VANCOUVER EMERGENCY COMMUNITY TELECOMMUNICATIONS ORGANIZATION

Volume 3, Issue 2

Spring 2001

Remembrance Day Hotel Fire

Field Day 2001

Only 4 months Away!

Plan to Participate

AHEAD...

- SW Regional Amateur Radio Emergency Exercise 'Tophat' — March 31, 2001
- Vancouver Marathon
 May 6, 2001
 Communications Volunteers
 Needed.
- Emergency Preparedness Week — May 7-13, 2001.

At approximately 4:00 P.M. on November 11th, a fire started in the furnace room of 33 West Hastings. This building housed a pub on the main floor as well as low-income residential units above. The because of the age of the building, the number of residences as well as the threat to surrounding buildings, Vancouver Fire and Rescue called in a Four Alarm Fire. Radio reports indicated by 5:30 P.M. that ESS had been notified. An estimated 60 to 80 people were believed to be affected.

VECTOR Asked to Assist:

VECTOR Members, in support of the ESS Disaster Assistance Team were asked to respond. In total, five VECTOR members turned out, supported by Paulette VE7VPE, who took on net control and callout duties. Cam VE7MMV and Lee VE7FET set up communications at the Salvation Army's Harbour Lights Centre, which was used to feed evacuees and make alternate accommodation arrangements, Tom VE7TOX covered communications from the scene, and Derek VE7WVG was brought down to provide communications should a hotel location be required.

You may ask "Why use amateur radio at all, don't you have cel phones?" That was the concept until a large east side apartment fire last year resulted in hours making arrangements from the site, dead cel phone batteries and busloads of evacuees driving around without communications looking for temporary accommodation. Two lessons from last year's pre-Christmas fires were the need for communications the following day and the need to have enough communications. Two operators who were unable to attend immediately were put on stand-by for communications in the morning. Another operator was on standby in case further hotels were opened that night. Secondly, while communications could have been handled comfortably by two or three operators, five operators were utilized. This allowed great flexibility should the situation require additional communications. As well, it gave interested operators a chance to see what communications during a call-out were like.

One of the biggest successes of the callout was having Cari VE7CHJ, Jeff VE7HAK and Rick VE7EMT available, especially for the next day. Taking care of evacuees normally requires communications for the next day if not two days as was the case of last year's pre-Christmas fire. Having enough hams during the callout was good coverage, having people available for the next morning was great coverage.

If you want to help, you have to make the effort yourself to get involved. Paulette, Cam, and Derek said they were willing and wanting to get more experience. Let people know, sign up to help with net control, special events and field day. It's the people who get involved who get called!

Tom Cox VE7TOX

HAMS ASSIST IN INDIAN EARTHQUAKE

Sun, Feb 04 12:56 PM EST

By RAMOLA TALWAR BADAM, Associated Press Writer

GANDHINAGAR, India (AP) - "Everything here is panicky! Everything has collapsed!" It was one of the first messages out of western India after hundreds of villages crumbled in an earthquake that killed thousands.

For four days, before telephone and mobile services were partially restored, the voices of two amateur ham radio operators were among the quake-zone's vital links to the outside world for news about casualties and relief needs. The transmissions - by computer engineer Ram Mohan and ham radio instructor N. Ravi in Bhuj, near the epicenter - offered a terrifyingly vivid account of the first days after the Jan. 26 quake had leveled whole towns.

"We can't count the bodies. There are too many. It's impossible to count. Everything is buried under debris," the two distraught operators shouted. Mohan and Ravi were among 10 volunteers from southern India to reach Gujarat state the evening of the 7.7-magnitude quake. The first message from Bhuj was sent the following morning.

A ham operator control room was set up in Gandhinagar, the Gujarat capital, 200 miles east of Bhuj. Some 200 messages were received on the first day over the high-frequency band from Bhuj about the need for doctors, medicines, ambulances and cranes. "Soon urgent messages about patients who had lost both legs or whose arms had to be amputated were sent so the nearest hospital could be warned to prepare," said S.B. Ram, manager of the National Institute of Amateur Radio, which teaches ham operating skills in Hyderabad in southern India.

About 40 operators from all over India reached the worst affected villages and towns to set up more than 20 stations in makeshift hospitals and relief camps in a matter of days. Worried people from Britain, France and Switzerland sent messages to trace the whereabouts of relatives who were touring historic sites in Gujarat. Calls came pouring in from Indians at home

and abroad to inquire about family members or friends. The messages ranged from a simple, "Where are you? Take care," to this plea to find a relative in Bhuj: "Please find him. He's deaf and dumb."

