WISCONSIN
TECHNICAL COLLEGE
SYSTEM

Fire Apparatus
Driver/Operator - Aerial

Certification Preparation Guide

June, 2016

Firefighter Code of Ethics

I understand that I have the responsibility to conduct myself in a manner that reflects proper ethical behavior and integrity. In so doing, I will help foster a continuing positive public perception of the fire service. Therefore, I pledge the following…

- Always conduct myself, on and off duty, in a manner that reflects positively on myself, my department and the fire service in general.
- Accept responsibility for my actions and for the consequences of my actions.
- Support the concept of fairness and the value of diverse thoughts and opinions.
- Avoid situations that would adversely affect the credibility or public perception of the fire service profession.
- Be truthful and honest at all times and report instances of cheating or other dishonest acts that compromise the integrity of the fire service.
- Conduct my personal affairs in a manner that does not improperly influence the performance of my duties, or bring discredit to my organization.
- Be respectful and conscious of each member's safety and welfare.
- Recognize that I serve in a position of public trust that requires stewardship in the honest and efficient use of publicly owned resources, including uniforms, facilities, vehicles and equipment and that these are protected from misuse and theft.
- Exercise professionalism, competence, respect and loyalty in the performance of my duties and use information, confidential or otherwise, gained by virtue of my position, only to benefit those I am entrusted to serve.
- Avoid financial investments, outside employment, outside business interests or activities that conflict with or are enhanced by my official position or have the potential to create the perception of impropriety.
- Never propose or accept personal rewards, special privileges, benefits, advancement, honors or gifts that may create a conflict of interest, or the appearance thereof.
- Never engage in activities involving alcohol or other substance use or abuse that can impair my mental state or the performance of my duties and compromise safety.
- Never discriminate on the basis of race, religion, color, creed, age, marital status, national origin, ancestry, gender, sexual preference, medical condition or handicap.
- Never harass, intimidate or threaten fellow members of the service or the public and stop or report the actions of other firefighters who engage in such behaviors.
- Responsibly use social networking, electronic communications, or other media technology opportunities in a manner that does not discredit, dishonor or embarrass my organization, the fire service and the public. I also understand that failure to resolve or report inappropriate use of this media equates to condoning this behavior.

Developed by the National Society of Executive Fire Officers

Firefighter Code of Ethics

Background

The Fire Service is a noble calling, one which is founded on mutual respect and trust between firefighters and the citizens they serve. To ensure the continuing integrity of the Fire Service, the highest standards of ethical conduct must be maintained at all times.

Developed in response to the publication of the Fire Service Reputation Management White Paper, the purpose of this National Firefighter Code of Ethics is to establish criteria that encourages fire service personnel to promote a culture of ethical integrity and high standards of professionalism in our field. The broad scope of this recommended Code of Ethics is intended to mitigate and negate situations that may result in embarrassment and waning of public support for what has historically been a highly respected profession.

Ethics comes from the Greek word ethos, meaning character. Character is not necessarily defined by how a person behaves when conditions are optimal and life is good. It is easy to take the high road when the path is paved and obstacles are few or non-existent. Character is also defined by decisions made under pressure, when no one is looking, when the road contains land mines, and the way is obscured. As members of the Fire Service, we share a responsibility to project an ethical character of professionalism, integrity, compassion, loyalty and honesty in all that we do, all of the time.

We need to accept this ethics challenge and be truly willing to maintain a culture that is consistent with the expectations outlined in this document. By doing so, we can create a legacy that validates and sustains the distinguished Fire Service institution, and at the same time ensure that we leave the Fire Service in better condition than when we arrived.

WISCONSIN
TECHNICAL COLLEGE
SYSTEM

The mission of the Wisconsin Technical College System is to provide citizens with comprehensive technical and adult education that:

- Enables individuals to acquire the occupational education necessary for full participation and advancement in the workforce;
- Provides remedial and basic skills education to enable individuals to function as literate members of society;
- Fosters economic development through on-site training and technical assistance to business, industry, and labor.

FIRE SERVICE TRAINING WISCONSIN

http://mywtcs.wtcsystem.edu/fire-service

The mission of Wisconsin Fire Service Training is to provide the state's fire service personnel with:

- A comprehensive education and training program in fire prevention and protection;
- Certification according to standards established by the National Fire Protection Association.

Acknowledgement

The Wisconsin Technical College System (WTCS) gratefully acknowledges the assistance of many dedicated fire service personnel during both the development and the administration of the WTCS Fire Service Training (FST) Certification Program. It would be impossible to individually recognize each and every person who has helped to make the program the resounding success that it is.

Morna K. Foy, President
Carrie Morgan, Associate Vice President
Peter Silva, Jr., Education Director, Fire Service

Special recognition for their technical expertise, time and effort is extended to the Driver/Operator-Pumper Curriculum Committee.

Keith Kiesow	David Sass
Randy Klaybor	Eric Johnson
Ricky Ertl	Gary Gillitzer

As a member of the Training Resources and Data Exchange (TRADE) of the National Fire Academy, WTCS FST is committed to fostering the ongoing exchange of ideas, programs, and curricula among and between Federal, State and local fire training organizations. Many of the publications and training materials of the WTCS FST may be freely used to aid emergency responders in any way possible. This manual is one of the aforementioned publications. We would appreciate the accompaniment of a credit line with any portion of this guide that is used indicating WTCS FST as the origin of the material. We also ask that such materials borrowed from us not be sold for profit.

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Foreword

On May 23, 1978, the Wisconsin Board of Vocational, Technical and Adult Education (WBVTAE), since renamed the Wisconsin Technical College System Board (WTCSB), approved the provision of certification to the Wisconsin fire service. The WTCSB also adopted the Professional Qualifications for the Fire Service, National Fire Protection Association (NFPA) 1000 Series Standards, and any future standards of the series as those which shall be used for identifying training course content for the certification of Wisconsin fire service personnel.

Fire service certification in the state of Wisconsin is not mandated by the WTCSB. Certification is rather an endeavor to be undertaken voluntarily by individuals or by collective members of fire departments. Those who aspire to Wisconsin Fire Service Certification, however, must satisfy the program requirements which are based on the appropriate NFPA Standards, and be tested for competency.

Certification is not necessarily a means of determining who may participate in the vocation or avocation of fire fighting, but is rather a symbol of dedication and commitment by the certified individual. Certification also provides documentation that the individual has demonstrated a high level of proficiency established through national consensus.

The WTCS Fire Service Training (FST) is ready and able to assist motivated individuals and/or fire departments in achieving their training and certification goals.

Assistance in Preparing for Certification

The WTCS FST publishes a *Certification Program Policy and Procedures Manual* which lists each category and level of certification offered. These manuals contain pertinent information designed to assist candidates in preparing for the certification process. *Certification Program Policy and Procedures Manual* may be obtained from the WTCS web page:

http://mywtcs.wtcsystem.edu/fire-service/fire-certification/policy-and-procedures

Entrance into the Wisconsin Fire Service Certification System

Qualified individuals may enter the certification system by contacting any of the institutions of the WTCS. Upon receipt of a request, appropriate information and application materials for any of the certification categories/levels available will be forwarded. A listing of WTCS institutions and their respective fire service coordinators/supervisors can be accessed from the WTCS FST web page.

Written Examination Element

Approved candidates will be allowed to write the state certification examination for the category and/or level chosen. The written examination will consist of 100 questions with a 90-minute time limit. Multiple choice, true/false and matching questions can be expected. If the candidates successfully achieve a minimum score of 70 percent on the written examination, they will advance to the practical skills examination element of the process. Candidates who received their preparatory training through the state-approved training program and who fail their initial attempt at the written examination will be allowed up to 2 retests. If still unsuccessful after their second retest, these candidates are required to re-enroll in and complete the approved training program before being allowed to again write the examination. A variety of exams will be used to insure that no candidate is allowed to take the same exam more than once. Each exam will be based on the NFPA standard, current edition, and constructed from a bank of questions maintained by WTCS FST. Individuals granted advanced standing for documented training from sources other than the state-approved training program will be allowed a one-time challenge of the written examination. If successful in the challenge, they will be scheduled for the practical skills component of the certification process; if unsuccessful, they must complete the state-approved training program before being allowed to again write the examination.

Practical Skills Examination Element

Candidates who have passed the written examination element will be assigned to a practical skills examination at an approved WTCS test site on a date of their choosing (pending availability of openings). All candidates are required to pay the standardized statewide practical skills examination fee of $80.00 (checks only, payable to the assigned WTCS test site).

