US Forest Service, Intermountain Region
EMERGENCY VEHICLE OPERATOR MANAGEMENT PLAN

March 2021

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1. INTRODUCTION

The Intermountain Region Emergency Vehicle Operator Management Plan is intended to provide for the safe and effective implementation of direction in Forest Service Manual (FSM-5109.16, Chapter 30) for emergency vehicle operation using red lights and sirens on all Intermountain Region Forests. Plan components of the Emergency Vehicle Operation Program are defined and serve to set the framework for a program that can be implemented, monitored and adjusted as needed to ensure that risks are being evaluated and mitigated. This plan includes minimum administrative responsibilities, Emergency Vehicle Operation training and driver eligibility requirements, risk identification and mitigation measures. Forests should supplement this plan to address local needs and identify local operating protocols.

This risk management process identifies and evaluates risk. There is no single method or solution for managing risk. Local units may deal with a different set of specific risks that are identified and mitigated in this plan. This Emergency Vehicle Operator Management Plan serves as a guide to develop local risk management plans specific to the unique hazards that may be present at the Forest level.

The implementation of the Region's Emergency Vehicle Operator Management Plan is subject to all mitigating measures addressed in the Risk Matrix (Appendix A). The Emergency Vehicle Operator Management Plan, including qualifications, training and implementation, will be monitored and assessed. The Regional Director of Fire and Aviation Management will monitor the effectiveness and bring forward recommendations for program improvements to the Regional Forester.

2. ADMINISTRATION

2.1 Regional Forester

1. Establish supplemental regional policy for emergency vehicle operations, including the use of emergency lighting and siren equipment. Regional policy must include an operational plan which includes a risk assessment for the selection, screening, and supervision of emergency vehicle operators. Regional policy must also assess the hazards, risks, and benefits for the use of emergency lighting and siren equipment in wildfire operations; if and when the use of emergency lighting and siren equipment is authorized; and risk mitigation measures. At no time may the Regional policy for emergency vehicle operation be less restrictive than the policy in FSH 5109.16, Chapter 30.

2. Monitor and assess the effectiveness of the regional emergency vehicle operation program.

3. Approve the regional emergency vehicle operator training and certification program.

4. Ensure all forests have an emergency vehicle dispatch protocol.

2.2 Forest Supervisor

1. Implement regional emergency vehicle operation policy, to include dispatch protocols.

2. Maintain a database for forest employee emergency vehicle operator training and certification.

3. Ensure all off-forest fire resources are briefed on local emergency lighting and siren equipment policy.

4. Conduct after action reviews as appropriate to monitor compliance with emergency vehicle operation policy.

2.3 District Ranger

1. Identify emergency vehicle operators within the unit and ensure they meet training and certification standards.

2. Ensure that emergency vehicle operation is in compliance with regional emergency vehicle operation policy.

3. Ensure after action reviews are conducted as appropriate to monitor compliance with this policy.

4. Prepare and approve job hazard analyses or risk assessments.

2.4 Forest Fire Management Officer

1. Brief all fire resources on the Forest Emergency Vehicle Operator policy.

2. Designate Emergency Vehicle Operator instructors for initial and recertification training.

3. Inform all Emergency Vehicle Operators in writing of their personal and legal responsibilities to operate in accordance with their training.

4. Establish a process at the Forest level to document red light and siren use and provide a copy to the Regional Office.

5. After red light and siren use conduct after action reviews to monitor program effectiveness and compliance with policy.

3. INSTALLATION OF EMERGENCY LIGHTING AND SIREN EQUIPMENT

Emergency lighting and siren equipment must only be installed on vehicles as identified in national fire vehicle specifications and these vehicles must meet applicable NFPA 1906 requirements for optical and audible warning devices and reflective striping (FSM 5126.11). Pre-national standard (FSM 5126.03), fire vehicles may maintain existing emergency lighting and siren equipment until the next replacement cycle.

4. TRAINING AND CERTIFICATION

4.1 Screening of Emergency Vehicle Operators

1. Screening of potential operators will be based on years of driving experience, history of license suspensions or traffic violations, and other risk factors.

2. A driver's qualification file for each certified Emergency Vehicle Operator must be maintained (as an option, this file may be a sub-section within the individual's incident qualifications master record file) (FSH 5109.17).

3. Forests must verify that the prospective Emergency Vehicle Operator meets the requirements defined in FSH 7109.19 and is qualified to drive Forest Service emergency vehicles.

4. Forests must, where possible, subscribe to a pull notice program with their state's department of motor vehicles. This subscription provides an automatic notification to the Forest of driving infractions incurred by subscribed employees. Forests that do not or cannot subscribe to a pull notice program must annually require that each Emergency Vehicle Operator submit a State Department of Motor Vehicles report listing all non-contested or convicted traffic violations received within the previous year. Benefiting program funds must pay for the reports that are a required part of an employee's job (FSM 6511.31i). Keep the report in the employee's driver's qualification file and review prior to the issuance or renewal of the U.S. Government Motor Vehicle Operator Identification Card (OF 346).

4.2 Training

Candidates for Emergency Vehicle Operator certification must pass an initial Emergency Vehicle Operator training program. Emergency Vehicle Operators must take refresher training at least every three years to maintain their certification.

1. Emergency Vehicle Operator certification training programs must be guided by the requirements described in NFPA 1002 and NFPA 1451 to the extent reasonable and applicable to Forest Service wildland fire operations. (See Appendix B for NFPA requirements)

2. Emergency Vehicle Operator certification training programs must include a proficiency test that demonstrates the operator can competently perform the requisite skills contained in NFPA 1002 for wildland fire apparatus. The initial proficiency testing must be in the same class of vehicle for which the employee is certified to operate.

3. Candidates can obtain certification training at a regional engine academy, an Emergency Vehicle Operator course (EVOC), a Code 3 driving simulator, a municipal fire department, an EMS training institute or other similar facility meeting the above standards. Regions may designate trained personnel to provide equivalent training.

