

Orientation Guide to Collegeville

For Amateur Radio Operators



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v1.8 M.Kelly VE3FFK

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Revisions 0.4 Jun 2007 added document images, added "BLEVE" to Glossary, minor text changes. Released as version 1.0

V1.1 additions to Glossary

V1.2 added access process, door, badge, book etc.

V1.3 not used

V1.4 added "NO DUFF" protocol for real emergencies

V1.5 revised access process, updated schedule 2008-2010, added more words to glossary

V1.6 revised access process again, added fax procedure, added site access map

V1.7 added Incident Commander, startex and endex to Glossary, added FAX instructions

V1.8 minor revisions. Updated Table of Contents page

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Purpose

This document is intended to be a general guide of operations, amateur radio operator duties and items to watch for, for those hams at Collegeville for the first time. It may also be a refresher to the seasoned veterans who have not attended in a long time. This document may seem a bit disjointed or out of order, but I am not an editor by inclination.

Collegeville Overview

What is now called the Canadian Emergency Management College is probably best known under one of its former names, Emergency Preparedness College, or perhaps as part of the federal Emergency Measures Organization. They used to be located in Arnprior, but are now located at 1495 Heron Rd., in Ottawa. Whatever you call it, they run three courses that have amateur radio participation built into them. Information on the courses can be found at http://www.publicsafety.gc.ca/prg/em/cemc/04pgc_01en.asp

Access procedure:

The building entrance is on the East side, near the back and is clearly marked "RECEPTION". (See diagram on last page). Typically that is where most of the cars are parked within the lot. If you are there for the first time, it is best to call one of the other amateurs on 146.550 or 146.880- as you arrive, so they can escort you in. Upon arrival, let the commissionaire know who you are and that you are there for the course. They will issue you with your course book name and access badge. You will also have to sign in. The access badge must be returned at the end of the day as you sign out. Proceed down the glassed in hall to the right (north). Follow the signs to the EOC. The college is willing to pay mileage and may also be able to provide accommodations on site for amateurs who are assisting in at courses.

Courses

The training courses are "Emergency Operations Centre Management" for both the fictitious town of Grandville (Pop 5,574) and the fictitious city of Collegeville (Pop 137,500), and "Emergency Site Management" for Collegeville. For exercise purposes, both municipalities are considered to be in the Province of "United" in the county of "Plains." The provincial capital is Worthington. It is outside of the county.

The title of the courses "Emergency Operations Centre Management" and "Emergency Site Management" clearly outline the purpose of each of the courses. They are run at the same time, and their exercises interlock. About 30 to 50 students from across Canada take part in these week-long courses. Students are typically municipal officials and emergency responders who have a management responsibility in the event of an emergency occurring in their municipality. Courses are offered at the College about 10 times per year. The simulated exercise dates remain fixed, no matter what time of year the course is

offered. For example even if a course is offered in January, a particular exercise may be thought of as occurring on July first. The EOC course for Grandville has just the EOC and Simulation rooms active, but is otherwise similar to the Collegeville courses, from the amateur point of view. When numbers warrant, the Grandville course may split in two, with two parallel EOCs in operation, each working with their own SIM room.

Amateurs

Amateur radio is involved during exercises conducted on two consecutive days during the course. A minimum of three amateurs are required for Grandville (two in EOC, one in SIM), and four for Collegeville exercises (two amateurs in EOC and one each in SITE and SIM) The second op is in EOC to help with increased traffic there. There may also be understudies participating while learning the job. It is preferred that there be two amateurs in each of the SITE and EOC, so students come to expect a team of operators for each shift.

Staff

Courses are run by a Course Coordinator. They have a Course Officer in charge of each of the EOC (Emergency Operations Centre) and ESM (Emergency Site Management) courses. There is a team leader for each of the three rooms (EOC, SITE, and Simulation room).

There are Service Coaches for each of Fire, Police, EMS (Emergency Medical Services (Ambulance)), Public works, Transportation, Health, EMO (Emergency Measures Organization), HR (Human Resources) and Social Services. In addition to the amateurs playing the role of amateurs, there is also a present or past Mayor or other municipal head of government who acts in the role of Mayor for the exercises. There may be others serving as understudy (trainee) for any of these positions. Those who are not attached permanently to the College are called "Visiting Staff". Various staff members will be pressed into service in the simulation room to act as people not directly written into the exercise, such as military liaison, humane society, kennel operator or airport manager if required by the actions of the students.

