DEPARTMENT OF THE AIR FORCE
Headquarters US Air Force
Washington, D.C. 20330-1030

QTP24-3-GENERAL VEHICLE SAFETY
23 January 2026

General Vehicle Safety

Qualification Training Package (QTP)

TABLE OF CONTENTS

LIST OF FIGURES

Chapter 1

BASIC OPERATING PROCEDURES AND MANEUVERS

Section 1A—General Information

1.1. **Objective.** The objective of training an operator of an Air Force Government Motor Vehicle (GMV) is to teach him/her how to perform the job efficiently with maximum safety, comfort, and economy. Good driving habits are attained through constant practice. During daily driving, review the techniques discussed below.

1.2. **Purpose:** To provide a general-purpose vehicle training plan that details operating procedures for transporting cargo and personnel, maintaining safe vehicle operation, and fall safety.

1.3. **Tactical Vehicle Driver Training**. Will be conducted in accordance with (IAW) training plans prepared by DoW Components and use curriculum that reinforces a positive attitude, individual responsibility, correct response to routine and emergency driving situations, and sharing the road safely with other road users. **(T-0)**.

1.4. **Basic Responsibilities.** Operators of Air Force GMVs are responsible for the following:

1.4.1. Safely operating the vehicle and complying with applicable federal, state, local, and host nation laws and regulations.

1.4.2. While operating a military vehicle, use of personal or government-issued hand-held wireless phones or text messaging equipment or any other type of electronic devices will not be used. **(T-0).** Vehicle operators on a DoW installation and operators of Government Motor Vehicles (GMVs) will not use cell phones unless the vehicle is safely parked or unless they are using a hands–free device if allowed by state and local law. However, in general using hands-free devices is discouraged and should only be done as a last resort. The wearing of any other portable headphones, earphones, or other listening devices (except for hands–free cellular phones) while operating a GMV is prohibited.

1.4.3. Following all operator maintenance outlined in the appropriate technical order, Qualification Training Package, and policy.

1.4.4. Carefully operate the vehicle and clean the vehicle and equipment after operations.

1.4.5. Ensure the safety and comfort of passengers (includes ensuring that seat and shoulder belts are safely fastened). The GMV operator will ensure that passengers comply before operating the vehicle. **(T-0).**

1.4.6. Ensure the security of the vehicle and cargo.

1.4.7. Notify supervision of any change in status that may affect the operator's ability to operate a vehicle (for example, inability to drive due to physical condition or withdrawal of your state Driver’s license).

1.4.8. Operators of GMVs are subject to corrective action by commanders for incidents of abuse, misuse, and damage to unit-assigned vehicles.

1.4.9. Operators of GMVs may be required to operate two-way radio equipment. Do not attempt to operate the two-way radio equipment in the vehicle unless instructions have

been given. Supervisors should determine who is qualified to efficiently operate equipment and furnish local standard procedures, codes, etc.

Section 1B—Basic Unit/VCO Responsibilities

1.5. **Unit/VCO Responsibilities.** The unit will provide the operator with required items for off- base travel. **(T-1).** All necessary vehicle forms will be included with the vehicle, to include the SF 91, *Motor Vehicle Accident Report,* DAF Form 1800, *Operator's Inspection Guide and Trouble Report*, DD Form 518, *Accident Identification Card*, and SF 94, *Statement of Witness*. **(T-1).**

1.6. **Toll Tickets/Transponders.** When off-base routes include locations where passage would require a toll, prepaid toll tickets or transponders may be issued (if available) at the time of travel. If not, follow local policy for being reimbursed for tolls and parking fees. Always ask the toll keeper for a receipt. Upon returning, submit any toll receipts and/or unused toll tickets and/or transponder to the dispatcher.

Section 1C—Operator of Air Force GMVs Health and Well-Being

1.7. **Operator Health and Well-Being.** The ability to operate a vehicle is not the only consideration of a safe operator.

