Operating Guideline # 1000 **Communications – Radio System** **November 18, 2022**	FIRE RESCUE MUSKOKA

PURPOSE:
The purpose of this Operating Guideline (OG) is to establish guidelines for the use of the primary station radio channels, to describe the initial radio report to be communicated by the first arriving officer at all emergency incidents and ensure rapid and efficient communications for the department.

ISSUE/RATIONALE:
The first few minutes of offensive fire ground operations can often dictate the next several hours of activity. Clear communication and disciplined use of the emergency system will ensure that only the most important messages are using the radio system. A consistent, timely and accurate initial report by the first arriving unit "sets the stage" for all other responding fire crews – the initial officer must paint a verbal description of the situation being confronted so that other crews can prepare to support the initial crew with appropriate and efficient fire ground actions.

A reliable and effective communications system is vitally important to the accomplishment of the department's mission.

GUIDELINE:
1. Every fire department apparatus that responds to an emergency incident will notify dispatch by radio that they are responding using the MLFD Main Channel. This channel is not to be used to notify others of apparatus out of service, routine maintenance or during training unless approved by the Fire Chief.
2. While responding, all units will advise other units of any observations relating to the emergency e.g. obstructions to traffic, road conditions etc.
3. The apparatus operator of the first arriving apparatus begins the Command, Control and Communications process with an Initial Radio Report (IRR) on MLFD Main.
4. All vehicles upon arrival shall remain on MLFD Main channel unless directed by Command to a different channel. Generally MFLD Main will be used for light radio traffic incidents, such as alarm calls, medical assist calls, hydro or public safety calls. When a situation develops into more than 2 task/workgroups the MLFD TAC channel should be used (i.e. – interior fire attack, interior search & rescue, ventilation).
5. Secondary support activities (i.e. - water supply, tanker shuttle, traffic control, wildland workgroups) should be assigned to other radio channels to avoid radio "clutter". Secondary channels are not recorded and should be used when radio traffic will not need to go beyond a 2 km area. R2R1, OFM 2
6. MNR – OFM 1 is the channel that we use to communicate with the MNR on wildfire responses. This channel is monitored during these incidents and it will allow for communication with air assets from the MNR.
7. The Incident Commander must be in a position to directly monitor all radio channels or dedicate an aide whose responsibility it will be to monitor secondary radio channels and report directly to the Incident Commander any radio transmission of a critical or urgent nature.

8. Vehicles equipped with repeaters shall use the repeater when there is difficulty in establishing radio contact with dispatch due to geography. When the repeater is activated the operator shall indicate to personnel that REPEATER is ON and ACTIVE on Mobile Repeater Channel. This will only repeat the MLFD MAIN channel to allow for dispatch to communicate with Command. This also means that we need to use R2R1 or OFM 2 as our TAC channel, as TAC will likely not function if the MLFD MAIN is not functioning.

9. When responding to calls for mutual aid in neighbouring municipalities, the responding units shall report their response to dispatch on MLFD MAIN. Upon approaching the municipal border the apparatus shall inform Muskoka Lakes dispatch of their switching frequencies to the host department's radio channel (if possible). The apparatus shall then monitor the host frequency for a clear channel and then contact the host department's dispatch giving the apparatus location, type and availability.

10. Upon being released from the mutual aid call, the returning apparatus shall switch to MLFD MAIN frequency and contact Dispatch advising of their status, location and availability.

11. Below is a list of channel names as named and programmed into our service issue radios. The chart identifies the channel # and name, the use of the channel and the radio types that have the channel. Mobile radios in vehicles and in stations are denoted by M, portable radios are denoted by P, and pagers are denoted by PA for full communication and PAL for listen only.

