

THE RAMBLER

The Ottawa Valley Mobile Radio
Club Incorporated

P.O.Box 5530

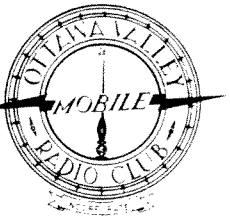
Station F

Ottawa Ontario

K2C 3M1

NOV. 1988

NEXT MEETING: THURSDAY, NOVEMBER 17, 1988
PLACE: THE MUSEUM OF SCIENCE AND TECHNOLOGY
TIME: 7:30 P.M.



The Ottawa Valley Mobile Radio Club Inc.
P.O. BBox 5530
Station F
Ottawa, Ontario
K2C 3M1

LARRY WILCOX
565 EASTVALE DR.
GLOUCESTER ONT.
K1J 6Z4

**OVMRC EXECUTIVE
1988-1989**

President

Alan Boyce
VE3LNH
737-4937

Vice-President

Doug Carswell
VE3ATY
839-5854

Past President

Bill Seyler
VE3OAI
836-5818

Treasurer

George Dew
VE2OWW
777-3183

Secretary

Archie McKenzie
VE3NJY
731-3698

Editor

Bob Baillargeon
VE3MPG
235-0187

Technical Advisor

Ed Leblanc
VE3VLF
829-6314

Public Relations

Leo Desjardins
VE3NVL
225-0902

Membership

Pat Brewer
VE3KJQ
820-9309

✠

**THE OTTAWA VALLEY MOBILE RADIO CLUB
INCORPORATED**

OVMRC SPONSORED ACTIVITIES

POT HOLE NET - OVMRC NET -

Every Sunday, 1000 local time on 3760 kHz, SSB. All Radio amateurs are welcome to participate.

THE WISE OWL NET - OVMRC NET -

Rag chew net every Friday evening at 2000 local time on the club repeater VE3TWO - 147.30/90 mHz.

VE3JW - Amateur radio station of the National Museum of Science and Technology. The **OVMRC** helps maintain the station and schedules operators for the station as part of an Amateur Radio public relations display. VE3JW operates on all HF bands, both CW and phone. Slow scan TV is also demonstrated. For information or if you wish to operate the station, contact the Public Relations Coordinator.

AMATEUR RADIO ACTIVITIES IN THE NATIONAL CAPITAL:

POT LID NET - Sponsored by Ed Morgan VE3GX. An informal slow speed CW net meets each Sunday (except July and August) at 1100 hrs. on 3620 kHz to provide and stimulate interest and proficiency in CW procedures.

CAPITAL CITY FM NET - Sponsored by the Ottawa Amateur Radio Club Inc. every Monday evening at 2000 hrs. local time. Conducted on VE2CRA repeater 146.94/146.34.

SWAP NET - Sponsored by Ed Morgan VE3GX, each Sunday as part of the Pot Hole Net, and each Monday as part of the Capital City FM Net (except July and August). Ed may be reached at 733-1721 for listings and queries.

THE MILITARY NET - Sponsored and conducted by Frank, VE3MSC, Tuesdays at 2000 hrs. on VE3TWO 147.30/147.90 mHz.

Membership in the **OVMRC** is open to all those interested in Amateur Radio. Regular meetings are held on the third Thursday of each month (except July and August) at 2000 hrs. unless otherwise posted. Meetings normally take place in the auditorium of the Museum of Science and Technology on St. Laurent Blvd. (south of the Queensway).

The **OVMRC** provides code practice 24 hours a day. Dial 825-0786.

The Rambler

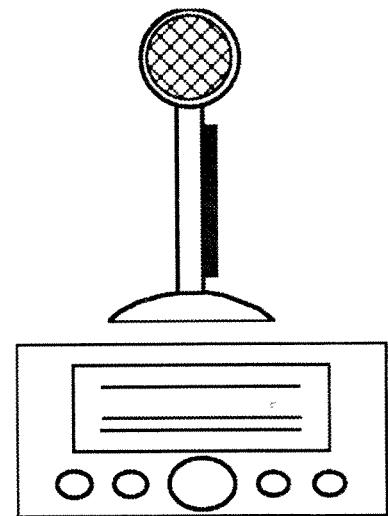
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November 1988

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The next meeting of The Ottawa Valley Mobile Radio Club is scheduled for Thursday November 17, 1988 at 7:30 p.m.