1.7.1. No operator will be under the influence of alcohol or narcotics while operating a vehicle. **(T-0).**

1.7.2. Operators are ultimately responsible for exercising good judgment by imposing additional time constraints as needed.

1.7.3. Adequate Rest. Operators work/rest cycle will be monitored and must be in compliance with DoDI 6055.04, *DoD Motor Vehicle and Traffic Safety*. **(T-0).** The operator is responsible for informing their supervisor if they have not slept adequately and feel their driving will be unsafe. **(T-1)**.

Section 1D—Manual and Automatic Transmissions Operation

1.8. **Starting.** Instructions on starting manual and automatic shift vehicles are found in this chapter. However, the following points are given on specific starting conditions:

1.8.1. **On Hills.** When starting a vehicle on an upgrade, engage the parking brake to keep the vehicle from rolling backward. Keep the parking brake on while shifting into low gear and begin to release the clutch pedal slowly. When the vehicle begins to pull against the brake, release the brake slowly. This allows the operator to start the vehicle without the danger of rolling back and losing control. Although it may not be necessary to use the parking brake in vehicles equipped with automatic transmission or special devices that prevent rolling back on hills, it is a safety precaution that an operator should take.

1.8.2. **Slippery Surfaces.** When starting a vehicle on a slippery surface (such as ice, sand, loose dirt, or so forth) use second or a higher gear instead of low gear. Feed the gas and release the clutch pedal very slowly to avoid spinning the rear wheels (manual transmission only).

1.9. **General Information.** An operator of GMVs should be prepared to drive vehicles with either manual, semiautomatic, or automatic transmissions. Each transmission type requires

specific methods to ensure smooth operation.

1.9.1. **Clutch Operation.** A clutch provides the means to apply engine power to the wheels smoothly and gradually. The operator must learn the following: Where the clutch starts to engage, how far the pedal moves to become fully engaged, how much free play the pedal has, and how fast they should engage the clutch.

1.9.2. The GMV operator's foot should not be on the clutch pedal except when actually starting, stopping, or shifting gears. Even a slight constant pressure on the clutch pedal causes excessive wear. For this reason, when stopped on a hill, never slip the clutch to keep from rolling backward; instead use the brakes. While waiting in a long line at traffic lights or when halted for other reasons, press the clutch pedal and move the transmission shift lever into neutral. Release the clutch after shifting into neutral.

1.9.3. To safely slow down a vehicle for stopping or turning, downshift to reduce your speed to 15 mph or less before pressing the clutch pedal. Coasting at high speeds with the clutch pedal depressed is dangerous, as it can make the vehicle difficult to control and may cause damage to the clutch. Any damage resulting from this practice is considered vehicle abuse.

1.10. **Manual Shifting Purpose**

1.10.1. Skill in manual shifting is a requirement of good driving. Poor manual shifting results in poor vehicle performance and can damage the vehicle. The operator of the GMV should be so familiar with the gearshift lever positions that they can shift to any gear without looking at the shift lever.

1.10.2. The gearshift pattern is usually diagramed on the vehicle caution plate. Never move the gearshift lever from one position to another while the engine is running (until the clutch pedal has been fully pressed with the left foot).

1.10.2. To shift gears smoothly and quietly, keep the clutch pedal fully pressed until the shift has been completed.

1.10.3. When shifting gears in a 1 ½-ton or larger truck, the operator may be required to use the double-clutching instructions.

1.10.4. When shifting gears in rough terrain and on hills, always maintain positive momentum to avoid causing the engine to labor or jerk before shifting into a lower gear ratio. Always anticipate the need for extra power and shift gears accordingly.

1.10.5. When descending a hill, with or without a heavy cargo, always drive with the vehicle in gear and the clutch pedal out.