Candidates will be responsible for all skills required by the appropriate NFPA standard, and must be prepared to perform any of the skills contained within the examination structure (a summary of the practical skills test stations is included in this document [see appendix]). Due to the large number of skills required by the standard, however, all skills cannot possibly be tested in a given examination. Rather, a number or series of skills will be selected for each exam through a random process. Skills to be tested will not be selected until the day of the exam to prevent prior knowledge by the candidates. The intent of this process is to insure that candidates are prepared to test on all of the skills required by the standard. Each candidate must perform a total of 7 of the 12 possible evolutions contained within the Driver/Operator-Aerial examination structure, as an individual.

Practical examinations are graded on a 100 percent pass/fail basis. Throughout the design of the evaluation checklists, critical components of the skills will be strictly evaluated. “Non-fatal” components, and many “local issue” components that vary from fire department to fire department will not be critically evaluated during the examination.

Candidates must successfully complete all skills stations of an examination to receive a passing grade. Candidates who fail up to 2 stations may retest on the same day at no additional cost. If, after retesting, the candidates fail the station(s) again, they must retake the entire examination at a later date. Candidates who fail 3 or more stations on their initial examination attempt must retake the entire examination at a later date as well. This requirement is necessitated by the random examination skills selection process. Such retakes also require payment of another examination fee.

Examination Results

Candidates will be notified of certification examination results upon examination completion.

Certification

Upon successful completion of all elements of the certification process, the candidate's name will be entered into the WTCS FST Certification database. Individuals will also receive, at no additional cost, an individualized certificate from the WTCS FST.

Denial and Revocation of Certification

The WTCS FST will deny or revoke certification if the individual(s):

- Knowingly submits false information to the WTCS FST.
- Cheats during the examination process.

Appeal Process

If certification is denied or revoked, the individual is entitled to due process, including appeal and hearing. The entire appeal process is listed in the WTCS FST *Certification Program Policy and Procedures Manual.*

Driver/Operator Certification Preparation Guide

This document is provided to assist candidates as they ready themselves to enter the WTCS FST Driver/Operator-Aerial Certification Process.

The requirements of NFPA 1002, *Standard for Fire Apparatus Driver/Operator Professional Qualifications,* 2014 Edition, Driver/Operator Job Performance Requirements (JPRs) are listed in the left column. The right column contains information that will help candidates identify study resources or other notes on how to prepare for the examination elements.

The requirements that must be met for certification are divided into four (4) elements. These elements are: State Summary Form; Self-Study Assignment(s); Written Examination; and Practical Skills Examination.

The primary reference material for meeting the certification requirements is the International Fire Service Training Association (IFSTA) *Pumping and Aerial Apparatus Driver/Operator Handbook,* 3rd Edition and Jones and Bartlett Fire Apparatus Driver/Operator, 2nd Edition, and the accompanying student manuals.

Self-Study, Written, and Practical Skills Requirements and Study Hints NFPA 1002, Fire Apparatus Driver/Operator JPR, 2014 Edition		
JPR's	**Chapter References**	**Page References**
NFPA 1002, Fire Apparatus Driver/Operator Professional Qualifications, Chapter 2, General Requirements, 2014 Ed. JPR's		
4.1 General. Prior to operating fire department vehicles, the fire apparatus driver/operator shall meet the job performance requirements defined in Sections 4.2 through 4.3.		
4.2 Preventative Maintenance.		
4.2.1 Perform routine tests, inspections, and servicing functions on the systems and components specified in the following list, given a fire department vehicle and its manufacturer's specifications, and policies and procedures of the jurisdiction, so that the operational status of the vehicle is verified. • Battery(ies) • Braking system • Coolant system • Electrical system • Fuel • Hydraulic fluids • Oil • Tires • Steering system • Belts • Tools, appliances, and equipment **(A) Requisite Knowledge:** Manufacturer specifications and requirements, policies, and procedures of the jurisdiction. **(B) Requisite Skills.** The ability to use hand tools, recognize system problems, and correct any deficiency noted according to policies and procedures.	IFSTA Chapters 2, 16 J&B Chapters 1, 2, 3, 8, 19	IFSTA Pages 29-30, 36-48, 582-585, 588-604 J&B Pages 8-13, 26-28, 36-37, 168-187, 467-504
4.2.2 Document the routine tests, inspections, and servicing functions, given maintenance and inspection forms, so that all items are checked for operation and deficiencies are reported. **(A) Requisite Knowledge.** Departmental requirements for documenting maintenance performed and the importance of keeping accurate records. **(B) Requisite Skills.** The ability to use tools and equipment and complete all related departmental forms.	IFSTA Chapters 2, 15, 16, 17 J&B Chapter 8	IFSTA Pages 29-30, 36-41, 44-45, 48, 515-530, 582-585, 588-604 J&B Pages 168-187

Self-Study, Written, and Practical Skills Requirements and Study Hints NFPA 1002, Fire Apparatus Driver/Operator JPR, 2014 Edition		
4.3 Driving/Operating.		
4.3.1* Operate a fire apparatus, given a vehicle and a predetermined route on a public way that incorporates the maneuvers and features that the driver/operator is expected to encounter during normal operations, so that the vehicle is operated in compliance with all applicable state and local laws and departmental rules and regulations. **(A) Requisite Knowledge.** The importance of donning passenger restraint devices and ensuring crew safety; the common causes of fire apparatus accidents and the recognition that drivers of fire apparatus are responsible for the safe and prudent operation of the vehicle under all conditions; the effects on vehicle control of liquid surge, braking reaction time, and load factors; effects of high center of gravity on roll-over potential, general steering reactions, speed, and centrifugal force; applicable laws and regulations; principles of skid avoidance, night driving, shifting, and gear patterns; negotiating intersections, railroad crossings, and bridges; weight and height limitations for both roads and bridges; identification and operation of automotive gauges; and operational limits. **(B) Requisite Skills.** The ability to operate passenger restraint devices; maintain safe following distances; maintain control of the vehicle while accelerating, decelerating, and turning, given road, weather, and traffic conditions; operate under adverse environmental or driving surface conditions; and use automotive gauges and controls.	IFSTA Chapter 3 J&B Chapters 9, 10, 16	IFSTA Pages 83-112, 118-119 J&B Pages 194-204, 207, 209-201, 219-225, 238-239
4.3.2* Back a vehicle from a roadway into restricted spaces on both the right and left sides of the vehicle, given a fire apparatus, a spotter, and restricted spaces 12 ft (3.7 m) in width, requiring 90-degree right-hand and left-hand turns from the roadway, so that the vehicle is parked within the restricted areas without having to stop and pull forward and without striking obstructions. **(A) Requisite Knowledge.** Vehicle dimensions, turning characteristics, spotter signaling, and principles of safe vehicle operation. **(B) Requisite Skills.** The ability to use mirrors and judge vehicle clearance.	IFSTA Chapter 3 J&B Chapters 9, 16	IFSTA Pages 100-104, 113-116, 118-119 J&B Pages 200-208, 404-405, 407-408
4.3.3* Maneuver a vehicle around obstructions on a roadway while moving forward and in reverse, given a fire apparatus, a spotter for backing, and a roadway with obstructions, so that the vehicle is maneuvered through	IFSTA Chapter 3	IFSTA Pages 100-104, 113-116, 118-119

Self-Study, Written, and Practical Skills Requirements and Study Hints NFPA 1002, Fire Apparatus Driver/Operator JPR, 2014 Edition		
the obstructions without stopping to change the direction of travel and without striking the obstructions. **(A) Requisite Knowledge.** Vehicle dimensions, turning characteristics, the effects of liquid surge, spotter signaling, and principles of safe vehicle operation. **(B) Requisite Skills.** The ability to use mirrors and judge vehicle clearance.	J&B Chapters 9, 16	J&B Pages 200-204, 404-405
4.3.4* Turn a fire apparatus 180 degrees within a confined space, given a fire apparatus, a spotter for backing up, and an area in which the vehicle cannot perform a U-turn without stopping and backing up, so that the vehicle is turned 180 degrees without striking obstructions within the given space. **(A) Requisite Knowledge.** Vehicle dimensions, turning characteristics, the effects of liquid surge, spotter signaling, and principles of safe vehicle operation. **(B) Requisite Skills.** The ability to use mirrors and judge vehicle clearance.	IFSTA Chapter 3 J&B Chapters 9, 16	IFSTA Pages 100-104, 113-116, 118-119 J&B Pages 200-204, 404-405, 407, 409
4.3.5* Maneuver a fire apparatus in areas with restricted horizontal and vertical clearances, given a fire apparatus and a course that requires the operator to move through areas of restricted horizontal and vertical clearances, so that the operator accurately judges the ability of the vehicle to pass through the openings and so that no obstructions are struck. **(A) Requisite Knowledge.** Vehicle dimensions, turning characteristics, the effects of liquid surge, spotter signaling, and principles of safe vehicle operation. **(B) Requisite Skills.** The ability to use mirrors and judge vehicle clearance.	IFSTA Chapter 3 J&B Chapters 9, 16	IFSTA Pages 100-104, 118-119 J&B Pages 200-204, 404-405
4.3.6* Operate a vehicle using defensive driving techniques, given an assignment and a fire apparatus, so that control of the vehicle is maintained. **(A) Requisite Knowledge.** The importance of donning passenger restraint devices and ensuring crew safety; the common causes of fire apparatus accidents and the recognition that drivers of fire apparatus are responsible for the safe and prudent operation of the vehicle under all conditions; the effects on vehicle control of liquid surge, braking reaction time, and load factors; the effects of high center of gravity on rollover potential, general steering reactions, speed, and centrifugal force; applicable laws and regulations; principles of skid	IFSTA Chapter 3 J&B Chapter 10	IFSTA Pages 85-93, 96-116, 118-119 J&B Pages 219-225, 238-239