The speaker will be Merv Lemke, VE3CV. Merv will give a presentation on different aspects of HF mobile radio operation and installation.



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RAMBLINGS

By Alan Boyce VE3LNH

Why is it difficult to attract new people to Amateur Radio? I think that it is because we are so cliquish.

Then why is Amateur Radio such a clique? What is it about our hobby that makes it so difficult for newcomers to break in?

One might argue that it's because this is such a technical hobby -- with so many details, rules, and procedures to learn that people are discouraged.

This is true to some extent. In addition to learning an introductory course in electronics, one has to learn a legal code, the morse code, the phonetic code, and the Q-codes. Codes are by their nature exclusive.

However, I would suggest that there are more technical details, rules, and procedures involved in flying, and yet there are three times as many licenced private pilots as licenced Amateur Radio Operators in Canada.

No, I think that an awful lot of us have consciously encouraged the

development of a clique. The problem is not with the hobby, but with ourselves and the way we present our hobby to newcomers, to the public, and to each other. We try to intimidate and exclude people.

Do you think I'm exaggerating? Then why do we de-

scribe our "home QTH" when we could simply say "home"? And how many other exclusive code words slip into your regular conversation when there are non-hams around?

We are even cliquish within the hobby. How many ham radio organizations were started because one group wanted to exclude another? Too many.

Our publications are not much better. I remember a US ham magazine once had the headline "I just worked the whole WPX Test!" Wow. Now I know that "test" is a morse code short form for "contest". But the big aggravation was that nowhere in the entire magazine was "WPX" defined. I read every word, and I couldn't find out what "WPX" meant. I still don't know what it means, but frankly Scarlet ...

(This will ruffle a few feathers: but I find some testers the most cliquish of all hams.)

The cool treatment of outsiders discouraged me from getting my licence. I just about became a ham a dozen times. Every time I met a group of hams I was made to feel like an intruder, and I would put ham radio aside for another few years.

What finally made the difference to me was the help and encouragement I got from one guy: Bill Lane, VE3CFL. I knew Bill through school, and he encouraged me to join the Hart House Radio Club. I did, and he continued to en-

courage me. He showed me how to operate the transceiver to listen to the W1AW code practice. He explained what all the short forms meant; (he didn't really like the way they were abused either). He showed me where I could find the study material for the exams. He spent hours sending me code and scolded me when I didn't practice. I passed, and I have him to thank.

Before I ever got on the air, though, we both moved out of town and I ended up in the cold city of Ottawa. I was lucky enough to meet a couple of people who took the time to help me out. Bob, VE3MPG showed me how to operate at a field day, and then spent hours coaching me with his rig, helped me with antennas, and with my code. Dave, VE3KMV took the time to show me how to operate two metre phone in the middle of the Shinerama exercise.

A group of people got their first introduction to Amateur Radio at the September meeting. Some of them may want to know more about the hobby.

What are you doing to make them feel welcome? You could call one of them up and invite them out again. You could help Ed work on the public relations program or you could become a mentor for the course.

Someone might thank you for it.



EDITORIAL

By Bob Baillargeon
VE3MPG

How many of you remember the first time amateur radio became part of your life? Not exactly when you became an amateur, but the moment when you knew that someday you would become an amateur? The fascination, with that neighbor, or friend who had all that fancy gear and strange looking aerials in his back yard? I do.

It was back in the late 1950's. I was almost eight years old, and living in the small southern Ontario town of Tecumseh, a few miles from the motor city of Windsor. Across the street lived a ham, though at the time I was unaware of his activities. After moving from that location several years later I remembered him and, jumped on my bicycle to race across town to the old neighborhood. I found that his antennas were still there. Courageously I banged on the door, and that ham answered. I spent the afternoon there, listening to him and his wife (both amateurs) talk to a friend in Great Britain. From that moment on I was hooked on radio. Later, I had hidden away a crystal radio, in the shape of a tiny Gemini space capsule, under my bed. CBC Radio in Windsor came in the strongest at night.