Volunteer scheduling and maintenance of the volunteer amateur radio operator roster is done by the registrar, currently Carole Michaud,

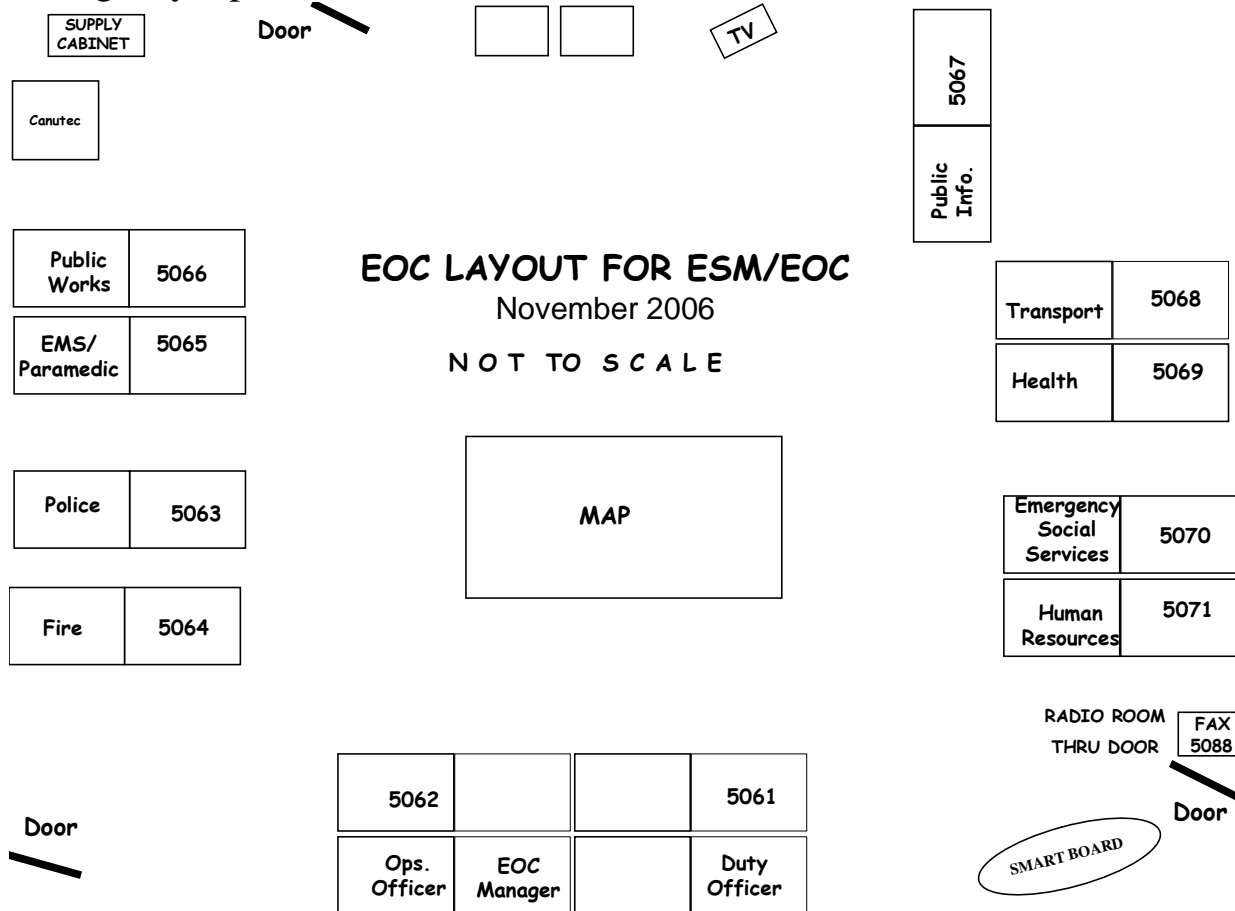
carole.michaud@ps-sp.gc.ca 613.949.5017

In practice, amateur radio operators are scheduled by Mike Kelly VE3FFK
E mail is his callsign at rac dot ca / phone 613 322 0669 (cellular)

