

URGENT, MAYDAY, EVACUATIONS

Morris County, New Jersey

Best Practice Guidelines

IMPORTANT NOTICE ABOUT THIS DOCUMENT

The codes, standards, recommended practices, and guides, of which the document contained herein is one, are developed through a consensus of appointed members of chosen departments representing Morris County. This process brings together volunteers representing varied viewpoints and interests to achieve consensus on Standardizing MAYDAY Procedures though out Morris County. This committee reviewed various documents, processes and rules to promote fairness in the development of consensus. It does not independently test, evaluate, or verify the accuracy of any information or the soundness of any judgments contained in any code and/or standard.

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Mission Statement

It's imperative that this document be established to assist fire personal in recognizing situations where they shall call for help through either a Mayday or Urgent radio transmission, and to develop a Best Practice Guideline which can be utilized at all emergency incidents, in an effort to preserve fire personnel life and safety.

This document is being established out of concern for all Morris County firefighter safety at the scene of an emergency incident. This document shall be a guideline that individuals should follow during Mayday and Urgent situations based on their functional responsibility during such an incident.

Table of Contents

Terms & Definitions.....	5-6
1 Urgent Guideline.....	7
1.1. Who Should Call an Urgent	7
1.2. When to Call Urgent	7
1.3. How to Call Urgent	7
1.4. Urgent Acknowledgement	8
2 MayDay Guideline.....	9
2.1. Who Should Call a Mayday	9
2.2 When to Call a Mayday.....	9
2.3. How to Call a Mayday	9
2.4. MayDay Acknowledgement.....	10
2.5 Managing the Mayday	11
2.5-1 IC Responsibilities.....	11
2.5-2 Mayday Supervisor Responsibilities.....	11
2.6 Termination of Mayday.....	12
3 Evacuation.....	13
3.1 Who Should call an Evacuation	13
3.2 When to call an Evacuation	13
3.3 How to call an Evacuation	13
3.4 What to do when Evacuation is ordered.....	13
4 Communications.....	14
Appendix	
ICS Flow Chart.....	16
ICS Flow Chart.....	17
ICS Flow Chart.....	18
Mayday Tactical Check List.....	19
References.....	20
Contributors to Document.....	20

Terms & Definitions

ACCOUNTABILITY: Maintaining continuous status and location of all resources, committed to an incident. Staff assistants completing company accountability by documenting situation and resource status will fulfill these duties initially. In large or complex incidents, additional staff may be assigned to oversee these functions. Each branch Director, Division and Group Supervisor, and Company Officer is responsible for maintaining accountability of members and resources under their command.

Authority Having Jurisdiction (AHJ): An organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure.

Change of Operations: A decision by the Incident Commander to change the tactics being used during an incident for the safety of personnel or to bring an incident safely to closure, such as a change of operations from an interior offensive to exterior defensive attack. A change of operations should be conducted via radio or verbal communications this may not always require a use of an emergency evacuation order or signal.

CLEAR TEXT: Use of Common terminology understanding by all. The intent of the use of clear text for radio communications is to paint a clear picture and reduce confusion at incidents, particularly where different agencies are working together.

Collapse Zone: Is defined as one and a half times the height of the structure. Or as defined by the incident commander.

EMERGENCY TRAFFIC: A term used to clear designated radio channels during incident to make way for important radio traffic for a firefighter emergency situation, safety concerns for members on scene, or an immediate change in tactical operations.

Evacuation: A rapid and orderly removal of all personnel from a structure or area of danger.

Evacuation Signal: When the risk posed to firefighters is so great that an incident commander or his or her designee must order an evacuation from a hazardous area, a uniform procedure and accompanying audible signal recognizable by all personnel operating on an incident scene shall established, adopted and utilized by all departments.

“FIREFIGHTER DOWN”, “FIREFIGHTER MISSING”, OR “FIREFIGHTER TRAPPED”: Clear text terms used for radio communications to notify personnel on scene at an emergency that a firefighter accident or emergency has occurred.

