

## Suggested Reference Material:

**The Career Equipment Fleet Manager**, Association of Equipment Management Professionals. Reference that you are taking an EVT exam to be eligible for member price of \$225.00 from 970-384-0510 or [www.AEMP.org](http://www.AEMP.org)  
 NFPA reference listed below - National Fire Protection Association (800) 344-3555 or [www.nfpa.org](http://www.nfpa.org)  
 NFPA 1071, **Professional Qualification Standard for Emergency Vehicle Technicians, including Annex A-C**  
 NFPA 1911, **Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Automotive Fire Apparatus**,  
 NFPA 1917, **Standard for Automotive Ambulances**  
 NFPA 1901, **Standard for Automotive Fire Apparatus Leadership Theory and Practice**, Peter G. Northouse [www.amazon.com](http://www.amazon.com)

**LEARNING OBJECTIVES**

Section A - The Manager shall understand the principles stated in **The Career Equipment Fleet Manager**

**1. Finance**

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| <ul style="list-style-type: none"> <li>a. Financial Management           <ul style="list-style-type: none"> <li>(1) Equipment economic life cycle</li> <li>(2) Budget definition</li> <li>(3) Budget types               <ul style="list-style-type: none"> <li>(a) Capitol budget</li> </ul> </li> <li>(4) Capital equipment</li> <li>(5) Physical improvements</li> <li>(6) Negotiations               <ul style="list-style-type: none"> <li>(a) Negotiation skills/guidelines</li> </ul> </li> <li>(7) Vehicle Replacement</li> <li>(8) Equipment overhead costs</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>b. Procurement           <ul style="list-style-type: none"> <li>(1) Life Cycle/Cost</li> <li>(2) Effective negotiator</li> <li>(3) Writing effective contracts and purchase orders</li> </ul> </li> <li>c. Risk Management           <ul style="list-style-type: none"> <li>(1) Property insurance</li> <li>(2) Mobile equipment</li> <li>(3) Policy types</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>d. Warranty           <ul style="list-style-type: none"> <li>(1) Performance guarantee</li> <li>(2) Legalities</li> <li>(3) Incentives</li> <li>(4) Coverage</li> <li>(5) Factory recalls</li> <li>(6) Types of warranties</li> <li>(7) Purchasers responsibility</li> <li>(8) Warranty Statement</li> </ul> </li> </ul> |
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**2. Information**

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| <ul style="list-style-type: none"> <li>a. Benchmarking           <ul style="list-style-type: none"> <li>(1) Definition</li> <li>(2) Business Practice               <ul style="list-style-type: none"> <li>(a) Process (practice) analysis</li> </ul> </li> <li>(3) Resources</li> <li>(4) Constraints</li> <li>(5) Pareto Analysis</li> </ul> </li> <li>b. Life Cycle Analysis           <ul style="list-style-type: none"> <li>(1) Oil analysis</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>c. Specifications           <ul style="list-style-type: none"> <li>(1) Specification Writing</li> <li>(2) Tires/Fuel</li> <li>(3) Automatic Transmissions</li> <li>(4) Diesel Engine/Gasoline Engines</li> <li>(5) Road calls</li> <li>(6) Air brake dryers</li> <li>(7) Considerations for specs</li> </ul> </li> <li>d. Technology           <ul style="list-style-type: none"> <li>(1) Data retention</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>(2) Data management</li> <li>(3) Data implementation</li> <li>(4) Information resources</li> <li>(5) Technological Improvements</li> <li>(6) System capability</li> <li>(7) Training</li> <li>(8) Information Systems           <ul style="list-style-type: none"> <li>(a) Implementation</li> </ul> </li> <li>(9) Telematics</li> </ul> |
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**3. Policies**

