



SOUTH LYON FIRE DEPARTMENT

Manual of Procedures 417

MANAGING THE MAYDAY

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Approved: Chief Mike Kennedy

I. PURPOSE

All maydays are not created equally nor are the conditions in which they occur. Each mayday will come with its own unique set of critical factors. The IC must use the same critical factor based command system to manage a mayday that is used to manage all of our other IDLH hazard zone activity.

II. MAYDAY PREVENTION

The best way to run a mayday incident is to operate in a manner that eliminates them from occurring in the first place. This is done by:

- Following all MOP's
- Having all initial and subsequent alarms dispatched with enough task, tactical, and strategic level resources to:
 - Control the problem
 - Manage the work rest cycle
 - Maintain a tactical reserve (3 deep)
 - Embed safety operations as required (Division Supervision/Entry Control)
 - Support the IC as required
 - Performing a thorough size-up and always operating in the correct strategy
 - Putting water on the fire as safely and as quickly as possible (PUT THE FIRE OUT!)
 - Covering all key tactical positions (around the 7 sides of the fire) as early as possible
 - Managing air supplies so that all members always exit the hazard zone with at least a 33% air reserve

The #1 way to prevent maydays from happening is for the IC to always operate in the correct strategy based on the current critical factors of the incident. "Strategic Maydays", caused by personnel operating in offensive positions during defensive fire conditions, are generally more severe in scope and nature and are very hard to recover from.

On the other hand, maydays that occur during offensive fire conditions are generally much less severe in their scope and nature. Maydays that occur under offensive fire conditions also give the IC and the rest of the team enough time to react to resolve the firefighter emergency. Always operating in the correct strategy eliminates maydays and it is the tool the IC uses to maintain safe and effective incident operations.

II. GENERAL MAYDAY GUIDELINES

Mayday Defined

A mayday is defined as: Anytime a firefighter cannot safely exit an IDLH hazard zone.



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Declaring a mayday

Maydays must be declared/transmitted as soon as the person or crew(s) affected knows that they cannot safely exit an IDLH hazard zone. This is especially true for a person or crew who are experiencing a mayday with a diminished air supply. The sooner the mayday is transmitted, the sooner the IC and operating crews can react to resolve the mayday.

III. RESOURCES

Resource becomes a big critical factor in managing any mayday. The mayday emergency traffic report to Novi Dispatch should include a resource determination that can adequately address the mayday as well as all of the other critical factors that are occurring at the incident site.

Based on the mayday CAN report, the IC will need to get the proper EMS resources deployed to the scene to treat and transport any injured firefighters. These units should be deployed to the warm zone of the incident scene where the mayday firefighter(s) will be exiting the structure. This facilitates the treatment of the firefighter(s) as soon as they exit. Prior to the mayday, firefighter(s) exiting the structure, EMS crews need to be far enough away from the entry point so they do not interfere with the rescue operation.

IV. FIRE CONTROL

Controlling and extinguishing the fire gives the entire team the time needed to resolve the mayday. IC's and S/D supervisors must address and coordinate controlling the fire if any active fire exists during a mayday. Operating interior crews that are actively addressing fire control when a mayday occurs should continue with their fire control efforts. Put the fire out!

V. COMMUNICATIONS

All hazard zone operations and mayday operations will remain on the same tactical channel when a mayday has been declared. This connects all hazard zone companies to the mayday operation and it also helps the IC and/or S/D supervisors facilitate the "Help Order" (covered later in the MOP).

A "NO-PAR" policy will be in effect once a mayday has been transmitted. This means that unless an operating Unit DOES NOT have a PAR, PAR information is NOT to be transmitted over the tactical channel. This policy greatly reduces the amount of radio traffic transmitted in the first few minutes of a mayday and it allows the IC the airtime needed to react to the mayday traffic.

Some types of maydays e.g. collapses, extreme fire behavior, etc. will require the IC to perform a roll call to determine the scope of the problem and what units were affected by the conditions. Roll calls must be driven by the IC. This will greatly reduce the confusion and the time it takes to obtain PAR's on all IDLH units. When performing a roll call, the IC should announce to all units that a roll call is going to commence and to stand-by to be counted off.

All operating units will maintain radio silence once a mayday has been transmitted. All operating units will ONLY transmit Mayday announcements (you're having a mayday), Priority traffic, and status change reports during a mayday.



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Mayday CAN reporting becomes very critical when declaring a mayday. The sender must be very specific on the NEEDS required to help resolve the mayday. Always base mayday actions on the NEEDS given in the mayday CAN report. This will prevent everybody on the incident scene from over-reacting when there is a report of a mayday.

VI. DEPLOYMENT OF ON-DECK UNITS AS RIC CREWS

IC's and/or S/D Supervisors **MUST NOT** flood the interior with On-Deck companies acting as RIC crews after a mayday has been declared. On-Deck crews where no tactical level Supervisor is assigned **MUST NOT** self-deploy into the hazard zone unless ordered to by the IC. The IC must revise the existing IAP to include the mayday. All future assignments must consider the NEEDS given in the mayday CAN report.

