



Burlington Fire Department



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Section: Suppression	
SOG Number: 01.33	Effective Date: 03.14.2022
Subject: Aerial Apparatus	
By Order of Fire Chief Steven A. Locke	

I. Purpose:

To establish standard direction in the operations of the Burlington Fire Department's aerial apparatus. These directions at no time will supersede the manufacturer's recommended practices for operations.

II. Scope:

This document shall apply to all uniformed members of the Burlington Fire Department (BFD).

III. Definitions:

Aerial Apparatus - Firefighting vehicle equipped with a hydraulically operated ladder or elevating platform attached to a specially designed fire apparatus. (IFSTA)

Quint - Fire apparatus equipped with a fire pump, water tank, ground ladders, and hose bed in addition to the aerial device. (IFSTA)

Short jacking - Setting the stabilizers on one side of the apparatus shorter than the stabilizers on the other side; usually done when access for full stabilization is restricted. (IFSTA)

Tower 1- 2019 E-One HPS 100 Rear mounted aerial apparatus with attached platform.

IV. Guidelines:

A. Aerial Apparatus Operator

1. Aerial Apparatus Operation Training/Qualifications.
 - a) No member shall operate a Quint Apparatus unless properly trained by The Burlington Fire Department. Any member hired after July 1, 2022 shall be required to complete The Burlington Fire Departments Aerial Ladders Training Program.
 - b) Tower 1 driver/operator designation will be obtained per the most recent edition of the “Burlington Fire Department Tower 1 Qualification/Credentialing Program”
2. Response:
 - a) The Burlington Fire Department has a unique response matrix meaning at times the Quint apparatus designated as Ladders may respond to any incident as an engine. It is recommended when responding as an engine that the apparatus is positioned in such a way that the aerial device maybe deployed if necessary.
 - b) Aerial apparatus will respond when dispatched to an incident and operate in accordance with The Burlington Fire Department Standard Operating Guidelines and State Laws.

B. Aerial Apparatus Functions and Responsibilities

1. Aerial Apparatus Crew members may be called upon to perform any of the following functions or other functions deemed by the Incident Commander or Company Officer. Life safety
 - Size-up - Reference; SOG 6.21 “B.I.R”
 - Apparatus placement
 - Laddering – Both Ground and fixed apparatus
 - Forcible entry
 - Locating fire
 - Search and rescue- Reference; SOG 1.56 “rope assisted search”
 - Ventilation- Reference; SOG 3.10 “power saws”
 - Examination for extension
 - Extinguishment
 - Overhaul
 - Lighting
 - Salvage
 - Utilities control- Reference; SOG 4.02 “LOTO”
 - Extrication
 - Rapid Intervention- Reference; SOG 1.34 “RIC”

- Elevator rescue- Reference; SOG 4.07 “elevator rescue”
- Low angle rope rescue- Reference; SOG 4.15 “rope rescue”
- Water rescue Reference; SOG 4.05, 4.08
- High rise operations Reference; SOG 1.54
- Airport phase Reference; SOG 4.06 (still in draft)

2. Aerial Apparatus riding position tool

assignment recommendation for Structural response:

- a) It is the discretion of RTS to change tool assignments depending on needs found during size-up. This will also change when one of the Quints are tasked with engine company operations
 - a. Three- member crew
 - b. Officer – Portable radio, TIC, 6-8’ hook
 - c. Backend- Portable radio, Irons, Water can
 - d. Chauffer- Portable radio, rabbit tool, 6-8’ hook
- b) Two - member crew
 - a. Officer- Portable Radio, TIC, 6-8’ hook
 - b. Driver- Portable Radio, Irons, Water can

C. Apparatus Placement

1. First Due Ladder: (Ref: SOG 1.52)

- a) Typically position on side alpha. The following is dependent on the number of personal assigned to apparatus and RTS size up.