After a few years, short wave listening became a strong interest, but becoming a ham was still my dream. In the early seventies, I left that sleepy southern Ontario town for Kitchener-Waterloo,

and a college education. There I met one of the college administrators who belonged to the local ham club. My interests at that time though, were other than getting a ticket. I did not pursue amateur radio further until 1979 when I enrolled in the Algonquin radio course with Dan Holmes, VE3EBI, as instructor. By June of 1980 I had picked up my ticket at DOC headquarters in Ottawa. They even let me pick my own call. That week, at a friend's ham shack, I made my first contact on CW. That friend helped me every step of the way, showing me the proper way to make that first contact. He lent me a spare rig for a few months until I had made a decision on a rig. Every new ham needs a buddy like that.

When I visit Tecumseh now, I make a point to visit an old ham friend of mine. He is 90 years young. Albert "Mac" Graham is Tecumseh's legendary railway station master. The railway station is no longer there. Mac is a veteran of 50 years in railroading with Canadian National, Wabash and Grand Trunk lines. This was followed by eight years as summer employment manager at the Green Giant plant in Tecumseh.

The station was the place where the bad news came, when the telegraph operator and the telegram was a major means of communication. During WWII Mac received and delivered telegrams advising that Tecumseh servicemen had been killed or were missing in action. The parish priest always accompanied him.

"When we walked up the sidewalk, the people in the house

would be screaming before we got to the door. They knew what the news was," Mac said.

Mac's career in railway began at the age of 15 in his native Omemee. His parents ran a general store with Mac's help. He delivered bread to the station. His first job was checking baggage and handling express for \$48 a month. The CNR was called the Grand Trunk in those days. Three years later he was night operator at Waubaushe 12 hours a day, seven days a week, for \$71 a month.

One job he disliked was dispatching trains of seven railroads over the international bridge at Fort Erie. "It was a rip snorter of a job. I got to hell out of there. There was an easier way to make a living, you know what I mean?" After five years at St. Catherines he moved to Tecumseh in 1935 to be near his family in Detroit.

Mac is the founder and current treasurer of the Sun Parlor Retirees Amateur Radio Club. He's there every week teaching senior citizens and the blind how to operate ham radio.

Mac's ham station is simple. A Kenwood TS520 and a tri-bander. His hamshack is the old railway station interior, the old panelling, his old telegraph key with the telegraph sounder nearby. Mac Graham is still active on all bands, especially forty meters. He has a good "fist" for 90. His call is VE3EPG. ☺

Letters To The Editor

Greatest CONGRATULATIONS! on the redesigning of THE RAMBLER. I certainly can add my applause to your undertakings. Thanks for telling us all about how you are doing it. (I would have been wary of using anything by Gold Disk. The program "SPREADSHEET 64" which was distributed by Gold Disk was slow and troublesome on my Commodore 64.) I wonder what THE RAMBLER would do without your Amiga and your laser printer? Thanks again for making our publication "el perfecto".

I've enjoyed everything about the new RAMBLER, including - but not limited to - the following: The Best of VE3JF, the Letters To The Editor, Antenna Works, the illustrations, and press (return) to continue. . .

73 Vance VE3OAO

Dear Vance,

Thanks for your hearty congratulations on the newly designed Rambler. I would first like to make a few comments regarding some points you mention. Gold Disk is one of the leading software houses writing "professional" software for the Amiga. ProPage is the highest rated DTP (desktop publishing) package available on the machine. These ratings were arrived at by "Studio" magazine, a Canadian publication geared towards the graphics and photography professional, and by a leading American DTP magazine "Personal Publishing". The facts are that Gold Disk is 100% Canadian, and to produce such a slick "professional" piece of software these days is no mean feat, let alone being Canadian! Their other software titles include Professional Draw, an object oriented design and drawing package - a first for the Amiga. Consider that ProPage is the only DTP package for any machine that is able to produce four color separations! Every new piece of software on the market has its bugs. That is why the manufacturer continually upgrades his product, relying on the feedback from "legal" purchasers for "bugs" and "troublesome" areas, to be rectified in future upgrades.