IMMEDIATELY DANGEROUS TO LIFE OR HEALTH (IDLH): The maximum level of danger one could be exposed to and still escape without experiencing any effects that may impair escape or cause irreversible health effects.

I O U MY Life: **I-** Imminent Collapse Feared, **O-** Collapse Occurred, **U-** Unconscious Firefighter or Life Threatening Injury, **My-** Missing member or missing officer, **LIFE-** Member Lost or Trapped

Lunar: An acronym used to give information after declaring a MAYDAY. L-Location, U – Unit, N – Name, A- Assignment, R- Resources

MAYDAY: A universal call for help. A Mayday indicates that an individual or crew is in extreme danger. (I O U MY Life) **I-** Imminent Collapse Feared, **O-** Collapse Occurred, **U-** Unconscious Firefighter or Life Threatening Injury, **MY-** Missing member or missing officer, **LIFE-** Member Lost or Trapped.

NFPA 1407: Standard for Training Fire Service Rapid Intervention Crews.

NFPA 1500: Standard for Occupational Safety and Health Program.

PERSONNEL ACCOUNTABILITY REPORT (PAR): A report requested by and communicated to the incident commander from fire crews operating at a scene as to their location and situation.

RAPID INTERVENTION CREW: A dedicated crew of fire fighters who are assigned for rapid deployment to rescue lost or trapped members.

Urgent: A term used to clear designated radio channels during incidents to make way for important radio traffic for information that may affect firefighting tactics, a Safety concern or information that will provide early notification to fire personnel in order to prevent injury or death.

Urgent Guideline

1.1. Who should call an Urgent:

- Any member can call an urgent when they find themselves in possession of critical information and need to transmit it.

1.2 When to call Urgent:

- A firefighter or fire officer shall transmit an URGENT message if any of the following conditions exist:
 - A serious or deteriorating change in fire conditions.
 - An interior attack is going to be discontinued or an exterior attack is being prepared.
 - Discovery of a structural problem indicating a potential or imminent collapse.
 - Discovery of fire entering an exposure structure to a degree that any delay may considerably enlarge the fire problem.
 - A loss of water which would endanger fire personnel.
 - An excessive wind condition on the fire floor which could rapidly extend the fire and endanger fire personnel.
 - A downed electrical wire on the fire ground or fire apparatus.
 - Discovery of an unconscious, trapped, or disoriented victim.
 - Any life threatening situation or event that has occurred or is developing.
 - **D W I F E:** **D**- Discontinue Interior Attack, **W**- Water Loss, **I**- Injury, **F**- Collapse Feared, **E**- Fire Entering Exposure

1.3 How to call an Urgent:

URGENT TRANSMISSION PROCEDURE

- The firefighter or fire officer shall follow the procedure outlined below to the best of his ability during an URGENT situation:
 - Announce that there is an URGENT condition three times.
 - Identify his radio designation (611C, 603A, Firefighter Jones, etc.)
 - Identify his URGENT situation being as specific as possible
 - Identify his location, giving floor, side, and any other identifying information.
 - Example:
 - “URGENT URGENT URGENT, Firefighter Jones, Fire Company No. 1, Rear wall is about to collapse, 2nd floor, bravo side, master bedroom.”

- The firefighter or fire officer shall pause after each message during an URGENT transmission, and wait for acknowledgement of the incident commander.

1.4 URGENT ACKNOWLEDGEMENT

- All firefighters and fire officers on a fire scene must understand that an URGENT radio transmission must take priority over all other radio transmissions with the exception of a MAYDAY transmission.
- When an URGENT transmission has occurred, it is imperative that the incident commander attempts to clear the air of all other radio transmissions and establish radio communication with the party which has made the URGENT transmission.
- Once the air has been cleared of all unnecessary radio transmissions and contact has been established with the firefighter or fire officer who has made an Urgent transmission, the incident commander shall attempt to obtain more specific.
- Example:
 - Command to all units, clear the radio for an Emergency Traffic.
 - Command to all units, clear the radio for an Emergency Traffic.
 - Command to Firefighter (Jones), go with your URGENT message.
 - Command to Firefighter (Jones), can you provide any additional information?
- Additional information which may be requested by the incident commander will depend on the information which has already been provided as well as the nature of the situation. Though the additional information requested will vary based on the situation, it should often include information about the location and severity of the potentially dangerous or life threatening hazard.