Channel Name	#	Use	Radios That Have
MLFD MAIN	1	Dispatch, Apparatus Status, Command, Strategic	M / P / PAL
MLFD TAC	2	Tactical Tasks Interior SCBA work	M / P
R2R1	3	Less than 2 km communication, (Traffic Control)	M / P / PA
MOBILE RPTR	4	Repeater Channel	M / P
MNR-OFM 1	5	MNR Aviation Channel	M / P / PA
OFM 2	6	Tactical Channel when Repeater on	M / P / PA
GEORGIAN BAY	7	Mutual Aid Georgian Bay Ch.	M / P
GRAVENHURST	8	Mutual Aid Gravenhurst Ch.	M / P
HUNTSVILLE	9	Mutual Aid Huntsville Ch.	M / P
LAKE OF BAYS	10	Mutual Aid Lake of Bays Ch.	M / P
SEGUIN EAST	11	Mutual Aid Seguin East MAC TIER	M / P
SEGUIN WEST	12	Mutual Aid Seguin West ROSSEAU	M / P
SEVERN	13	Mutual Aid Severn	M / P
PUBLIC WORKS	14	Public Works Department	M / P
WEATHER	15	Marine Weather	M / P

MARINE 16	16	Emergency Traffic for Marine Incidents	M / P
PAGING		Exclusive to Chief 101, 102, PC Stn.	M / P

12. Listen before transmitting to make certain the channels are clear and organize your thoughts before transmitting.
13. Keep all transmissions brief and to the point. Avoid longwinded descriptions and unnecessary repetition. Accuracy, brevity, and speed are all important; however, they should be considered in that order.
14. Speak distinctly and pronounce words carefully. Speak at a moderate speed using your conversational tone of voice with emphasis and rhythm. A message should be spoken by phrases, not one word at a time.
15. When using a portable/mobile radio, hold the microphone about one inch from your lips, press the microphone button down firmly and then speak slowly and clearly across the mouthpiece in a normal voice.
16. From a cold start, different radios require varying amounts of warm up time. Be aware of this and allow for the radio to stabilize before attempting to transmit.
17. Avoid transmitting when audible emergency warning devices are operating. SCBA warning bells, alerts, sirens, horns.
18. Use official titles and authorized apparatus designations in all transmissions. Do not use nicknames, only use first names when directing traffic. Set up names for each side of traffic control PRIOR to starting.
19. During all radio operations, remain cordial and calm. Words or voice inflections which reflect an individual's irritation, disgust or sarcasm are not to be used. Remember, your conduct on the radio reflects your entire fire department.
20. No one station or emergency should overrun the radio. Remember, there can be any number of emergencies going on at one time. After you are paged be thoughtful about the level of information you are requesting and whether it is important to the outcome or resolution of the problem. For example, needing to know how long an ambulance will take is not important until after you have made patient contact, verified the call details and determined the need for ambulance care.
21. Do not monopolize the airtime, do provide updates every 30 minutes.
22. Do use preliminary calls (handshake) to establish contact with dispatch. When advising that a unit is responding, at scene, or in service. Do not simply identify yourself and give your message in a single transmission. Our dispatch is shared with other services and needs time to switch between other services, this is why it is important to use "Muskoka Lakes Fire Dispatch this is _____" first to establish the link.
23. The use of thanks, please, and other expressions of courtesy are unnecessary and should not be used. This uses more airtime.
24. All communications shall be clear text. Do not say "Be advised" or "at this time" these are unnecessary for the message to be understood.

25. Do use benchmarks such as "patient contact", "arrived at alarm point", "smoke showing", "fully involved", "loss stopped", "under control", and "rescue initiated".
26. Portable radios are expensive ($2,000 each) they are issued for all front-line Pumpers (4), Tankers (2), Marine units (2) and Rescues (2). Members in the buddy system should carry their portable radio at all times while operating at incidents. When channel changes are requested, task units should announce that they are on the new channel back to command.
27. Clear Terminology and Benchmarks.