What would THE RAMBLER do without my Amiga and laser printer? Glad you asked. The club now has a healthy membership. Out of those 130+ members one wonders how many IBM compatibles or even Macs or Ataris are out there. THE RAMBLER can be produced in the same fashion on any of these popular machines. The magic word Vance, is "volunteer". That is all

that is required. Oh, I don't own a \$5,500 laser printer. I take THE RAMBLER in on a 3.5" disk to the local laser printing shop and output on their equipment for \$1.50 per page. The Amiga can format the disk to MS-DOS or AmigaDos - most convenient.

-The Editor

MINUTES OF OCTOBER 20 MEETING

The speaker for the evening was Dr. Gerry Kambites, physician, priest and radio amateur. He returned to Canada from Uganda after spending five years on the Sese Islands in Lake Victoria. He described his work and adventures in Uganda with very detailed slides.

His call in Uganda was 5X5GK (now VE3ZFZ). He was on the air for four years, four times per week and made 40,000 contacts. With no newspapers, radio was his only source of information. He delivered a baby while consulting a doctor in the U.S.A.! He told the group if talking to a missionary via radio, ask if you can do anything for him. Gerry said he would be back to give another talk.

Past-President, Bill Seyler, VE3OAI, announced the passing away of fellow amateur, Jack Ravenscroft, VE3SR. Flowers from the Club will be sent to the family.

Members offered suggestions for the next "Introduction to Amateur Radio", the theme of the September meeting. A repeat of this successful meeting will occur in the spring of 1989. A motion was passed to form a PR committee to produce promotional material for this meeting. Those volunteering for the committee are Ed LeBlanc, VE3VLF, Chuck King VE3PDK and Lee Demone VE3OWD.

Vice-President, Doug Carswell, VE3ATY, said 24 people were taking the course. It was stressed that the students should be aware of national amateur organizations and our own club activities.

The President noted that the Museum will be on a cost recovery program in the future. The Astronomy course will get priority use of the meeting room. Other rooms will have to be used for the OVMRC meetings. A motion by Serge Letourneau VE3SLS and seconded by Bob Herber VE3PUE and approved by the members will keep the meeting time at 7:30 P.M. instead of the former 8:00 P.M.

There are still 7 T-shirts and several hats, with the club insignia available from the Prez. Caps are \$8.00 and T-shirts are \$10.00.

The meeting adjourned at 9:15 P.M.

Secretary, VE3NJY

The coax between my rig and my antenna routes from the basement "shack" location through a hole in the floor behind our cooking stove and up and out through the vent to the outside of the house. From there it goes down the outside of the wall and under the turf (eventually) and follows the foundation of the house below the turf to a point opposite the base of my vertical antenna. Then, it routes out under the turf to just below the fence post I'm using for a mast for my 18 AVT/WB-S TELEX Hy-Gain vertical radiator. In the years since first installing this, the RG-58/U has worked up from under the turf on the end under the stove's vent from the action of the wind and other factors. It has been attacked by the "whipper-snipper" as trimming the tall grass at the edge of the lawn is in progress. I've mended the coax cover with silicone rubber to keep out moisture and prevent corrosion to the copper shielding.

The reason I didn't do a better job of routing the coax is that I'm renting this house and the lease is picky about routing electrical wiring through the walls except for what is provided by the landlord.

During the week prior to this one Saturday, my wife had been mowing the lawn. And the coax was loose and not properly buried under the stove vent. It got sucked up into the rotary mower and was severed! My wife advised me of the mishap. (She'd been warning me!) So, this Saturday was the day to do the repair. I cut away the damaged coax and mounted a PL-259 to each end of the coax, one on the end of the coax to the radio and the other on the end of the coax to the antenna. I then joined the coax back together again with a PL-258 coupler.

Now, back down in the "shack", I tested the coax for continuity and found that it had a direct short!. First, I figured that I had erred in attaching those two new PL-259 plugs, so I disconnected them and checked back toward the open end at the radio; that tested open, so

the "trouble" was the other way. Checking at the PL-259 on the coax toward the antenna, it still showed a direct short. So, I went to the bottom of the antenna and disconnected the PL-259 on the coax from the SO-239 on the antenna. Checking the coax back toward the radio, showed that it was open; so the "trouble" was not in the coax or my repair job. I remembered that there was a real bad lightning strike near our house this summer and maybe it got into my antenna. I have a "blitz" bug on the bottom of my antenna that is supposed to be a lightning arrester, so I checked that next and found it to be OK. But there was still a short across the terminals of the SO-239 on the antenna.