Self-Study, Written, and Practical Skills Requirements and Study Hints NFPA 1002, Fire Apparatus Driver/Operator JPR, 2014 Edition		
avoidance, night driving, shifting, gear patterns; and automatic braking systems in wet and dry conditions; negotiation of intersections, railroad crossings, and bridges; weight and height limitations for both roads and bridges; identification and operation of automotive gauges; and operational limits. **(B) Requisite Skills.** The ability to operate passenger restraint devices; maintain safe following distances; maintain control of the vehicle while accelerating, decelerating, and turning, given road, weather, and traffic conditions; operate under adverse environmental or driving surface conditions; and use automotive gauges and controls.		
4.3.7* Operate all fixed systems and equipment on the vehicle not specifically addressed elsewhere in this standard, given systems and equipment, manufacturer's specifications and instructions, and departmental policies and procedures for the systems and equipment, so that each system or piece of equipment is operated in accordance with the applicable instructions and policies. **(A) Requisite Knowledge.** Manufacturer's specifications and operating procedures, and policies and procedures of the jurisdiction. **(B) Requisite Skills.** The ability to deploy, energize, and monitor the system or equipment and to recognize and correct system problems.	IFSTA Chapters 2, 16 J&B Chapters 6, 11	IFSTA Pages 40-41, 566-581 J&B Pages 102-109, 111-115, 246-250, 253-255, 257-268, 271-274
6.1* General. The requirements of Fire Fighter I as specified in NFPA1001 (or the requirements of Advanced Exterior Industrial Fire Brigade Member or Interior Structural Fire Brigade Member as specified in NFPA1081) and the job performance requirements defined in Sections 6.1 and 6.2 shall be met prior to qualifying as a fire department driver/operator—aerial.		
6.1.1 Perform the routine tests, inspections, and servicing functions specified in the following list in addition to those specified in 4.2.1, given a fire department aerial apparatus, and policies and procedures of the jurisdiction, so that the operational readiness of the aerial apparatus is verified: (1) Cable systems (if applicable) (2) Aerial device hydraulic systems (3) Slides and rollers (4) Stabilizing systems (5) Aerial device safety systems (6) Breathing air systems	IFSTA Chapter 16 J&B Chapter 3, 8, 15, 17, 18, 19	IFSTA Pages 546-550, 562-566, 572-573, 592-604 J&B 42-44, 168-187, 359-360, 363, 422-429, 434-460, 471, 474-476

Self-Study, Written, and Practical Skills Requirements and Study Hints NFPA 1002, Fire Apparatus Driver/Operator JPR, 2014 Edition		
(7) Communication systems **(A) Requisite Knowledge.** Manufacturer's specifications and requirements, and policies and procedures of the jurisdiction. **(B) Requisite Skills.** The ability to use hand tools, recognize system problems, and correct any deficiency noted according to policies and procedures.		
6.2 Operations.		
6.2.1 Maneuver and position an aerial apparatus, given an aerial apparatus, an incident location, a situation description, and an assignment, so that the apparatus is positioned for correct aerial device deployment.	IFSTA Chapters 17, 18, 19 J&B Chapters 3, 15	IFSTA Pages 610-635, 642-661, 691-697 J&B Pages 42-44, 363-367
(A) Requisite Knowledge. Capabilities and limitations of aerial devices related to reach, tip load, angle of inclination, and angle from chassis axis; effects of topography, ground, and weather conditions on deployment; and use of the aerial device. **(B) Requisite Skills.** The ability to determine a correct position for the apparatus, maneuver apparatus into that position, and avoid obstacles to operations.		
6.2.2 Stabilize an aerial apparatus, given a positioned vehicle and the manufacturer's recommendations, so that power can be transferred to the aerial device hydraulic system and the device can be deployed. **(A) Requisite Knowledge.** Aerial apparatus hydraulic systems, manufacturer's specifications for stabilization, stabilization requirements, and effects of topography and ground conditions on stabilization. **(B) Requisite Skills.** The ability to transfer power from the vehicle's engine to the hydraulic system and operate vehicle stabilization devices.	IFSTA Chapters 16, 17, 18 J&B Chapter 15	IFSTA Pages 546-552, 623-635, 642-665 J&B Pages 367-371
6.2.3 Maneuver and position the aerial device from each control station, given an incident location, a situation description, and an assignment, so that the aerial device is positioned to accomplish the assignment. **(A) Requisite Knowledge.** Aerial device hydraulic systems, hydraulic pressure relief systems, gauges and controls, cable systems, communications systems, electrical systems, emergency operating systems, locking systems, manual rotation and lowering systems, stabilizing systems, aerial device safety systems, system	IFSTA Chapters 16, 17, 19, 20 J&B Chapter 15	IFSTA Pages 543-577, 616-619, 678-696, 703-713, 721, 736-748 J&B Pages 359-360, 364-367, 371-375, 377-384

Self-Study, Written, and Practical Skills Requirements and Study Hints NFPA 1002, Fire Apparatus Driver/Operator JPR, 2014 Edition		
overrides and the hazards of using overrides, safe operational limitations of the given aerial device, safety procedures specific to the device, and operations near electrical hazards and overhead obstructions. **(B) Requisite Skills.** The ability to raise, rotate, extend, and position to a specified location, as well as lock, unlock, retract, lower, and bed the aerial device.		
6.2.4 Lower an aerial device using the emergency operating system, given an aerial device, so that the aerial device is lowered to its bedded position. **(A) Requisite Knowledge.** Aerial device hydraulic systems, hydraulic pressure relief systems, gauges and controls, cable systems, communications systems, electrical systems, emergency operating systems, locking systems, manual rotation and lowering systems, stabilizing systems, aerial device safety systems, system overrides and the hazards of using overrides, safe operational limitations of the given aerial device, safety procedures specific to the device, and operations near electrical hazards and overhead obstructions. **(B) Requisite Skills.** The ability to rotate and position to center, unlock, retract, lower, and bed the aerial device using the emergency operating system.	IFSTA Chapters 16, 17, 19 J&B Chapter 15	IFSTA Pages 543-577, 616-619, 678-686, 696-697, 714 J&B Pages 359-360, 388
6.2.5 Deploy and operate an elevated master stream, given an aerial device, a master stream device, and a desired flow so that the stream is effective and the aerial and master stream devices are operated correctly. **(A) Requisite Knowledge.** Nozzle reaction, range of operation, and weight limitations. **(B) Requisite Skills.** The ability to connect a water supply to a master stream device and control an elevated nozzle manually or remotely.	IFSTA Chapters 19, 20 J&B Chapter 15	IFSTA Pages 681-682, 738-744, 750-752 J&B Pages 384-389

APPENDIX

SAMPLES OF QUESTIONS USED IN THE WRITTEN EXAMINATION ELEMENT

TEST AND SERVICE [NFPA 1002: 4-2.1(a)]

1. A clean engine and clean functioning parts permit proper _____ of an apparatus.

    A. maintenance
    B. operation
    C. inspection
    D. public relations

INCIDENT OPERATIONS [NFPA 1002: 6.2.1(a)]

2. The **second priority** of an aerial apparatus at an emergency is

    A. Elevated streams.
    B. Overhaul.
    C. Rescue.
    D. Exposure protection.

INCIDENT OPERATIONS [NFPA 1002: 6.2.1(a)]

3. Whenever possible, aerial apparatus used at buildings five stories or higher should be positioned:

    A. Outside the pumpers on the scene.
    B. At the front of the building.
    C. At the corner of the building.
    D. Closest to the structure.

INCIDENT OPERATIONS [NFPA 1002: 6.2.1(A)]

4. The working height of an elevating platform is measured from:

    A. Turntable to the highest platform rail.
    B. Ground to the bottom of the platform.
    C. Ground to the highest platform rail.
    D. Turntable to the bottom of the platform.

