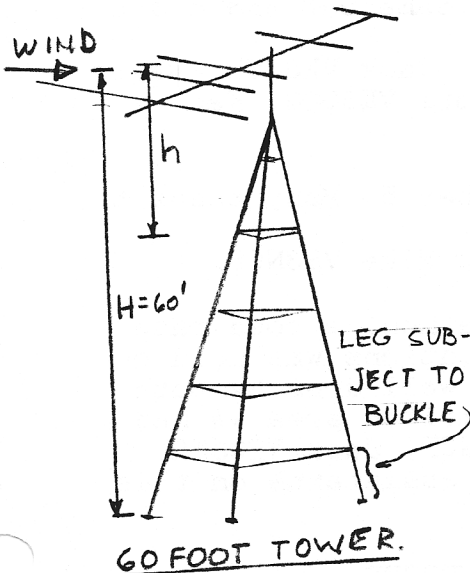
Builders Corner

By Boris VE3ITY (Ex. VP2LB)  
Towers

- Ham #1 QSL Bob, nice to hear you on NCF; are you planning on going to the Fleamarket? QSL
- Ham #2 QSL Joe, I'll be there selling some goodies.  
QSL.....

Does the above sound like gibberish to you? It does to me. Before I start this month's topic let me blow off some steam regarding the excessive and incorrect use of QSL. Gentlemen, QSL means MESSAGE received. QSL? means "did you receive my message?" The Q codes were meant for C.W. not phone but that's another topic in itself. If we are going to use the Q codes at all, let's use them in the right context. If there is no message then don't send QSL. (QSL cards are something else, I am not referring to sending cards). Specifically, QSL does NOT mean transmission received. For that purpose we have R on C.W. and Roger on phone. Incidentally, R actually means ALL of the transmission received. To say "Roger on 60% of your transmission Jack" is contradictory. So please, no more incorrect and excessive "QSL". Thump! Thump!!! That's me getting down from my soap box.

It has come to my attention that many hams believe that they could increase the wind load carrying capacity of a self-supporting tower by using guys (guy wires). This is a misconception which should be nipped in the bud before anyone gets killed. A three legged self-supporting tower is designed to resist mostly wind loads. Some towers (the better ones) have cross-bracing to resist torsion or twisting. When we mount an obstacle such as an antenna at the top of a tower the force of blowing wind against the elements multiplied by the height above ground gives us what is called an overturning moment.



If we call the wind force  $W$  and an intermediate height  $h$ , as in the sketch, the overturning moment, at point  $h$ , is  $W \times h$ . As we go down the tower,  $h$  increases until it becomes  $H$  at the base -- the maximum height. The point is that the overturning moment is greatest at the base of the tower and further, all wind-induced (lateral) forces will cause the greatest overturning moment at the base of the tower. Depending on the direction of the wind, we could have one or two legs in compression due to wind forces. Compression tries to shorten the leg of the tower. Assuming full wind and only one leg in compression we have a worst case design situation. Now if we assume a 60 ft. tower ( $H=60$  ft.) and further assume that the top of the tower moves about 4 inches in full wind then, by calculation we find that the compression leg has shortened by .00258 inches. Note, the tower is still safe under those conditions. The legs in tension will stretch by about .00129 inches. However, its the legs in compression we must watch because of the chance of buckling.

OVERTURNING MOMENT  
IS  $W \times H$ .

Now here comes Joe Ham. He wants to put up a TH60xxx effectively doubling or tripling his wind load.