1.11. **Clutch Shifting Procedure.** After becoming acquainted with the vehicle's instruments and controls, the operator is ready to begin driving operations. Start and warm the engine with the transmission in neutral. Perform the following steps to start moving the vehicle in low or first gear:

1.11.1. Press the clutch pedal and shift into low gear.

1.11.2. Check the inside and outside rearview mirrors.

1.11.3. Check blind spots.

1.11.4. Let the clutch pedal up slowly, pausing at friction point or when the clutch feels like it is taking hold. Hesitate; then check mirrors again for traffic.

1.11.5. Release the parking brake.

1.11.6. Slowly release the clutch pedal and at the same time slightly press the accelerator.

1.11.7. When driving operation is underway, the left foot should be completely removed from the clutch pedal.

1.12. **Double-Clutch Shifting Procedure.** Good driving practice in trucks (1 ½-ton or larger) often requires the operator to double-clutch to properly engage the gears and to prevent loss of momentum. Do the following to shift to a lower gear by double-clutching:

1.12.1. Release pressure from the accelerator and begin pressing the clutch pedal.

1.12.2. When the clutch pedal is fully pressed, move the gearshift lever to the neutral position.

1.12.3. Release the clutch pedal and at the same time press the accelerator to speed up the engine.

1.12.4. Let up on the accelerator and press the clutch pedal.

1.12.5. While the clutch pedal is pressed, move the gearshift lever to the next lower gear speed.

1.12.6. Release the clutch pedal and at the same time press the accelerator to maintain engine speed as the load is again connected to the engine.

1.12.7. The procedure is the same for shifting to a higher gear speed, except that the engine is not accelerated while the gear is in neutral.

1.13. **Spark Ignition Engine Braking Operation.** If the hill is steep enough to require using brakes to reduce speed, shift into the next lower gear at the crest of the hill and use the engine compression as a brake.

1.13.1. Take extreme care to prevent excessive engine speed while descending a hill. Judge the necessary gear and shift, if necessary, at the crest of the hill before speed has increased from downhill movement.

1.13.2. Ordinarily, the gear required to ascend a hill is proper to use to descend it. Gearing down after engine speed has increased may extensively damage the engine. Except when used to compensate for brake failure, damage resulting from this practice is considered vehicle abuse. With proper gear selection, intermittent application of brakes can reduce the speed of the vehicle to safe limits.

1.13.3. The operator of a GMV, when preparing to stop the vehicle, should remove their foot from the accelerator and use the engine compression as a brake to help stop the vehicle.

1.13.4. Do not press the clutch pedal until the motor is operating at low speed and is no longer serving as a brake. Then press the clutch pedal before the engine begins to labor from slow speed. Apply the foot brake to help this braking action.

1.13.5. The above rules apply to most vehicles. To meet the military's transportation needs for moving heavy equipment and traveling over rough terrain, new vehicles are

constantly being developed. These vehicles may have more complicated transmissions (such as multi- gear ranges and dual-speed axles or other special features). To understand how a new vehicle may operate, read the Manufacturer's Operator's Manual and the respective QTP written for that vehicle before attempting to operate it. Coordinate with local TVO section for recommendations.

Section 1E—Backing

1.14. **Backing.** Backing is more dangerous than going forward. Visibility is limited and the vehicle is harder to control. When possible, always park vehicle with limited visibility to the rear so pulling out without backing isn't necessary.

1.14.1. Before backing even a short distance, ensure that there are no people or objects behind the vehicle.

1.14.2. Never back long distances, unless absolutely necessary. It is much safer to turn around and cover the distance going forward.

1.14.3. When parking in areas with perpendicular parking, use the following safety tips:

1.14.3.1. Stay alert and scan the area - use mirrors or rear-view cameras.

1.14.3.2. Look for pedestrians.

1.14.3.3. Drive slowly – obey speed limits and signs.

1.14.3.4. When parking, keep distance between your vehicle and others.

1.14.3.5. Reverse Park into the parking space. **NOTE:** Parking in reverse is a simple way to reduce the risk of accidents. By reverse parking, you avoid backing out blindly into oncoming traffic or into the path of pedestrians.

