

STANDARD OPERATING GUIDELINE

First Alarm/Structure Fires

Purpose

This standard operating guideline has been developed to provide basic operating guidelines for the personnel responding to and arriving on the scene of a first alarm assignment for a reported fire in any type of structure.

The intent of this document is to provide: safe, effective, and efficient direction toward mitigating all hazardous circumstances at a structure fire. This operating guideline will coordinate all essential fire ground functions in a standardized format to ensure consistent fire ground proficiency.

It is understood that structure fires, in their nature, present with unique conditions and variables. This document is a recommended operating guideline; however, is not all-inclusive and cannot cover all of the possible situations that personnel may encounter at a structure fire. If conditions warrant, operations may deviate from these methods to fit a particular incident or condition

Scope

Fire ground Operations will be based on the following priorities: 1) to save human life, 2) to conserve property, and 3) to minimize impacts to the environment. The following tactical lists will be the basis for these considerations.

1. To Save Lives:

- a. Attack fire (locate, confine, contain)
- b. Ventilate
- c. Search
- d. Rescue

2. To Conserve Property:

- a. Locate fire
- b. Stop fire spread (contain and confine)
- c. Attack and extinguish fire
- d. Ventilate

3. To Minimize Impact to Environment:

- a. Confine
- b. Extinguish

The determination of the assignment and order of individual tactical operations are affected by: 1) available personnel, 2) available apparatus response time, and 3) emergency response characteristics (construction, occupancy, water supply, terrain). Due to the resources of the St. Louis County fire agencies, initial functions are not assigned according to apparatus type (Truck

or Engine). These functions are assigned in this standard operating guideline in relation to function prioritization and apparatus arrival order. Engine functions include the supply and use of water or other extinguishing agent. Truck functions include placement of aerial and ground ladders, overhaul, ventilation, forcible entry, search and rescue, salvage, and control of utilities. This prioritization of fire ground functions directly supports the objective of achieving the identified fire ground priorities: to save lives, protect property, and to minimize harmful impacts to the environment.

Each company arriving on the fire ground shall report with tools specific for tasks and job functions specified by this standard operating guideline or assigned by the incident commander.

Procedures

First Arriving Company

The Primary Objective is Fire Attack

- Conduct an accurate and thorough radio report to the dispatch agency, including:
 - Structure type and occupancy, fire and smoke conditions, including volume, location and extent.
 - Possible entrapment or victims
 - Associated hazards and exposure problems
 - Mode of attack and initial actions
 - Orders to incoming units, including water supply and further actions
 - Possible anticipated actions, including: possible rapid fire events, imminent
 - Refer to the radio report outlined in the Incident Command SOG

**It is no longer necessary to communicate passing command or announcing that command is mobile. This function of taking command of the incident, regardless of interior or exterior, is automatically accepted by the initial arriving company and should be assumed.*
- Conduct an Initial 360 size-up of incident, including;
 - Location of possible victim(s),
 - Location of fire,
 - Extent of fire,
- Identify Associated hazards, including:
 - Exposures
 - Collapse Hazards
 - Utilities
 - Hazardous Materials
 - Hazardous Conditions, including possible violent threats
 - Hampering Weather Conditions
- Take command of the incident, as determined by the initial operation mode. This initial command function may be mobile. If the operation is defensive, the first due will initiate a fixed command, designating the area of the command location. The command location should be designated by the street and side designation. *Refer to the ICS SOG in reference to*

command of the incident.

- Initiate an operational mode
 - Offensive- initiating interior operations. During this operational mode, the command is mobile.
 - Defensive- initiating exterior operations. During this operational mode, the command is fixed.
 - Transitional*-*Transitional mode of attack is considered one of the three attack modes; however, crews should communicate initial actions of interior or exterior deployment in order to avoid fire ground confusion and to dictate latter support actions by future arriving apparatus.*
- Consider forward laying a supply line to the incident,
- If this apparatus does not possess an aerial device, ample room should be left for aerial device placement in the front of the building.
- Conduct possible forcible entry for initial egress.
- Stretch attack line of adequate size or master stream to control, contain/confine, or extinguish the estimated amount of fire.
- Initiate interior operations checking for victims and attempt to locate the fire.
 - Make immediate entry for known life hazards or incipient fires. (Exception to 2 in / 2 out rule)
 - Make entry upon the arrival of the second apparatus to search for unconfirmed occupants or attack working structure fires.