I ended up completely dismantling the 5-band trapped vertical. I couldn't get the base apart where the "trouble" seemed to be. I figured that I would have to order a new one of these from the manufacturer during the following week.

Later, after I was all finished, I looked through the "spec" in connection with ordering the new part to replace the "bad" part. While reviewing the front page my eyes fell upon the last paragraph, "NOTE: If the terminals of the input connector are checked with an ohmmeter, they will show a direct short. This is normal! The matching coil in the antenna base puts the entire system at DC ground, but presents a perfect 52-ohm impedance to RF energy." Boy! did I ever feel stupid!!!

Well, nine days later after re-assembling the antenna and burying the coax more properly and covering all the connections with COAX-SEAL, I was back on the air, and it seemed to work better than before. I'm glad I carefully marked the parts before dis-assembly in order to make re-assembly easier. My antenna had been due for some routine maintenance anyway, so the time spent doing this "trouble-shooting" wasn't a complete waste.

I hope that this story might prevent someone else from falling into the same mistake.

The Best @VE3JF

From: N1BTQ
Subject: "INVASION OF THE "GOOD BUDDIES"

Last Saturday, (October 15, 1988), I decided to drop into a local electronics supply store, Buzzards Bay Electronics, of Buzzards Bay, MA to pick up a copy of the ARRL Antenna Manual. I was suprised to find the new Uniden 2510 transceiver on display, powered on, and connected to an antenna. With 10 meters being one of my favorite bands to proceeded over to the rig to give it a try. After a brief dialog with the store manager I began to tune around. To my dismay I heard "Roger, you got one at the 4 mile marker westbound!...brrrrr snap crackle..."Ten-foe...y'all clean back to the Bridge". The radio had been converted to (gasp) the 11 meter band and was being sold for \$399.95 as a "Super CB". I looked again at the model number, "yup it was a 2510". About that time the store manager smiled at me and said "Nice, eh?". Of course at that time I began a rather lengthy offensive dialog with him. I ask him, "Has this radio been modified in any way?" He replied, "Naw...you can do it...it's simple...and everybody does it" I really didn't get too upset until I proceeded to tune right into the 10 meter CW portion from the 11 meter band.

We have to do something. My first reaction is to boycott all retailers that do this. That wouldn't solve it as all the money they are making are from these "renegade CB operators".

Any ideas? I'm going to at least write a letter to Buzzards Bay Electronics protesting their unethical practices. Anyone want to join me?

I recommend you "test drive" their "Super CB" first.

73, Tim Smith, N1BTQ (@KQ1K PBBS)

**HR AMSAT NEWS SERVICE BULLETIN 298.01
FROM AMSAT HQ
SILVER SPRING, MD OCTOBER 24, 1988
TO ALL RADIO AMATEURS BT
Amateur Radio Operations From Aboard Mir Said
To Be Imminent**

AMSAT has learned that amateur radio operations from the Soviet space station Mir are about to commence. Reliable western European sources report that a 2 watt 2 meter FM transceiver has been placed aboard Mir, possibly during a recent resupply mission. Sources also indicate that the crew has placed a 1/4 wavelength ground-plane antenna on the outer surface of the space station.

U1MIR will be the call sign used by the Mir cosmonauts during these amateur radio communications. Amateur operations are expected to begin the first week of November.

A meeting is to be held in Moscow on Friday October 28th with the appropriate Soviet authorities to resolve schedule and frequency issues related to this activity. It is anticipated that a split frequency operation will be utilized to avoid any QRM problems on U1MIR's downlink frequency.

Reports indicate that U1MIR will most probably be active for the duration of the stay of the current cosmonaut team aboard Mir. It is thought that when the current team of cosmonauts is replaced with a relief crew that a 10 watt 2 meter FM transceiver will be placed aboard Mir and the call sign of the operation changed to U0MIR.