Exercise Room Layouts

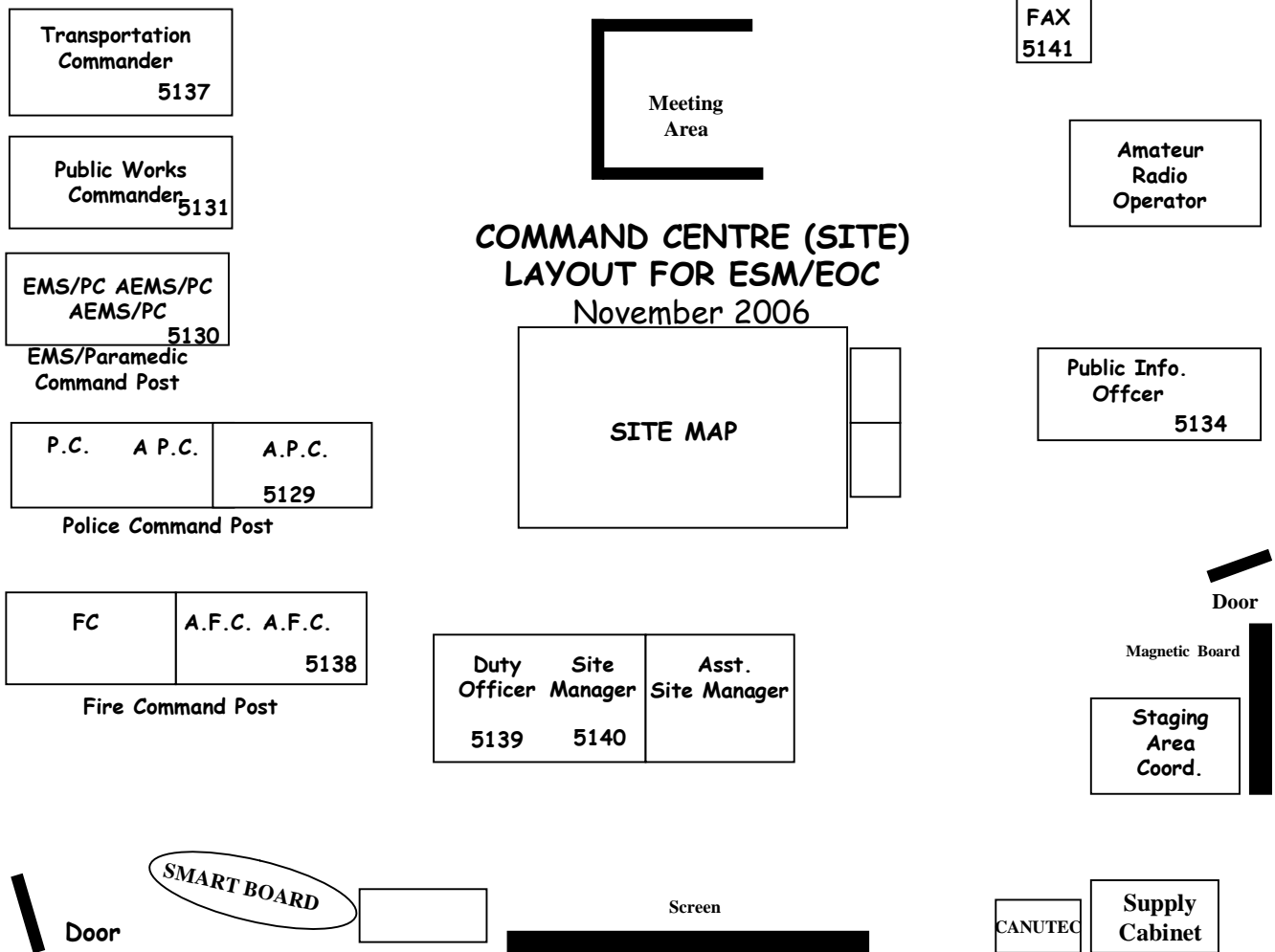
An exercise is conducted in three rooms as follows: An Emergency Operations Centre with attached telecommunications room, a room representing an Emergency Site Command Post, and a room used to run the simulation. For Grandville, only the EOC and simulation rooms are active. Grandville students spend some time in the simulation room as well as the EOC, but there is no “site” in their exercises.