4.3 Physical Fitness Standard

The current position-specific fitness requirements and State issued driving license constitute the physical fitness standards for Emergency Vehicle Operators. All other general licensing requirements found in FSH 7109.19 Chapter 60 apply.

4.4 Certification

The Forest Lead Licensing Examiner must certify Emergency Vehicle Operators with the concurrence of the Unit Fire Program Manager. Forests must not certify an Emergency Vehicle Operator less than 21 years of age (5109.16, 32.4).

Certification as an Emergency Vehicle Operator must be revoked immediately if the employee no longer meets the certification requirements defined in FSH 7109.19 (example: a revoked or restricted state driver license). Certification as an Emergency Vehicle Operator must also be revoked if the employee fails to take refresher training within the required interval.

Consistent safe driving is a condition of Emergency Vehicle Operator's certification. Emergency Vehicle Operator certification may be revoked at the discretion of the Lead Licensing Examiner, Unit Fire Management Officer, or Forest Supervisor if the employee fails to demonstrate operating proficiency. Indicators of poor operating proficiency include but are not limited to the following:

1. Failure to follow federal, state and local laws and regulations, and Forest Service policy for emergency vehicle operation.
2. Accidents or near misses
3. Abuse or misuse of equipment.

4.5 Refresher Training

Refresher training is required every three years to maintain certification. Training must be accomplished with classroom instruction as a minimum, or a combination of classroom instruction and hands-on training. Classroom instruction must include the following minimum topics:

1. Discussion of safety, following distances, preventable collisions and defensive driving.
2. Driving with emergency lighting and siren equipment
3. Applying safe driving techniques.
4. Specialized local considerations.
5. Review risk assessment process (5109.16).
6. Agency policy.
7. State and local laws and regulations.
8. Applicable case studies/lessons learned.

4.6 Qualification Card

The endorsement "Emergency Vehicle Operator" must appear on the individual's OF-346. This endorsement on the signed OF-346 is proof of the employee's certification as an Emergency

Vehicle Operator. Other certification terminology, for example “Red Lights and Siren”, on existing OF 346’s must remain valid until the OF 346 is re-issued. Upon re-issuance the endorsement “Emergency Vehicle Operator” must appear on the OF 346.

4.7 Reporting Requirements

Emergency Vehicle Operators convicted of a moving vehicle violation must report the conviction to their immediate supervisor and the certifying official within 30 days. In addition, any driver’s license revocation must be reported to the employee’s immediate supervisor before close of business of the following scheduled work day (FSH 7109.19).

Employees with a commercial driver license (CDL) are subject to commercial driver license notification and reporting requirements (49 CFR 383.31).

4.8 Post-Accident Drug and Alcohol Testing Requirement

Drug and Alcohol testing guidance for the Forest Service is contained in Executive Order 12564, the USDA’s Plan for a Drug Free Workplace and the NFFE/FS Master Agreement and the negotiated Memorandum’s of Understanding relating to Commercial Driver License/Driving. Employees holding a CDL must comply with controlled substance testing requirements in Title 49, Code of Federal Regulations, Section 391.81 (49 CFR 391.81). Operators found to be illegally under the influence of alcohol or drugs must have their Emergency Vehicle Operator’s certification revoked.

5. USE

5.1 Operations

1. Forests must provide sufficient oversight to ensure that Emergency Vehicle Operators demonstrate sound risk management principles in all aspects of emergency vehicle operation.

2. The use of emergency lighting and siren equipment must be guided by NFPA 1451, Emergency Response, to the extent reasonable and applicable to Forest Service operations and documented in annual operating plans and/or dispatch protocols.

3. Only certified Emergency Vehicle Operators may use emergency lighting and siren equipment while driving on public roads, except for authorized training exercises. Certification as an Emergency Vehicle Operator does not constitute approval for use of emergency lighting and siren equipment.

4. **Vehicles equipped with emergency lighting and siren equipment may be operated by uncertified operators, however, that equipment may only be used while parked to facilitate operational or safety objectives.**

5. Emergency lighting and siren equipment may only be used on public roads only when the benefits to public safety justify the increased risks. Regions or Forests may restrict the use of emergency lighting and siren equipment as defined in supplemental regional or forest policy.

6. The use of emergency lighting or siren equipment is restricted to requesting right-of-way, blocking right of way, diverting traffic, traffic flow restrictions, or whenever the risks associated with the use of emergency lights and sirens are offset by the benefits to public or firefighter safety. State and local laws and policies must be considered regarding the use of emergency lighting and siren equipment near road construction activities.

    a. In all cases Emergency Vehicle Operators must follow the most restrictive federal, state and local laws and regulations, and Forest Service policy while exercising due caution for life and property.

    b. Emergency Vehicle Operators are required to operate at all times with the safety of pedestrians, other vehicles, and themselves as the primary objective.

    c. Operators must bring the emergency vehicle to a complete stop and must not proceed until it is safe under the following conditions: any yield sign, stop sign or signal, blind intersections, intersections where the operator cannot see all lanes of traffic, a stopped school bus with red flashing warning lights, and unguarded railroad crossings. Emergency vehicles must not be driven around railroad crossing gates. Emergency vehicles must discontinue the use of emergency lighting and siren equipment at a stopped school bus with its red lights flashing and when driving through a posted school zone.

    d. Operators must exercise extreme caution when passing or overtaking other vehicles.

APPENDIX A – REGIONAL RISK ASSESSMENT

The Regional Risk Management Specialist was tasked with the initial identification, evaluation and mitigation of risks associated with the use of red lights and sirens. This process was documented in a Risk Assessment Matrix that was adopted and modified from a USDA Forest Service Southwest Region Risk Management Plan for Emergency Vehicle Operation. Each potential hazard was given an initial rating in both likelihood and severity for conditions commonly found in the Intermountain Region. This product was then reviewed and adjusted by the Regional Fire Equipment Working Team to establish a final version for the Region. This product is intended to be reviewed and adjusted as necessary by each Forest to account for specific local situations.