Section 1F—Spotter Safety

1.15. **Spotter Safety.** Spotters will be required when operator visibility is obscured or in question, when backing a vehicle, and prior to beginning aircraft up/downloading (with pre-positioned chock in place). **(T-1).** When using a spotter, the following guidance will be followed: **(T-1).**

1.15.1. The following safety items will be required for spotters during hours of darkness or periods of reduced visibility: Reflective belt and flashlight or luminous wands. **(T-1).**

1.15.2. Spotters must be trained on standard hand and arm signals and flashlight signals before guiding a vehicle. **(T-0).** Hand and arm signals are the basic method used for ground guiding.

1.15.3. Operators and spotters must coordinate signals before vehicle movement. **(T-0).** Voice signals between a spotter and operator can be misunderstood. Therefore, they will not be used except in an emergency. **(T-1).**

1.15.4. The number of spotters used is determined by the availability of personnel and visibility restrictions (cargo, darkness, etc.). In most cases only one spotter is required. The spotter will be positioned in a manner in which they will be seen by the operator at all times. **(T-1).**

1.15.5. Spotters will never spot between the tires of an All-Terrain (AT) Forklift. **(T-1).**

Spotters should maintain a minimum distance of 12 inches out from the front vehicle tire within the area of the forward rim.

1.15.6. In the event more than one spotter is required, only one spotter will be designated as the primary spotter to give signals to the operator. **(T-1).** Everyone involved (the operator and spotters) must understand who will give the signal and who will receive it before any movement is executed. **(T-0).**

1.15.7. Before a vehicle is started for movement, a member of the crew or the operator (if no spotter is available) must walk completely around the vehicle to ensure that no personnel or property are in danger from the vehicle's movement. **(T-0).** The crew member or operator will: **(T-0).**

1.15.7.1. Verify clearance: **(T-1).** Determine visual clear distance with a ground reference point from the cab of the vehicle.

1.15.7.2. Mount the vehicle, sound the horn (if tactical situation allows), and back to the rear of the pre-selected ground reference point. **(T-1).** Stop and repeat the process, as necessary, until the desired vehicle position is obtained.

1.15.8. Spotters should avoid walking backwards while guiding a vehicle. If it is necessary for a spotter to walk backwards, they must first check to ensure there are no potential hazards that may cause the spotter to slip, trip, or fall. **(T-1).**

1.15.9. The GMV operator will not put the vehicle into motion until visual contact is made with the spotter. **(T-1).** To ensure the safety of the GMV operator and the spotter, spotters must always maintain visual contact with the vehicle. **(T-1).**

1.15.10. The spotters keep a reasonable and safe distance between themselves and the vehicle front, rear, and corners. They must never be directly in front of or behind the vehicle during operation. **(T-1).**

1.15.11. Spotters will not position themselves between the vehicle (and trailer, if applicable) being guided and another object, trailer, or fixed/portable loading ramp where an inadvertent engine surge or momentary loss of vehicle control could cause injury or death. **(T-1).**

1.15.12. If visual contact of the spotter is lost or if the GMV operator notices that the guide is dangerously positioned, the operator must immediately stop the vehicle. **(T-1).** The GMV operator will secure their vehicle, dismount, and make an on-spot correction before continuing operations. **(T-1).**

1.15.13. At night, a spotter should use two luminous wands (if not available, flashlights with clear or colored lenses are permitted) to give the proper signal for the vehicle to move.

1.16. **Air Force Standard Spotting Hand and Arm Signals.** Standard hand and arm signals, known by all Airmen, are needed to ensure safe and effective spotting while guiding a vehicle. Described below are the Air Force Standardized Basic Hand and Arm Signals (IAW TO 36M-1- 141, *463L Material Handling Equipment System*), which must be used by all operators of GMVs and spotters. **(T-1).**

1.16.1. **Come towards the spotter.** Bend both elbows, palms or night wands facing up. In unison, move forearms forward. Signal either above your head, or to the sides of your

body to ensure hand movements are clearly seen.

