Bath Township Fire Department			Standard Operating Guideline	
Section **Operations**	**Referral No.** **O-18**	**Subject:** **Positioning Aerial Apparatus**	**Date Issued** **4/07**	**Date Revised** **3/08**

Purpose:

- This procedure identifies the tactical placement considerations for Ladder Company positioning at an emergency scene.

Scope:

- This Standard Operating Guideline will apply to all personnel.

Responsibilities:

- Officers
  - All officers will ensure that any personnel operating the ladder company are properly trained.
  - The person operating the ladder company shall do so in a safe manner.
- Personnel
  - All personnel have the responsibility of wearing proper safety equipment and operating the ladder company in a safe manner.

Guidelines:

- All personnel must be seated with seat belts in place prior to moving the apparatus
- The Placement of the Ladder Company shall be given priority at all structures.
  - Even if aerial ladder operations are not indicated on arrival, a majority of tools and equipment needed for ventilation, forced entry and salvage are carried on the ladder.
- No vehicle shall be parked within 30’ of the rear of the ladder truck to facilitate ladder and equipment removal.
- On situations where the aerial will be used, consideration to spotting vehicle in the most advantageous location is a priority.
- For buildings of two or more stories, the Ladder Company should be positioned in front of the fire building to facilitate rescue operations.
  - When rescue is not a concern, the Ladder Company should be spotted at the buildings corner, closest to the fire.
  - If possible, the Ladder Company should be placed on the windward side of a structure, especially in heavy fire or wind conditions.
- The minimum staffing for the Ladder Company shall be two trained firefighters.

- **During all operations, the pedestal man shall:**
  - Remain at pedestal until properly relieved by member trained in unit's pedestal operation.
  - Maintain and monitor hand-held radio communications and relay orders and pertinent information to the tip via intercom.
  - Watch movement of water stream and be prepared to over-ride controls if stream is in danger of striking electrical sources or endangering personnel.
  - Frequently assess footing of apparatus jacks and outriggers for signs of undermining and/or street pavement collapse.
  - Monitor operating hydraulic pressure for signs of possible hydraulic leak that may cause loss of boom movement.
    - Loss of fluid from main reservoir due to broken line is rapid and boom will lock in position.
  - Advise personnel operating elevated master-stream if change in water supply is anticipated,
    - e.g., switching source of supply, burst length, Engine Co. apparatus overheating, etc.
  - If member(s) leave the ladder for search or roof operations, he shall not move boom unless member(s) are advised of his intentions and they in turn give approval, or a visible life

- **Overhead Obstructions:**
  - Overhead wires may interfere with operations.
  - When trees obstruct operations, it is possible to extend or raise boom through light branches. However, retraction or lowering of the boom through branches may present a problem and some cutting may be required.

- **Live Wires on Apparatus:**
  - Live overhead wires can present a problem if they fall on the apparatus.
  - It is possible for the apparatus to be energized, particularly if the jacks and outriggers are down in place.
  - If this should occur:
    - **No member shall touch the apparatus.**
    - Safeguard civilians and other unsuspecting members.
      - Also consider supply line and supply Engine.
    - Immediately notify the Incident Commander that Ladder is out of service.

        - Notify the utility company and rescue to respond to cut the wire used to remove the wire from the apparatus.
        - Secure the wire and post a guard until turned over to the utility company.
    - Consideration should also be given regarding operations of Ladder during severe lightning storms.
        - Apparatus is grounded and usually wet during stream operations and in many instances higher than surrounding objects or buildings.

- **Positioning on Hills:**
    - Position apparatus parallel to the direction of slope so that boom operations will be in the "up-hill" direction.
        - If possible, apparatus should be facing "down-hill", e.g., if facing downhill, turntable past the objective. If facing uphill, turntable before objective.
    - Set the parking brake and chock front wheels to assure that apparatus does not move prior to setting of all jacks and outriggers.
    - All operation of boom should be performed at low speed and delicately while on steep inclines.
        - Sudden stops in maneuvering can cause damage to apparatus and/or cause apparatus to "skip" downhill.
        - Maneuvering in the downhill direction must be done delicately and with extreme caution avoiding sudden starting and stopping.
        - All "violent" reactions should be avoided so that excessive "shock" loads are not applied to the apparatus.

    Note: Sudden starts and stops should be avoided under all operating conditions.
- Retracting and/or raising of the boom may be required for "up-hill" operation.
- By retracting and/or raising the boom, the load will be rotating on a shorter radius, thereby reducing the torque requirements for uphill rotation. **Note:** Grades up to 4% slope may be treated as level ground.
- Disregard for the above-recommended procedures and practices may cause serious damage to the apparatus and could cause an accident involving personnel.
    - **Note:** Grades up to 4% slope are considered to be level for operation of a TL.
    - When the apparatus is in other than a "level configuration" its performance, stability and safety factors are reduced in proportion to the degree of deviation.
        - For example, the rotation system was designed for level operation. When the chassis is on a slope (from front to rear) the rotating function now includes the work of "lifting" the boom system uphill.