Second Arriving Company

The Primary Objective is Water Supply/IRIC/IC/Supporting Initial Attack Line

- Establish appropriate supply line to first arriving company, if not completed.
- Assure connection to sprinkler/standpipe system if building is so equipped.
- Support IRIC mandates of 2 in 2 out until further companies arrive
- Assume command at the discretion of the first arriving company officer.
 - Transfer command upon arrival of the Chief Officer.
 - Refer to ICS procedures outlined in the Incident Command SOG
- Size-up and Support the efforts of the initial attack line

Third Arriving Company or Available Truck Company

The Primary Objective is Initial Truck Company Operations (Fire floor activities)

- Conducting fire floor support operations:
 - assisting with search of fire location
 - conducting search and rescue
 - conducting horizontal ventilation
 - considering additional forcible entry
- Consider providing egress to sides and divisions of the structure:

- Laddering upper floors
- Removing security bars
- Rear forcible entry/additional forcible entry
- Support IRIC mandates of 2 in 2 out until further companies arrive
This company is a member of the Truck Company Group. The Truck Company Group will be made by the Third or Fifth arriving Company slot. If a truck company is available or designated, it will be assigned either the Third or Fifth slot in this SOG, depending on its arrival. Please reference the definition of the St. Louis County Truck Company Group.

To alleviate fire ground confusion, the company officer of this apparatus will arrive on the fire ground, determine arrival order, and assume truck operations by transmitting: “assuming truck operations.”

Fourth Arriving Company

The Primary Objective is Back-up Line or Secondary Attack Line

- Deploy a second hand line for either attack or backup line. Advance the line to back up the first arriving company when necessary, or advance the line to the floor above the fire in multi-story buildings.
- Consider backing into the scene or parking near a hydrant to be prepared to establish a secondary water supply. Communication may be necessary to prevent being blocked by later arriving units.
- At the determination of the IC, this apparatus should secure a secondary water supply
 - Considerations for secondary water supply situations, include:
 - Multiple attack lines/streams
 - Heavy fire load and building size
 - Defensive/Master stream operations
 - Exposure challenges
- Support IRIC mandates of 2 in 2 out until further companies arrive

Fifth Arriving Company or Available Truck Company

The Primary Objective is Incomplete Truck Company Operations

- Conduct all incomplete support functions:
- Evaluate Ladder placement and the need to additionally support upper level egress
- Consider ventilation needs, including roof (vertical) ventilation
- Secure structure utilities
- Salvage and overhaul
- Assist search and rescue

- Consider searching above the fire floor
- If a secondary attack line has been placed in service, consider supporting/assisting secondary hand line
- Support IRIC mandates of 2 in 2 out until further companies arrive

This company is a member of the Truck Company Group. The Truck Company Group will be made by the Third or Fifth arriving Company slot. If a truck company is available or designated, it will be assigned either the Third or Fifth slot in this SOG, depending on its arrival. Please reference the definition of the St. Louis County Truck Company Group.

To alleviate fire ground confusion, the company officer of this apparatus will arrive on the fire ground, determine arrival order, and assume truck operations by transmitting: “assuming truck operations.”

It is essential that this company officer makes communication with the Third Arriving Company slot to determine which truck functions need to be completed.