STABILIZING [NFPA 1002: 6.2.4(a)]

5. Of the following, which grade is the **easiest** to correct during stabilization**?**

    A. Longitudinal.
    B. Perpendicular.
    C. Lateral.
    D. Axial.

SUMMARY OF PRACTICAL SKILLS TEST STATIONS

Due to the limited availability of Aerial apparatus for testing purposes, Stations 1, 2, 3, and 4 will be evaluated and signed off by an examiner during the class sessions.

1. **Pre-trip Inspection** – Individual

   Target Time 8-10 minutes

   1- Individual will conduct a pre-trip inspection for one of the following:

   1-A Cable System (if applicable)
   1-B Aerial Device Hydraulic System
   1-C Slides and Rollers
   1-D Stabilizing System
   1-E Breathing Air Systems (if applicable)
   1-F Communication System (if applicable)

The examiner will randomly select **one** of the areas to be inspected.

All six (6) areas will also include an inspection of the Aerial Device Safety Systems.

2. **Practical Driving Exercises – Simulated Emergency Driving** – Individual

   Target Time 10-12 minutes

   2 - Individual will drive the apparatus both forward and in reverse for **one** of the following:

   2-A Serpentine
   2-B Diminishing Clearance

3. **Staged Driving Evolutions – Non-Emergency Driving** – Individual

   Target Time 7-12 minutes

   3 - Individual will drive the apparatus for **one** of the following:

   3-A Alley Dock or Station Apparatus Backing Maneuver
   3-B Confined Space Turnaround

4. **Over-the Road Driving Evolutions** – Individual

   Target Time 15-20 minutes

   4 - Individual will drive the apparatus over-the-road on **one** of two predetermined routes randomly selected by the station examiner:

5. **Positioning Aerial Device –** Individual

   Target Time 10-15 minutes

   5 - The individual will position apparatus in accordance with the evolution to be performed with the aerial device

   Types of structures to be used for test station:
   - Drill Tower
   - Splash board
   - Commercial structure

6. **Stabilizing Aerial Apparatus** – Individual

Target Time 10-15 minutes

6 - The individual will stabilize the aerial apparatus on either even or uneven terrain

6-A Even terrain
6-B Uneven terrain

The examiner will select the terrain evolution.

7. **Operating Aerial Device**

Target Time 10-15 minutes

7 - The individual will correctly operate the pedestal controls to position the aerial device in one of four evolutions

7-A Roof placement
7-B Window placement
7-C Elevated fire stream operation for exposure protection
7-D Lower the aerial device using the emergency operating system (auxiliary hydraulic pump)

Grading Schedule

The following criteria will be used to evaluate and determine the pass/fail status of a candidate. Each item in the performance test checklist is given a rating.

Critical (C)–This rating has been assigned to items, which, if omitted or performed incorrectly, would result in severe injury to, or death of, an individual. Should a candidate fail to perform any **ONE** item rated as *critical* (C), the candidate would be unsuccessful in demonstrating the required proficiency level for that standard.

Major (M)–This rating refers to any item that is very important to the general safety of personnel and the successful completion of the evolution. Should a candidate fail to perform any **TWO** items rated as *major* (M), the candidate would be unsuccessful in demonstrating the required proficiency level for that standard.

General–This rating, although there is no symbol, has been given to all remaining items that in combination are relevant to the successful completion of the evolution. Should a candidate fail to perform any **THREE** items rated as *general*, the candidate would be unsuccessful in demonstrating the required proficiency level for that standard.

Should a candidate fail to perform any combination of Major or General rated items resulting in a sum total of **THREE**, the candidate would be unsuccessful in demonstrating the required proficiency level for that standard.

***Candidates will not be penalized for equipment failures or cancellations/delays due to inclement weather or other circumstances.**

The test evolutions are based on the ***2014 NFPA 1002 Job Performance Requirements***. Skills are evaluated in accordance with the IFSTA *Pumping and Aerial Apparatus Driver/Operator Handbook,* 3rd Edition and Jones and Bartlett *Fire Apparatus Driver/Operator, 2nd Edition* curriculum.

Each candidate will perform a total of 7 of the 12 possible evolutions (three from each of the 2 major areas). The tests will be selected randomly either by the state or by the evaluator. Candidates must be prepared to perform any of the skills listed. The assignment of each team member during the evolution is randomly selected at the time of the test and cannot be changed. Non-compliance can be grounds for failure of the entire examination.

Target time is the time to accomplish the task. Total time includes replacing tools and equipment. Times are estimated and may vary slightly from site to site. Test evolutions include properly breaking down equipment and replacing to the starting point.

The Driver/Operator-Aerial Practical Skills Examination is physically demanding and the candidate is responsible for his/her own physical fitness and ability to perform the skills required.

Candidates are responsible for providing the proper PPE to be worn by driver/operators of their respective fire department. If the candidate is a member of a fire department, the candidate's fire department must provide an Aerial Apparatus for the candidate to use during the driving portion and aerial device operation of the practical examination. The candidate must have a CDL learner's permit if he/she is not an active member of a Wisconsin fire department at the time of the practical examination. The candidate must have a valid driver's license and show the license to the evaluator before participating in the driving portion of the practical examination.

TEST # 1 **PRE-TRIP INSPECTION**
INDIVIDUAL TEST

Description:

The candidate will perform a pre-trip inspection on one area of the apparatus.

Procedures:

1. Candidate will perform a pre-trip inspection of an operational aerial apparatus (Limited to 10 minutes).
2. A fire department inspection checklist may be used as a guide.
3. Inspection to be performed at a starting location designated by the station examiner.

Performance Test Guidelines:

Perform routine tests, inspection, and service function on aerial apparatus and aerial devices as assigned by your instructor.

Performance Evaluation Guidelines:

NFPA 1002 – JPR 6.1.1
IFSTA *Pumping Apparatus Driver/Operator Handbook, 3rd Edition*
Jones and Bartlett *Fire Apparatus Driver/Operator, 2nd Edition*

TEST # 1 **PRE-TRIP INSPECTION**
INDIVIDUAL TEST

Directions to the Candidate:

At this station the candidate will be evaluated on performing a pre-trip inspection. The candidate may use a checklist as a guide. The candidate, at the direction of the station examiner will conduct a check to be sure that the apparatus is safe to operate and respond to an incident. The candidate should begin the inspection at a location on the apparatus designated by the station examiner. The station examiner will have the candidate inspect **one** of the listed areas. The station examiner may have the candidate start the engine and deploy the stabilizers to perform an inspection of the stabilizers. The candidate may also be required to engage the PTO, set the stabilizers and then operate the pedestal controls to ensure the aerial device is working properly. The type of inspection and checks would be the type performed by a career fire department at the beginning of the tour of duty or a non-career firefighter on a weekly or bi-weekly basis.

Time: – Target: 8 Minutes ***Maximum: 10 Minutes*** ***Total Station Time – 12 Minutes***

Passing Criteria (Failures): 1 Critical, 2 Major, 3 General or combination of 3 Major/General			
ELEMENTS/STEPS	**STANDARDS**	**NO**	**YES**
Correct any deficiency noted according to policies and procedures.	**A. Cable System**		
	1. Inspected visually for free travel		
	2. (M) Checked for any signs of misalignment and defects		
	3. Checked for proper lubrication		
	4. Checked for proper operation		
	5. Inspect safety system such as an interlock system		
	B. Aerial device hydraulic system		
	1. Checked visually for kinks		
	2. Checked for any signs of cuts and abrasions		
	3. **(M)** Checked lines for any signs of fluid leaking		
	4. **(M)** Checked pump for any signs of fluid leaking		
	5. Inspect safety system such as an interlock system		
	C. Slides and rollers		
	1. Checked for lubrication		
	2. Checked for any signs of wear and distortion		
	3. Checked cables for proper adjustment		
	4. Inspect safety system such as an interlock system		

Time: – Target: 8 Minutes ***Maximum: 10 Minutes*** ***Total Station Time – 12 Minutes***

Passing Criteria (Failures): 1 Critical, 2 Major, 3 General or combination of 3 Major/General			
ELEMENTS/STEPS	**STANDARDS**	**NO**	**YES**
	D. Stabilizing systems		
	1. Inspected all stabilizer components for defects and all welds for fractures		
	2. **(M)** Hydraulic system for leaks		
	3. Inspect safety system such as an interlock system		
	E. Breathing air systems (if applicable)		
	1. Verified all components area present in serviceable condition		
	2. Inspected air cylinder mounting brackets		
	3. Verified air cylinder level and check for leaks		
	4. Inspect safety system such as an interlock system		
	F. Communication system (if applicable)		
	1. Inspected for proper operation		
	2. Inspect safety system such as an interlock system		
	(C) Completed task within listed time limits with no safety violations		

TEST # 2-A **PRACTICAL DRIVING EXERCISES**
INDIVIDUAL TEST **SIMULATED EMERGENCY DRIVING**

Description:

This exercise simulates maneuvering the fire apparatus in tight locations and around parked vehicles.