On-Deck crews acting as RIC crews must equip themselves with any required equipment based on the mayday CAN report prior to making entry. Crews calling the mayday should include any equipment and personnel requirements as part of the mayday CAN report. RIC crews prematurely deploying into the hazard zone without the proper equipment needed to help solve the mayday will lengthen the rescue time, it creates more radio traffic, and it adds to the potential of having additional maydays occur during the rescue operation. On-Deck crews must properly equip themselves, have a rescue plan, and be ordered into the hazard zone by the IC and/or S/D Supervisors before making entry.

VII. AIR SUPPLY

Managing air supplies is a major IAP consideration during mayday operations. This includes the air supply of the mayday firefighter(s) as well as the air supplies of any other unit(s) assigned into the hazard zone.

Most air supply maydays that occur after the original mayday, come from units who were already on air and are working in the hazard zone when the mayday was declared. While these unit(s) are in the best position to quickly start addressing the mayday, any rescue situation that is not quickly resolved, will require these units to exit and be back-filled with other rescue companies before their air supplies are compromised.

Any unconscious or downed mayday firefighter (unable to move on their own power or assist in the rescue in any way) will require extra time and resources to remove them from the hazard zone.

Many times, maydays of this nature will require the rescue to be performed in stages:

1. Locate the firefighter(s)
2. Air trans filling
3. Packaging
4. Extrication of the firefighter(s) from the hazard zone

IC's and S/D supervisors must be prepared to deploy RIC crews in the stages that are needed, based on the air limitations of the rescue workers. RIC companies should be given clear, realistic goals that don't compromise their air supplies or create additional maydays.



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VIII. THE HELP ORDER

Mayday studies and national statistics show that approx. 80% of maydays are resolved by:

1. The firefighter having the mayday performs self-rescue
2. The firefighter's own crew members performs the rescue
3. Another company already working in the hazard zone performs the rescue
4. Or a combination of all three of the above

Based on this information and the natural reactions of other firefighters working in and around the hazard zone to come to the immediate aid of firefighters who are in trouble, the IC and the rest of the Command team will utilize the "Help Order" during a mayday operation.

The Help Order is the order in which an IC or a S/D supervisor will try to assist a firefighter who is experiencing a mayday. This order is:

1. Communicating to a lost firefighter self-rescue techniques to assist with the rescue
2. Using a mayday firefighter(s) own company to assist with the rescue
3. Using a company already located inside of the hazard zone to assist with the rescue
4. Using an On-Deck company located outside of the hazard zone as a RIC crew

1. A lost firefighter who is able to talk on a portable radio should be able to provide a standard mayday CAN report (covered later in the SOP). The IC should acknowledge the mayday CAN report and respond back with the following to the mayday firefighter(s):

- Verbally state to the mayday firefighter(s); "calm down and control your breathing"
- Maintain radio contact long enough to get a sufficient amount of information in order to implement an adequate rescue IAP
- Have them activate their PASS unit (shut the PASS unit off when talking on the radio)
- Mayday firefighter(s) may be difficult to clear/communicate with once they have activated their PASS unit

2. and 3. When communicating with a mayday firefighter's own crew or with another crew who can assist with the rescue, the IC or S/D Supervisor must consider 3 things when using the Help Order:

- The air limitations of the interior working crews
- The possibility of interior crews lacking the tools required to make the rescue
- The fire control efforts required to maintain interior tenability - other operating interior crews that are actively addressing fire control when a mayday occurs should continue with their fire control efforts. Put the fire out!

4. When deploying On-Deck crews as RIC crews, they must properly equip themselves, have a rescue plan, and be ordered into the hazard zone by the IC or S/D Supervisor before making entry. Outside On-Deck crews that are deployed to perform rescue activities should always bring the air trans-fill equipment along with any other equipment needed to solve the mayday.



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IX. MAYDAY COMMUNICATION ALGORITHM

Once a member or unit determines they cannot safely exit the hazard zone, declare a mayday over the incident's assigned tactical channel by announcing mayday 3 times



Mayday, mayday, mayday



While still keying the microphone, the mayday FF or unit will provide a CAN report that includes:

- Who - The identity of who is having the mayday. Unit, Unit riding position, or entire name
- What – Caused the condition(s) of the mayday
- Where - Identify your current location/surroundings or your last know location
- Provide the NEEDS that will help resolve the mayday (critical)



IC will acknowledge the mayday CAN report using the Order Model



IC will provide any necessary self-help information required to the mayday firefighter or Unit



If required, quickly make any necessary Unit deployment(s) to start addressing the mayday



Contact Novi Dispatch and transmit:

- Brief mayday update that includes the who, what, and where of the mayday
- Tell all units operating at the scene to maintain radio silence
- Request any additional resources that are required to completely resolve the mayday



