Standard Operating Guidelines

3000.165 **Structure Fire Size-Up** Implemented: 02/07/2024 Revised:



Adam Harrison

Page 1 of 19 , Fire Chief

PURPOSE:

The size up of an emergency scene starts at the dispatching of the call. Pertinent information is given throughout the ongoing mitigation that should be communicated to all responding companies and dispatch. The Size-Up is the initial communication of what the company or individual sees on arrival.

OBJECTIVE:

To provide an outline on the suggested best practices for pertinent information identification and communication for emergency scenes.

SCOPE:

All Personnel

PROCEDURE

On arrival of the first due company or officer, the scene size up will commence. Factors to consider for the communication to all those responding are:

Number of Floors Type of Occupancy **Establish Building Orientation Smoke/Fire Conditions** Smoke/Fire Location **Operations Mode** Immediate Hazards/Pertinent Information Confirm Scene Location **Establish Command**

Number of Floors/Divisions:

While the front of the structure usually provides the total floors of the building, only after a 360 recon of the structure will the true number be known. Many houses in Escambia County are multi-level, including elevated houses on pilings. These types of houses may also have enclosed lower levels as a "blow-out" wall for storm surges. When a home is elevated, size-up information will be based on the ground up, no matter if enclosed: "Single story", "2-story", etc. This will relay the hazards that can be present at a house off grade and restricted in access points. Pre-planning a commercial structure will give the best information as to the total floors in the structure. A "walk-out" is only viewed after a 360 is complete. The house appears as a single story from one side, but multi story on another side. Split level is defined as walking in on the ground level and having an immediate up and down access (see picture reference).

3000.165 Structure Fire Size-Up Implemented: 02/07/2024 Revised:



<u>Adam Harrison</u>

, Fire Chief Page 2 of 19

A *walkout* will be defined as walking in at ground level and having another exit at a lower than ground floor level. This can be a single, lower level or more (see picture reference). A *basement* will be defined as a fully enclosed space underground level with access only from the interior or the building.

Floors/Divisions will be referred to in ascending chronological order, starting with the ground floor being the first floor/division. Going up from there, unless otherwise pre-labeled (discovered during pre-planning) on the building/ in the stairwells/ in the elevator panel. If pre-labeled, ECFR will use the labeled verbiage. A Star $\sqrt[-4]{}$ usually indicates the main level of the building used for entry and exit outside. This is also indicated on the elevator and can assist in the identification of the lobby for further arriving companies.



Standard Operating Guidelines

3000.165 Structure Fire Size-Up Implemented: 02/07/2024 Revised:



Adam Harrison

, Fire Chief Page 3 of 19

Type of Occupancy:

The National Fire Protection Agency (NFPA) classifies different Building Occupancies based on the type of fire protection needed for the occupants. Examples of these that can be used during the size-up are:

Assembly Business Educational Health Care Residential Apartment Factory Industrial Storage Lodging/Dormitory

*These occupancies can be found in NFPA 101 and 5000 for further information and definition.

Smoke/Fire Conditions:

Each structure will present many ways that smoke, and fire can be presented. Although there may be "Nothing Showing" on arrival, crews should not let their guard down that there can still be a life safety hazard and occupant danger still present.

Nothing Showing:

On arrival, there are no visible signs of smoke or flames anywhere in or around the structure.

3000.165 Structure Fire Size-Up Implemented: 02/07/2024 Revised:



<u>Adam Harrison</u>

, Fire Chief Page 4 of 19

***Working Fire Protocol in Dispatch will be used in all the following:

(EMS assigned, Utility Companies contacted, SOP text sent, Consider Move ups)

Light Smoke Showing:

Lighter colored, lighter volume smoke conditions from any part of the structure. *Indicative of a smoldering or incipient fire.

*Caution should be taken for other signs of backdraft/smoke explosions in these presentations based on ventilation limitations. *

Smoke Showing:

Smoke of any significant volume coming from any part of the structure. *Indicative of a growing fire that has limited or not yet vented.

Heavy Smoke Showing:

High volume of smoke with intensity, pressure, and/or volume coming from the structure. *Indicative of a very active fire with active fire loads burning

Fire and Smoke Showing:

Visible flames combined with smoke coming from the structure. *Indicative of a ventilated, free burning fire

Well Involved:

Fire from all initially visible opening in the structure and a defensive approach with limited entry as the mode of attack.