Procedures:

1. The candidate should drive the apparatus along the left side of the markers in a straight line and stop just beyond the last marker.
2. Spotter will be used during the backing segment but only to prevent a collision (not providing directions)
3. The candidate will back the apparatus to the left side of marker No. 1
4. Candidate will back the aerial apparatus to the right-side of marker No. 2.
5. Candidate will back the aerial apparatus to the left-side of marker No. 3
6. Activate warning lights and siren to simulate emergency driving conditions while driving forward through the course (a recording of the siren on a tape player maybe used inside the cab).
7. Candidate will drive forward to the right-side of marker No. 3.
8. Candidate will drive forward to the left-side of maker No. 2.
9. Candidate will drive forward to the right-side of marker No. 1.
10. Candidate will stop just beyond the last cone.
11. De-activate siren.
12. Station is complete after backing and driving forward through the course.

Performance Evaluation Guidelines:

NFPA 1002 – JPR 4.3.3, 4.3.6
IFSTA *Pumping Apparatus Driver/Operator Handbook, 3rd Edition*
Jones and Bartlett *Fire Apparatus Driver/Operator, 2nd Edition*

TEST # 2-A
INDIVIDUAL TEST

PRACTICAL DRIVING EXERCISES
SIMULATED EMERGENCY DRIVING
SERPENTINE

Directions to the Individual:

All skill stations are pass/fail. Failure to meet the criteria will result in a failure. The individual will demonstrate the ability to maneuver an aerial apparatus forward and backward through a traffic cone serpentine course. Warning lights and siren will be used during the forward segment of the exercise to simulate emergency driving conditions. The candidate should drive the apparatus along the left side of the markers in a straight line and stop just beyond the last marker. The candidate then should begin the exercise by backing the aerial apparatus between the markers by passing to the left of marker No. 1, to the right of marker No. 2, and to the left of marker No. 3. At this point, the candidate should stop the vehicle and then drive it forward between the markers by passing to the right of marker No. 3, to the left of marker No. 2, and to the right of marker No. 1. The candidate will not lean out the window, but must use the mirrors and spotter during the backing maneuver. The candidate is not permitted to stop, reposition or change direction during the maneuver. The evolution is concluded after the candidate has driven forward and backed the apparatus through the exercise without touching the cones.

Spotter will be used during the backing segment but only to prevent a collision (not providing directions).

Time: – Target: 10 Minutes ***Maximum: 12 Minutes*** ***Total Station Time – 12 Minutes***

Passing Criteria (Failures): 1 Critical, 2 Major, 3 General or combination of 3 Major/General			
ELEMENTS/STEPS	**STANDARDS**	**NO**	**YES**
	A. Serpentine		
	1. **(C)** Fastened seat belt		
	2. Drove apparatus along the left side of the markers in a straight line and stopped just beyond the last barrel/cone		
	3. **(M)** Backed the apparatus between the markers by passing to the left of #1, to the right of #2, and to the left of #3 and stop beyond the last barrel/cone without stopping to change direction		
	4. **(M)** Drove vehicle forward and to the right of #3, left of #2, and right of #1 without stopping to change direction		
	5. **(M)** Used all applicable warning devices		
	6. **(M)** Completed exercise without striking a cone (each struck cone counts as a major)		
	(C) Completed task within listed time limits with no safety violations		

TEST # 2-B **PRACTICAL DRIVING EXERCISES**
INDIVIDUAL TEST **SIMULATED EMERGENCY DRIVING**

Description:

This exercise measures a driver's ability to steer the aerial apparatus in a straight line, to judge distances from wheel to object, and to stop at a finish line.

Procedures:

1. Candidate to position apparatus at entrance to lane.
2. Candidate will activate warning lights and siren to simulate emergency driving conditions while driving forward through the course (a recording of the siren on a tape player maybe used inside the cab).
3. Candidate drives through the lane maintaining a constant speed.
4. Candidate will stop within three feet to row of cones beyond the lane. (siren off when stopped)
5. Candidate will back through course with a spotter.
6. Candidate backs through the lane maintaining a constant speed.
7. Candidate stops at the row of cones beyond the lane.
8. Candidate may not lean out of the window while driving.
9. Spotter will be used during the backing segment but only to prevent a collision (not providing directions)

Note: Cones may have to be repositioned for each aerial as required using the **driving course specification sheet** found in the Appendix.

Performance Evaluation Guidelines:

NFPA 1002 – JPR 4.3.5, 4.3.6
IFSTA *Pumping Apparatus Driver/Operator Handbook, 3rd Edition*
Jones and Bartlett *Fire Apparatus Driver/Operator, 2nd Edition*

TEST # 2-B **PRACTICAL DRIVING EXERCISES**
INDIVIDUAL TEST **SIMULATED EMERGENCY DRIVING**
DIMINISHING CLEARANCE

Directions to the Candidate:

All skill stations are pass/fail. Failure to meet the criteria will result in a failure. The candidate will demonstrate driving forward and backing an aerial through the restricted lanes of a diminishing clearance exercise. Warning lights and siren will be used during the forward segment of the exercise to simulate emergency driving conditions. The course is set-up using two rows of traffic cones forming a lane that varies in width. The candidate starts forward at the widest end of the lane with the lane becoming narrower as the aerial proceeds through the course. The candidate will stop the aerial apparatus within three feet of a row of cones positioned 50 feet beyond the last cone of the lane. The candidate will then back through the diminishing clearance course until clear of all cones using a spotter. The candidate must maintain a constant speed while maneuvering through the exercise. The candidate is not permitted to lean out of the window during the exercise. The exercise is completed after driving forward and backing through the course.

Spotter will be used during the backing segment but only to prevent a collision (not providing directions).

Time: – Target: 10 Minutes ***Maximum: 12 Minutes*** ***Total Station Time – 12 Minutes***

Passing Criteria (Failures): 1 Critical, 2 Major, 3 General or combination of 3 Major/General			
ELEMENTS/STEPS	**STANDARDS**	**NO**	**YES**
	A. Diminishing		
	1. **(C)** Fastened seat belt		
	2. Proceeded from wide to narrow end		
	3. **(M)** Stopped with the forward most aspect of the vehicle within 3 feet of finish line		
	4. Came to complete stop in a smooth and safe manner		
	5. **(M)** Back vehicle through course using mirrors until clear of all cones		
	6. **(M)** Used all applicable warning devices (forward only)		
	7. **(M)** Completed exercise without striking cones (each cone struck counts as a major)		
	(C) Completed task within listed time limits with no safety violations		

TEST #3-A **PRACTICAL DRIVING EXERCISES**
INDIVIDUAL TEST **NON-EMERGENCY DRIVING**
ALLEY DOCK OR STATION APPARATUS BACKING

Description:

This exercise tests the ability of the candidate to back a fire aerial apparatus into a restricted area and into an alley, dock or fire apparatus bay without striking markers, cones or walls. The backing maneuvers will be accomplished using mirrors and a spotter.

Procedures:

1. Candidate will drive past and stop with the restricted area on the left side.
2. Candidate will back into the restricted area using a spotter.
3. Candidate will stop when signaled from the spotter.
4. Candidate will not strike any markers, cones or obstructions.
5. Candidate will be directed to repeat the exercise from the opposite direction.
6. Spotter will be used during the backing segment but only to prevent a collision (not providing directions).

Performance Evaluation Guidelines:

NFPA 1002 – JPR 4.3.2
IFSTA *Pumping Apparatus Driver/Operator Handbook, 3rd Edition*
Jones and Bartlett *Fire Apparatus Driver/Operator, 2nd Edition*

TEST # 3-A
INDIVIDUAL TEST

PRACTICAL DRIVING EXERCISES
NON-EMERGENCY DRIVING
ALLEY DOCK OR STATION APPARATUS BACKING

Directions to the Candidate:

All skill stations are pass/fail. Failure to meet the criteria will result in a failure. The candidate will maneuver and back the aerial apparatus into a restricted area, such as an apparatus bay or a simulated apparatus bay using traffic cones. The candidate will back into the restricted area from the left and right sides of the aerial/apparatus. The candidate will use mirrors and a spotter during the exercise. The candidate is not permitted to lean out of the window during the exercise. The candidate is to complete the exercise without striking markers, cones or obstructions.

Spotter will be used during the backing segment but only to prevent a collision (not providing directions).

