



## Emergency Measures Radio Group

### Ottawa ARES

Two Names - One Group - One Purpose



### General Meeting

Date: Saturday Sept 28, 2002  
Time: 9:00AM - 12:00PM  
Place: Blackburn Hamlet Fire Stn.  
East end of old Innes Rd, near  
the intersection with the bypass

#### Agenda:

- EMRG Update
- Exercise Integration -Airport
- Next Exercise -SET Nov 9
- Red Cross
- Training Update

### Team Leaders Message

Since the last EMRG general meeting a lot of great things have happened with and for EMRG. Some of these events are captured in this newsletter and others will be discussed at the Sept meeting.

This time last year, we set out to make sure EMRG would have a year of steady activity and that we would be back as a group to do even more this year. Having a great team has helped to distribute the work, which is showing great benefits. We had training at each meeting, there were two exercises and the membership database is organized. I think we can look forward to an even better year ahead.

Sept 11 is in the news and minds of many people right now. There have been many articles written about the various groups that were involved, including several articles in commercial magazines, talking about the role of amateur radio. The key elements behind the success were pre-planning and portable equipment.

If you know someone who might be interested in EMRG, let them know about the meeting.

Peter -VE3BPQ      ve3bqp@rac.ca

## Events Earlier This Year

### Emergency Preparedness Week Display

On May 6, EMRG participated in a display at the Cartier Drill hall, next to City Hall. This was a joint Federal, Provincial and City planned event to kick off Emergency Preparedness Week. This event provided a great opportunity for EMRG to talk to people from other agencies from different levels of Government. The booth was 10' x 10' and the displays covered all aspects of Amateur communications from HF to APRS. There are a few pictures on the EMRG web site.

### Exercise Integration

John Senez, EMRG exercise planner was sitting at the table as a partner in exercise planning for the Ottawa Airport exercise. The actual exercise took place on Thursday May 23, but the planning took several months, including several all day meetings. This exercise was a great step forward and shows the credibility that EMRG has developed with other agencies.

The exercise involved a plane crash near the airport, into a residential area. EMRG provided radio communications from the shelter, but also provided backup for the hospitals when they simulated a failure of their intra hospital radio system.

### Hospital Disaster Planning Committee

The Airport exercise strengthened the relationship between EMRG and the Ottawa Hospitals. While EMRG was always recognized by the Hospitals as a backup communications resource, deploying EMRG operators to various hospitals and demonstrating what can be done added a lot of credibility.

EMRG is now a member of the Hospital Disaster Planning Committee as shown on the pamphlet below. (see just below the middle)

## Hospital Disaster Planning Committee of Ottawa

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The mandate of this committee is to develop, and revise as needed, a regional disaster plan which would ensure a coordinated state of disaster preparedness for all hospitals in the region. It reports to the Capital Health Alliance.

### Members:

The Ottawa Hospital:  
General Campus  
Civic campus  
Riverside Campus  
The Queensway-Carleton Hospital  
The Children's Hospital Of Eastern Ontario  
The Montfort Hospital  
The Rehab Institute  
The Royal Ottawa Hospital  
The University of Ottawa Heart Institute  
Emergency Medical Services  
Central Ambulance Communication Centre  
Ottawa Emergency Measures Unit  
Emergency Measures Radio Group  
Public Health & Long term Care  
Canadian Red Cross  
Base Hospital Program  
Ottawa Fire Department  
Ottawa Police Services  
Ottawa Community Access Centre.  
Macdonald-Cartier International Airport  
Authority

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The Hospital Disaster Planning Committee has also asked EMRG to provide an amateur radio display at their annual disaster planning conference in October. This is a large scale event, attracting people from all over the Province. The EMRG name appears again in the pamphlet as one of the exhibitors.

What have you done this year to make  
yourself better prepared than last year?

**Winter is coming soon!**

## **R Is For Radio**

In an emergency, most EMRG communications will take place on Amateur Radio frequencies, but it is important to remember that the R in EMRG is for Radio, any radio.

In an emergency, the same operations and technical skills that are applied for Amateur Radio can also be applied to CB, FRS, Marine or Commercial frequencies. If a community is isolated by a disaster, people will try to communicate with what they have. Being prepared to communicate on these other frequencies is part of the value EMRG can provide in an emergency.

## **City Radio Equipment**

### **City Of Ottawa Surplus Equipment**

For many years there has been talk about what happens to the existing radio equipment as various agencies in Ottawa migrate to the EDACS trunked radio system. Some of the migration started under the old RMOC and continues under the new City of Ottawa. Ottawa Fire Dept is the next major agency to switch.

While many vehicle and portable radios have been changed already, some repeaters and base stations that were turned off are only now being removed. All equipment must be inventoried and matched with the original equipment inventories from multiple former Municipalities and agencies.

Some equipment from Ottawa Police has been used temporarily by the amalgamated Ottawa Fire Dept to provide multi channel radios in all vehicles, so all fire channels could be shared across the City. With the emphasis on migrating radio users to EDACS and the amalgamation into one City, equipment removal and sale has had a low priority.

The topic of getting access to some of this equipment for EMRG is now officially underway. Harold Murphy from the Emergency Measures Unit (EMU) requested a list of equipment that EMRG would be interested in as a starting point. EMU, Ottawa Fire and EMRG representatives will meet in the next month to discuss options and try to identify specific equipment.

## **EMRG Equipment Philosophy**

Until now, EMRG has intentionally stayed away from owning equipment, preferring to use the repeater infrastructure owned by local clubs and radios owned by EMRG members. However this is a once in a lifetime opportunity to get access to key City radio sites and to get equipment to put in them.

The objective is to seek equipment that can improve the general Amateur Radio infrastructure in Ottawa (repeaters) and enhance EMRGs capabilities to respond in an emergency. This is not about getting free radios for everyone.