Once a hazard is identified, it is given an initial rating in likelihood, severity which results in an outcome rating. A mitigation measure is then implemented than the risk is re-evaluated using the same method. If a risk can be mitigated to an acceptable level, the system can operate. If not, the risk is deemed to be unacceptable.

RISK ASSESSMENT MATRIX				
	Severity			
Likelihood	Negligible	Marginal	Critical	Catastrophic
Frequent				
Probable				***High***
Occasional			***Serious***	
Remote		***Medium***		
Improbable	***Low***			

Severity Scale Definitions	
Catastrophic	Results in fatalities and/or loss of the system.
Critical	Severe injury and/or major system damage.
Marginal	Minor injury and/or minor system damage.
Negligible	Less than minor injury and/or less than minor system damage.

Likelihood Scale Definitions		
Frequent	Individual	Likely to occur often.
	Fleet	Continuously experienced.
Probable	Individual	Will occur several times.
	Fleet	Will occur often.
Occasional	Individual	Likely to occur some times.
	Fleet	Will occur several times.
Remote	Individual	Unlikely to occur, but possible.
	Fleet	Unlikely but can reasonably be expected to occur.
Improbable	Individual	So unlikely, it can be assumed it will not occur.
	Fleet	Unlikely to occur, but possible.

System - Emergency Vehicle Operations					R4 Emergency Vehicle Operations Risk Assessment			Prepared 11/7/2013
		Pre Mitigation			Mitigation	Post mitigation		
Sub-systems	Hazards	Likelihood	Severity	Outcome		Likelihood	Severity	Outcome
Emergency Lighting and Siren Equipment & Configuration	Component failures: overheating, faulty wiring, unsecure mounting, etc.	Occasional	Marginal	Medium	Use professional installation vendors or follow manufacture's instructions completely. Integrate inspection into preventative maintainance checklist. Add to monthly and post incident inspections.	Remote	Marginal	Medium
	Inaccessible or obtrusive user controls	Remote	Negligible	Low	Mount components in accessible and ergonomically correct manner. Use sandardized control panels when feasable.	Improbable	Negligible	Low
	Engine crew unfamiliar with components.	Occasional	Marginal	Medium	Training, briefings, and placarding	Remote	Marginal	Low
Operations in Poor Visibility	Vehicle collision with other objects, other engines or civilian traffic, and humans.	Remote	Catastrophic	High	Use NFPA compliant lights. Properly install reflective striping and use sirens as appropriate. Use operators trained and certified in emergency vehicle operations.	Improbable	Catastrophic	Medium
Operations in high density Urban Interface	Vehicle collision with humans and other traffic.	Remote	Catastrophic	High	Use NFPA compliant lights. Properly install reflective striping and use sirens as appropriate. Use operators trained and certified in emergency vehicle operations.	Improbable	Catastrophic	Medium
Emergency driving in mixed traffic	Operations in rural areas near unsupervised children with the potential of child/vehicle collisions.	Occasional	Catastrophic	High	Use operators trained and certified in emergency vehicle operations. Turn off RLS and proceed only with the flow of traffic in the vicinity of active school crossings and other areas with where young children are present and supervision is not comprehensive.	Remote	Catastrophic	Serious
	Operations in congested or heavy traffic situations resulting in wake effect collisions.	Occasional	Critical	Serious	Use operators trained and certified in emergency vehicle operations. Turn off RLS when other traffic cannot safely clear right of way while remaining on the roadway.	Improbable	Critical	Medium
	Operations involving controlled intersections resulting in wake effect collisions.	Probable	Catastrophic	High	Use operators trained and certified in emergency vehicle operations. Come to a stop and nose-in at all controlled intersections where traffic control devices require stopping and proceed only when right-of-way is confirmed. Turn off RLS at railroad crossings and proceed only when clear.	Remote	Catastrophic	Serious

		Pre Mitigation			Mitigation	Post mitigation		
Sub-systems	**Hazards**	**Likelihood**	**Severity**	**Outcome**		**Likelihood**	**Severity**	**Outcome**
Human Factors	Risk Tendency - attitude of 'thrill seeking'	Remote	Catastrophic	High	Use operators trained and certified in emergency vehicle operations. Screen EVOs to ensure a safe driving history and maturity. Ensure supervisors, Fire Management Officers and Line Officers monitor and actively supervise operator performance and understand FS policy and operational restrictions. Review all close calls and near misses and share and discuss these reviews at the District, Forest, and Regional level. Use AARs after every RLS mission creating a culture of peer pressure that rejects risky behaviors. Promptly remove individuals with a hazardous attitudes from the mission	Improbable	Critical	Medium
	Casualness	Occasional	Catastrophic	High	Use operators trained and certified in emergency vehicle operations. Require refresher training every three years. Supervisors, Fire Management Officers and Line Officers monitor and supervise operator performance. Review all close calls and near misses and share and discuss these reviews at the District, Forest, and Regional level. Use AARs after every RLS mission creating a culture of peer pressure to reject risky behaviors.	Remote	Critical	Medium
	"Copy-cat" behavior when working with high-risk cooperating fire departments.	Frequent	Critical	Serious	Use operators trained and certified in emergency vehicle operations. Brief cooperating EVOs on Forest Service Policies concerning safe and conservative EVO operations. Use cooperating department for initial and refresher EVO training when possible and promote open discussions and feedback.	Improbable	Critical	Medium
	Sense of urgency, heightened by social or cultural pressure to accept unreasonable risks particularly with respect to vehicle speed, operations in dense smoke and urban interface operations.	Occasional	Critical	Serious	Use operators trained and certified in emergency vehicle operations. Supervisors, Fire Management Officers and Line Officers monitor and supervise operator performance. Use AARs after every RLS mission creating a culture of peer pressure to reject risky behaviors. Discuss Crew Resource Management techniques and encourage employees to speak up and challenge risky behaviors. Line Officers and FMOs follow-up on reports and stories of unreasonable risk taking.	Improbable	Critical	Medium
	Fatigue, Exhaustion, Stress burn out	Occasional	Critical	High	Supervisors monitor employees and manage fatigue. Emphasize CRM, Respectful Interaction, proper hydration and nutrition.	Remote	Critical	Medium

APPENDIX B – NFPA 1002 & 1451 SIMPLIFIED FOR USFS APPLICATIONS

According to National (5109.16) and Regional Forest Service policy, Emergency Vehicle Operators (EVOs) that utilize red lights and sirens (RLS) are required to comply with NFPA standards 1002 and 1451. Many portions of these standards are not applicable to Wildland Emergency Vehicle Response. This is a guide for EVOs and EVO trainers to follow when accomplishing EVO training and which portions of the NFPA standards to follow. If any questions arise, refer to the appropriate NFPA standard.

NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications

Only Chapters 4 and 8 apply to wildland operations.

Chapter 4

4.2--Perform preventative maintenance checks and document.

4.3 – Driving and Operating

4.3.1 Given a vehicle and a predetermined route, operate the vehicle in accordance to state and local laws while conducting:

1. Four left and four right turns.
2. A straight section of urban street or two lane road 1 mile in length.
3. One through intersection and two intersections where a stop must be made.
4. Railroad crossing.
5. One curve left or right.
6. Highway that includes a conventional entrance and exit ramp long enough to accomplish two lane changes.
7. Downgrade requiring downshifting and brake use.
8. Upgrade requiring downshifting.
9. Underpass or low clearance bridges.

During operations of all previously mentioned maneuvers, consider vehicle control, liquid surge, brake reaction time, load factors, effect of high center of gravity to rollover, steering reactions, speed, centrifugal force, principles of skid avoidance, night driving, shifting and gear patterns, negotiating intersections, railroad crossing, bridge limitations (height and weight).

4.3.2. Backing vehicle from roadway into restricted (12ft) space (both left and right) requiring a 90 degree turn so that vehicle is parked within the space and without having to stop and pull forward and without striking obstructions. A spotter can be used.

4.3.3. Maneuver slalom course both forward and backward with cones placed between 30-38 feet apart depending on vehicle wheel base. Spotters can be used for backing.

4.3.4. Confined space turnaround Y turn in a 50ft x 100ft box.

4.3.5. Maneuver vehicle in area restricted both vertically and horizontally. Straight course should diminish in width from 9'6" to 8'2" as vehicle proceeds. If possible suspend a bar at varying vertical heights to judge vertical clearances.

4.3.6 Operate vehicle utilizing defensive driving techniques under emergency simulations.

4.3.7. Operate all fixed vehicle equipment.

Chapter 8

8.1.2. Operate wildland apparatus on predetermined route in the following conditions:

1. Loose or wet soil.
2. Steep grades (30 percent fore and aft)
3. Limited sight distance.
4. Blind curve
5. Vehicle clearance obstacles (height, width, undercarriage, angle of approach and departure)
6. Limited space for turnaround.
7. Side slopes (20 percent side to side)

Consider all vehicle responses spelled out in 4.3.1

NFPA 1451: Standard for a Fire Service Vehicle Operations Training Program

These excerpts from Chapter 4-6 are the most pertinent with Wildland Fire Operations.

Chapter 4: General Rules and Considerations

4.2.1 Department will adopt an official written risk management plan dealing with fire service vehicles.

4.2.3 The fire department shall evaluate the effectiveness of its training program every 3 years.

4.3.3 The fire department shall establish written standard operating procedures for safely driving, riding within, and operating fire department vehicles during emergency response.

4.3.4 Provide employees with JHA

4.3.5 Develop, implement, and enforce PPE requirements.

4.3.10 Members shall be trained to operate specific vehicles before being authorized to operated given vehicle.

Chapter 5: Training and Education

5.3.1 Be trained in and shall exercise the applicable principles of defensive driving techniques under both emergency and nonemergency conditions.

5.3.5 Receive training to perform preventative maintenance checks, inspections, and servicing.

5.3.6 Receive training that states department's procedures, limits, and applicable local, state, and federal regulations regarding non-emergency response to incidents.

5.3.7 Provide JHA

5.3.8 Training program shall include information on the potential hazard of driving unconventional or specialized units.

5.3.9 Train operators in inclement driving procedures

5.3.10 Provide training on potential hazards of retarders (engine, transmission, or driveline) and antilocking braking systems (ABS).

5.**3.13** Training shall include review of vehicle crash scenarios.

5.4 Instructor Qualifications

5.4.2 Meet qualifications for Instructor 1 as outlined in NFPA 1041

**Instructors having completed M410 meet these qualifications.

5.5 Training Program Safety

This section states that the department safety officers shall ensure that all training is conducted in a safe manner and has the appropriate level of safety oversight.

5.6 Training Records.

Driver records shall state which vehicle a given driver is qualified to drive.

Chapter 6: Laws and Liabilities

This section states that drivers shall have knowledge of applicable federal, state, and local laws governing fire service vehicles. Familiarity with DOT regulations.

Chapter 7: Emergency Response

7.1.1 Have written policy governing speed and limitations to be observed during inclement weather and under various road and traffic conditions.

7.1.2 Rules cannot be less restrictive than state laws.

7.1.3 Drivers encountering the following situations shall come to a complete stop and not proceed until it is confirmed safe to do so:

1. Any stop sign (sign or light)
2. Blind intersection.
3. Intersection where the operator cannot see all lanes of traffic.
4. Stopped school bus with flashing warning lights.

7.1.4 Stop at all unguarded railroad crossing and do not drive around in place railroad crossing gates.

7.1.5 Maintain safe following distances.

Chapter 8: Crash and Injury Protection

8.1.2 Avoid operating in reverse when possible

8.1.5 No member shall be allowed to stand on tail step, side step, running board or any other location on the apparatus while in motion.

8.2.1 Vehicles should be operated only by members who have completed approved training or under the direct supervision of a qualified driver.

8.2.2 The driver/operator shall be directly responsible for the safe and prudent operation of the vehicle under all conditions.

8.2.4 During non-emergency travel, drivers/operators shall obey all traffic control signals and signs and all the laws and rules of the road in the jurisdiction for the operation of motor vehicles.