Fully Involved:

Fire from every opening and a defensive approach with limited entry as the mode of attack. **Only to be announced after confirmation of 360 walk around completed.** *"Fully involved- Confirming no viable living spaces."*

*Indicative of little to no chance of survival of any occupants. *

*Risk/Reward not conducive to entry. *

Standard Operating Guidelines

3000.165 Structure Fire Size-Up Implemented: 02/07/2024 Revised:



<u>Adam Harrison</u>

, Fire Chief Page 5 of 19

Smoke/Fire Location:

Locations of the smoke/fire can give the first arriving company the mindset of the primary purpose of fire attack, Life Safety. Depending on time of day, location of smoke/fire, and occupancy type, the ability to save trapped occupants can be thought of during the size-up of the Smoke/Fire Location.

The "address side" or "mailbox side" of the structure is the "A" side. This is the front of most buildings and can be the main entry route for both occupant and firefighter. This is usually the front/main door. On a corner house, the "A" side is usually the main entry door, as the lot may have the house turned or diagonal to the streets.

ECFR uses the alphabetical labeling for building side locations. The front will be the "A" side. Continuing in a clockwise movement, the left side will be labeled the "B", rear is the "C" side, right (when looking at the front) is the "D" side. Verbalizing the significant portions of the home will also assist in "painting the picture" of the building: garage, front, chimney, etc.

Labeling Sides:

ECFR uses alphabetical labeling for building side locations. The first arriving company officer should provide clear delineation of which side is the "A" side. Or, in the case of an odd, shaped building, XYZ (description) is the "A" side. This could be the name of a particular store for L or U-shaped strip malls or could be as simple as a door that's a different color is the "A" side (side with the red door, etc.). All other sides will be labeled based off that in the established alphabetical, clockwise manor using as many letters as necessary.

Operations Mode:

The selection of mode of operation will be determined by the visual presented during arrival, caller information, life safety, experience, and operation sustainment. With Life Safety as the highest priority, searching the building as safe as possible can be done in most situations. Modes of operation include:

Offensive Defensive Blitz Attack Investigation

Standard Operating Guidelines

3000.165 **Structure Fire Size-Up** Implemented: 02/07/2024 Revised:



Adam Harrison

Page 6 of 19 , Fire Chief

Offensive Mode:

Offensive mode is described best as an internal attack of the fire using the proper hose, reach and stream. The fire can be contained and extinguished safely with the structural integrity intact for the protection of the interior teams (attack, search, etc.).

Defensive Mode:

Defensive mode is an exterior attack only. The fire has either overwhelmed the building, structural integrity has been compromised, or the risk of entry by teams is deemed a life safety hazard. Crews will use handlines or master streams to attack the fire from the outside only.

<u>Blitz Attack:</u>

This mode is used when the fire has overtaken a major part of a building or occupancy, but savable areas are still present for crews to enter, contain the fire spread, and search tenable spaces for trapped occupants. Attack lines will be used from both interior and exterior locations.

Investigation Mode:

No immediate hazards are presented from the arriving company. Investigation into the incident will continue under little to no Immediately Dangerous to Life and Health (IDLH) conditions.

Immediate Hazards/Pertinent Information:

On arrival, many additional hazards may be present and have the need to communicate to other arriving and responding companies. Some examples are:

Live Electrical Lines: identify the location and exclude access as safe as possible.

Exposure complications: vehicle, neighboring structure, wood line, etc.

Access complications: locked gates, overly cluttered yard, etc.

Oddly Shaped Buildings: H, L, U, large square footage houses, etc.

Unsafe scene- civil disturbance, armed occupant, etc.

Standard Operating Guidelines

3000.165 Structure Fire Size-Up Implemented: 02/07/2024 Revised:



<u>Adam Harrison</u>

, Fire Chief Page 7 of 19

Establish Command:

Command should be established as the first arriving to facilitate the Incident Command System (ICS) Structure. Command can be transferred to others as needed, but the initial calling of command establishes a single point of control of the incident. Using the names of the street or business gives a single point of referce for the location of that specific incident.

Ongoing Size-up

As the situation dictates, the need for ongoing Size-up can show conditions improving, declining, or not changing yet. Using the ICS structure and appropriate ECFR SOG's, mitigation of the incident will continue with the safest, most appropriate actions taken. Solar Panels should also be communicated, as they can add Dead Load to the roof system and active electricity back fed into the homes electrical system. The Incident Commander will relay information as needed until the Life Safety, Incident Stabilization, and Property Conservation is complete.