Deepak Dave, general manager of marketing for Ambuja Cement, said time made the difference when he approached ham operators for news about his sister's family in Gandhidham, where apartment houses had come crashing down. "Seconds after the earthquake you could not reach telephone lines anywhere. I desperately wanted to know if my sister and her two kids were safe," Dave said. "I realized the difference of getting information in 24 hours or waiting for a few days for news in a calamity."

The operators traveled with aid groups to remote villages to contact people in affected areas and send information to government and relief agencies about needed supplies. There are 30,000 licensed ham operators in India, of which 500 are active users. They tune into a high-frequency band to communicate via voice or Morse code and each user has a personal code name or number that follows the country code, such as "VU" for India.

In Bhuj, two days after the earthquake, Mohan and Ravi ran out of drinking water and survived on biscuits before supplies reached them. "They slept on the road with blankets on the first two days because there were no tents," Ram said. Operators complain that since amateur radio is categorized as a hobby, Indian policy makers don't take them seriously. The ham operators have come through in disasters before, however. When a supercyclone that killed 10,000 people in eastern Orissa state hit in 1999, ham operators made their way to the chief minister's house in the capital, Bhubaneshwar, and enabled him to tell the federal government in New Delhi that the storm had devastated the state. "This system works when expensive satellite communications fail," said Pravin Valera, a sub-inspector in Gujarat who is a ham operator. "We can set up a second line of communication anytime, anywhere, anyplace in half an hour."

VECTOR EXECUTIVE

President Paulette Schouten, VE7VPE

Vice-President Fred Chen, VE7LNX

Treasurer Cam Bremner, VE7MMV

Secretary Jim Bulteel, VE7BAL

Director Tom Cox, VE7TOX Director John Schouten, VE7VPU

Director Bryan Larrabee

Questions?

If you have questions about VECTOR, Emergency Operations in the City of Vancouver or any other aspect of our emergency plan, please drop us a line. Our contact numbers and addresses are given on the last page.



The Provincial Emergency Radio Communications Service



TPARC The Telephone Pioneers Amateur Radio Club

VOICE REPEATER

The Telephone Pioneers Amateur Radio Club (TPARC) is a group of amateur radio operators who are either present TELUS employees or retirees. In 1989 TPARC (VE7TEL) joined together with the TOTEM ARC (VE7ESR) to provide an emergency amateur radio repeater that would cover the lower mainland and the lower end of Vancouver island on 145.170 (-600 KHz). The coverage of this repeater is from Hope to Sooke on Vancouver Island.

In an emergency or exercise, TPARC supports the Provincial Emergency Social Services Operations Center (PESSOC) with amateur radio communications. VE7TEL is one of the main repeaters supporting communications for the support agencies: St Johns, Salvation Army, Red Cross, and the Ministry of Human Resources.

PACKET RADIO NETWORK

In the early 90's, a group of amateur radio operators met at the B.C. Tel. headquarters building to discuss the possibility of extending local area packet radio operations into the Interior of the province. Very simple concepts were discussed, that being the state of packet radio at the time.

It was felt that it may be possible to establish a series of "NODES", that would be able to hear at least their adjacent counterparts, and that would form a simple "digipeating" chain of stations. But, it was recognized that, before such a network went very far, the traffic flow would slow down drastically. On top of that, the data flow would be at 1200 baud, a limitation of the so-called Bell 202 audio frequency shift keying standard, that had been adapted for amateur radio VHF/UHF relaying.

To get started, equipment would have to be borrowed, as there were few funds available. It was felt that this would lead to uncertainty down the road, and system continuity would indeed be dependent on the generosity of the donors.

Ambitious plans were developed. It was felt that

the only way to get a more efficient system going was to design it from scratch, as there was little equipment available to do what was required. A group of keen data engineers got busy. It was, however, time consuming and required a lot of dedication from the people who were also required to do their regular jobs. Volunteers are not all retired, some work. Family commitments, job changes and other factors finally resulted in the abandonment of the design and construction project, although most of the necessary circuit boards had reached the prototype stage.

It was time to regroup. Do we abandon, or continue in some other way. We had, by then, established a voice repeater at our company's Haney radio site. It was setup to relay 1200 baud packet signals and establish a connection to the local DX packet cluster station, part of a fast growing network of stations all around the world.