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| <ul style="list-style-type: none"> <li>a. Training           <ul style="list-style-type: none"> <li>(1) Repetitive motion injuries</li> <li>(2) Fleet manager responsibilities</li> <li>(3) Employee productivity</li> </ul> </li> <li>b. Environmental           <ul style="list-style-type: none"> <li>(1) Hazardous Materials</li> <li>(2) Hazardous Waste</li> <li>(3) EPA</li> <li>(4) Fuel Storage Tank Regulations               <ul style="list-style-type: none"> <li>(a) Above Ground</li> <li>(b) Diesel</li> <li>(c) Monitoring Equipment</li> </ul> </li> <li>(5) Containers</li> <li>(6) Toxic Wastes</li> <li>(7) Reactive Waste</li> <li>(8) Employee Environmental Training</li> <li>(9) Hazardous Communication Program</li> <li>(10) Shop Ventilation</li> <li>(11) Material Safety Data Sheets</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>(12) Hazardous waste generator-LQG, SQG, CESQG</li> <li>(13) Used oil management</li> <li>(14) Record Keeping - Hazardous Material Disposition</li> <li>c. Human Resource           <ul style="list-style-type: none"> <li>(1) ADA</li> <li>(2) Discipline</li> <li>(3) Sexual Harassment</li> <li>(4) EEOC</li> <li>(5) Employment Law</li> <li>(6) Motivation</li> <li>(7) Performance Evaluation</li> <li>(8) Personnel Management</li> <li>(9) Fair Labor Standards Act (FLSA)</li> <li>(10) Discrimination</li> <li>(11) Quid Pro Quo</li> <li>(12) Training</li> <li>(13) Duty to investigate</li> <li>(14) Uniformed Service Employee Re-employment Rights Act (USERRA)</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>(15) Terminations</li> <li>(16) Exit Interview</li> <li>(17) Interviewing</li> <li>(18) Pregnancy</li> <li>(19) The hiring process</li> <li>(20) Negligent Hiring</li> <li>(21) Age Discrimination</li> <li>d. Safety           <ul style="list-style-type: none"> <li>(1) Emergency Evacuation Plan</li> <li>(2) Personnel Protective Equipment</li> <li>(3) Fire Extinguishers</li> <li>(4) Lock out/Tag out</li> <li>(5) Forklift Operator Training</li> <li>(6) Alcohol concentration</li> <li>(7) Retention of records</li> <li>(8) Container labeling</li> <li>(9) Inspection</li> </ul> </li> </ul> |
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**4. Controls**

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| <ul style="list-style-type: none"> <li>a. Outsourcing           <ul style="list-style-type: none"> <li>(1) Reasons outsourcing fails</li> <li>(2) Control</li> <li>(3) Rules/Resistance to change</li> </ul> </li> <li>b. Parts Management           <ul style="list-style-type: none"> <li>(1) Vendor managed inventory (VMI)</li> <li>(2) Just In Time (JIT)</li> <li>(3) Carrying costs</li> <li>(4) Stocking Levels</li> <li>(5) Re-manufactured parts</li> </ul> </li> <li>c. Preventive Maintenance           <ul style="list-style-type: none"> <li>(1) Scheduled Maintenance</li> <li>(2) Unscheduled Maintenance</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>(3) Failure Analysis</li> <li>(4) Roadside Inspections</li> <li>(5) Training</li> <li>(6) Reactive/Proactive maintenance</li> <li>(7) What is the future</li> <li>d. Shop/Facilities Management           <ul style="list-style-type: none"> <li>(1) Diagnosing Problems</li> <li>(2) Empowering</li> <li>(3) Ethics</li> <li>(4) Failure Analysis</li> <li>(5) Job Assignments</li> <li>(6) On-the-Job Training</li> <li>(7) Scheduling</li> <li>(8) Serving Customers</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>(9) Task Assignment</li> <li>(10) PMI / Driver / Technician</li> <li>(11) Road calls</li> <li>(12) Reports</li> <li>(13) Re-Manufactured parts</li> <li>(14) Unscheduled maintenance cost</li> <li>(15) Vehicle availability</li> <li>(16) Maintenance controls</li> <li>(17) Overtime</li> <li>(18) Work standards</li> <li>(19) Repair authorization</li> </ul> |
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## Section B

The Manager shall understand the requirements for Fire Apparatus and Automotive Ambulances as stated by **NFPA**.