Observers feel that operations from U1MIR/U0MIR will most likely involve amateur radio contacts on an international scale and not be limited to Soviet amateur radio operators alone.

AMSAT will provide further information as it becomes available. Watch AMSAT News Service Bulletins for late breaking details.

The following are some HF frequencies that distribute weather FAX information. Hope this helps.

HF WEFAX Stations

Frequency	Station	Comment
3.357	NAM	2000-1400Z
4.217	CFH	15 min. to 30 min./ hour
4.346	NMC	
4.36	WLO	
4.975	NAM	24 hours
6.330	CFH	
8.080	NAM	24 hours (good choice)
10.536	CFH	
10.865	NAM	24 hours
12.730	NMC	
13.520	CFH	
14.879	NPM	24 hours
16.410	NAM	1100-2100Z
17.1512	NMC	
20.015	NAM	1200-2400Z

NAM Norfolk, Virginia
NFM Boston, Massachusetts
NMC Point Reyes, California
NPM Pearl Harbour, Hawaii
NOJ Kodiak, Alaska
CFH Halifax, N.S.

Chuck Brennan VE3PTQ DEC Toronto

Protecting electronic equipment from voltage transients induced by static discharge, lightning, and other hazards is a subject demanding more attention these days. While adding to the cost of a system, the cost of non-protection ranges from mysterious catastrophic failure to often subtle performance degradation.

This brief discussion will focus on protection of lines used to carry data and control signals. Protection of AC/DC power and RF-carrying circuits is somewhat different. Proper circuit layout, shielding, and low impedance grounding are important, although not always followed; these also are topics unto themselves.

Transient Hazards

Electrostatic discharge can supply 40kv at up to 80A peak. An indirect lightning-induced surge may supply 10kv at several hundred amps. Direct-strike current is typically 20kA and has been measured at up to 250kA at 200kv, such awesome energy that makes direct-strike survival unlikely. Solid-state devices have damage energy thresholds in the microjoule to milijoule range, making them quite vulnerable. The transient seen at the load end of a line must be reduced to a safe level.

The voltage and current available at the equipment end of the line depends on the surge magnitude, waveform, proximity, line length and impedance, shielding and grounding, and other conditions. Available current will divide among multiple conductors in a cable.

The voltage/current waveforms are significant. Total energy content and rise/fall times dictate how much protection is needed. Often an "8/20" waveform is assumed for lightning: 8 us rise to 90% level, and 20 us fall to 50% level. Other waveforms used are the 10/1000 us pulse and the damped sine wave, (indicating resonance).

There are several types of devices available to the designer. High-power devices include spark gaps, gas tubes, and varistors.

Lower power devices include RLC/diode networks, low power varistors, zeners, and a refined zener sold under the trademark "TransZorb" (RT of General Semiconductor). Each has its usefulness and limitations.

Spark Gaps and Discharge Tubes

Spark gaps are inexpensive protection. To control breakdown voltage better, an ionizing gas and very small amount of radio-active material are added

to the envelope. When voltage across the electrodes rises to typically a few hundred volts, the gas ionizes and conducts heavy current, dropping the voltage to a few tens of volts. Distinction must be made between the DC firing voltage, often less than 100v, and the AC firing voltage, proportional to risetime, which is typically 500v for 10kv/us.

Even a small tube the size of a 2W resistor can survive multiple short 10000A pulses. These devices are available in 1- and 2-gap styles: a single gap protects single-ended (unbalanced) lines, whereas the 2-gap device with common ground terminal protects balanced lines such as twisted pairs. In the latter case, two single devices should not be used, because one is likely to fire before the other, allowing a large voltage to appear across the load.

Varistors

The metal-oxide varistor, or MOV, is composed of zinc oxide and other materials formed into a disk or block. This forms a highly non-linear resistor. Below its breakdown voltage, it is characterized by high resistance (and capacitance, typically 1000's of pF). Above breakdown, resistance falls sharply, shunting much of the surge current away from the load. These devices are cheap and widely available in capacities from a few hundred peak watts (disc capacitor size), to many kW (large blocks), and voltages from a few to several hundred volts. Unfortunately, clamping voltages are "soft" at high current, causing higher voltage across the load. As well, they may explode if severely overloaded.