8.2.5 During non-emergency travel, emergency warning lights shall not be used.

APPENDIX C – SAMPLE FORMS FOR CERTIFCATION

4.3 Driving Operating
4.3.1 Standard Area: Driving / Operating

JPR #DO2
Revised 12-3-2009

Candidate: _____ Date: _____

ID#: _____

STANDARD: 4.3.1 NFPA 1002, 2009 Edition	TASK: Operate a fire department vehicle, given a vehicle and a predetermined route on a public way that incorporates the maneuvers and features specified in the following list that the driver/operator is expected to encounter during normal operations, so that the vehicle is safely operated in compliance with all applicable state and local laws, department rules and regulations, and the requirements of NFPA 1500, Standard on Fire Department Occupational Safety and Health Program, Section 4.2.

PERFORMANCE OUTCOME: The candidate will safely complete the task operating the department vehicle on a predetermined route provided by the Authority Having Jurisdiction.

The Authority Having Jurisdiction will administer this JPR prior to the candidate participating in the Driver/Operator Practical.

CONDITIONS: The candidate will complete all elements of the assigned task.

EQUIPMENT REQUIRED: A fire department vehicle, the appropriate equipment to complete the assigned tasks and access to department policies, procedures and related forms.

NO.	TASK STEPS	FIRST TEST		RETEST	
		Pass	Fail	Pass	Fail
1.	Four left turns				
2.	Four right turns				
3.	A straight section of urban business street or a two-lane rural road at least 1 mile in length				
4.	One through-intersection and two intersections where a stop has to be made				
5.	One Railroad crossing				
6.	One curve, either left or right				
7.	A section of limited-access highway that includes a conventional ramp entrance and exit and a section of road long enough to allow two lane changes				
8.	A downgrade steep enough and long enough to require downshifting and braking				
9.	An upgrade steep enough and long enough to require gear changing to maintain speed				
10.	One underpass or a low clearance or bridge				

Proctor/Evaluator Comments: _____

_____

_____

Proctor/Evaluator (Print & Sign)	**Date**	**Candidate**	**Date**
Re-Test Proctor/Evaluator (Print & Sign)	**Date**	**Re-Test Candidate**	**Date**

4.1 Driving / Operating
4.3.3 Driving / Operating
Standard Area: Driving / Operating

JPR #DO6
Revised 12-3-2009

Candidate: _____ Date: _____

ID#:

STANDARD: 4.3.3 NFPA 1002, 2009 Edition	**TASK:** Perform the practical driving exercises specified 4.3.2 through 4.3.5 given a fire department pumper and a spotter for backing, so that each exercise is performed safely without striking the vehicle or obstructions.
PERFORMANCE OUTCOME: 4.3.3* Maneuver a vehicle around obstructions on a roadway while moving forward and in reverse, given a fire department vehicle, spotter for backing, and a roadway for obstructions, so that the vehicle is maneuvered through the obstacle without stopping and/or changing the direction of travel and without striking the obstructions. **(Serpentine Exercise)**	
CONDITIONS: The candidate will complete all elements of the assigned task.	
EQUIPMENT REQUIRED: A fire department vehicle, the appropriate equipment to complete the assigned tasks and access to department policies, procedures and related forms.	

NO.	TASK STEPS	FIRST TEST		RETEST	
		Pass	Fail	Pass	Fail
1.	Maneuver the pumper forward around obstructions without stopping and/or changing direction of travel and without striking obstructions.				
2.	Maneuver the pumper in reverse around obstructions without stopping and/or changing direction of travel and without striking obstructions.				
3.	Do not allow the pumper to leave course boundaries.				

Proctor/Evaluator Comments: _____

Proctor/Evaluator (Print & Sign)	**Date**	**Candidate**	**Date**
Re-Test Proctor/Evaluator (Print & Sign)	**Date**	**Re-Test Candidate**	**Date**

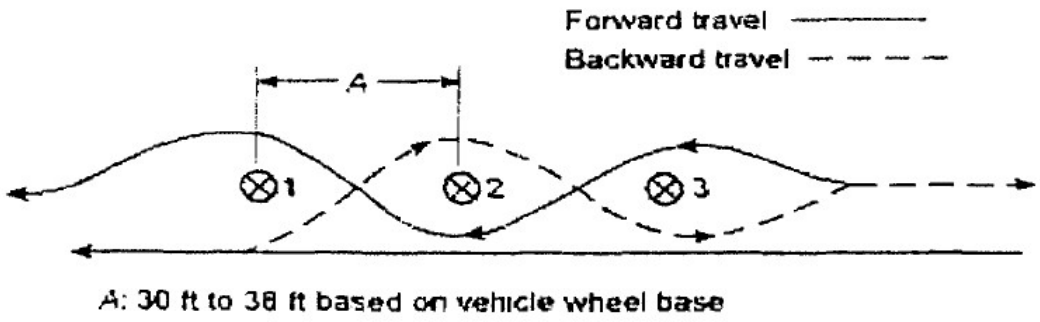
See attached NFPA Appendix & Figure A-4.3.3 for instructions and dimensions.

Note: Course boundaries are 20 feet from center of cone on each side. Total width of 40 feet.

A-4.3.3 Serpentine Exercise

The serpentine exercise can be used as practice for or in the evaluation of this requirement. This exercise measures a driver's ability to steer the apparatus in close limits without stopping. The exercise should be conducted with the apparatus moving first backward, then forward. The course or path of travel for this exercise can be established by placing a minimum of three markers, each spaced between 30 ft (9 m) to 38 ft (12 m) apart, in a line. The spacing of the markers should be based on the wheel base of the vehicle used. Adequate space must be provided on each side of the markers for the apparatus to move freely. The driver should drive the apparatus along the left side of the markers in a straight line and stop just beyond the last marker. The driver then should back the 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 driver 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. *(See Figure A-4.3.3.)*

NOTE: For large vehicles, such as ARFF apparatus, this course might need to be modified.



A: 30 ft to 38 ft based on vehicle wheel base

NOTE: Use 36 feet for Driver Operator Pumper (based on a standard wheel base of 16 feet overall length of 32 feet. If pumper is longer adjust length as referenced above.)