The infrastructure (repeater) emphasis is on being able to provide hand held coverage across the City. There are many areas not covered by local repeaters, or only covered with a high powered mobile radio.

The other area of concern is building an inventory of equipment that can be packaged and ready for deployment as complete shelter kits, cross-band repeater systems for use at remote locations or for communications from inside a building, such as a Hospital.

This is an important opportunity to ensure that EMRG has the equipment required to meet the needs for today and in the future. It is also an opportunity for amateurs that are interested, to get a chance to do some hands on work with communications equipment that would not normally be part of amateur operation.

## **Thanks To Local Clubs**

One of the best ways to keep in touch with local amateurs is to visit the ham flea markets. This year EMRG had a booth at the two Ottawa flea markets, the Ottawa Valley Mobile Radio Club (OVMRC) in the spring and the Ottawa Amateur Radio Club (OARC) this fall.

Both clubs provide a table at no cost and are very accommodating of our needs. Thanks to both clubs for their continued support!

## **Portable Repeater**

The portable repeater was forced to move to a new frequency earlier this year. The frequency is now: 145.110 MHz – . There is an output tone on the repeater of 136.5kHz.

## **EMRG MEMBERSHIP**

### **Yearly Updates (Its really easy this year)**

It is time once again for membership updates from everyone who wishes to remain active with the group. If you submitted an application form in the previous year, a simple confirmation that there are no changes and that you want to remain on the list is all that is required. Please let Tom VA3WTJ or Liz VA3ELB know by email, mail or telephone.

If there are changes since your last update these should be provided, such as a new email address or telephone number. The membership year runs from September 1 of each year to August 31 of the following year.

### **Membership List Organization**

The purpose of maintaining an EMRG membership list is to ensure that contact information is accurate and to confirm who wants to participate in EMRG. The membership list is used for several things,

- to generate a call up list
- to maintain a list at EMU, so in an emergency information about EMRG members is already on file
- to mail the newsletter

The membership list is organized into three categories; Active, Inactive and Archived.

#### Active List

Members on the active list have either filled in a membership form or notified Tom & Liz that they want to remain as EMRG members for the year.

Active members are expected to participate in training, exercises and meetings (as often as time will allow, we all have a life) and will receive a copy of the newsletters.

#### Inactive List

The inactive list includes everyone who was an active member last year, but who does not provide an update this year. The lack of an update could be because they forgot, personal circumstances just don't leave enough time for other activities, or they are no longer interested.

Inactive members are viewed as potential active members, so they continue to receive the newsletters.

### Archived List

When no update is received for two years in a row, the name is moved into the archive list. At this point it is assumed that the person does not have time, has moved or is truly not interested. The newsletter is not sent to names in the archive list.

Anyone who is not sure when they provided their last update can contact Tom & Liz to confirm when their information was last updated. Email, if available, is the most convenient but please use the method best for you.

Tom VA3WTJ & Liz VA3ELB (225-3791)  
[va3wtj@rac.ca](mailto:va3wtj@rac.ca) [va3elb@rac.ca](mailto:va3elb@rac.ca)

### **Simulated Emergency Test**

This is an Ontario wide ARES Exercise  
Saturday November 9  
(More details to follow)

### **EDACS -Trunked Radio**

The former RMOC initially implemented the EDACS radio system, first for the amalgamated Police Dept, then public works and now all City agencies will be transferred.

But what is EDACS [Enhanced Digital Access Communications System]. EDACS is a radio communications system that provides fault-tolerant, high-speed, wireless analog voice, digital voice and data communications.

Each transmitter tower has it's own group of frequencies, one of which is a control channel. The system can choose ANY of the frequencies for the Control Channel. The EDACS System is limited to 25 frequencies per tower site. The computer controlled radio system instantly assigns a random channel for each transmission by sending digital information over the control channel. Each call will be on a different channel. Transmissions can be simulcasted over all transmitter towers or sent to an individual tower to cover only a certain area.

The system controller is programmed to detect interference on any of the frequencies and cease all operations on that frequency until a specified time elapses after the interference

stops. If the radio is lost or stolen, it can be locked out by the system.

EDACS Logical ID's (LID). A LID is a numeric ID assigned to each radio during it's programming that will specifically ID that radio on the system. It is used to display the name or ID of the individual originating the transmission as well as to the system for it's permissions and denials of groups/features. The dispatcher can detect if a person is transmitting on a portable or a car radio because each unit has a different ID. Some radios are not allowed to use the telephone interconnect, make individual calls and some are not even allowed to transmit. This is all controlled via the logical ID of the radio. The LID is also used to make individual calls, you have to know or have pre-programmed the LID of the radio you want to have an I-Call with.

Group calls are the standard calls made on a trunked radio system. Groups are the trunked equivalent of conventional channels. A user can call another group without having to know who is currently in that group. Groups are normally collections of users who need to communicate with each other regularly.

Groups are split into a hierarchical structure, comprising the system, agencies, fleets, and subfleets. This structure permits flexible partitioning of users who may be split geographically and organizationally. In this way several user groups can co-exist on the same system, without unnecessary interference. This makes EDACS particularly suitable for shared networks, where several organizations share the same radio infrastructure.

For example, a community-wide system has been divided into a small number of agencies, such as police and fire services. These agencies can be split further into fleets, such as police districts 1 and 2, or North and South fire stations. Each police district can be further broken down into subfleets, such as detectives, traffic, patrols, etc. All subordinate subfleets will hear a fleet call, and all subordinate fleets and subfleets will hear an agency call. This allows authorized users to make general announcements to certain user groups. In competing systems lacking a fleet structure, there is no convenient way to communicate with multiple groups simultaneously.