Figure 1.1. Standard Spotting Hand and Arm Signals – Come Towards the Spotter.

1.16.2. **Move away from the spotter.** Extend both arms downward with palms facing away or wands pointing down. In unison, move arms forward and back. At no time should hands be above waist height. Repeat this movement until the operator is required to stop the vehicle. **NOTE:** Picture shows motion only. Proper positions should be facing the GMV operator.

Figure 1.2. Standard Spotting Hand and Arm Signals – Move Away from the Spotter.

1.16.3. **Right Turn/Left Turn.** Depending on the placement of the spotter (forward or rear of the vehicle), the spotter should point in the direction that the vehicle needs to move with one hand, and raise the opposite arm, bent at the elbow. The hand or wand is pointing up. Motion the hand in the direction that the vehicle should move. (**See Figure 1.11 and 1.12**)

Figure 1.3. Standard Spotting Hand and Arm Signals.

Figure 1.4. Standard Spotting Hand and Arm Signals.

1.16.4. **Slow Down.** Raise both arms, bend elbows. Position palms or wands facing down, in front of your body. Move both hands or wands in an up and down motion.

Figure 1.5. Standard Spotting Hand and Arm Signals – Slow Down.

1.16.5. **Stop.** Extend and raise both arms. Cross arms or wands in front of body.

Figure 1.6. Standard Spotting Hand and Arm Signals – Stop.

1.16.6. **Shut Down.** Position palm or wand facing down, horizontally across your neck. Move your hand, or wand in a sweeping motion from left to right.

Figure 1.7. Standard Spotting Hand and Arm Signals – Shut Down.

Section 1G—Parking

1.17. **General.** Except on one-way streets, always park on the right side of the street in jurisdictions where operators are required to operate the GMV on the right side of the road, except when local law states otherwise. In jurisdictions where operators are required to operate the GMV on the left-side of the road, always park on the left side of the street, except when local law states otherwise. Remember to lock the ignition switch on vehicles of commercial design and remove the key. Turn-off the master switch on tactical vehicles. Exceptions may be directed by local commanders.

1.17.1. **Parallel Parking.** Parallel parking to the curb between vehicles is difficult for many, if not most, operators. If followed, this step-by-step method can make parallel parking easier:

1.17.1.1. Select a large enough space.

1.17.1.2. Give the proper hand signal for stopping. Pull up alongside the vehicle parked in the space ahead of the vacant parking space. The vehicle being parked should be one to two feet away from the parked vehicle and the rear bumpers of both vehicles should be even.

1.17.1.3. For jurisdictions where operators are required to operate the GMV on the right- side of the road, except when local law states otherwise:

1.17.1.4. Start backing slowly. Turn the steering wheel as hard as possible to the right as soon as the vehicle starts moving. With the steering wheel all the way over to the right, continue backing until the vehicle is at a 45-degree angle to the curb. At this point the right front door is opposite the rear bumper of the other vehicle.

1.17.1.5. Straighten the front wheels. Go straight back a short distance until the right

end of the front bumper of the vehicle being parked is opposite the left end of the rear bumper of the parked vehicle.