Emergency Operations Centre (EOC)



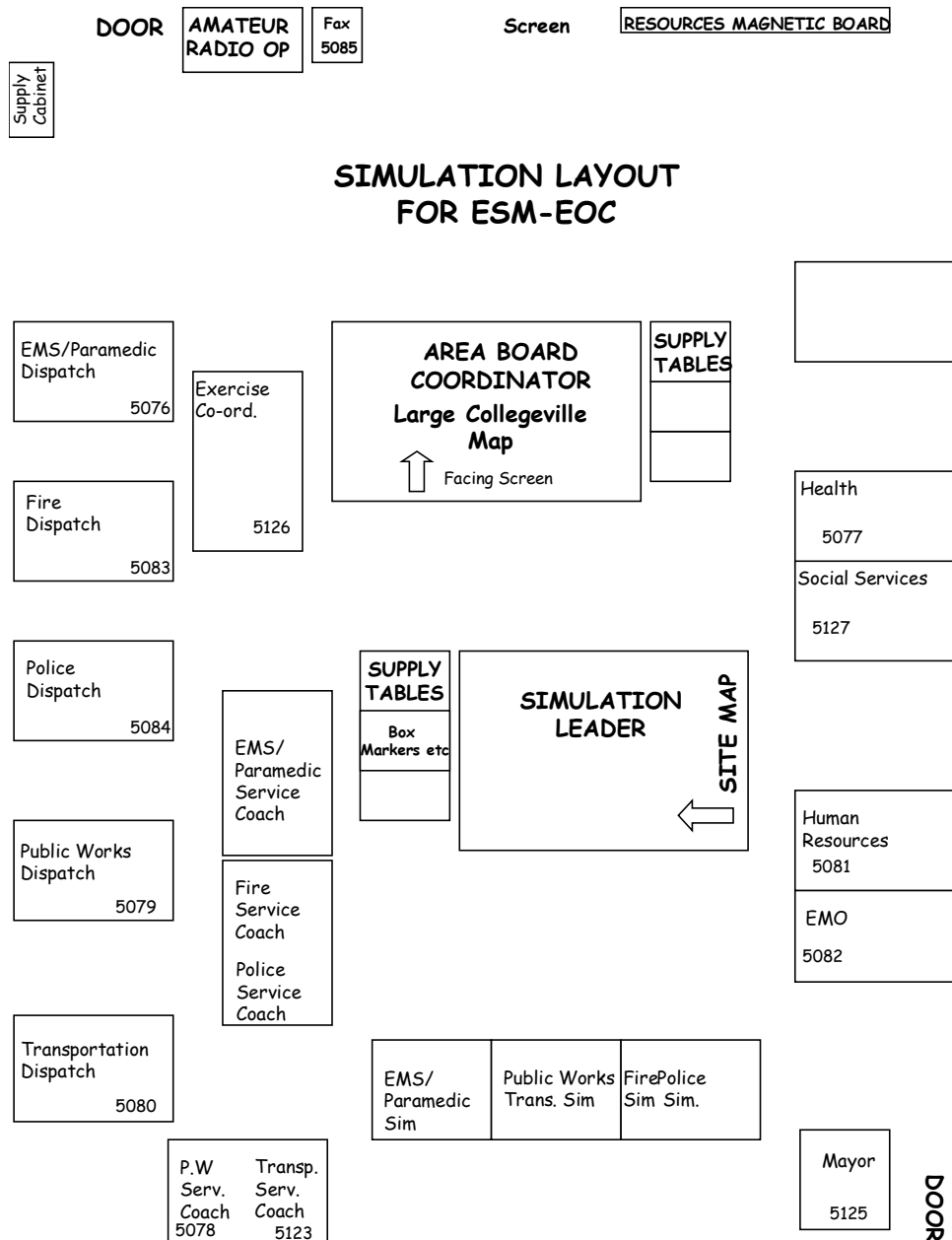
The 4 digit numbers in the above diagram are the telephone numbers for the various services.