Mayday Guideline

2.1 Who should call a Mayday:

- Any firefighter can call a mayday for themselves or any other firefighter that feels they are in life threatening situation.

2.2 When to call a Mayday:

- Any firefighter shall transmit a MAYDAY message if any of the following conditions exist:
 - A firefighter or fire officer has become lost, trapped, or has sustained a serious or life threatening injury.
 - A firefighter or fire officer has become tangled or pinned and is unable to free himself after the first attempt.
 - An unconscious firefighter has been discovered.
 - A low air alarm is activated and the firefighter or fire officer is unable to find a door or window in a timely manner.
 - There is zero visibility and a firefighter or fire officer has lost all contact with a hose line or search rope, and does not know where the exit is.
 - The primary exit is blocked by fire or collapse, and an immediate secondary exit can not be located.
 - A firefighter or fire officer falls through a floor, roof, staircase, down a shaft, or suffers any other similar fall.
 - A firefighter or fire officer is caught in a rollover condition and cannot find an exit.
 - A firefighter or fire officer is caught in a flashover condition and cannot exit the area.

2.3 How to call a Mayday:

- A fire department communication system shall provide a standard method for giving priority, over that of a routine radio communication, to the transmission of emergency messages and notification of imminent hazards to all levels of the incident command structure.
- When firefighters encounter conditions that pose a non-routine threat to their life or safety or that of others, they shall convey that situation via two-way radio to the incident commanders and/or rescue crews utilizing clear text.

- The firefighter will transmit over the radio: “MAYDAY, MAYDAY, MAYDAY” then give the L.U.N.A.R (Does not have to be in order) Location, Unit, Name, Assignment, and Resources needed.
- Example:” Mayday, Mayday, Mayday, captain Smith, Ladder 1, Search group, I am out of air, Division 2, A-B corner.”
- The firefighter calling the mayday will pause and wait for an acknowledgement. The member will continue to call a mayday until an acknowledgement, while also trying to self rescue until resources arrive.

2.4 Mayday Acknowledgement:

- Once a mayday is called every firefighter should do the following:
 - Keep off the radio and monitor it for further instructions.
 - Hold your position and continue your current assignment.
 - Prepare for a PAR.
 - Do not freelance.
 - If command does not answer the mayday, acknowledge the mayday and inform command. You are now the mayday supervisor until the assignment is transferred.
 - Only assist in the mayday operation if ordered to do so or if you are in the immediate area of the mayday and can affect a positive outcome.
- All firefighters and fire officers on a fire scene must understand that all MAYDAY transmissions will take priority over all other radio transmissions, including URGENT radio transmissions.
- When a MAYDAY transmission has occurred, it is imperative that the incident commander attempts to clear the air of all other radio transmissions and establish radio communication with the party which has made the MAYDAY transmission.
- Once the air has been cleared of all unnecessary radio transmissions and contact has been established with the firefighter or fire officer who has made a MAYDAY transmission, the incident commander shall attempt to obtain more specific information which may assist in a rescue attempt.
- Example: Command to all units, clear the radio for an Emergency Traffic.
Command to all units, clear the radio for an Emergency Traffic.
Command to Firefighter (Jones), go with your MAYDAY.
Command to Firefighter (Jones), can you provide any additional information?

- Additional information which may be requested by the incident commander will depend on the information which has already been provided as well as the nature of the situation. Additional information requests may include but are not limited to the following:
 - “What is the best or closest access route to your location?”
 - “Can you hear a hose line or power tool running nearby?”
 - “Are you near a stairway, shaft, wall, or other identifying building feature?”
 - “What is your current condition?”
 - “Do you require any additional tools or equipment?”
 - “What is your Air Supply situation?”
 - “Any other request for useful information which may assist in a rescue attempt?”