Figure A-4.3.3 Serpentine Exercise.

Copyright NFPA

(9 Traffic Cones)

Wheel Base	Cone Spacing
15'	30'
16'	32'
17'	34'
18'	36'
19'	38'

4.1 Driving / Operating
4.3.5 Driving / Operating
Standard Area: Driving / Operating

JPR #DO8
Revised 12-3-2009

Candidate: _____ Date: _____

ID#:

STANDARD: 4.3.5 NFPA 1002, 2009 Edition	TASK: Perform the practical driving exercises specified 4.3.2 through 4.3.5 given a fire department pumper and a spotter for backing, so that each exercise is performed safely without striking the vehicle or obstructions.

PERFORMANCE OUTCOME: 4.3.5* Maneuver a fire department vehicle in areas with restricted horizontal and vertical clearances, given a fire department vehicle and a course that requires the operator to move forward 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.
(Diminishing Clearance Exercise)

CONDITIONS: The candidate will complete all elements of the assigned task.

EQUIPMENT REQUIRED: A fire department vehicle, the appropriate equipment to complete the assigned tasks and access to department policies, procedures and related forms.

NO.	TASK STEPS	FIRST TEST		RETEST	
		Pass	Fail	Pass	Fail
1.	Maneuver the pumper forward through the diminishing clearance exercise without striking obstructions.				
2.	Do not allow the pumper to cross over the finish line.				

Proctor/Evaluator Comments: _____

Proctor/Evaluator (Print & Sign)	**Date**	**Candidate**	**Date**
Re-Test Proctor/Evaluator (Print & Sign)	**Date**	**Re-Test Candidate**	**Date**

See attached Appendix and Figure A-4.3.5 for instructions and dimensions.

NOTE: Not all apparatus will fit in dimensions given below. Proctor should measure wheel width of apparatus to be used in the course to include tire bulge, add 2" to the total width of the course (1" on each side)

A-4.3.5

The diminishing clearance exercise can be used as practice for or in the evaluation of this requirement. This exercise measures a driver's ability to steer the apparatus in a straight line, to judge distances from wheel to object, and to stop at a finish line. The speed at which a driver should operate the apparatus is optional, but it should be great enough to necessitate quick judgment. The course for this exercise is created by arranging two rows of markers to form a lane 75 ft *(22.9 m)* long. The lane varies in width from 9 ft 6 in. *(2.9 m)* to a diminishing clearance of 8 ft 2 in. *(2.5 m)*. The driver should maneuver the apparatus forward through this lane without touching the markers. The vehicle should be stopped at a finish line 50 ft *(15.25 m)* beyond the last marker. No portion of the vehicle should protrude beyond this line. *(See Figure A-4.3.5.)*

NOTE: For large vehicles, such as ARFF apparatus, this course might need to be modified.

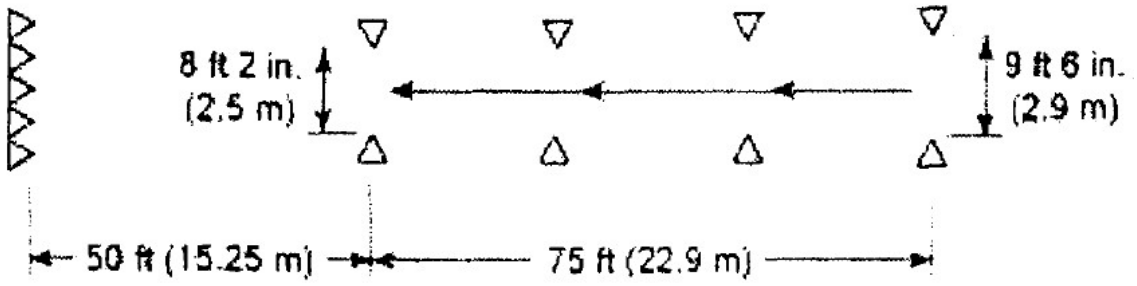


Figure A-4.3.5 Diminishing clearance exercise.

(10 Traffic cones)

4.1 Driving / Operating
4.3.2 Driving / Operating
Standard Area: Driving / Operating

JPR #DO5
Revised 12-3-2009

Candidate: _____ Date: _____

ID#:

STANDARD: 4.3.2 NFPA 1002, 2009 Edition	**TASK:** Perform the practical driving exercises specified 4.3.2 through 4.3.5 given a fire department pumper and a spotter for backing, so that each exercise is performed safely without striking the vehicle or obstructions

PERFORMANCE OUTCOME: 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 department vehicle, a spotter, and restricted spaces 12 ft 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/or pull forward and without striking obstructions.
(Alley Dock Exercise)

CONDITIONS: The candidate will complete all elements of the assigned task.

EQUIPMENT REQUIRED: A fire department vehicle, the appropriate equipment to complete the assigned tasks and access to department policies, procedures and related forms.

NO.	TASK STEPS	FIRST TEST		RETEST	
		Pass	Fail	Pass	Fail
1.	Back the pumper into restricted space on the right side without having to stop and/or pull forward and without striking obstructions.				
2.	Back the pumper into restricted space on the left side without having to stop and/or pull forward and without striking obstructions.				
3.	Do not allow the pumper to leave course boundaries.				

Proctor/Evaluator Comments: _____

Proctor/Evaluator (Print & Sign)	**Date**	**Candidate**	**Date**
Re-Test Proctor/Evaluator (Print & Sign)	**Date**	**Re-Test Candidate**	**Date**

See attached NFPA Appendix & Figure A-4.3.2 (a) & (b) for instructions and dimensions.

NOTE: JPR is complete upon backing into the dock exercise; the candidate will not be evaluated while pulling out of the dock area.