It was decided that we would purchase the necessary higher speed data equipment to work with available UHF radio equipment. This equipment was available from a small number of suppliers, but we went ahead with a 19.2K relay link to connect Haney back to our Burnaby HQ. site, and established an access channel there, so that better connections could be made to Haney from the Vancouver area. We gained much experience, particular in the data equipment area, and realized just how immature the available equipment technology was at that time.

We planned to begin extending our system east to Kamloops through a series of relay stations already developed and used by B.C. Tel. for microwave relay purposes.

In November of 1993, an emergency preparedness exercise, called "Exercise Thunderbird 1" was held. Our group participated, along with some of the other clubs, by providing standard voice communications using VHF channels. This exercise covered the territory from the Fraser Valley to Victoria. The only way we could possibly reach Victoria from Vancouver would be to use an al"The Telephone Pioneers Amateur Radio Club (TPARC) is a group of amateur radio operators who are either present TELUS employees or retirees"



TOPHAT 2001

Emergency Communications Exercise & Competition

Highlights

THE FIRST TIME!

It is intended that "TOPHAT 2001" will be an annual exercise in emergency communications in the Greater V a n c o u v e r / Fraser Valley region.

There will be a great deal of learning during this first time around. There may be lots of mistakes and frustration.

Patience and understanding will be required by ALL participants.

Date & Time	: Saturday, March 31st 2001, 08:30 AM until 12:00 noon		
Location:	PEP SW Region		
Scenario:	Based on an actual emergency involving loss of life that oc- curred in Vancouver (not another earthquake).		
Teams:	Open to all clubs and individuals. The exercise is designed for teams of at least 10 people, no maximum limit. Teams will provide their own equipment and transportation where required. Non-licensed volunteers can be part of a team as long as IC operating regulations are adhered to.		
Structure:	The exercise will consist of several components: set-up \cdot operating procedures \cdot message handling \cdot contacts and contesting. Points will be awarded to teams for completion of tasks in various components. Typical tasks would include:		
	 obtaining a task number scheduling shift changes completeness of station logs. 		
Locations:	Expect to set up and staff at least three stations - EOC, hospital and reception centre. An additional remote site station may also be required.		
Modes:	Primary operating modes will be VHF & UHF. Packet ra- dio, ATV and HF operating modes will an optional team choice. The final hour will allow participants to contest for contacts 'Field Day' style in their choice of mode and band.		
Prizes:	We expect that a trophy will be awarded to the winning team, and individual prizes will be awarded to the winning team members.		

Further information contact: VE7TOX@rac.ca or VE7CYU@rac.ca or VE7VPU@rac.ca or call (604) 8935024

2001-01-16 by Noel S. Brady, Journal Reporter

SNOQUALMIE - Residents of this remote town bound by mountains are asking an important question: "Are we ready for a disaster?"

Police and firefighters say maybe not. That's why they're working with local volunteers and ham radio operators to assemble a backup system for extra people power and communication equipment in case of an emergency that overwhelms existing systems, such as the high-frequency radio dispatch service.

One of the concerns is that police and firefighters might lose the 800 megahertz communications system if the facilities are damaged by a huge wind storm," said Les Kerr, a retiree and ham radio aficionado who volunteers with the burgeoning Snoqualmie Emergency Communication Support Team. "Or a huge event like an earthquake could overload the system with emergency calls."

Still in its infancy, the organization is intended to prepare Snoqualmie for the worst kinds of disasters. Already, similar groups of shortwave radio or ham operators have begun serving King County, Redmond, Mercer Island and Kirkland.

The group's founder, Betty Keeton, got the ball rolling a year ago. She immediately had

the support of Snoqualmie police and fire-fighters.

In fact, designers of the new Snoqualmie police station, like Capt. Jim Schaffer, made sure a ham radio antenna was included in plans for the new building, which opened in November 1999.

"This was a real opportunity to put together something we needed and would use," Schaffer said. "It's an organization and the kind of volunteers we really have to have." Now all the group needs is a few more volunteers, said Keeton, who drives a school bus in the daytime. "If all the police communication systems become swamped, they can rely on our ham radios," she said. "We'll also supply volunteers to staff an emergency center in the police station, so we're also looking for gophers, people to provide food and coffee to workers and other odd jobs."

So far the group has met three times, and has attracted about eight volunteers, several of whom also are involved with the county's volunteer search and rescue team. Kerr said volunteers don't have to have a ham radio license or experience to join the organization. But if they're interested in learning about ham radio, the group with offer classes for volunteers to obtain a license.

Almost as important as providing an emergency plan, Kerr said he hopes the group will help create a stronger Snoqualmie community of civic-minded residents. "Are we ready for a disaster?"