2.5 Managing the Mayday

- Since it is inevitable that MAYDAY situations will strain the resources and management of any incident, the incident command must maintain control and continuity of the incident by any means necessary.
- It is the responsibility of the **Incident Commander** to utilize the following options to assist in the management of a MAYDAY situation:
 - Clear the air for emergency traffic and acknowledge Mayday
 - Deploy RIC crews
 - Assign a Mayday Supervisor
 - Transfer Mayday operations to Mayday supervisor
 - IC will maintain fire ground operations
 - Move fire operations to secondary radio channel
 - Request additional alarms / mutual aid and designate a staging area
 - Request additional RIC crews
 - Assign a safety officer to the Mayday group
 - Assign additional RIC / additional companies to Mayday group
 - Re establish RIC for fire operations (3rd RIC)
 - Conduct PAR for all crews
 - Reinforces firefighting positions, consider deploying additional hose lines.
- It is the responsibility of the **Mayday Supervisor** to utilize the following options to assist in the management of a MAYDAY situation:
 - Maintain communication with members calling Mayday
 - Oversees RIC / Rescue operations
 - Perform additional LUNAR
 - Coordinates with IC and Safety
 - Conduct Risk Analyses (Is the rescue viable)

- Ensure RIC Supervisor is managing Air Management of Mayday.
- Designating a separate frequency for the MAYDAY, rescue and fire ground operations.
- Conducting an accountability roll call to determine the number of missing individuals.
- Verifying that fire suppression operations are continuing.
- Removing all non-essential personnel.
- Eliminating all free-lancing and establishing control of the situation.
- Request of any additional resources or equipment wherever they maybe needed.
- Any other action which will assist in the management of the MAYDAY situation.

2.6 Termination of Mayday:

- **Canceling the Mayday:**
 - If a firefighter has declared a mayday and then find themselves out of harm's way the firefighter shall :
 - Report the successful self rescue to the IC
 - Report to EMS for evaluation.
 - The IC shall notify the RIC Team to pull back once the firefighter who declares the mayday is confirmed out of the structure.
- **Returning to normal operations:**
 - Once the MAYDAY has been successfully managed, the IC will:
 - Conduct a PAR on all units on scene,
 - Reevaluate the plan of action for the original fire and deploy units as they deem necessary,
 - Notify units on scene to the operational channel being utilized and the new plan of action.
- **Re-establishing the RIC:**
 - Once a RIC has been deployed it is vital for the IC to reestablish an on scene RIC.
 - The IC shall request additional resources to ensure ample manpower is at the incident to cover all assignments.

Evacuation Guideline

- Personnel must understand that an Evacuation order is for the rapid and orderly removal of all personnel from a structure or area of danger. An “Evacuation” should not be confused with a “Change in Operations” order, such as a change from an interior to exterior attack. A change of operations should be conducted via radio or verbal transmissions with no use of an emergency evacuation order or signal.

3.1 Who should call an Evacuation:

- Incident Commander
- Operations Chief
- Safety Officer

3.2 When to call an Evacuation:

- Rapid change in Interior / Exterior Conditions
- Change in Operational Mode
- Potential Collapse
- Deteriorating conditions
- Prolonged interior operations with no change in conditions
- Loss of water supply
- Regroup personnel

3.3 How to call an Evacuation

- The officer ordering the evacuation will transmit over the radio: “EVACUATE EVACUATE EVACUATE” then gives the Location, followed by a request that units acknowledge the Evacuate order.
- Example:
 - EVACUATE EACUATE EVACUATE Command to all units operating at 22 Main St, evacuate the structure – Command to all units operating at 22 Main St, evacuate the structure – Command to all units acknowledge”.
- All the operating crews on the fire ground shall acknowledge and communicate receipt of the evacuation. (reference section 3.4 of this document)
- The evacuation signal shall consist of repeated short blasts of an air horn for a period no longer than 10 seconds, followed by 10 seconds of silence. This sequence of repeated short air horn blasts for 10 seconds followed by 10 seconds period of silence shall be done three times; the total evacuation signal, including periods of silence, shall last 50 seconds.
 - Sequence of horn blast is to sound the air horn three times, pause, sound horn three times, pause, sound horn three times within the 10 second window to avoid any possible confusion of an apparatus arriving on scene or having a malfunction.