Time: – Target: 10 Minutes ***Maximum: 12 Minutes*** ***Total Station Time – 12 Minutes***

Passing Criteria (Failures): 1 Critical, 2 Major, 3 General or combination of 3 Major/General			
ELEMENTS/STEPS	**STANDARDS**	**NO**	**YES**
	A. Alley dock		
	1. **(C)** Fastened seat belt		
	2. Passed the "barricades" marking the loading dock on the left		
	3. Using side mirrors, backed apparatus by a left turn into the marked loading dock		
	4. Using side mirrors, backed apparatus by a right turn into the marked loading dock		
	5. Came to a complete stop in a smooth and safe manner		
	6. Stopped where and when directed		
	7. **(M)** Used spotters when backing		
	8. **(M)** Completed exercise without pulling forward		
	9. **(M)** Completed exercise without striking cones and/or obstructions (each struck cone counts as a major)		
	(C) Completed task within listed time limits with no safety violations		

TEST # 3-B
INDIVIDUAL TEST

PRACTICAL DRIVING EXERCISES
NON-EMERGENCY DRIVING
CONFINED SPACE TURNAROUND

Description:

This exercise tests the ability of the candidate to turn the aerial 180 degrees and change direction within a confined space.

Procedure:

1. Candidate will start by positioning the aerial apparatus at the opening to the confined space.
2. Candidate will enter the confined space and start the turnaround.
3. Spotter will be used during the backing segment but only to prevent a collision (not providing directions).
4. Candidate will back-up and pull forward until the aerial apparatus is turned 180 degrees.
5. Candidate will then exit through the original starting point.
6. Candidate will not cross any boundaries or touch any cones.

Performance Evaluation Guidelines:

NFPA 1002 – JPR 4.3.4
IFSTA *Pumping Apparatus Driver/Operator Handbook, 3rd Edition*
Jones and Bartlett *Fire Apparatus Driver/Operator, 2nd Edition*

TEST # 3-B
INDIVIDUAL TEST

PRACTICAL DRIVING EXERCISES
NON-EMERGENCY DRIVING
CONFINED SPACE TURNAROUND

Directions to the Candidate:

All skill stations are pass/fail. Failure to meet the criteria will result in a failure. The candidate will perform a 180 degree turnaround maneuver within a confined space or an area in which the vehicle can not perform a U-turn without stopping and backing up. The confined space turnaround area should measure 50 feet by 100 feet with a 12 foot opening on one of the 50 foot sides. The candidate will begin the maneuver by entering the 12 foot opening, turning the aerial apparatus around in the confined space and exiting through the same 12 foot opening. The candidate will use a spotter and will complete the exercise without striking obstructions or extending a portion of the aerial apparatus over any boundary lines of the given space. There is no limitation on the number of times the candidate has to maneuver the aerial apparatus to accomplish the exercise.

Spotter will be used during the backing segment but only to prevent a collision (not providing directions).

Time: – Target: 7 Minutes ***Maximum: 10 Minutes*** ***Total Station Time – 12 Minutes***

Passing Criteria (Failures): 1 Critical, 2 Major, 3 General or combination of 3 Major/General			
ELEMENTS/STEPS	**STANDARDS**	**NO**	**YES**
	A. Confined Space Turnaround		
	1. **(C)** Fastened seat belt		
	2. Pulled into a designated area through opening		
	3. Made confined space turnaround		
	4. Backed up at least once using spotters and mirrors		
	5. Exited area through same opening		
	6. **(M)** Completed exercise without striking obstruction or extending over the boundary lines of the space (each struck cone counts as a major)		
	(C) Completed task within listed time limits with no safety violations		

TEST # 4 **OVER-THE-ROAD DRIVING**
INDIVIDUAL TEST

Description

This exercise demonstrates the ability of the candidate to safely control and operate the aerial apparatus on public roads and thoroughfares.

Procedures:

1. Aerial apparatus properly prepared for driving.
2. Candidate will properly position seat and mirrors.
3. Candidate will inform station examiner when they are ready to begin driving.
4. Station examiner will provide instruction and candidate will start engine and begin the driving.
5. Station examiner will describe any adverse weather or road conditions for the candidate to respond to.

Performance Evaluation Guidelines:

NFPA 1002 – JPR 4.3.1, 4.3.6
IFSTA *Pumping Apparatus Driver/Operator Handbook, 3rd Edition*
Jones and Bartlett *Fire Apparatus Driver/Operator, 2nd Edition*

TEST #4 **OVER THE ROAD DRIVING**
INDIVIDUAL TEST

Directions to the Candidate:

All skill stations are pass/fail. Failure to meet the criteria will result in a failure. The candidate will be driving the aerial apparatus on public roads and highways over a pre-determined route. The aerial apparatus should have been properly prepared for driving. The candidate should adjust the seat position and the mirrors before starting the apparatus. Seat belts must be worn by all occupants during the exercise. The station examiner will provide instructions and directions to the candidate regarding the route that the candidate will be driving. The candidate will follow the station examiner's instructions and directions as to where to turn and what lane to move into for lane changes. The candidate should not look at the station examiner or engage in conversation while operating the aerial apparatus during the exercise. The candidate is encouraged and allowed to ask the station examiner to repeat the instructions or directions if they were not heard or understood. The candidate must obey all traffic laws, including the speed limit, failure to do so will result in immediate failure. The candidate will demonstrate the proper posture and hand positions while operating the apparatus. A traffic accident will result in immediate failure for the day (exam).

Time: – Target: 15 Minutes ***Maximum: 20 Minutes*** ***Total Station Time – 20 Minutes***

Passing Criteria (Failures): 1 Critical, 2 Major, 3 General or combination of 3 Major/General			
ELEMENTS/STEPS	**STANDARDS**	**NO**	**YES**
	A. Drive Predetermined Course		
	1. **(C)** Demonstrated responsibility and concern for safety of apparatus and personnel while driving apparatus		
	2. Properly adjusted mirrors		
	3. **(M)** Adjusted speed for weather		
	4. **(M)** Adjusted stopping distances		
	5. **(C)** Fastened seat belt		
	B. Made 4 left turns		
	1. **(M)** Activated left turn signal		
	2. Checked the side view mirrors		
	3. Moved vehicle to left lane when necessary		
	4. Checked for oncoming traffic		
	5. Checked to see if side street or road is clear		
	6. Made safe left turns		

Time: – Target: 15 Minutes ***Maximum: 20 Minutes*** ***Total Station Time – 20 Minutes***

Passing Criteria (Failures): 1 Critical, 2 Major, 3 General or combination of 3 Major/General			
ELEMENTS/STEPS	**STANDARDS**	**NO**	**YES**
	C. Made 4 right turns		
	1. **(M)** Activated the right turn signal		
	2. Checked side view mirrors		
	3. Moved to the right lane, if necessary		
	4. Checked for oncoming traffic		
	5. Checked to see if side street or road was clear		
	6. Safely made the right turns		
	D. Drove straight section of road or highway		
	1. Maintained vehicle speed and safe following distance		
	2. Checked for oncoming traffic		
	3. Checked side view mirrors		
	4. Checked side streets or roads		
	E. Passed through one intersection		
	1. Approached the intersection with caution		
	2. Brought the apparatus to a complete stop, if necessary		
	3. Checked for traffic on the left, right, and left again		
	4. Safely proceeded through the intersection		
	F. Passed through two intersections with stop		
	1. Approached intersection with caution		
	2. **(M)** Brought the vehicle to a complete stop		
	3. Checked traffic – left, right, and left again		
	4. Safely proceeded through the intersection		
	G. Railroad crossing		
	1. Approached crossing with caution		
	2. Checked tracks – left and right		
	3. Stopped when necessary		

Time: – Target: 15 Minutes ***Maximum: 20 Minutes*** ***Total Station Time – 20 Minutes***

Passing Criteria (Failures): 1 Critical, 2 Major, 3 General or combination of 3 Major/General			
ELEMENTS/STEPS	**STANDARDS**	**NO**	**YES**
	4. Proceeded across tracks when safe to do so		
	H. Curve in highway – right or left		
	1. Slowed vehicle before entering curve		
	2. Adjusted speed as required		
	3. Maintained safe control of vehicle		
	I. Entered limited access highway		
	1. Checked traffic while on entrance ramp		
	2. Adjusted speed of vehicle to match flow of traffic		
	3. **(M)** Activated turn signal		
	4. Checked side view mirrors		
	5. Moved vehicle from acceleration lane to highway safely		
	J. Changed lanes on limited access highway		
	1. **(M)** Activated turn signal		
	2. Checked side view mirrors		
	3. Safely completed lane change		
	K. Exited limited access highway		
	1. **(M)** Activated turn signal		
	2. Checked side view mirrors		
	3. Safely moved vehicle into deceleration lane		
	4. Slowed vehicle and exited safely		
	L. Downgrade		
	1. Downshifted before entering grade (if applicable)		
	2. Made sure vehicle remained in gear		
	3. Used brakes and lower gears		
	4. Maintain proper engine RPM		
	M. Upgrade		
	1. Downshifted standard transmission to maintain engine rpm and speed (if applicable)		

Time: – Target: 15 Minutes ***Maximum: 20 Minutes*** ***Total Station Time – 20 Minutes***

Passing Criteria (Failures): 1 Critical, 2 Major, 3 General or combination of 3 Major/General			
ELEMENTS/STEPS	**STANDARDS**	**NO**	**YES**
	N. Underpass or low clearance		
	1. Approached with caution		
	2. Checked to see if underpass height is marked		
	3. Stopped and checked for proper clearance if it's not apparent		
	4. Proceeded only when sure it was safe to do so		
	(C) Completed task within listed time limits with no safety violations		

TEST # 5 **POSITIONING AERIAL APPARATUS**
INDIVIDUAL

Description:

Demonstrate the correct procedures for proper placement of an aerial apparatus to perform different evolutions at the scene of an emergency.