A-4.3.2

The alley dock exercise can be used as practice for or in the evaluation of this requirement. This exercise measures a driver's ability to drive past a simulated dock or stall, back the apparatus into the space provided, and stop smoothly. A dock or stall can be simulated by arranging barricade 40 ft (12.2 m) from a boundary line. These barricades should be 12 ft (3.66 m) apart, and the length should be approximately 20 ft (6.1 m). The driver should pass the barricades with the dock on the left and then back the apparatus, using a left turn, into the stall. The exercise should then be repeated with the dock on the right side, using a right turn. [See Figure A-4.3.2(a)].

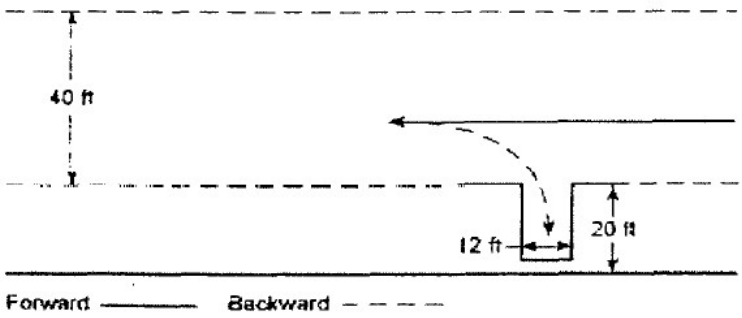


Figure A-2-3.2(a) Alley dock exercise.

(10 Traffic cones)

The apparatus station parking maneuver can also be used as practice for or in the evaluation of this requirement. This exercise measures the driver's ability to back the apparatus into a fire station to park or to back the apparatus down a street to reverse the direction of travel. An engine bay can be simulated by allowing for a 20-ft (6.1 m) minimum setback from a street 30 ft (9 m) wide, with a set of barricades at the end of the setback, spaced 12 ft (3.66 m) apart to simulate the garage door. The setback from the street should be determined by the testing agency to ensure that the distances reflect those encountered by the apparatus driver during the normal course of duties.

A marker placed on the ground should indicate to the operator the proper position of the left front tire of the vehicle once stopped and parked. A straight line can be provided to assist the operator while backing the apparatus, facilitating the use of vehicle mirrors. The minimum depth distance is determined by the total length of the vehicle. *[See Figure A-4.3.2 (b)]*.

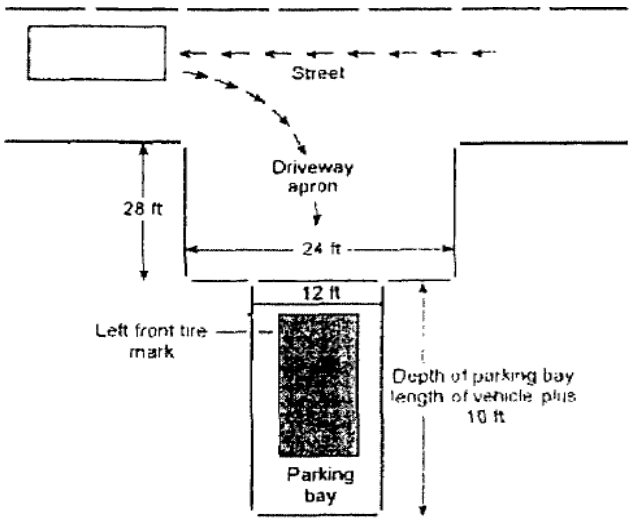


Figure A-2-3.2(b) Station parking procedure drill.

(14 Traffic cones)

4.1 Driving / Operating
4.3.4 Driving / Operating
Standard Area: Driving / Operating

JPR #DO7
Revised 12-3-2009

Candidate: _____ Date: _____

ID#: _____

STANDARD: 4.3.4 NFPA 1002, 2009 Edition	**TASK:** Perform the practical driving exercises specified 4.3.2 through 4.3.5 given a fire department pumper and a spotter for backing, so that each exercise is performed safely without striking the vehicle or obstructions.
PERFORMANCE OUTCOME: 4.3.4* Turn a fire department vehicle 180 degrees within a confined space, given a fire department vehicle, a spotter for backing, 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. **(Turn Around Exercise)**	
CONDITIONS: The candidate will complete all elements of the assigned task.	
EQUIPMENT REQUIRED: A fire department vehicle, the appropriate equipment to complete the assigned tasks and access to department policies, procedures and related forms.	

NO.	TASK STEPS	FIRST TEST		RETEST	
		Pass	Fail	Pass	Fail
1.	Turn the pumper 180 degrees within a confined space, without striking obstructions.				
2.	Do not allow the pumper to leave course boundaries.				

Proctor/Evaluator Comments: _____

Proctor/Evaluator (Print & Sign)	**Date**	**Candidate**	**Date**
Re-Test Proctor/Evaluator (Print & Sign)	**Date**	**Re-Test Candidate**	**Date**

The confined space turnaround can be used as practice for or in the evaluation of this requirement. This exercise measures the driver's ability to turn the vehicle around in a confined space without striking obstacles. The turn is accomplished within an area 50 ft x 100 ft *(15.25* m x *30.5* m). The driver moves into the area from a 12 ft *(3.66-m)* opening in the center of one of the 50 ft *(15.25-m)* legs, turns the vehicle 180 degrees, and returns through the opening. There is no limitation on the number of times the driver has to maneuver the vehicle to accomplish this exercise, but no portion of the vehicle should extend over the boundary lines of the space. *(See Figure A-4.3. 4.)*

NOTE: For large vehicles, such as ARFF apparatus, this course might need to be modified.

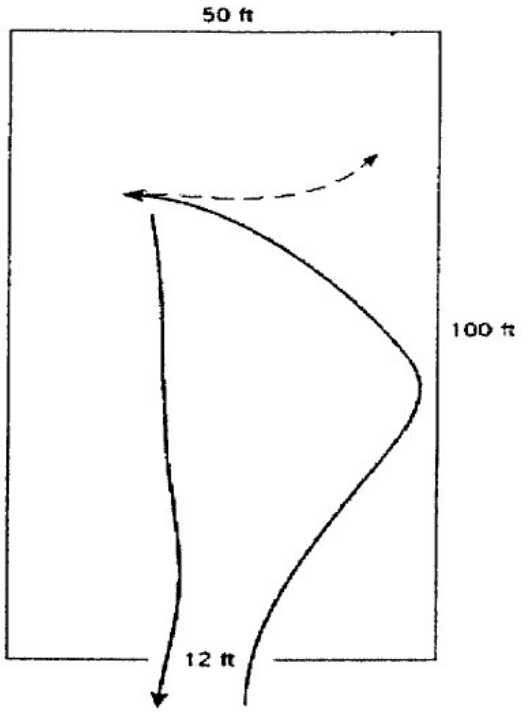


Figure A-4.3.4 Confined space turnaround.

