M-1 Management Level 1 Supervisor September 2026

Suggested Reference Material:

The Career Equipment Fleet Manager, Association of Equipment Management Professionals.$295.00
https://aemp.org/page/Publications

NFPA reference listed below - National Fire Protection Association (800) 344-3555 or www.nfpa.org

NFPA 1900: Standard for Aircraft Rescue and Firefighting Vehicles, Automotive Fire Apparatus, Wildland Fire Apparatus, and Automotive Ambulances **(NFPA 1901 and 1917 CHAPTERS)** 2024 edition

NFPA 1910: Standard for the Inspection, Maintenance, Refurbishment, Testing and Retirement of In-Service Emergency Vehicles and Marine Firefighting Vessels **(NFPA 1911 and 1071 CHAPTERS)** 2024 edition

LEARNING OBJECTIVES

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

1. Information
   - a. Benchmarking
     - (1) Definition
     - (2) Business Practice
     - (3) Implementation
   - b. Specifications/Life Cycle Cost
     - (1) Specification Writing
       - (a) performance & functional
     - (2) Tires/Fuel
     - (3) Automatic Transmissions
     - (4) Diesel Engine/Gasoline Engines
     - (5) Road calls
     - (6) Air brake dryers
     - (7) Considerations for specifications
     - (8) Fundamental requirement
     - (9) Technical specifications
     - (10) Functional specifications
     - (11) Sole source
   - c. Technology
     - (1) Maintenance software
     - (2) Computer based records
     - (3) Benefits of GPS/GIS
     - (4) Pitfalls of new technology and implementation

2. Policies
   - a. Environmental
     - (1) Hazardous Materials
     - (2) Hazardous Waste
     - (3) EPA
     - (4) Fuel Storage Tank Regulations
     - (5) Containers
     - (6) Toxic Wastes
     - (7) Reactive Waste
     - (8) Employee Environmental Training
     - (9) Hazardous Communication Program
     - (10) Shop Ventilation
     - (11) Material Safety Data Sheets
     - (12) Used Oil
     - (13) Diesel Emission Fluid (DEF)
       - (a) NOx (nitrogen oxide) reduction
       - (b) NOx formation
       - (c) EGR (exhaust gas recirculation)
       - (d) SCR (selective catalyst reduction)
   - b. Human Resource Chapter
     - (1) ADA
       - (a) Pre-employment Testing & Inquiries
     - (2) Discipline
     - (3) Sexual Harassment
     - (4) EEOC
     - (5) Employment Law
     - (6) Motivation
     - (7) Performance Evaluation
     - (8) Personnel Management
     - (9) Compensation Practices
       - (a) Fair Labor Standards Act (FLSA)
     - (10) Discrimination
     - (11) Quid Pro Quo
     - (12) Training
   - c. Safety
     - (1) Emergency Evacuation Plan
     - (2) Personnel Protective Equipment
     - (3) Fire Extinguishers
     - (4) Lock out/Tag out
     - (5) Forklift Operator Training
     - (6) Safety awareness

3. Controls
   - a. Outsourcing
     - (1) Reasons outsourcing fails
     - (2) Feasability/Effectiveness
     - (3) Outsourcing and increased control
     - (4) Definition of control
   - b. Parts Management
     - (1) Vendor managed inventory (VMI)
     - (2) Inventory volume/costs
     - (3) Purpose of inventory
     - (4) Just-in-Time
     - (5) Order quantity cost
   - c. Preventive Maintenance
     - (1) Preventative/Scheduled Maintenance
     - (2) Unscheduled Maintenance
     - (3) Failure Analysis
     - (4) Oil Filters
     - (5) Labor Productivity
     - (6) Oil Analysis
   - d. Shop/Facilities Management
     - (1) Diagnosing Problems
     - (2) Empowering
     - (3) Ethics
     - (4) Failure & Breakdown Analysis
     - (5) Job Assignments
     - (6) On-the-Job Training
     - (7) Productivity
     - (8) Quality Control
     - (9) Record Keeping
     - (10) Regulations/Dot Bureau of Motor Carrier Safety
     - (11) Scheduling
     - (12) Serving Customers
     - (13) Task Assignment
     - (14) PMI / Driver / Technician
     - (15) Road calls
     - (16) Reports
     - (17) Unscheduled maintenance cost
     - (18) Vehicle availability
     - (19) Maintenance controls
     - (20) Overtime
     - (21) Work standards
     - (22) Repair authorization