To resist the extra load he decides to guy the tower. Here's where I step in and tell him don't. Why? No matter what kind of wire is used or how well we think the other end is anchored, a guy wire because of its length and anchorage is far more flexible than the bottom leg of a self-supporting tower. Because of the increased wind loading, the overturning moment at the base of the tower will increase. That is so because guy wires will stretch and anchors will give a little, no matter how diligent we are in construction. As the guy wires stretch more load is placed on that single leg (worst case) in compression. In fact the tower will collapse not by the guy wires breaking (most hams use overkill in that direction), but by that leg collapsing (buckling) and the anchorage yielding a little. Some hams even portray a defiant look in their eyes when they say they used aircraft cable for the guy wires. I suppose when the term aircraft is used in such context its supposed to send chills up the spine of lesser mortals. "How dare my tower collapse when I used aircraft cable?"

My advice to all hams is -- forget the implied "super strength and zero stretch" properties of aircraft cable. Do not guy towers which were designed to be self-supporting. On the other hand, its quite okay to guy the smaller T.V. type tower, but be sure the base is properly secured so that it can't move sideways. Follow this advice and you'll sleep soundly with no worries. "Oh! sleep it is a gentle thing beloved from pole to pole".

---

#### GOOD WORK, GUYS

Communications for the annual Pepsi Challenge race again was very successful. On September 14, the following people came out and did a good job:  
Fred VE3GCP, Stan VE3GFE, Cam VE3GVG, Bill VE3KYC, Jack VE3JTR, Wayne VE3LWD, Hal VE3JTC, John VE3FDK, Jerry VE3ACA, Fiori VE3OQG, Ken VE3OIN.

The United Way 10 km walkathon took place on October 5. Many thanx to these people who gave up their time to help out:  
Bob VE3CIB, Wayne VE3LWD, Bill VE3KYC, Ron VE3MWO, Mike VE3NCS.

On October 5 (the same day as the United Way walkathon) a road race was held from Hamilton to St. Catherines. Communications was held on repeaters VE3TVI and VE3RAF. Message handling was well done by both the Hamilton and St. Catherines hams. From the Hamilton area we had: Stan VE3GFE, Gerry VE3ACA, Peter VE3DOU, Fred VE3GCP, Jack VE3JTR. Many thanx to the St. Catherines people for their assistance on this event.

-- Stan VE3GFE

THE HAMILTON AMATEUR RADIO CLUB SWAP NET with Ralph VE3BYM

;;

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- VE3OIG- Tom- 416-227-1522- St. Catharine.  
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- VE3NCK- Bill- 549-0270 Hamilton.  
Skypole 2 mtr. ant. 35.00  
KDK I44 2M. xcvr. syn., 225.00
- VE3MFK- Don- 639-2300 Burlington.  
2- FM xcvr (Radio Shack) with earphones each. 50.00
- VE3WHB- Bill- 527-89II Hamilton.  
SX-I90 150.00
- VE3NCN- Bert- 627-0573 60.00  
NM-W4 swr/pwr meter 0-I000 40.00  
Hustler whip with 40 & II m. coils
- VE3JTJ-Bob- 632-2670 Burlington.  
Estate Heathkit complete station with manuals. SB-303, 40I, 600,  
of 630, 6IO. also Shure 444 and Electrovoice mic. neg 650.00
- VE3NYA Relistic S.W. rcvr. with external spkr. and man. 125.00  
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- VE3IQL- Terry- 648-3116- Ancaster. 25.00  
NYE-Viking SSKI- paddle 80.00  
SENCOR Universal UPS-I64 10 amps. 12V! P/S charger 275.00  
NDI 2 M. syn. 30W. no man. 150.00  
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ICO 377 Audio gen. Good condx.
- VE3OQG- Florie- 560-6329- Hamilton.  
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- VE3GTE- John- 519-753-0536 Brantford. 175.00  
Mosley TA33 senoir TRIBander, 100' rg8 & balun, take dwn. 95.00  
Ham M rotator 75' 8 wire cable
- VE3ISZ- Fred- 827-6824 Oakville. 50.00  
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- VE3JUR- Dave- 689-667I. Burlington. 400.00  
AZDEN PC-2000 2 meter xcvr. Would consider a trade.
- VE3TO - BOB- 385-9624. Hamilton.  
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