Term of Phrases and Benchmarks	Definition	Example
"Did Not Copy"	Used when signal received is not clear	Pump 6 to Tank 6 I DID NOT COPY
(Officer, Firefighter or Unit) Copies	Used to acknowledge message received	Pump 6 COPIES, Cancel the call
Affirmative	Yes	Pump 11 AFFIRMATIVE
Negative	No	Pump 11 to Command NEGATIVE
Responding	En route to assigned emergency	Pump 5 is RESPONDING
Out of Service Mechanical	Indicates a unit is not able to respond for mechanical reason	Pump 1 is OUT OF SERVICE MECHANICAL
Out Of Service MINIMUM STAFFING	Indicates a unit is not able to respond because of a lack of personnel	PUMP 9 IS OUT OF SERVICE MINUMUM STAFFING
In Service	Indicates a unit is able to respond	PUMP 44 IN SERVICE
Stand By	Order for unit or station to remain intact and ready for assignment	COMMAND TO PUMP 3 STAND BY for now
On Scene	Indicates Unit has arrived at assigned incident	PUMP 7 ON SCENE
In Quarters	Indicates unit is back at station	PUMP 77 IN QUARTERS
Smoke Showing	An indication that there is an actual fire at the location	Main Street Command to Dispatch we have SMOKE SHOWING
Fully Involved	Fire has spread and engulfed a structure or building	Main Street Command to Dispatch the building IS FULLY INVOLVED
Primary All Clear	Used to indicate initial search for victims inside structure is complete and no victims located	Main Street Command to Dispatch we have a PRIMARY ALL CLEAR

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Term of Phrases and Benchmarks	Definition	Example
Secondary All Clear	Used to indicate that a more thorough search for victims is complete and no victims were located	Main Street Command to Dispatch we have a SECONDARY ALL CLEAR
Fire Under Control	Indicates that the fire has been knocked down and is not spreading	Main Street Command to Dispatch FIRE UNDER CONTROL
Loss Stop	Indicates that the fire is out and all possible measures have been taken to stop further damage to a structure and its contents. This includes the completion of overhaul and salvage	Main Street Command to Dispatch we have LOSS STOP

RADIO BASE CHARGER:
Below is a list of what each solid LED light means on an IMPRES charger. Flashing LED lights, which may be a problem with your battery.

SINGLE FLASH GREEN: Begin charge. Charger has successfully powered on.
STEADY RED: Battery is in Rapid Charge Mode.
STEADY GREEN: Battery has completed its charge and is fully charged.

STEADY ORANGE (ONLY IMPLIES TO IMPRESS BATTERIES): Your battery is in reconditioning mode. However long your battery remains in this mode depends on the remaining charge of your battery. Fully charged batteries require more reconditioning time (8 hours or more) than fully discharged batteries

  What does the FLASHING light mean on an IMPRES charger?
Your IMPRES charger may flash different colors of green, orange, or red. This may mean your battery is just completing its charge time like normal but other LED flashes may be a warning to the state of your battery.
  Below, is a list of what each flashing LED light means on your IMRPES charger.

FLASHING GREEN: The battery has completed rapid charge (>90%) and is now in top off charge.

FLASHING ORANGE: The charger has recognized the battery but is waiting to charge. Battery voltage could be too low or temperature could be too low or too high to allow for charging. When corrected, the battery will start charging.

FLASHING RED: The battery cannot be charged or not making proper contact with the charger. Check contacts in the charging base and battery (clean and in working conditions)

FLASHING RED/GREEN: The battery is fully charged and continues to be usable but may be nearing end of service life. Start looking for replacement batteries if you do not have one already.

FLASHING AMBER (YELLOW)/GREEN: The battery is in recalibration mode. As soon as possible, enable calibration and calibrate the battery. You can force calibration by removing and reinserting the battery within a few seconds. Wait until a solid green light is indicated to know calibration is complete.

RESPONSIBILITY:
It is the responsibility of all firefighting staff to comply with the provisions of this Operating Guideline.

REFERENCES:
- The Highway Traffic Act
- Blue Card Command Standard Operating Procedures
- Ontario Traffic Manual April 2022 Appendix A: Unplanned Events