Sixth Arriving Company

The Primary Objective is Rapid Intervention (RIC)

- All company members report to Command in full PPE and SCBA for assignment as the Rapid Intervention Company. Appropriate tools should be brought to tool staging area.
- Conduct an additional size up
- Communicate with incident commander and safety officer
- Consider further ladder placement
- Evaluate and remove egress hazards
- Refer to the Standard Operating Guideline for Rapid Intervention Companies for further information and minimal tool assignment
- Consider establishing a RIC group

First Arriving Chief Officer

The Primary Objective is Initial Incident Commander

- Assume command and initiate the National Incident Management System (NIMS).
- If command has been established by an officer other than first due, the Chief Officer will meet with the current Incident Commander for a face to face meeting if possible. The Chief Officer will then determine if they need to assume command or remain to assist the current commander.
- The IC shall complete a full 360° view of the involved structure when possible.

- 1st arriving Officer shall provide a size-up to Dispatch Center including a designation of Side A, and declare a strategy (Mode) for all to hear. If the first due Chief Officer arrives after the initial company officer, the first arriving Chief Officer will announce a secondary, more thorough size up, including:
 - Current action progress
 - Detailed building description (type, occupancy, size, height, use) and conditions
 - Detailed exposures
 - Detailed fire and smoke conditions
 - Possible anticipated actions, including: possible rapid fire events, imminent collapse, transitional actions (Defensive to Offensive), overwhelming conditions (Condition Doubtful).
- Establish or review strategies that will best control the incident, i.e. proper size attack hose lines, water supply established, proper ventilation, search and rescue, etc.
- Begin incident documentation by utilizing an approved tactical worksheet. Utilize command vehicle as Command Post (CP) when possible. If FD Command vehicle is not used as CP the IC will establish a single CP and announce its location to on-scene units and Dispatch.
- Call for additional resources if needed, i.e. additional alarms, EMS, Police, Utilities, etc.
- Assure that (RIC) Rapid Intervention Crew has been established and is ready to perform assigned task.
- The IC shall have the authority to deviate from this SOG as necessary to commit resources to life safety/search and rescue operations.
- Confirm all occupants are clear from the structure. Assure primary and secondary searches are complete and communicate status with Dispatch.

All Other Arriving Chief Officers

- Report to IC for assignment
- Incident Safety Officer designation is high priority. The next available command officer designee should assume this position and immediately conduct a 360 size up.
- Dependent upon staff availability and the size/complexity of the incident, considerations for other command positions, Include:
 - Division C
 - Accountability
 - RIC
 - Staging
 - Medical Group
 - Other Divisions/Branches as deemed applicable

ALS Ambulance

- Triage victims
- Transport victims
- If no victims are present, this unit will establish rehab
- If this unit transports or begins conducting triage, an additional ALS ambulance should be considered by the IC to conduct rehab/standby activities.
- This unit will be held on the scene until command is terminated or at the discretion of the incident commander

General comments

- Major consideration should be given to placing aerial apparatus at front of building.
- Communication considerations
Upon the initial assignment of a 1st Alarm, three TAC channels will be assigned by the dispatcher. Of these three, the dispatcher will only announce which channel is the primary channel for that specific incident. All radio communications pertaining to this incident shall be conducted on this primary TAC channel (i.e., responding, updates, size ups, orders, etc.). The Incident Commander will have the authority to delegate the usage of the two remaining TAC channels. The dispatcher will remain only monitoring on the primary TAC channel unless ordered by the IC to monitor the radio traffic on the other TAC channels in use.

The IC should consider the usage of the "extra" TAC channels for, however not limited to:

- fire ground operations
- divisions communications
- group communications
- RIC/Mayday Activations (Refer to RIC/Mayday Policy)

Once the incident has been placed under control, the IC will consider "releasing" the dispatcher from constantly monitoring the primary TAC channel. When this occurs, any communications needed with the dispatcher would be conducted on the "MAIN" channel

- This standard operating guideline supports two hand lines. If an additional hand line is necessary, the IC should consider requesting additional apparatus.
- Circumstances which could require an exception to the standardized operating guideline include; however, not limited to:
 - Immediate rescue(s) of trapped occupant(s)
 - Defensive operations
 - Water supply deficiency/challenges
 - Structure type, including high rise operations
 - Additional hazards