Procedures:

1. Candidate will drive aerial apparatus to positioning area and structure.
2. Candidate will correctly position aerial apparatus to perform assigned scenario.
3. Candidate may use spotter and is encouraged to do so.
4. Candidate will inform examiner upon completion of the positioning of the apparatus.

Note: PPE as required by candidate's fire department or AHJ – **HELMET REQUIRED**

Performance Evaluation Guidelines:

NFPA 1002 – JPR 6.2.1
IFSTA *Pumping Apparatus Driver/Operator Handbook, 3rd Edition*
Jones and Bartlett *Fire Apparatus Driver/Operator, 2nd Edition*

TEST # 5 **POSITIONING AERIAL APPARATUS**
INDIVIDUAL

Directions to the Individual:

The candidate will be informed by the examiner as to the evolution the candidate will be required to perform which has a direct impact on the positioning of the aerial apparatus. The examiner will have the candidate respond and position to perform rescue operations from a window, rescue operations from a roof or balcony, perform ventilation of windows or to support elevated fire suppression activities. The candidate will drive the apparatus at least one city block to the structure where the aerial apparatus will be positioned. The candidate may use a spotter.

Time: – Target: 10 Minutes ***Maximum: 15 Minutes*** ***Total Station Time – 12 Minutes***

Passing Criteria (Failures): 1 Critical, 2 Major, 3 General or combination of 3 Major/General			
ELEMENTS/STEPS	**STANDARDS**	**NO**	**YES**
	A. Position Apparatus		
	1. **(C)** Properly placed apparatus according to given scenario (Offensive/Defensive)		
	2. **(C)** Ground and overhead obstructions identified		
	3. Positioned upwind (can be verbalized if conditions don't allow)		
	4. Ground conditions considered		
	(C) Completed task within listed time limits with no safety violations		

TEST # 6 **STABILIZING AERIAL APPARATUS**
INDIVIDUAL

Description:

Demonstrate correct stabilizing procedures to stabilize an aerial apparatus on even or uneven terrain.

Procedures:

1. Examiner will tell candidate to proceed with stabilizing operations.
2. Candidate will operate controls for stabilizers.
3. Candidate and non testing candidate will place stabilizer pads or plates.
4. Candidate will stabilize apparatus using stabilizers.
5. Candidate will inform examiner when stabilizing of the apparatus has been completed.

Note: PPE as required by candidate's fire department or AHJ – **HELMET REQUIRED**

Performance Test Guidelines:

Stabilize an aerial apparatus on even terrain
Stabilize an aerial on an uneven terrain

Performance Evaluation Guidelines:

NFPA 1002 – JPR 6.2.2
IFSTA *Pumping Apparatus Driver/Operator Handbook, 3rd Edition*
Jones and Bartlett *Fire Apparatus Driver/Operator, 2nd Edition*

TEST # 6 **STABILIZING AERIAL APPARATUS**
INDIVIDUAL

Directions to the Individual:

The station examiner will tell the candidate if he/she has successfully positioned the aerial apparatus for the assigned scenario. The candidate may now proceed to properly stabilize the aerial apparatus. Another candidate may assist the testing candidate in the placement of the stabilizing pads or plates. The candidate will proceed, as an individual to operate the controls for the stabilizers. The candidate must follow the manufacturer's recommendations and guidelines when stabilizing the apparatus for even and uneven terrain. The operations must be performed safely and correctly. The candidate will inform the examiner when he/she has completed the stabilizing operations.

Time: – Target: 10 Minutes ***Maximum: 10 Minutes*** ***Total Station Time – 10 Minutes***

Passing Criteria (Failures): 1 Critical, 2 Major, 3 General or combination of 3 Major/General			
ELEMENTS/STEPS	**STANDARDS**	**NO**	**YES**
	A. Stabilizing Apparatus		
	1. **(C)** Transfer of power for operation of aerial		
	2. **(M)** Position of the pads or plates		
	3. **(M)** Proper deployment of stabilizer		
	4. Check for proper level, lateral and longitudinal		
	5. **(M)** Pins placed into stabilizers (if applicable manufacturer specific)		
	(C) Completed task within listed time limits with no safety violations		

TEST #7-A **OPERATING AERIAL DEVICE**
Individual Test **ROOF OPERATIONS**

Description:

Demonstrate the correct procedures and operation of the pedestal controls to properly place the aerial device to the roof for rescue or ventilation operations.

Procedures:

1. Station examiner will tell the candidate to begin the evolution providing that the aerial apparatus was properly positioned and stabilized.
2. Candidate will elevate aerial device from the bedded position.
3. Candidate will rotate aerial device to position to be extended.
4. Candidate will extend the aerial device.
5. Candidate will properly position the aerial device.
6. Candidate will set safety devices and ladder locks.
7. Candidate will advise the station examiner the aerial device is in position to carry out the assigned scenario.
8. Candidate will correctly return the aerial device back to the bed position.
9. Candidate will observe and follow all manufacturer's recommendation and fire department policy.
10. Following the above procedures, two individuals can switch positions and repeat.

Note: PPE as required by candidate's fire department or AHJ – **HELMET REQUIRED**

Performance Evaluation Guidelines:

NFPA 1002 – JPR 6.2.3
IFSTA *Pumping Apparatus Driver/Operator Handbook, 3rd Edition*
Jones and Bartlett *Fire Apparatus Driver/Operator, 2nd Edition*

TEST #7-A **OPERATING AERIAL DEVICE**
Individual Test **ROOF OPERATIONS**

Direction to the Individual:
When testing from an aerial platform, the station examiner will tell the candidate to operate either from the platform or pedestal controls alternately. This may be done with two individuals that switch positions. For an aerial ladder with tip controls, the candidate will not operate the device from the tip. The tip of the aerial device is to be placed near the roof for rescue or assist roof operations, such as ventilation. This operation can only proceed if the aerial apparatus was properly positioned and the apparatus properly stabilized. The candidate is to perform only one operation at a time, such as elevating from the bed, rotation, and extension. The candidate will also retract lower and bed the aerial device. NFPA 6.2.3 states that the driver/operator should operate the controls from each station if applicable.

Time: – Target: 8 Minutes ***Maximum: 8 Minutes*** ***Total Station Time – 15 Minutes***

Passing Criteria (Failures): 1 Critical, 2 Major, 3 General or combination of 3 Major/General			
ELEMENTS/STEPS	**STANDARDS**	**NO**	**YES**
	A. Roof Operations		
	1. **(C)** Raised aerial device, checking for overhead obstruction		
	2. Rotate aerial device		
	3. Extend aerial device		
	4. Position the tip/platform of aerial device (6ft. above edge of roof – straight ladder, just above roof – platform)		
	5. Lock aerial device (if applicable)		
	6. Unlock aerial device (if applicable)		
	7. **(C)** Raise, retract and lower aerial device		
	8. Bed aerial device		
	9. **(C)** All operations completed smoothly and safely		
	(C) Completed task within listed time limits with no safety violations		

TEST # 7-B **OPERATING AERIAL DEVICE**
INDIVIDUAL TEST **WINDOW OPERATIONS**

Description:

Demonstrate the correct procedures and operation of the pedestal controls to properly place the aerial device to a window for rescue or ventilation operations.