- Example: (within 10 seconds)
 - HORN-HORN-HORN
 - pause
 - HORN-HORN-HORN
 - pause
 - HORN-HORN-HORN
- Conduct a Personal Accountability Report (PAR)

3.4 What to do when Evacuation is ordered

- **Incident Commander**
 - Communicate and Initiate evacuation signals (reference section 3.3 of this document)
- **All Crews**
 - Remove themselves from the collapse zone,
 - Crew leaders shall insure a PAR and report such findings to the Accountability Officer.
- **Interior Crews**
 - **Suppression Crew:** Shall shut down their hose lines, leave them in place and follow the hose line out of the building. Unless needed to protect a means of egress for another interior operating crew.
 - **Truck Crew:** All interior truck operations shall cease and members shall remove themselves with their tools if the tools will not slow their evacuation from the area. If you are operating under the protection of a suppression crew you must let them know you have exited the area.
- **Exterior Crew**
 - **Roof Division:**
 - All members operating on the roof division shall safely descend and clear the collapse zone.
 - All other outside crews shall remove their operations outside of the collapse zone.
- **Personnel Operating outside of Collapse Zone or IDLH area:**
 - All members operating in an area which is non-hazardous by nature or location shall wait to acknowledge the evacuation order until units operating in an area with potential collapse or IDLH have had an opportunity to do so.

- **Safety Officer**
 - Shall ensure the collapse zone is established.
 - Shall ensure a PAR is conducted.

- **Accountability Officer**
 - All crew leaders shall conduct a PAR and report such to the accountability officer.
 - Ensure PAR's are conducted
 - Report outcome of PAR to the IC.

- **Apparatus Operator**
 - Upon being instructed to do so or upon receiving the evacuation order transmission apparatus operators who can sound the air horn of apparatus in the immediate vicinity of the structure or area being evacuated without abandoning their current assignment shall sound the Evacuation Signal as described in section 3.3 of this document.