Emergency Site Command Post (SITE)



The 4 digit numbers in the above diagram are the telephone numbers for the various services.

Simulation room (SIM)



The 4 digit numbers in the diagram are the telephone numbers for the various services.

Each room has maps of the area on the wall next to each work table, as well as the central map. Each work table has a placard on the wall over it, indicating what service operates there. The EOC and SITE rooms have a large screen connected to a computer. This is used by students to keep a "Master Event Log" that is their record of large scale events occurring during the exercise. There is a clock in each room. They are synchronized to each other, but differ slightly from "real" time. There is a fax /copy machine near the radio operator.

Exercise Conduct

Students are in either the SITE or EOC room. They receive "inputs" (telephone, radio or other messages) from staff in the Simulation room (SIM) at various times, and are required to respond to them in a manner that deals with the developing emergency. From time to time they are shown simulated news media reports via a closed circuit TV system. Some of them will have to go to media interviews or press conferences occasionally. As the exercise progresses students are called to meet around the map table to share information around the room.

Amateur Radio in the Exercises

Amateur radio personnel are required in all three rooms of the exercise. The amateurs will decide among themselves which person is assigned to which location. They may be rotated among the various spots over the duration of the exercises, to gain experience at all locations.

The duties of the amateur radio operators are to:

- On arrival, introduce yourself to the Team Leader in your room.
- Any problems related to participants will be brought to the attention of the Team Leader.
- Forward information received by radio or fax to the appropriate person.
- Pass messages by fax, radio or runner to the appropriate person in another part of the exercise.
- Show by example what amateurs are capable of in an emergency situation.
- Maintain a log of activities, messages in and out, etc. (see samples).
- Maintain the Input log and input board, (a large (60x60CM) chart containing the numbers 1 through 100 on it). The board is maintained by crossing off the number of the Input being introduced into the exercise. These "inputs" are sent by radio from SIM. The input board is used by the course instructors to keep track of the elements of the exercise. (more about this later)
- Acknowledge receipt of the Input once you have crossed it off the chart.
- Conduct various other technical duties related to your position as telecommunications director for the municipality. These may include simulation of checking the backup generators at the EOC, or simulated dispatch of amateurs to other locations around the city. - You never know what students will ask for.
- Make photocopies as required, using the copy feature of the fax machine.
- The Team Leader in your room may ask for a list of unused inputs, or for your logs after the exercise, so be prepared to hand over this information.
- After the exercise, provide feedback to the students on how well they performed in various tasks related to communications. We recommend the use of the critique format below.
- Generally be helpful in the conduct of the exercises.

Post Exercise Critique Format.

Suggested format for the post-exercise telecommunications debriefing.

- Did they use amateur radio or other means to make contact when they encountered problems with their normal communications means?
- Did they follow proper procedure with regard to the routing of messages?
- Were there obvious communications problems within the room?
- Were their faxes readable?
- Did they clearly state the origin and destination on them?
- Did they use cover sheets?
- Did they assign precedence (priorities) to messages?
- Did they close the loop after originating communications?
- Were they proactive, pulling in required information rather than passively waiting for it to arrive?

Communication Flow

Information coming into the EOC through the radio room (by formal message or by fax) should be directed to the "head table", preferably to the operations officer. This person is responsible for the operation of the room. It is their job to determine who, in addition to the addressee, should receive the information and to get it delivered within the room.

Information coming into the SITE (by formal message or by fax) should be directed to the "head table", usually to the Emergency Site Manager, (ESM) / Incident Commander (I/C) , their designated assistant, or the Duty Officer (DO).

Information leaving the EOC or SITE via amateur radio or fax should be approved by the official assigned that task, or their delegate before going out. This is especially true if the information is destined for the media, or someone outside the municipal organization, such as the Provincial EOC. This approval is also necessary to ensure that when communications are disrupted, high priority messages go out before routine ones. A similar flow occurs at the site. Tactical traffic between site and EOC need not be approved before transmission, since it all stays within the municipality and its agencies.