Labeling Exposures:

When/if apartments are clearly labeled the IC may opt to use the apartment numbers/address as labels with the corresponding division, but only when clearly labeled and visible to suppression personnel. Otherwise, exposures will be labeled using an extension of alphabetical method of labeling the sides. For exposures attached to (under the same roof even if divided by firewall) the fire unit. This labeling will start with the original fire location. Example: With a row of 5 apartments with fire in the exact middle. You will have the fire apartment, then to the left will be exposure B1 then B2, to the right will be D1 then D2 (Figure: 2). Expanding this out to multi story with vertical extension would look like this: Division two "A1" exposure apartment (apartment with direct extension) then label second floor exposures just like you would with the first floor; Division two B1 then Division two B2 on the left and Division two D1, Division two D2 on the right (Figures: 3,4,5). If the building is one laid out in a pod style with shared stairwells. You would label in the same manner using the corresponding side letter with numbers. Buildings with multiple floors, the stacked units on each floor would all bear the same numbers after the corresponding side (Figures: 3,4,5). In this situation (Pod style - 4/6/8 etc. to a floor) when the fire is on the "A" side you may also have an apartment directly behind the fire apartment as an exposure, this would be the "C#?" exposure (Adding the division where necessary). Adding numbers, continuing with the clockwise pattern, when there are multiples (Figure: 8). When operating at a structure fire at a garden style apartment type, the main fire apartment shall be designated the same as the side designation on which the fire is occurring, any apartment above or below will also be assigned the same with the corresponding division. If the main fire apartment was Division 3 Alpha 1 the apartment directly above would be Division 4 Alpha 1 and the apartment directly below the main fire apartment (Division 3 Alpha 1) would be Division 2 Alpha 1. If there is an apartment on the same division directly opposite the alpha apartment that apartment would be labeled "Charlie #? exposure" with the corresponding division label. Detached exposures

3000.165 Structure Fire Size-Up Implemented: 02/07/2024 Revised:



<u>Adam Harrison</u>

, Fire Chief Page 8 of 19

would simply be labeled with the single letter of the corresponding side or corner to which it is closest with numbers where needed in case of multiple exposures on a side (Fig. 13).

ECFR Size Up Report

Confirm Scene Location Number of Floors Type of Occupancy Establish Building Orientation Smoke/Fire Conditions Smoke/Fire Location Operations Mode Immediate Hazards/Pertinent Information

3000.165 Structure Fire Size-Up Implemented: 02/07/2024 Revised:



<u>Adam Harrison</u>

, Fire Chief Page 9 of 19

ECFR Size Up Descriptions:

Single Story Private Dwelling



Two Story Private Dwelling



3000.165 Structure Fire Size-Up Implemented: 02/07/2024 Revised:



<u>Adam Harrison</u>

_, *Fire Chief* Page 10 of 19

Single Story Private Dwelling on Stilts



Two Story Private Dwelling on Stilts



Standard Operating Guidelines

3000.165 Structure Fire Size-Up Implemented: 02/07/2024 Revised:



Adam Harrison

Page 11 of 19 , Fire Chief

Single Story Private Dwelling Enclosed



Two Story Private Dwelling Enclosed



3000.165 Structure Fire Size-Up Implemented: 02/07/2024 Revised:



Adam Harrison

_, *Fire Chief* Page 12 of 19

Single Story Private Dwelling Row Home



Two Story Private Dwelling Row Home



3000.165 Structure Fire Size-Up Implemented: 02/07/2024 Revised:



Adam Harrison

_, *Fire Chief* Page 13 of 19

Two Story Apartment



Multi Story Apartment



Adam<u>Harrison</u>

Standard Operating Guidelines

3000.165 Structure Fire Size-Up Implemented: 02/07/2024 Revised:



Page 14 of 19 , Fire Chief

Multi Story High Rise (7 floors or greater)



Single story Off-grade Private Dwelling



3000.165 Structure Fire Size-Up Implemented: 02/07/2024 Revised:



<u>Adam Harrison</u>

_, *Fire Chief* Page 15 of 19

Single Story with a Walk out

"A" Side



"B" Side



Only visible on complete 360 of structure

3000.165 Structure Fire Size-Up Implemented: 02/07/2024 Revised:



<u>Adam Harrison</u>

_, *Fire Chief* Page 16 of 19

Single Story Industrial



Single Story Strip Mall



3000.165 Structure Fire Size-Up Implemented: 02/07/2024 Revised:



<u>Adam Harrison</u>

_, *Fire Chief* Page 17 of 19

Single Story Assembly



Multi Story Lodging



3000.165 Structure Fire Size-Up Implemented: 02/07/2024 Revised:



Adam Harrison

Page 18 of 19 , Fire Chief

Single Story Storage



Single Story Healthcare



Single Story Educational



3000.165 Structure Fire Size-Up Implemented: 02/07/2024 Revised:



Adam<u>Harrison</u>

Page 19 of 19 , Fire Chief

Multi Story Dormitory



Split Level Private Dwelling