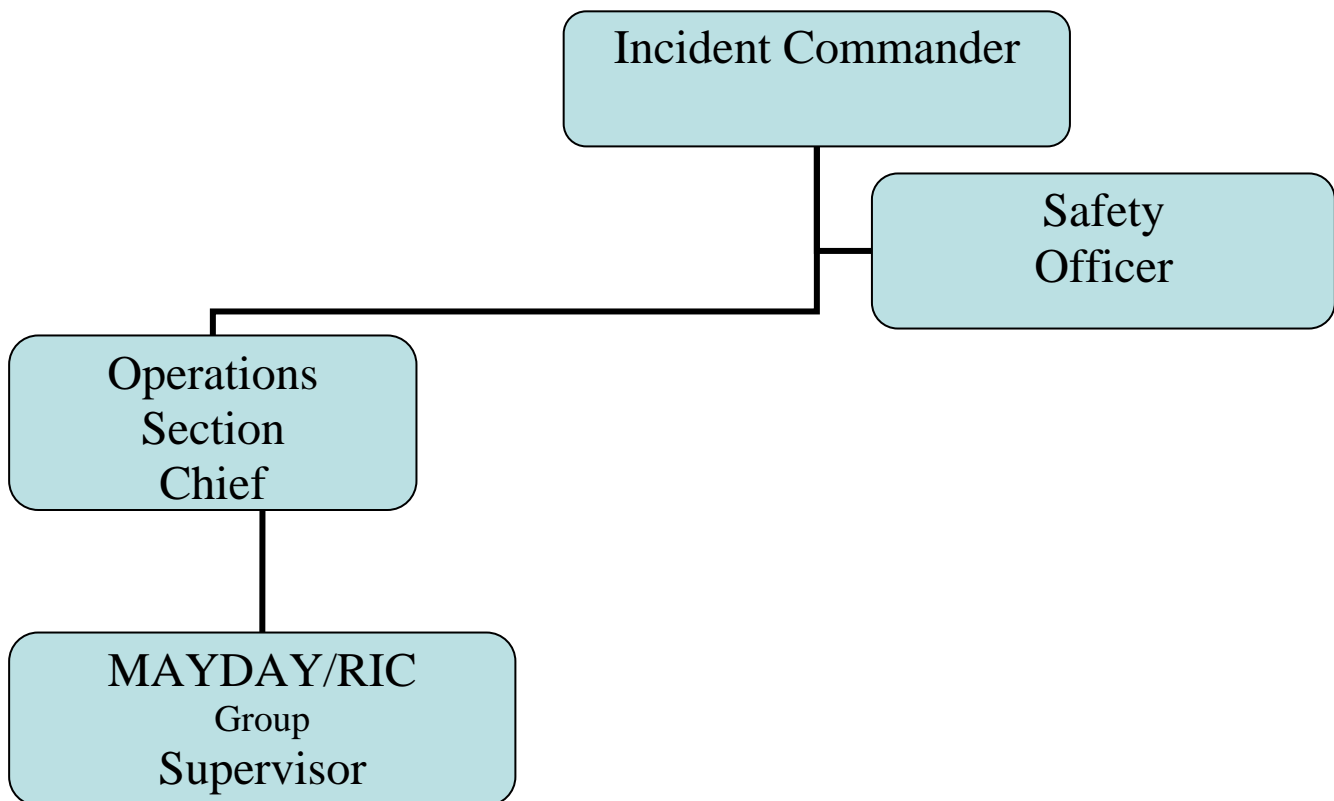
Communications

- If possible, during a MAYDAY all fire ground operations should be switched to a secondary radio channel and mayday communications should continue on the original radio channel.
- RIC should operate on a separate radio channel whenever possible.
- All units operating on the scene should be using clear text for all transmission.
- If the radio's in use by the department possess the ability to transmit an emergency tone or similar function prior to transmission during a URGENT, MAYDAY or EVACUATION order the authority having jurisdiction may include that function during these radio transmissions if they so choose to do so.