Communications to and from the simulation room (SIM) need not be scrutinized as closely, since the outgoing messages originate with the instructors. If there is a problem with an incoming message, the instructor receiving the message will deal with the originator directly.

Equipment

The list below is a guideline. Any questions or concerns regarding required radio equipment should be directed to an amateur who has been there before. It is easier to get equipment than volunteers, so **don't let a lack of equipment stop you from coming out**. If you need a piece of equipment to participate, we will find it for you to use.

- Radio - hand held *with earphone or preferably with a headset*. It is not practical to have a speaker going when the exercise is being conducted. A speaker/mic with an earphone connected will work. In the worst case, an earphone can be used but it is a nuisance to have to pick up the radio each time to speak into its built in microphone.
- Manual for your radio. If your radio has an automatic power off after a period without activity, you have to be able to disable this "feature". If you can't do that without reading the manual, then bring it.
- Spare batteries - you must be able to sustain operations for two work days. Although this shouldn't be hard, many first timers run out of battery after a day and a half. This is unacceptable. Bring spares.
- Clock - Although there is a clock in each room it is sometimes difficult to see. Since Collegeville time varies slightly from local time, it is easiest just to bring a clock and set it to Collegeville time.
- NOTE: Water, coffee and snacks are provided periodically, so you needn't bring them. Lunch is provided if the operator is working both before and after the lunch break. Breakfast is available on the morning of day two.

Radio Frequencies

Typically we use **146.550** simplex. If there is someone else using this frequency, we may change frequencies. Since we are all within the same building, it is not too difficult to change frequencies on the fly. We *may* also be monitoring 146.880- for incoming hams.

Net Control

There is no net control. There are only three stations on frequency. If a double is heard, the third station will call out "double". Stations simply make their call. For example "EOC from SITE" (note FROM, not "TO") Keep transmissions short and leave breaks.

Tactical Callsigns and Identification

Tactical callsigns used are "SITE", "SIM, and "EOC. Amateurs must also send their Industry Canada assigned call sign once every half hour. Typically one person remembers to do this and the other stations follow. At that time we announce "this is an exercise" to prevent any outside listeners to our communications from thinking there is a real emergency. **Note: should a REAL emergency occur during the conduct of an exercise, the words "NO DUFF" will be used in the message.**

Messages and logging

Stations must log input number and time for "Inputs" received by radio. They are then posted on a wall chart by drawing a line through the input number.

INPUTS

CALAMITY
3-MAY-07

TIME	INPUTS	TIME	INPUTS	TIME	INPUTS
1331	1, 2, 3, 4	1513	70, 72		
1334	7, 11, 9, 15	1514	75, 76		
1337	17, 13, 12, 14	1515	74, 77		
1338	18, 10, 16	1516	78		
1340	19				
1343	8				
1344	22				
1345	17A				
1347	21				
1348	24				
1351	20, 27, 25				
1352	26				
1453	59				
1454	60, 65				
1456	58				
1459	64				
1501	55				
1503	63				
1507	62				
1511	66, 68, 71, 69				

INPUT LOG SHEET

Telecommunications
Télécommunications


1	2	3	4	5	6	7	8	9	10	11	12	13
14	15	16	17	18	19	20	21	22	23			
24	25	26	27	28	29	30	31	32	33			
34	35	36	37	38	39	40	41	42	43			
44	45	46	47	48	49	50	51	52	53			
54	55	56	57	58	59	60	61	62	63			
64	65	66	67	68	69	70	71	72	73			
74	75	76	77	78	79	80	81	82	83			
84	85	86	87	88	89	90	91	92	93			
94	95	96	97	98	99	100						

INPUT WALL CHART

Stations must log messages sent and received either by fax or by radio. Note that the time on the fax machine will differ slightly from both local and Collegeville time. Use Collegeville time for all log entries. Occasionally formal traffic will be received by radio and sent to its destination using the three part message form. (see next page)

Mark the time sent or received on messages before forwarding to their destination within your room. They are typically passed through the ops officer.

NOTE: If a fax call is made to a busy fax machine the originating machine will re-dial about ten minutes later. This is too long to wait in a time compressed exercise. To get around this problem the sending station should radio the receiving station both to inform them there is an incoming fax and to ensure that their machine is not busy with other traffic.