1. **NFPA 1071** including Annex A-C
  - a. Administration and Definitions
  - b. Emergency Vehicle Technician I
  - c. Emergency Vehicle Technician II
  - d. Emergency Vehicle Technician III
  - e. Qualifications and Certifications
  - f. Annex A - Explanatory Material
  - g. Annex C - JPR
    - (1) Certification
2. **NFPA 1911**
  - a. Administration
    - (1) Scope
    - (2) Application
  - b. Definitions
    - (1) In service fire apparatus
    - (2) Leakage
    - (3) Qualified Person
    - (4) Operational checks
    - (5) Diagnostic check
  - c. General Requirements
    - (1) Inspections and Diagnostic tests
  - d. Retirement of Apparatus
  - e. Out of service criteria
  - f. Inspections and Maintenance
  - g. Performance Testing
    - (1) Major repairs
    - (2) Water gauge
    - (3) Test results
  - h. Inspecting & testing aerial ladders
    - (1) Rotation bearing mounting bolts
  - i. Road Test
3. **NFPA 1917**
  - a. Definitions
    - (1) Approved
    - (2) Contractor
    - (3) Types of ambulances
  - b. General Requirements
    - (1) Contractor responsibility
    - (2) Third party certifications/test results
    - (3) Effective date
    - (4) Generator specifications
    - (5) Exceptions
    - (6) Payload
    - (7) Serviceability
    - (8) Documentation
    - (9) Acceptance test/test on delivery
  - c. Annex A
    - (1) Explanatory material
    - (2) AHJ
    - (3) Gross vehicle weight rating (GVWR)
  - d. Fuel system
    - (1) Chafe protection
  - e. Chassis
    - (1) Stepping surface
    - (2) Wheels and tires
4. **NFPA 1901**
  - a. General requirements
    - (1) Rollover stability
    - (2) Weight distribution
    - (3) Vehicle date recorder
    - (4) Responsibility of the purchaser
    - (5) Responsibility of the contractor
    - (6) Roadability
  - b. Driver and Crew Areas
    - (1) Equipment mounting
  - c. Administration
    - (1) Equivalency
  - d. Annex D - Guidelines for first line & reserve fire apparatus
  - e. Foam systems
    - (1) CAFS - Compressed air foam system
    - (2) Foam proportioning system
  - f. Low voltage electrical systems and warning devices
    - (1) Performance testing
    - (2) Wiring and wire harness construction
    - (3) Compartment lighting
    - (4) Alternator performance tests at full load
  - g. Aerial Devices
    - (1) Aerial ladder requirements
      - (a) Rated capacity
      - (b) Heat shield
      - (c) Stability
  - h. Line voltage electrical systems
    - (1) Stability
    - (2) Grounding & bonding
  - i. Air systems
    - (1) Breathing air quality
  - j. Winches
    - (1) Winch wire or synthetic rope
  - k. Diesel Engines
    - (1) Diesel particulate filter
    - (2) High Exhaust System Temperature (HEST) Icon
    - (3) Diesel Emission Fluid (DEF)

Section C Leadership - The manager shall understand leadership qualities as stated in **Leadership Theory and Practice**

1. Basic Leadership Qualities
  - a. Ethics definition
  - b. Ethical theories
  - c. Leadership
    - (1) Types
    - (2) Power
    - (3) Coercion
  - d. Management compared to leadership
  - e. Leadership definition
  - f. Human skill
  - g. Integrity
  - h. Management skills
  - i. Situational leadership
  - j. (1) Cognitive ability
2. Trait Approach
  - a. Intelligence
    - (1) Emotional intelligence
    - (2) IQ
3. Psychodynamic Approach
4. Transformational Approach
5. Authentic Approach
6. Team Leadership Model
7. Adaptive Leadership
8. Leadership Ethics
9. Distributed Leadership
  - a. Team Processes
10. Team Leadership
11. Culture & Leadership