Zeners and Transzorb

At lower power and voltage, zener diodes have been used; they simply break down and limit voltage. Ordinary zeners are not rated for high surges, and clamping characteristics are poor because of their impedance. An ordinary 1W zener will be destroyed by a 10A pulse.

An improved zener suppressor, the "TransZorb", offers much improved clamping, usually 30% above nominal breakdown voltage. Peak power capacity ranges from 500W to several kW. Switching speed is very fast, usually in the nanosecond range. A wide range of voltages is available. Bidirectional versions allow clamping of surges of either polarity.

Unfortunately, capacitance in the "off" state can be tens of thousands of pF, adversely affecting medium to high speed signals. This limitation is overcome by an additional series diode, reducing capacitance to 100pF or less.



2-Level Protection

An effective system approach may require two-tier protection. A high-power primary stage stage diverts most of the surge away from the load. Large MOV's, gas tubes, or spark gaps are used. This stage is characterized by poor clamping ratio and slow response.

The secondary protection clamps the surge to a level safe for the equipment. TranZorbs are commonly used here. Peak current limiting from the first stage is essential, in the form of a wire-wound series resistor. Composition or film resistors cannot be used because of low surge capability; an ordinary 10W WW resistor can survive 25kW peak power for 100us.

"It is easier to denature plutonium than to denature the evil spirit of man."

-Albert Einstein

El Cheapo....

Here are some ideas on using the \$30 Radio Shack tripod mount and short masts for portable VHF/UHF antenna setups. Some have found this useful when operating VHF/UHF contests from various lookouts in Gatineau Park.

My objective is that all components be capable of transport in an ordinary passenger vehicle, limiting length to about 6'. The tripod, once detached from its mounting base (eg 2x4 pieces or plywood sheet), folds down nicely.

I discovered an aluminum hedge clipper extension pole at a hardware store. This device is a set of telescoping 5' aluminum tubes which lock at the centre. It is light-duty and costs about \$14, but is handy in some situations.

A cheaper (albeit heavier) alternative to the aluminum mast is a 10' section of 1 1/4" swaged, galvanized steel pipe. It's called a fencing "top rail" section, costing about \$7. Have the section cut in half; this is usually done at no charge. Deburr the cut ends. When reassembled with the swage in the

centre, both ends are left straight for clamping. Another 5' swaged section could be added on top, but I suspect this is about the limit of this arrangement for temporary setups.

Dave Harris, VE3KMV

"Intelligence has a lot to do with what folks believe. Those with smart kids, for example, are more likely to believe in heredity."

-Frank Clark

JUST THINK HOW THE POSTAL SERVICE HANDLES PACKAGES MARKED "FRAGILE"

Dugway Proving Ground, Utah-

The U.S. Army wants to remodel its biological warfare laboratory here, so it can experiment with viruses that cause incurable diseases. Since a virus escaping onto the atmosphere could be dangerous, the Army has gone to elaborate lengths to reassure a skittish public that the desert facility, 70 miles from the nearest town, will contain virtually fool-proof safeguards.

A draft environmental impact statement goes on for 200 pages describing these safeguards. On the 201st page, however, there is a small surprise: The experimental viruses, such as those that cause anthrax and encephalitis, will get to the supersafe lab the same way you get a letter to aunt Sara...by MAIL! "They're going to wrap them up and drop them in a mailbox? That's incredible," says Dr. Richard P. Novick, Director of the New York based Public Health Research Institute, and a critic of the lab's plans.

Dr. Novick says he wasn't aware of the method of transport until a reporter told him. Shipping viruses through the mail like fruitcake seems "a little crazy" given public concerns over safety issues. Adds Steve Erickson of Downwinders Inc., a Utah based environmental group also opposed to the laboratory.

Upping his concern, Mr. Erickson adds, is a suspicion, denied by the Army, that certain genetically engineered viruses even deadlier than natural ones may become part of the army's ship-and-test plan. The Army says there isn't anything odd about its virus-by-mail plan, noting procedures for this outlined in a federal statute, which the army says it will studiously follow.

Indeed, the Army's recently released impact statement outlines a five step procedure for transporting viruses from commercial laboratories to the testing site. First, they will be heat-sealed in plastic tubing and with the shippers's name, address and "appropriate warnings." It will be placed in a cushioned cardboard box "sealed at all unions and sent through registered mail."