EMERGENCY MEASURES ORGANIZATION/ ORGANISATION DES MESURES D'URGENCE					
MESSAGE FORM/FORMULE DE MESSAGE					
FROM/EXPÉDITEUR: <i>TRANSPORTATION - SITE</i>		Addressee Phone/ No. de tél du destinataire <hr/> Date/Time of Origin Date/Heure d'origine <i>3 MAY 07 1405</i> <hr/> Originator's Number/ No. de l'expéditeur <hr/> Precedence/ Précédence <i>IMMEDIATE</i>			
TO/DESTINATAIRE: <i>TRANSPORTATION - EOL</i>					
MESSAGE/MESSAGE: <i>PLEASE ACTIVATE MUTUAL AID - NO BUSES LEFT IN COLLEGEVILLE!</i>					
 Authorized by/Autorisé par:					
RECEIVED/ REÇU	From/De	Date/Time - Date/Heure	SENT/ ENVOYÉ <i>14:07</i>	To/A:	Date/Time Date/Heure
DISTRIBUTION/DIFFUSION					
Out Message/ *Message envoyé	(1) White - Comms. Opr/ Blanc - Op. Comm.	(2) Yellow - File/ Jaune - Classeur	(3) Pink - Originator Rose - Expéditeur		
In Message/ *Message reçu	(1) White - Addressee/ Blanc - Destinataire	(2) Yellow - File/ Jaune - Classeur	(3) Pink - Comms. Opr. Rose - Op. Comm.		

MESSAGE FORM

PRECEDENCE

For formal traffic we use the following precedence's:

Immediate: Somebody will die if this message is lost or delayed (Like EMERGENCY in Amateur formal traffic)

Priority: Serious harm or property damage will occur if this message is lost or delayed

Routine: This can be sent after higher precedence messages are cleared.

Note: "Urgent" is not a precedence. Neither is "High" or "RIGHT AWAY"

When a message with a precedence above Routine is received, try to get a message back to the originator when the message is in the hands of the final recipient.

Messages going by fax should have a recipient clearly specified. The originator should also be clearly readable. If this is not done, you should inform the person once. If they continue to offer messages with vague destinations on them, it is fair game to "lose" the message. Just remember that the object is to educate, not humiliate the student. Similarly, if they fail to clear the outgoing messages with the operations officer when appropriate

send the first one, with a warning and refuse to send subsequent messages without proper authorization.

An "input" message just tells the operator that a particular input to the exercise has been put into play by the staff. It should be logged as noted above and acknowledged. The broadcast from SIM will sound like "input three seven." The acknowledgement takes the form of, "SITE roger three seven." You may receive several inputs during the same transmission so you may want to write them down in the log before updating the wall chart and acknowledging the transmission. Remember to keep acknowledgements short.

FAX/COPY Machines:

To send a fax, place face down in top of machine, dial the 4 digit number of the destination and hit green send button.

To make copies, place original face down, press number of copies (if more than one), then press "copy".

Glossary

EMSC - Emergency Medical Services Commander - highest ranking EMS officer on site

ARES Amateur Radio Emergency Service - Qualified Amateur Radio Volunteers

BLEVE "boiling liquid expanding vapour explosion". A type of explosion that can occur when a vessel containing a pressurized flammable liquid is ruptured.

CANUTEC: an outside resource that provides information on hazardous materials

CLCF Collegeville Long Term Care Facility

Consist -Synonym for Manifest, the list of goods or people on a vehicle

DHS Director, health services

EMO Provincial Emergency Measures Organization or local EMO

EMRG Emergency Measures Radio Group-The name of the City of Ottawa ARES group.

EMS Emergency Medical Services - primarily ambulance

Endex: End of Exercise has been declared

EOC Emergency Operations Centre

EOC Manager - a participant who is responsible for overall operations within the EOC.

EOCT Emergency Operations Centre Team

ESM Emergency Site Manager =Incident Commander - Typically a senior police or fire official at the site.

ESS Emergency Social Services - responsible for organizing emergency shelters, other victim services

Exercise Director - Staff member responsible for overall conduct of the exercise.