(12 Traffic cones)

APPENDIX D – EMERGENCY VEHICLE OPERATOR DELEGATION TEMPLATE

File code: 5100

Subject: Delegation of Authority, (Forest) National Forest Emergency Vehicle Operators (EVO)

To: (Forest)

Emergency vehicle operators are required to operate at all times with the safety of pedestrians, other vehicles and themselves as the primary objective. Consistent safe driving is a condition of Emergency Vehicle Operator's certification. This letter is to inform all emergency vehicle operators in writing of their personal and legal responsibilities to operate in accordance with their training, Forest Service policies and due caution for life and property (FSH 6709.11, sec. 12.12).

As a certified Emergency Vehicle Operator you are hereby delegated the authority to use red lights and sirens while responding to an incident as necessary. Your use must be consistent with your training, policy, and the requirements provided in this letter. In all situations, use red lights and sirens on public roads only when the risks associated with the use of emergency lights and sirens are off-set by the benefits to public or firefighter safety.

Use of red lights and sirens are only authorized for Forest Service emergency vehicles in compliance with applicable State statutes for emergency vehicle operations as follows:

A. Initial attack resources responding to an incident where public or firefighter safety is threatened, or major property or resource damage is occurring on National Forest System lands or under immediate threat from adjacent lands; and circumstances exist where traffic congestion has resulted in either a complete stoppage of traffic, or has slowed to the extent it impedes normal and safe progress of the vehicle.

B. Parked or traveling on or alongside Forest Service, local, County, State, or Federal roads and highways during wildfires, prescribed fires, and other emergency responses where identification of parked or moving vehicles is needed to prevent collision impacts from other vehicles, and for safety purposes due to smoke conditions, adverse weather, and other conditions that result in poor or impaired visibility.

In addition to operation consistent and compliant with the training operators receive, operators are also required to:

1. Come to a complete stop at all stop signs and red traffic control lights. "Nose-in" technique for increased visibility is appropriate commensurate with training.
2. Come to a complete stop at any intersection where all lanes of traffic cannot be seen by the driver.
3. Stop, turn off lights and sirens, and do not pass any school bus with flashing warning lights.
4. Turn off sirens and lights when approaching and passing through an active school crossing zone.
5. Turn off sirens and lights when approaching a blocked intersection where non-emergency traffic cannot safely clear the travel way.
6. Adhere to posted speed limits.
7. Travel at or below safe speeds based on road conditions, weather conditions, visibility and vehicle configuration.
8. Obey all railroad crossing signals.

9. Understand local and state laws and regulations associated with emergency vehicle operation on the home unit. When operating in areas outside their normal jurisdiction, it is incumbent upon vehicle operators to become familiar with local policies and procedures for the use of red lights and sirens prior to using that equipment.
10. Report close calls, near-misses, failure of risk control measures and program effectiveness to the Forest EVO Certifying Official.
11. Notify dispatch when operating emergency red lights and sirens during emergency response for clearing right of way, blocking or diverting traffic, or bypassing congestion and traffic flow restrictions.
12. Maintain vehicle unit logs and document red lights and siren use
    a. During emergency response for clearing right of way, blocking or diverting traffic, or bypassing congestion and traffic flow restrictions with information on situation and rational for use (Code 3).
    b. While on an incident for enhanced visibility or awareness of responders (Code 2).
13. Conduct After Action Reviews after each operational use of red lights and sirens for clearing right of way, blocking or diverting traffic, or bypassing congestion and traffic flow restrictions.
14. Provide information on situation and rational for use along with AAR summary to Duty Officer and/or District Ranger in a timely manner after each operational use as described above.

Post-Accident Drug and Alcohol Testing Requirement. Drug and Alcohol testing guidance for the Forest Service is contained in Executive Order 12564, the USDA's Plan for a Drug Free Workplace and the NFFE/FS Master Agreement and the negotiated Memorandum's of Understanding relating to Commercial Driver License/Driving. Employees holding a CDL must comply with controlled substance testing requirements in Title 49, Code of Federal Regulations, Section 391.81 (49 CFR 391.81). Operators found to be illegally under the influence of alcohol or drugs must have their Emergency Vehicle Operator's certification revoked.

Forest Supervisor

Date

APPENDIX E – EVO CERTIFYING OFFICIAL DELEGATION TEMPLATE

File code: 5100

Subject: Delegation of Authority, __-National Forest for Emergency Vehicle Operator (EVO) Certifying Official

To: District Rangers, District Fire Management Officers, Forest Health and Safety Manager, Forest Fire Staff.

As the Emergency Vehicle Operator Certifying Official, you are hereby delegated authority to manage the Forest Emergency Vehicle Operator program.

Our considerations for management of the Emergency Vehicle Operator Program are:

1. Assure drivers meet training and pre-requisite requirements as defined in FSH 5109.16 prior to initial certification and Emergency Vehicle Operator endorsement on OF-346.
2. Annually review driver history to assure eligibility for initial or continued EVO certification.
3. Maintain confidential driver history records for Forest employees to be used for emergency vehicle operation certification.
4. Ensure all fire resources are briefed on local emergency vehicle operation policies.
5. Conduct After Action Reviews as appropriate to monitor compliance with policy.
6. Annually review forest level Risk Assessment for Emergency Vehicle Operators to insure continued validity.
7. Report close calls, near-misses, failure of risk control measures and program effectiveness to the Regional Risk Management Officer

Forest Supervisor

Date