ESCAMBIA COUNTY FIRE-RESCUE

Standard Operating Guidelines

4100.050

Elevator Emergencies

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Revised:

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----, Fire Chief

PURPOSE

Elevator emergencies can provide firefighters with several tactical and safety concerns.

OBJECTIVE

To provide personnel with guidelines that identify safe and effective operating methods to rescue persons who have become trapped inside an elevator for any reason. All companies, however will attempt to become aware of those occupancies that utilize elevators within their first due area. These elevators should be included in that respective companies pre-plan analysis for those buildings. Main points of reference for the pre-plan need to be the type of elevator (hydraulic or traction), the location of the elevator control room, and the location/accessibility for that control rooms keys.

SCOPE

All personnel

RESPONSE

Upon receiving a report of persons trapped in a stalled elevator, the dispatch center should dispatch the closest company.

Unless information is received from the communications center indicating a medical emergency or a person trapped in the mechanism of the elevator, responses to elevator emergencies shall be in the non-emergency mode. Any officer or acting officer may upgrade the response to emergency mode based on information received from the communications center.

Upon confirmation that a person is trapped in the mechanism of the elevator, the alarm should be upgraded to include an additional company and the special operations team.

PROCEDURE

Upon arrival the incident commander or apparatus officer shall meet with the complainant, if possible, to determine if there is person(s) trapped in the stalled elevator and how many.

Upon determination that a rescue is necessary, the incident commander or apparatus officer shall request the building representative on-scene contact an elevator repair service to respond.

The incident commander or apparatus officer shall consider the need for PPE. Elevator incidents can rapidly change to elevator emergencies thus requiring a higher level of PPE.

If the elevator service is equipped with phase I recall service, attempt to recall the elevator. If this does not free the elevator, continue with the following procedures. An occupant should then be asked to try pushing the door open button to see if it will activate the doors to simply open. Additionally, the occupant(s) should be given specific instructions to apply force against the car door in the direction of closing. This action attempts to close the car door safety circuit which may be out of alignment. At the same time a member of the rescue team should apply closing force to the landing door. This action may be all that is necessary to reenergize the car. The occupant(s) should then be directed to press a floor button. WARNING: This is the only directive that shall be given to the occupant(s) prior to shutting down and locking out and tagging out the power from the mechanical room.

A radio equipped company or member shall be sent to the elevator mechanical room and secure power to the effected elevator(s). The power source shall be locked and tagged out. Once the power has been secured to the elevator(s), the member or crew shall remain in the mechanical room until released by command. Also special consideration must be provided to shut down any back-up power to elevators.

Shutting off the main elevator power switch does not completely de-energize the cab. A separate main power switch for the cab lights is also located in the elevator control room. The passengers need to be notified if the cab lights must also be shut off.

When there are other elevators operating in a common hoist way, the IC must consider clearing all adjacent elevators of passengers and shut down and lock-out/tag-out power to these cars also.

The position of the car in the hoist way shall be determined. It may be necessary to open the hoist way door to determine the cars position.

The company officer shall establish contact with the cars occupants, and attempt to determine if any medical conditions are present, the company officer should then advise the cars occupants to do the following:

- Sit on the floor with your back against the wall of the elevator
- Stay away from the elevator doors
- The rescue is in progress

Once the above listed criteria are completed, the hoist way doors closest to the car will be opened utilizing a hoist way key.

All doors opened should be blocked open using a wooden door wedge.

Request the occupants of the car to activate the car's STOP switch.

Only in the event of an ongoing medical emergency within the car shall the door to an elevator be forced open.

OCCUPANT REMOVAL

All occupants who cannot walk without assistance shall be removed with the aid of a stair chair, backboard, or stokes basket.

Any occupant who can walk out will be assisted to do so if the car floor is even with the floor.

If the car floor is not even with the floor, a member shall board the car and the car occupants shall be assisted from the car using an attic ladder with a member in the car and at the floor level assisting the occupants. Any time an occupant must climb more than 4 feet from the car floor, a safety line shall be secured to the car occupants as fall protection.

If at anytime a topside removal is not possible the open shaft below the elevator should be barricaded. A good example of an appropriate barricade would be a roof ladder.

If the car doors cannot be opened normally, a roof hatch may be used to affect the rescue. When a roof hatch is used to evacuate the car's occupants, safety lines shall be attached to the occupants as fall protection. There is a power kill button that is on top of the elevator, this button should be activated once the roof hatch has been opened. This topside power kill button is a secondary means to assure that all power is secured to the elevator. Rescuers should utilize a roof hook or pike pole to activate this switch since it is typically not within normal reach.

A roof hatch removal is a complicated and dangerous removal requiring specially trained personnel and specialized equipment such as life safety rope and class three harnesses. Prior to utilizing this removal tactic the company officer shall notify the on-duty battalion chief and if in a volunteer district the corresponding district chief.

TERMINATION

Once a rescue has been completed, the hoist way doors shall be closed.

Any disconnected power supplies shall be left secured and lock out / tag out devices may be removed at the direction of the incident commander. Power may be restored to all other elevators only, power must remain secured to the stalled car.

The building's representative should be advised to leave the elevator out of service until it can be checked and/or repaired by an authorized service company.