Recommended Training Interval

SOG review quarterly
 Hands on Semi-Annual

Rescue matrix

When initiating interior operations, with limited initial resources, and a decision between immediate rescue and immediate line deployment needs to be made, the following table will be considered in assisting with this decision making process:

<i>Rescue</i>	<i>vs.</i>	<i>Immediate Line Deployment</i>
<i>Exact location of victim is known</i>		<i>Unknown location of victims</i>
<i>There are a minimum number of victims (1 or 2)</i>		<i>Unknown number of victims</i>
<i>Extensive fire conditions</i>		<i>Large number of victims trapped</i>
<i>Not enough firefighters for both rescue and attack and the above conditions are present</i>		<i>Unknown location of fire or fire prevents rescue access or egress</i>
		<i>Not enough firefighters for both rescue and attack and the above conditions are present</i>

References

- NFPA 1500, Fire Department Occupational Safety & Health Program, 2013 edition, section 8.8
- NFPA 1710, Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments, 2010 edition, chapter 5
- OSHA 29 CFR 1910.134
- NIMS 700/ 800
- FGSI Definition Document

Related definitions (Reference Definitions Section of the FGSI)

<i>Ambulance</i>	<i>Initial Rapid Intervention Crew (IRIC)</i>	<i>Truck Company</i>
<i>Attack Line</i>	<i>Offensive Mode</i>	<i>Truck Company Group</i>
<i>Back Up Line</i>	<i>Pre-Connect</i>	<i>Truck Company Group Supervisor</i>
<i>Company</i>	<i>Rapid Intervention Crew (RIC)</i>	<i>Two In/Two Out</i>
<i>Defensive Mode</i>	<i>Size Up</i>	
<i>Engine Company</i>	<i>Transitional Mode</i>	

Appendix A

Radio Size up example

The first arriving fire department unit activates the command process by giving an initial radio report. The Radio Report should include:

DESCRIPTION EXAMPLE

1. Company Number: 1814
2. Number of Stories: 1, 2, 3, or high-rise
3. Type of Construction: Frame, brick, metal, etc.
4. Occupancy type: Residential, commercial, industrial, etc.
5. Visual Observation: Nothing showing, smoke showing, fire showing
6. Initial Actions: Investigating, offensive, defensive
7. Request Additional Resources: Additional Alarms, specialized equipment

Example:

1814 on the scene of a two story frame residential with fire showing from the first floor.

We are initiating an interior attack with a pre-connect, dispatch a second alarm.

Appendix B

- Individual Company Tactical worksheets
 - First Arriving Company
 - Second Arriving Company
 - Third Arriving Company or Available Truck Company
 - Fourth Arriving Company
 - Fifth Arriving Company or Available Truck Company
 - Sixth Arriving Company
 - First Arriving Chief Officer
 - All Other Arriving Chief Officers
 - ALS Ambulance
- Incident Command Tactical worksheets

Appendix B

First Alarm/Structure Fires

Company Worksheets

First Arriving Company

The Primary Objective is Fire Attack

- Conduct an Initial 360 size-up of incident
- Identify Associated hazards
- Take command of the incident, as determined by the initial operation mode. This initial command function may be mobile.
- Initiate an initial operational mode (Offensive or Defensive)
- Conduct an accurate and thorough radio report to the dispatch agency
- **Consider** forward laying a supply line to the incident,
- If this apparatus does not possess an aerial device, ample room should be left for aerial device placement in the front of the building.
- Conduct possible forcible entry for initial egress.
- Stretch attack line of adequate size or master stream to control, contain/confine, or extinguish the estimated amount of fire.
- Initiate interior operations checking for victims and attempt to locate fire.