This is not all that reassuring to critics, given the rather universal experience of having things get lost or misdirected in the mail. "What happens if it gets shipped to the wrong address?" asks Dr. Novick. "and suppose the mail vehicle crashes, explodes and burns?" - *Wall Street Journal* April 6, 1988.

73 De George, N2ELC, High in the hills of Jersey!



Schedule for VE3JW to December 18, 1988

	Morning 9 AM - 1 PM	Afternoon 1 PM - 5 PM
NOV 19 SAT	Ted VE3PDA Otto VE3HCD	OPEN
Nov 20 SUN	Tom VE3OFM Serge VE3SLS J.P. VE3PXZ	OPEN
Nov 26 SAT	Norm VE3NDU Leo VE3NVL	Ed VE3VLF
Nov 27 SUN	Doug VE3ATY Alan VE3LNH	Fred VE3BAJ Jim VE3GJY
Dec 3 SAT	OPEN	Archie VE3NJY
Dec 4 SUN	Fred VE3PAA Judy VE3PAB	Bob VE3JDB
Dec 10 SAT	OPEN Leo VE3NVL	Lee VE3OWD
Dec 11 SUN	Kris VE3OWE Chuck VE3PDK	Don VE3ATJ
Dec 17 SAT	OPEN	OPEN
Dec 18 SUN	OPEN	OPEN

These are operators who have expressed an interest in operating VE3JW, the amateur radio station at the Museum of Science and Technology. If you are interested in operating the station call Leo Desjardins, VE3NVL, at 225-0902 or 992-4094.

Get those articles to the Editor!

Articles describing antenna projects, computer tips or software evaluations, rig modifications or articles aimed at the novice, should be sent to the Editor by the 25th of each month. Send them in on disk (IBM, Amiga, C64) or handwritten or typed. If you enjoy the articles in THE RAMBLER, contribute to the effort.

-The Editor

The NET/ROM Lynch Mob

A lynch mob mentality seems to be sweeping through the ranks of packetdom. One guy flames WA8DED, and suddenly a host of people, operating strictly on the basis of hearsay, are ready to "string him up" and trash every NET/ROM chip in sight. Methinks these folks doth protest too much. Could it be that some of them are feeling some pangs of guilt about embracing TheNet without first waiting to see if it was legit, and are now grabbing at any ammunition they can find to justify their actions?

Regardless of the motivation behind the flames, I wish everyone would just cool down for awhile. I have followed the TheNet vs. NET/ROM controversy closely, on Compuserve Hamnet and elsewhere, since it began a few months ago. As far as I'm concerned, the jury is still out on whether TheNet represents a legitimate "reverse engineered" clone of NET/ROM, as its legion of supporters would have us believe, or whether it is a blatant ripoff of a copyrighted product, as Ron Raikes and Mike Busch of Software 2000 claim. Likewise, are the recent actions of Ron Raikes simply vindictive and mean-spirited, or are they the actions of a man who strongly feels he has been wronged, and that the fruits of months of labor have been stolen from him? I don't know for certain, and neither, I suspect, do you. I do know that, amongst all the claims and counterclaims that have been flying around, I have yet to see any that were totally convincing.

Whatever else has happened, I consider these two points to be irrefutable:

- (1) Ron Raikes and Mike Busch have made several valuable contributions to the growth of packet radio, some of which are in the public domain.
- (2) There is absolutely nothing wrong with someone trying to make some money by developing and selling products to radio amateurs, or any other hobbyists for that matter. Whether the products are hardware or software makes not one whit of difference. I don't see anyone flaming AEA, Kantronics et al for not giving away their products or releasing their firmware, nor anyone claiming it's okay to make blatant unlicensed copies of their products because "it's only a hobby". If we drive out the commercial purveyors of amateur radio hardware and software, we'll all be the poorer for it. Granted that Software 2000 has made some errors, in marketing and otherwise. They still deserve our respect, and the benefit of our doubt. So let's disperse the mob and try and get some answers to these questions from some dispassionate and knowledgeable observers.

73, Barry VE3JF