Novi Dispatch will repeat the Emergency Traffic report using the Order Model



The IC will then manage the mayday based on the NEEDS report given in the mayday CAN report, or they will push the management of the mayday down to the S/D supervisor who is having the mayday in their S/D

X. MAYDAY OPERATIONAL GUIDELINES (TASK, TACTICAL, & STRATEGIC LEVELS)

Task/Company/Firefighter level mayday responsibilities

Firefighter or interior unit having the mayday must:

- Call for a mayday as soon as you realize you cannot safely exit the hazard zone
- Declare a mayday (x's 3) to ensure priority radio traffic, DO NOT un-key the microphone
- Give a CAN report that includes:
 - Who - your identity – unit, unit riding position, or entire name
 - What – caused the condition(s) of the mayday
 - Where - identify your current location/surroundings or your last know location
 - NEEDS – the needs that will help resolve the mayday (critical)
- Calm down and begin self-help/self-rescue techniques
- Conserve your air
- Activate your PASS unit if appropriate
- Maintain radio contact with the IC or the S/D supervisor as required

Other Companies operating in the hazard zone during a mayday must:

- Maintain radio silence
- Mayday announcements, priority traffic and status reports ONLY



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- Be prepared to assist with the rescue if you are able to do so
- Interior crews that are actively addressing fire control when a mayday occurs should continue with their fire control efforts. Put the fire out!

Tactical level mayday responsibilities (if in place)

A S/D supervisor that is in place at the entry point when a mayday occurs in their S/D must perform the following:

- Take strong control of entry point
- Resource assessment in the S/D
- Request enough resources to get the job done
- Support the fire fight when necessary – Put the fire out!
- Consider the critical factors in the S/D
- Develop the S/D's rescue IAP
- Utilize the Help Order when possible
- DO NOT flood the interior with resource
- Organize, properly equip, and brief On Deck Units before deployment
- Clear, realistic objectives to the rescue teams
- Implement, assess, and reinforce the rescue efforts as required in the S/D

Strategic level mayday responsibilities

When a mayday is declared on the fireground, the IC must:

Confirm the critical factors – the risk management plan – and the overall strategy

- Take **STRONG** control of the communications process
- Follow the mayday communication algorithm
- Change the IAP to high priority rescue effort
- A NO PAR policy will take effect
- Coordinate and support the rescue efforts with the S/Ds as required
- Expand the command organization
- Support the fire fight when necessary – Put the fire out!
- Provide the required support work
- Establish Treatment
- Consider the medical and technical requirements for the rescue

If there are S/D supervisors in place when a mayday is declared on the incident, once the IC has completed the mayday communication algorithm, their next action should be to push control of the rescue operation down to the S/D supervisor where the mayday is occurring. The S/D supervisor is in the best position to manage the rescue activities that need to take place in the S/D to resolve the mayday. The IC is then in the best position to coordinate and support the rescue, firefighting, and treatment efforts with the other S/Ds and Units as required by the incident's critical factors.



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If there are no tactical level S/D supervisors in place when a mayday is declared on the incident scene, the IC must continue to manage the entire tactical rescue effort required to resolve the mayday after completing the mayday communication algorithm.

On-Deck companies must use great discipline when there is no S/D supervisor in place during a mayday. On-Deck crews must properly equip themselves, have a rescue plan, and be ordered into the hazard zone by the IC before making entry.

The IC should assign S/D responsibilities as soon as possible into the event (when none are in place when the mayday is declared). This could be a subsequent arriving chief officer, safety officer, or a company officer that will operate at the entry point of the S/D. Once assigned, quickly brief the S/D supervisor on the details of the mayday and have them continue to manage the mayday directly in their assigned S/D.

XI. CLEARING MAYDAY OPERATIONS

Once all effected firefighters have been removed from the hazard zone, the IC must ensure that they are handed over to treatment and there are enough resources on-scene or responding to adequately treat and transport all of the injured firefighters.

After all mayday firefighters have been extricated from the structure, the IC will have to use the Strategic Decision Making Model to formulate a new strategy and IAP. IC's should be very pessimistic when continuing to conduct offensive operations in a building that just hosted a mayday.

Resources available for suppression or overhaul activities must be balanced with the resources required to treat and transport all effected firefighters.

The suitability of personnel to continue to work in IDLH atmospheres will be directly impacted by the severity of the mayday. Company and command officers must evaluate the mental and physical wellness of any deployed member working on the mayday prior to sending them back to work on the incident's problems. The status of crews being formally assessed after a mayday (or any other incident requiring mental health intervention) should be considered "out of service".

Once the mayday(s) have been controlled and there is adequate treatment under way, the IC should contact Novi Dispatch and clear the mayday radio traffic. This announcement should include:

- A brief Mayday conclusion report
- The strategy and IAP for the next operational period in the incident
- Resource determination

Example: "Novi Dispatch from Command – The mayday firefighter has been extricated from the building and is currently in treatment for fall injuries. I'm clearing the mayday radio traffic at 101 East Lake St. All units resume normal radio traffic. We will continue in the defensive strategy am holding the current assignment."



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