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First Alarm/Structure Fires Company Worksheets

Second Arriving Company

The Primary Objective is Water Supply/IRIC/IC/Supporting Initial Attack Line

- Establish appropriate supply line to first arriving company, if not completed.
- Assure connection to sprinkler/standpipe system if building is so equipped.
- Support IRIC mandates of 2 in 2 out until further companies arrive
- Assume command if first arriving command officer is in interior, fast-attack mode
- Size-up and Support the efforts of the initial attack line

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Company Worksheets

Third Arriving Company or Available Truck Company

The Primary Objective is Initial Truck Company Operations (Fire floor activities)

- Conducting fire floor support operations:
 - assisting with fire location
 - conducting search and rescue
 - conducting horizontal ventilation
 - considering additional forcible entry
- **Consider** providing egress to sides and divisions of the structure:
 - Laddering upper floors
 - Removing security bars
 - Rear forcible entry/additional forcible entry
- Support IRIC mandates of 2 in 2 out until further companies arrive

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Company Worksheets

Fourth Arriving Company

The Primary Objective is Back-up Line or Secondary Attack Line

- Deploy a second hand line for either attack or backup line. Advance the line to back up the first arriving company when necessary, or advance the line to the floor above the fire in multi-story buildings.
- Locate, identify, and prepare to establish a secondary water supply
- At the determination of the IC, this apparatus should secure a secondary water supply
 - Considerations for secondary water supply situations, include:
 - Multiple attack lines/streams
 - Heavy fire load and building size
 - Defensive/Master stream operations
 - Exposure challenges
- Support IRIC mandates of 2 in 2 out until further companies arrive

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Fifth Arriving Company or Available Truck Company

The Primary Objective is Incomplete Truck Company Operations

- Conduct all incomplete support functions:
- Evaluate Ladder placement and the need to additionally support upper level egress
- **Consider** ventilation needs, including roof (vertical) ventilation
- Secure structure utilities
- Salvage and overhaul
- Assist search and rescue
- **Consider** searching above the fire floor
- If a secondary attack line has been placed in service, consider supporting/assisting secondary
- Support IRIC mandates of 2 in 2 out until further companies arrive

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It is essential that this company officer makes communication with the Third Arriving Company slot to determine which truck functions need to be completed.

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Sixth Arriving Company

The Primary Objective is Rapid Intervention (RIC)

- All company members report to Command in full PPE and SCBA for assignment as the Rapid Intervention Company. Appropriate tools should be brought to tool staging area.
- Conduct an additional size up
- Communicate with incident commander and safety officer
- Consider further ladder placement
- Evaluate and remove egress hazards
- Refer to the Standard Operating Guideline for Rapid Intervention Companies for further information.
- **Consider** establishing a RIC group

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First Alarm/Structure Fires

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First Arriving Chief Officer

The Primary Objective is Initial Incident Commander

- Assume command and initiate the National Incident Management System (NIMS).
- If command has been established by an officer other than first due, the Chief Officer will meet with the current Incident Commander for a face to face meeting if possible. The Chief Officer will then determine if they need to assume command or remain to assist the current commander.
- The IC shall complete a full 360° view of the involved structure when possible.
- 1st arriving Officer shall provide a size-up to Dispatch Center and declare strategy (Mode) for all to hear. If the first due Chief Officer arrives after the initial company officer, the first arriving Chief Officer will announce a secondary, more thorough size up, including:
 - Current action progress
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 - Detailed fire and smoke conditions
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- Assure that (RIC) Rapid Intervention Crew has been established and is ready to perform assigned task.
- The IC shall have the authority to deviate from this SOG as necessary to commit resources to life safety/search and rescue operations.
- Confirm all occupants are clear from the structure. Assure primary and secondary searches are complete and communicate status with Dispatch.

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All Other Arriving Chief Officers

- Report to IC for assignment
- Incident Safety Officer designation is high priority. The next available command officer designee should assume this position and immediately conduct a 360 size up.
- Dependent upon staff availability and the size/complexity of the incident, considerations for other command positions, Include:
 - Division C
 - Accountability
 - RIC
 - Staging
 - Medical Group
 - Other Divisions/Branches as deemed applicable

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ALS Ambulance

- Triage victims
- Transport victims
- If no victims are present, this unit will establish rehab
- If this unit transports or begins conducting triage, an additional ALS ambulance should be considered by the IC to conduct rehab/standby activities.