Section B

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

1. **NFPA 1900 - 1901 Section**
   - a. Definitions
     - (1) Authority Having Jurisdiction (AHJ)
     - (2) Load Management System
     - (3) In-Service Weight
   - b. Requirements
     - (1) Acceptance tests
     - (2) Acceleration test
     - (3) Certification test
     - (4) Braking System GVWR
     - (5) Reflective stripping
     - (6) DPF regeneration
     - (7) Stability tests
   - c. Safety Components
     - (1) Vehicle data recorder
     - (2) Stability Control
     - (3) DPF Regeneration

2. **NFPA 1910 - 1911 Section**
   - a. Pump Test requirements
   - b. Service/Performance test
     - (1) Pressure measuring equipment
   - c. Gauges
     - (1) Calibration
   - d. Flow equipment
   - e. Pump Vacuum Test
   - f. Preventive Maintenance
   - g. Documentation
   - h. Operational Tests
   - i. Intake Reliefs
   - j. Test Results
   - k. Tire requirements
   - l. Out of Service Criteria
     - (1) Definition
     - (2) Engine systems
     - (3) Engine cooling system
     - (4) Stop engine light
     - (5) Transmission temperature
     - (6) Wheels/Axle
     - (7) Welding
     - (8) Warning lights
     - (9) Cab area
     - (10) Aerial device
   - m. Qualification of Personnel
   - n. Safety
   - o. Vehicle Stability/Instability
     - (1) Weight
   - p. Braking System
   - q. Aerial Instability
   - r. Types of leaks/leakage

3. **NFPA 1910 - 1071 Section**
   - a. Definitions
     - (1) JPR
     - (2) Technician Levels
     - (3) Emergency Response Vehicle
     - (4) Aerial Device Safety
     - (5) Deficiency
     - (6) Defect
     - (7) Test
     - (8) Structural Integrity
   - b. Duties & Responsibilities
     - (1) EVT I, II, III Responsibilities
     - (2) Level II Body & Cab Repairs
     - (3) Water tank repair Level II Technician
   - c. Chassis Testing
     - (1) Parking Brake
     - (2) Cab Tilt
     - (3) Pump & Tank Systems
   - d. Requisite Knowledge
     - (1) Level III
       - (a) Repair Times
       - (b) Failure Analysis
   - e. Training
     - (1) Continuing Education
     - (2) Technician Education
   - f. Requisite Skills

4. **NFPA 1900 - 1917 Section**
   - a. Payload
   - b. FDA & ambulance components
   - c. Legal requirements
   - d. Administration
   - e. Statement of exemptions
   - f. Low idle alternator output
     - (1) Accessory electrical loads
   - g. High idle alternator output
   - h. Patient compartment sound level test
   - i. Multiplex circuit protection
   - j. Ambulance Performance
     - (1) Altitude requirement
     - (2) Refueling distance
     - (3) temperature requirements
   - k. Water leak test
   - l. Oxygen system
     - (1) Leak test
     - (2) Storage
   - m. Personal protection
   - n. Road Performance
     - (1) Speed requirement
   - o. Wiring
     - (1) Wiring protection
     - (2) Wire harness construction
   - p. Scene lighting
   - q. Patient compartments and level testing
   - r. Patient compartment interior noise
   - s. Longitudinal weight distribution
   - t. Ambulance components
     - (1) Reliability
     - (2) Serviceability
   - u. Line Voltage Receptacles