Procedures:

1. Station examiner will tell the candidate to begin the evolution providing that the aerial apparatus was properly positioned and stabilized.
2. Candidate will elevate aerial device from the bedded position.
3. Candidate will rotate aerial device to position to be extended.
4. Candidate will extend the aerial device.
5. Candidate will properly position the aerial device.
6. Candidate will set safety devices and ladder locks.
7. Candidate will advise the station examiner the aerial device is in position to carry out the assigned scenario.
8. Candidate will correctly return the aerial device back to the bed position.
9. Candidate will observe and follow all manufacturer's recommendation and fire department policies.

Note: PPE as required by candidate's fire department or AHJ – **HELMET REQUIRED**

Performance Test Guidelines:

Raise an aerial to rescue a victim from the window.
Raise an aerial platform to rescue a victim from a window.

Performance Evaluation Guidelines:

NFPA 1001 – JPR 6.2.3
IFSTA *Pumping Apparatus Driver/Operator Handbook, 3rd Edition*
Jones and Bartlett *Fire Apparatus Driver/Operator, 2nd Edition*

TEST # 7-B. **OPERATING AERIAL DEVICE**
INDIVIDUAL TEST **WINDOW OPERATIONS**

Direction to the Individual:

When testing with an aerial platform, the station examiner will tell the candidate to operate from the platform and pedestal controls alternately. This may be done with two individuals that switch positions. For an aerial ladder with tip controls, the candidate will not operate the device from the tip. The aerial device is to be placed to a window for rescue operation or to assist fire operations, such as ventilation. This operation can only proceed if the aerial apparatus was properly positioned and the apparatus properly stabilized. The candidate is to perform only one operation at a time, such as elevating from the bed, rotation, and extension. The candidate will also retract, lower, and bed the aerial device. NFPA 6.2.3 states that the driver/operator should operate the controls from each station if applicable.

Time: – Target: 8 Minutes ***Maximum: 8 Minutes*** ***Total Station Time – 15 Minutes***

Passing Criteria (Failures): 1 Critical, 2 Major, 3 General or combination of 3 Major/General			
ELEMENTS/STEPS	**STANDARDS**	**NO**	**YES**
	A. Window Operations		
	1. **(C)** Raised aerial device, checking for overhead obstruction		
	2. Rotate aerial device		
	3. Extend aerial device		
	4. Position the tip/platform of aerial device (top rung even with window sill – ladder, top rail or floor even with window sill – platform)		
	5. Lock aerial device (if applicable)		
	6. Unlock aerial device (if applicable)		
	7. **(C)** Raise, retract and lower aerial device		
	8. Bed aerial device		
	9. **(C)** All operations completed smoothly and safely		
	(C) Completed task within listed time limits with no safety violations		

TEST # 7-C **OPERATING AERIAL DEVICE**
Individual Test **ELEVATED MASTER STREAM**

Description:

The candidate will correctly position and operate an aerial device in an elevated master stream scenario.

Procedures:

1. Station examiner will tell the candidate to begin the evolution providing that the aerial apparatus was properly positioned and stabilized.
2. Candidate will hook up the supply line.
3. Prior to elevation for an aerial ladder with a pinnable waterway, this must be pinned forward for waterway operation.
4. Candidate will elevate aerial device from the bedded position.
5. Candidate will rotate aerial device to position to be extended.
6. Candidate will extend the aerial device.
7. Candidate will properly position the aerial device.
8. Candidate will set safety devices and ladder locks.
9. Candidate will charge the waterway (simulate or verbalize).
10. Candidate will advise the station examiner the aerial device is in position to carry out the assigned scenario.
11. Candidate will correctly return the aerial device back to the bed position.
12. Candidate will observe and follow all manufacturers' recommendation and fire department policy.

Note: PPE as required by candidate's fire department or AHJ – **HELMET REQUIRED**

Performance Test Guidelines:

Operate both water and foam elevated master streams, given an incident location, a situation description, and an assignment.

Performance Evaluation Guidelines:

NFPA 1001 – JPR 6.2.5
IFSTA *Pumping Apparatus Driver/Operator Handbook, 3rd Edition*
Jones and Bartlett *Fire Apparatus Driver/Operator, 2nd Edition*

TEST # 7-C **OPERATING AERIAL DEVICE**
INDIVIDUAL TEST **ELEVATED MASTER STREAM**

Direction to the Individual:

The station examiner will tell the candidate the operation to be performed using the aerial device. The aerial device is to be positioned and operated using an elevated master stream for the protection of exposures or for a defensive strategy, directing the elevated stream on a heavily involved structure. This operation can only proceed if the aerial apparatus was properly positioned and the apparatus properly stabilized. The candidate is to perform only one operation at a time, such as elevating from the bed, rotation, and extension. The candidate should consider the G.P.M. to be discharged in relationship to the tip load, angle of inclination, and the extension of the aerial device.

Time: – Target: 8 Minutes ***Maximum: 8 Minutes*** ***Total Station Time – 15 Minutes***

Passing Criteria (Failures): 1 Critical, 2 Major, 3 General or combination of 3 Major/General			
ELEMENTS/STEPS	**STANDARDS**	**NO**	**YES**
	A. Elevated Master Stream		
	1. Install detachable ladder pipe and hose using spanner wrenches if needed (if applicable)		
	2. Verify position of pinnable waterway (if applicable)		
	3. Connect water supply		
	4. **(C)** Rotate and raise the aerial device, checking for overhead obstruction		
	5. Extend the aerial device		
	6. Lock aerial device		
	7. Proper position of master stream		
	8. Verify tip load using aerial load chart.		
	9. Control elevated nozzle manually or remotely		
	10. Bed the aerial device		
	11. **(C)** All operations completed smoothly and safely		
	(C) Completed task within listed time limits with no safety violations		

TEST # 7-D
INDIVIDUAL TEST

OPERATING AERIAL DEVICE
Lower Aerial Device
Using the Emergency Operating System
(Auxiliary Hydraulic Pump)

Description:

The candidate will correctly position and operate an aerial devices emergency operating system (auxiliary hydraulic pump) for lowering and bedding that device.

Procedures:

1. Station examiner will tell the candidate to begin the evolution providing that the aerial apparatus was properly positioned and stabilized.
2. Candidate will elevate aerial device from the bedded position.
3. Candidate will rotate aerial device to position to be extended.
4. Candidate will extend the aerial device.
5. Candidate will properly position the aerial device.
6. Candidate will bed the aerial device using the Emergency Operating System (Auxiliary Hydraulic Pump).

Note: PPE as required by candidate's fire department or AHJ – **HELMET REQUIRED**

Performance Test Guidelines:

Lower the aerial device using the Emergency Operating System (Auxiliary Hydraulic Pump).

Performance Evaluation Guidelines:

NFPA 1001 – JPR 6.2.4
IFSTA *Pumping Apparatus Driver/Operator Handbook, 3rd Edition*
Jones and Bartlett *Fire Apparatus Driver/Operator, 2nd Edition*

TEST # 7-D
INDIVIDUAL TEST

OPERATING AERIAL DEVICE
Lower Aerial Device
Using the Emergency Operating System
(Auxiliary Hydraulic Pump)

Direction to the Individual:

The station examiner will tell the candidate the operation to be performed using the aerial device. This operation can only proceed if the aerial apparatus was properly positioned and the apparatus properly stabilized. The candidate will raise and extend the aerial device. Once positioned, the examiner will advise the candidate to lower and bed the aerial device using the Emergency Operating System (Auxiliary Hydraulic Pump).

Time: – Target: 8 Minutes ***Maximum: 8 Minutes*** ***Total Station Time – 15 Minutes***

Passing Criteria (Failures): 1 Critical, 2 Major, 3 General or combination of 3 Major/General			
ELEMENTS/STEPS	**STANDARDS**	**NO**	**YES**
	A. Emergency Operating System (Auxiliary Hydraulic Pump)		
	1. Raise, rotate and position to center the aerial device		
	2. Unlock, retract, and lower aerial device using the Emergency Operating System (Auxiliary Hydraulic Pump)		
	3. Bed the aerial device		
	4. **(C)** All operations completed smoothly and safely		
	(C) Completed task within listed time limits with no safety violations		

Driving Course Specifications

Utilize this sheet to design your driving course in relation to the vehicles you have assigned. Please set up your course per calculations outline below.

Key
VW = Vehicle Width
VL = Vehicle Length
ft = feet

Exercise	Dimensions
Alley Dock	Depth of Dock: VL plus **3** ft Width of Dock: VW plus **2** ft Wall distance from Dock entrance: VL multiplied by **1.48**
Serpentine	Distance between cones: VL multiplied by **1.25**
Confined Space Turnaround	Entrance Width: VW plus **4** ft Width of Space: VL multiplied by **1.85** Length of Space: VL multiplied by **3.7**
Diminishing Clearance	Wide Entrance: VW plus **1.5** ft Narrow Point: VW plus **2** inches

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