FC - Fire Commander - highest ranking fire official at the site

FPO Fire Prevention Officer

Green: See triage

HR Human Resources - responsible for worker safety, union issues, management of volunteers etc.

Incident Commander (I/C): Person in charge of everything at the site of the emergency.

Inner Perimeter - The extreme danger zone. Only fully protected first responders may enter.

Input – Something that has been entered into the exercise, such as a weather forecast, the playing of a news broadcast, or a phone call saying the water is rising in the river.

Learning Pause -Short break in the exercise to regroup, and go over some lesson points.

Manifest -List of goods or people on a vehicle

MOH Medical Officer of Health

MSDS Material Safety Data Sheet. Describes how to deal with a particular hazardous substance

NO DUFF a REAL emergency is in progress. All stations to listen for instructions.

Outer Perimeter - Danger zone. No unauthorized personnel are permitted within the outer perimeter.

PC - Police Commander - highest ranking police officer at the site

PIO Public Information Office(r) - the person or group that interfaces with the media

PSA Public service announcement. Typically a press release.

PW Public Works - Cares for water and other infrastructure. Amalgamated into TUPW in smaller municipalities

PWC - Public Works Commander - highest ranking public works person at the site

Red: See triage

SC Service Coach - Instructor responsible for one of the services (PIO, Transport, etc.)

SIM Simulation room, where the inputs to the exercises originate.

SOE State of Emergency (as in Declaration of a state of emergency)

SOLE State of Local Emergency (see above)

Startex : Start of exercise has been declared

Triage: GREEN: Walking wounded, who can survive without immediate assistance.

Triage: RED: Seriously wounded, needing immediate medical care to survive

Triage: YELLOW: Wounded, needing medical care as soon as possible, but not before RED

TUPW Transportation, Utilities and Public Works Department

Team Leader - Instructor responsible for all participants within one of the three areas: EOC/Site/Sim.

Visiting Staff - Also know as Service Coaches/Instructors. Staff not permanently at the training centre. Amateurs are equivalent to visiting staff.

Yellow: See triage

Schedule

Amateur radio operators are required as follows:

Time on station for Collegeville is typically a half hour before the times listed below, Especially if you haven't been there before, and need to learn your way around a bit. Lunch is provided.

2008-09 and 2009-10 schedule **CHECK FOR CHANGES or CANCELLATIONS**

"COLLEGEVILLE" COURSE EXERCISES ARE WEDNESDAY / THURSDAY

"GRANDVILLE" COURSE EXERCISES ARE THURSDAY / FRIDAY

FEB 11,12 2009 COLLEGEVILLE **FRENCH**

MAR 4,5 2009 COLLEGEVILLE ENGLISH

APR 1,2 2009 COLLEGEVILLE ENGLISH (NO FOOLING)

APR 23,24 2009 GRANDVILLE ENGLISH

MAY 27,28 2009 COLLEGEVILLE ENGLISH

JUN 17,18 2009 COLLEGEVILLE **FRENCH**

SEP 30,OCT 1 2009 COLLEGEVILLE ENGLISH

NOV 4,5 2009 COLLEGEVILLE ENGLISH

NOV 19,20 2009 GRANDVILLE **FRENCH**

DEC 9,10 2009 COLLEGEVILLE ENGLISH

JAN 20,21 2010 COLLEGEVILLE **FRENCH**

FEB 4,5 2010 COLLEGEVILLE ENGLISH

FEB 24,25 2010 COLLEGEVILLE ENGLISH

MAR 11,12 2010 GRANDVILLE ENGLISH

Exercise times for <u>ESM-EOC Collegeville</u> course: Wednesday: 1:00 to 3:15 Thursday: 8:00 to 10:15 1:00 to 3:15 NOTE: THE TIMES MAY BE INCORRECT. COURSES OFFERED COULD BE CANCELLED. CHECK PRIOR TO COMMITTING TO ATTEND.	Exercise times for <u>EOC Grandville</u> course: Thursday: 8:30 to 2:30 Friday: 8:00 to 1:30 NOTE: THE TIMES MAY BE INCORRECT. COURSES OFFERED COULD BE CANCELLED. CHECK PRIOR TO COMMITTING TO ATTEND.
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