ARIANE-5: The new Amateur Radio Satellite is now in Orbit

Flood Threat

Freshet season is not likely to bring flooding along the Fraser River this year. The snow pack throughout the province is below to well-below normal, especially if normal accumulations occur during the next 3 or 4 months, and freshet runoff volumes are likely to be below normal this year.

Only sustained, extremely heavy rains over a long period could raise the River to a level of concern. For complete details on the situation, visit <u>www.env.gov.bc.ca/wat/flood/floodmgt.html</u> and click on "River Forecast Centre" or "BC and Yukon River Levels".

VECTOR congratulates one of our own. VE7WTX, Heather Chen was recently appointed to the post of Section Emergency Coordinator for British Columbia by the Radio Amateurs of Canada.

Congratulations Heather!

Upcoming Training and Workshops

- ESS Training Weekend (all-in-one) includes lunch. Sat/Sun April 21/22 contact 257-8620
- Introduction to ESS (to register call 257-8620)

Wednesday March 14 at 19:00 hrs—Renfrew Community Centre; and

Monday April 9th at 10:00 hrs—Ray-Cam

• Reception Centre Operations Saturday March 31st at 09:00 hrs—Kerrisdale Community Centre (to register call 257-8620) Monday April 30th at 09:00 hrs—Ray-Cam (to register call 257-8689)

- Critter Aid (Pet services during an emergency) Sunday March 18th 09:00—16:30 hrs at
- E·Comm (to register call 263-2311) • Personal Services
- hersonial services check <u>www.sallyann.org/eds</u>
 Messaging in Communications — week of
- Messaging in Communications week of March 25th date and time TBA at E-Comm.



City of Vancouver Emergency Planner Ron Martin presents VEC-TOR President Paulette Schouten, VE7VPE with a plaque recognizing the contributions of our volunteers and the service they have provided to the city over the past year.

The plaque will be displayed on the wall outside the VECTOR Room at E·Comm.

Morse Code Class Graduates

Most of the first class of VEC-TOR Morse Code Course graduates left E·Comm all smiles this past week. After seven weeks, twelve radio operators have already passed their code test and will shortly be on HF.

In the eight week course, Instructor Kevin McQuiggin VE7ZD and IC Examiner Fred Chen VE7LNX sent code each week during class, gradually building speed. Participants were encouraged to practice regularly and had the assistance of a web-site and the Shareware program Nu-Morse.

Congratulations go to:

- Cam VE7MMV
- Tom VE7TOX
- Lee VE7FET
- John VE7VPU

- Adriana VE7PUP
- Paul VE7PLC
- Wai Sam VE7IGO
- Robin VE7FFP
- Man-Kay VE7YEU
- Stephen VE7DLN
- James VE7RCF
- Bernie VE7MRQ

Special thanks for the efforts of Kevin and Fred!

VECTOR Visits Local Club

On the invitation of Brian Summers, VE7JKZ, VECTOR member Kevin McQuiggin VE7ZD attended a recent meeting of the Richmond Amateur Radio Club, and gave a presentation on E-Comm and our association. The talk covered the E-Comm project in general, current E-Comm projects such as the wide area radio system and consolidated dispatch, amateur radio at E-Comm, and emergency preparedness. About twenty

members were in attendance, and questions generated lively discussion that lasted about ninety minutes. Kevin's "other" role as a member of the Vancouver Police prompted several good questions on enhanced 911 and public service radio. Kevin invited the Richmond club to E-Comm for a tour of the facility and the VECTOR room at a future date. Thanks to Brian and the Richmond club for the invitation, it's always nice to visit other groups, meet the members, and tell people about amateur operations at E-Comm!

"Twelve radio operators have already passed their code test and will shortly be on HF..."

(Continued from page 3)

ready established VHF "NODE" station, operated by the Victoria amateurs who were part of a group called VARPA (Victoria Amateur Radio Packet Association). This station was located on Saltspring Island and provided good coverage from its strategic location.

These nodes are usually a single frequency operation, with the node repeating, on a slightly delayed basis, what it hears on its frequency. The stations desiring communications through the node simply connect through it by using the appropriate "connect" commands.

Some messages were first prepared on a computer word processor. These messages were saved as "text" on to a floppy disk. The computer on the packet radio channel then used this prepared disk and directly transmitted the file contents over the single frequency channel through the Saltspring node to Victoria.

This simple demonstration showed the value of packet transmission especially for computer originated messages. After the exercise, we were asked to explain how this was done, given that all the normal communication lines were "down" during the exercise. The rest is history. We were asked to revise our system planning priorities, and to instead look first at extending our network to Victoria.