The driver will focus on the following:

- Place ladders for the rescue and removal of occupants, and to increase safety of personnel. Priority will be for laddering alpha and bravo sides of the building, unless the circumstances dictate otherwise.
- Mitigate access issues.
- Control exterior utilities.
- Ventilation in coordination with the engine company.
- When applicable, provide Roof Report in accordance with SOG 06.20: Radio Procedures.

The RTS and firefighter are responsible for the following on the fire floor:

- Primary search in coordination with the first due engine on the fire floor.
- Forcible entry and door control to support searches and hose line placement.
- Open up for extension.
- Control interior utilities.

- Salvage.
- Provide CAN report in accordance with SOG 06.22: CAN Report.

2. Second Due Ladder:

- a) Position for access to the Charlie side, if possible. The following is dependent on the number of personal assigned to apparatus and RTS Size up.
- b) Provide the Charlie side report as outlined by SOG 06.20: Radio Procedures, if not already provided by another unit.

The driver will focus on the following:

- Place ladders for the rescue and removal of occupants, and to increase safety of personnel. Priority will be for laddering Charlie and delta sides of the building, unless the circumstances dictate otherwise.
- Mitigate access issues
- Control exterior utilities
- Ventilation in coordination with the engine company
- Assist 1st due ladder driver with vertical ventilation, when applicable.
- When applicable, provide Roof Report in accordance with SOG 06.20: Radio Procedures.

The RTS and firefighter will focus on the following:

- Primary search in coordination with the engine companies on the floors above the fire.
- Forcible entry and door control to support searches and hose line placement.
- Open up for extension.
- Control interior utilities.
- Salvage.

3. Third Due Aerial Apparatus:

- a. Location will be at the discretion of the Incident Commander. The RTS should conduct a size up to evaluate possible set up locations for best tactical advantage.

D. **Spotting Aerial Apparatus:**

It is important to locate aerial apparatus in such a way as to avoid obstructions that would impede the placement of the outriggers or operation of the aerial.

Obstructions include but, are not limited to:

- 1) Overhead electrical lines
- 2) Park vehicles
- 3) Curbs
- 4) Manhole covers
- 5) Adjacent buildings
- 6) Proximity to fire building
- 7) Icy or soft ground
- 8) Grade percentage and degrees

Quint not to exceed 12% grade/ 6.8 degrees

Tower not to exceed 14% grade/ 8 degrees

E. **Aerial Apparatus Stabilizations:**

1. Follow all manufacturer recommendation when stabilizing the aerial apparatus for operations.
2. Ensure that ground surface is solid where placing stabilizing jacks
3. **Only short jack an Aerial Apparatus that are designed to do so.** At this time Ladder 2 is the only department apparatus that is designed to be short jacked.
4. Follow all manufacturer recommendations when shorting jacking the aerial apparatus.
5. Never operate Ladder 2 on short jack side of apparatus.

F. **Aerial deployment**

1. Follow all manufacturer recommendation when deploying the aerial device for operations.
2. Do not operate within 10 feet of live power lines
3. Do not operate the aerial device in winds exceeding 35 MPH.
4. Quints- Determine if deploying aerial ladder for rescue or master stream operations. Ensure water monitor is pinned in correct position
5. Mid-section for rescue
6. Fly section for master stream
7. Tower 1- allow personnel to board platform
8. Check intended path of aerial device for obstructions
9. Raise, rotate and extend aerial device lowering device to objective.

G. Personal Operating on an aerial device

1. Follow all manufacturer recommendation when operating on aerial device.
2. Follow load charts for number of personnel allowed on aerial device.
3. Never operate (move) the aerial_device (straight ladder) with personal on it unless under emergency conditions.
4. Ensure the turntable is staffed while personnel are operating on device.
5. Ensure all personnel operating on aerial devices are wearing the proper safety harness and it is in use when personnel stationary.

V. Responsibility:

It is the responsibility of all members to read, understand and follow this Standard Operating Guideline

Revision History			
Revision Date	Section	Summary	Principal Author
03.14.2022	All	Initial Release	BC Webster