FLOW CHARTS AND CHECKLISTS

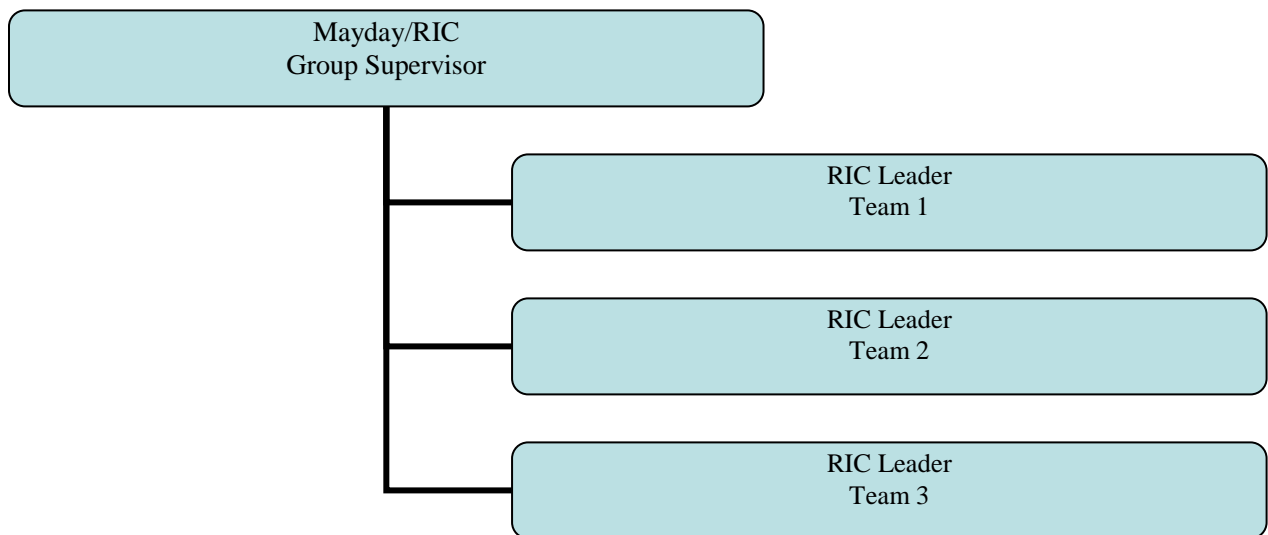
Command Structure –

The following diagram illustrates how the Mayday Supervisor operates within ICS when an Operations Section Chief **is assigned**.

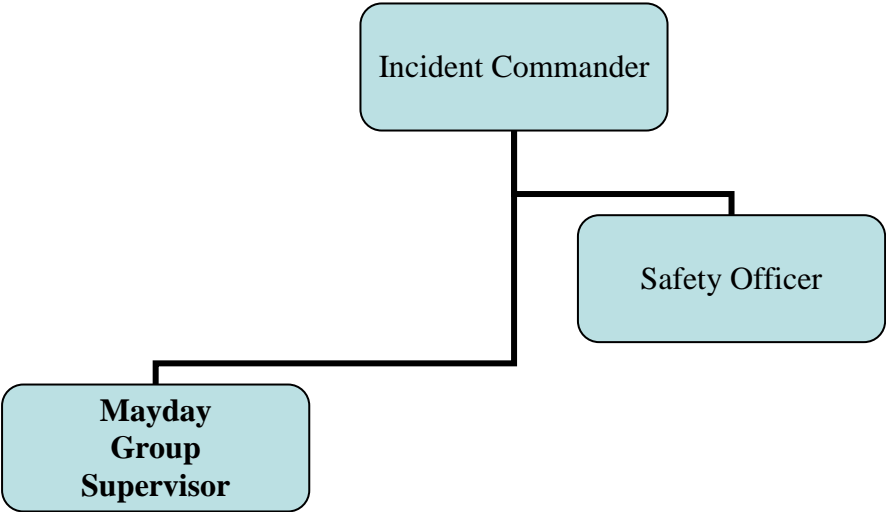


RIC Structure –

The following diagram illustrates individual RIC structures



The following diagram illustrates how the Mayday Supervisor operates within ICS when an Operations Section Chief is **not assigned**



MAY DAY PROCEDURES

Morris County, New Jersey

Mayday Tactical Checklist

- Declare “Emergency Traffic”
- Identify Mayday
 - Location L _____
 - Unit U _____
 - Name N _____
 - Assignment A _____
 - Resources needed for rescue R _____
- Deploy RIC
- Conduct PAR of all crews
- Move fire operations to secondary radio channel
- Immediately request additional alarm(s)/ resources to include EMS
- Designate a level 2 staging area for additional resources
- Assign a Mayday supervisor and turn the mayday over to them
- Assign an additional Safety Officer to the rescue group
- Conduct risk assessment
- Reinforce firefighting positions, consider deploying additional hose lines.
- Consider opening all doors and windows
- Ventilate to maintain tenable environment/ provide additional lighting as required
- Monitor structural stability of building
- Assess need for technical rescue teams (Heavy rescues)
- Assign new RIC to cover incident
- Maintain strong command and control of all units

References

NFPA 1407
N.J.A.C. 12:100 Subchapter 10 Standards for Firefighters
N.J.A.C. 5:75-2.4, 5:75-2.8
NFPA 1500
NFPA 1021
NFPA 1001

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