Funding was of course a problem. We had made some progress. Funds were building up through the sale of obsolete radio equipment that had been made available from B.C. Tel, through the Telephone Pioneers organization. More funding was going to be necessary. Certain key items of equipment had to be purchased new, as we could not depend on the serviceability of some used items such as power supplies, antennas and data equipment.

Some additional funding was provided, from Provincial Agencies with whom we were working. This turned out to be crucial in helping us get the network going. We have at last achieved our goal of providing a network from the Coast to the Interior of the province.

At Greenstone, we not only provide a direct local access channel to the local area, but we interconnect with an already established packet radio network that provides service locally, and beyond. The total configuration gives coverage down into the Okanagan and various locations north, towards Prince George.

We are planning to improve our coverage to the communities west of Victoria, using another site in the area. We also plan to extend the network into the Squamish Valley. Some consideration is being given to the establishment of additional sites which would in effect give us a "ring" type of layout to the interior, thus increasing network reliability and flexibility.

We are planning to convert some of our existing UHF 1200 speed access switches to 9600 bps to enhance performance. We realize it will be necessary to have more higher speed user equipment available to connect to these channels. We are looking at establishing an HF gateway terminal that would connect into our main network. This would provide essential thin route data communications with remote communities that are suitably equipped. We also plan to upgrade and modernize our site message switching technology to provide greater efficiencies. Some upgrading will be necessary to equalize the performance of all of our relay links.

The entire process has taken considerable time, but given the fact that everything we do is by volunteer effort, and we must fit in with the activities of our host company, it has worked out quite well.

We are indebted to B.C. Tel., which has been more than generous in allowing us to use their sites, and give us much support during the construction phase. They are also very supportive in helping us access the sites for maintenance and operational purposes.

We appreciate as well, the help and support given to us by the Provincial Emergency Social Services Program of the Ministry of Social Development and Economic Services, with whom we work on an ongoing basis.

The TPARC organization stands ready to continue serving the emergency communications needs of the province of B.C. in whatever way it can.

Don Byrne (VE7YQ) and Bryan Farrar (VE7BFY)

... additional sites would in effect give us a "ring" type of layout to the interior Page 8

On the web: www.city.vancouver.bc.ca (search for 'VECTOR') or www.qsl.net/ve7vct

WE SUPPORT









Silent Key

With profound sadness we report the sudden passing of VECTOR member Norm Field, VE7QNF. Norm helped us install the 80m dipole on the E-Comm roof and his entire family helped out at the



Vancouver Marathon last year. He is survived by his wife Lynn and his two sons, Kevin and Ryan.

On behalf of VECTOR, flowers were sent to his home with the message: "Norm VE7QNF VE7VCT QRT but not forgotten."

A memorial service was held on Saturday, January 27th at Cliff United Church in Burnaby.



VECTOR AGM 2000

The VECTOR AGM was held at E-Comm on November 28, 2000. In addition to the election of Officers, the Directors provided reports on the past year's activities and progress toward emergency preparedness planning.

Ronald Martin, one of the Emergency Planning Coordinators for the City of Vancouver in attendance announced that VECTOR has been awarded a plaque for its service to the community.

Is Your Year 2001 Membership Renewal Due?

Your \$5 per year registration for '2001' will soon be due. If you are not renewing, your E-Comm ID and Disaster Response Route Pass should be returned. You can still receive the newsletter on the City of Vancouver Web site at: http://www.city.vancouver.bc.ca/police/structure/op-support/oas/events/hamradio.html



VECTOR NET

VECTOR hosts an Amateur Radio emergency preparedness net Wednesdays at 8 PM — except the first Wednesday of the month which is BCFMCA net night.

Please tune in to the BCFMCA VE7RPT repeater at 146.940 MHz (-600 KHz) and join in.

Full Name	Date of Birth (YY-MM-DD)	for <u>NEW</u> memberships: Vancouver Police Department Services Liaison Section - VECTOR
Address		312 Main Street Vancouver, B.C.
		V6A 2T2
		Phone: (604) 717-3068 Fax: (604) 665-3913
E-Mail		Email:
lome Phone	Business Phone	vector@city.vancouver.bc.ca
Call-Sign		License Class
First-time Registration Fee \$5.00 Enclosed	Licensed Amater	ur Basic
Annual Renewal \$5.00 Enclosed	Unlicensed Publ Communications	
hereby authorize the Vancouver Police o conduct a confidential criminal record		Advanced