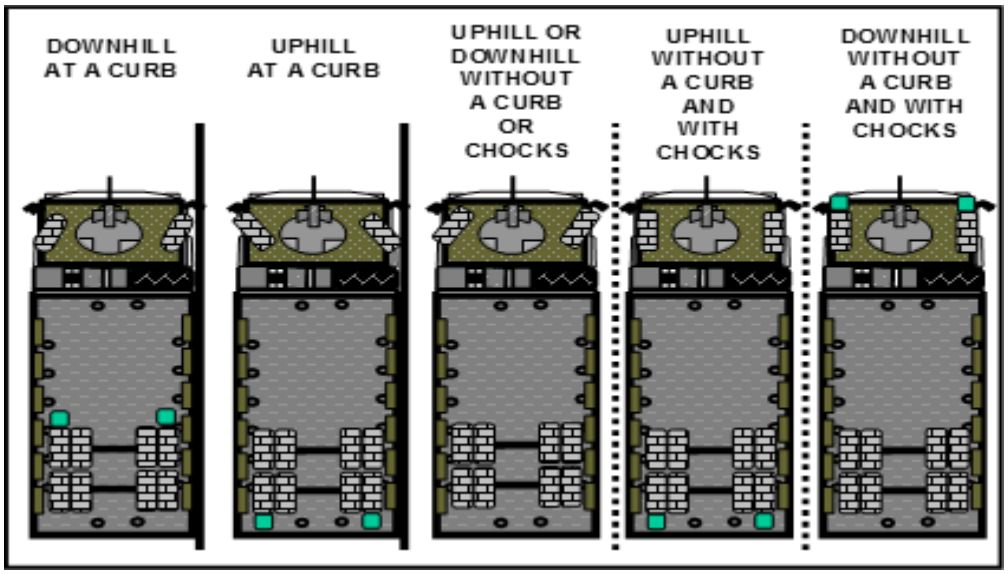
1.17.1.6. Pause a moment. Now turn the steering wheel hard to the left and back slowly into the space, straightening the front wheels just as they approach the curb. If unable to get all the way into the space, usually the best thing to do is to drive all the way out, get the vehicle ahead of the space, and start again.

1.17.1.7. Pull forward. A vehicle being parked should divide the parking space, leaving as much distance between the vehicle and the parked vehicles both ahead and to the rear. The front and rear wheels should be an equal distance from the curb and no more than a foot away.

1.17.1.8. Turn off the engine. Before leaving the vehicle, set the parking brake and put the vehicle in reverse gear. If the vehicle has an automatic transmission, place the lever in the PARK position. When parking on a downgrade, if there is a curb, turn the wheels so that the front right tire is against the curb and chock the front of the rear wheels. When parking on an upgrade, turn the wheels left and away from the curb so that the back of the right front tire locks against the curb and chock the back of the rear wheels. Doing this ensures that the vehicle does not roll. When parking uphill without a curb, the operator will use chocks behind the rear tires. **(T-1).** When parking downhill without a curb, the operator will place chocks in front of the front tires (see **Figure 1.8**). **(T-1).**

1.17.1.9. The parking brake is the primary safety item. Only use chock blocks as a secondary safety item in conjunction with the parking brake. Using chock blocks alone is not enough or effective. The parking brake must be set at all times when the vehicle is parked. **(T-0).**

Figure 1.8. Parking on a Hill.



Chapter 2

PROCEDURES FOR TRANSPORTING PERSONNEL

Section 2A—General Information and Procedures

2.1. Emergency Vehicles. Personnel may be designated as an operator of an ambulance or other emergency vehicle. However, the person designated must still conform to normal traffic regulations unless otherwise directed by their supervisor or as required by an emergency. Emergency runs will be restricted to actual emergencies.

2.1.1. The speed of emergency vehicles should be reasonable and proper with due regard for actual and potential hazards. Ambulances and police vehicles may exceed the posted speed limits only in emergencies and as directed by the provost marshal or security police directives.

2.1.2. Certain emergency vehicles are equipped with warning devices (usually a siren and/or a red or blue flashing light). These warning devices should be used to get other vehicles to yield the right-of-way. Under no circumstances will the operator assume that these signals give full clearance to operate the vehicle without suitable regard for life, property, and traffic laws.

2.1.3. Unless ordered otherwise, by the medical officer in charge, do not use the sirens on ambulances. Except when responding to an emergency call, observe all traffic laws carefully during the transfer of patients.

2.1.4. When responding to an emergency, emergency vehicles may proceed through a stop sign or light (if not in violation of local law), only after slowing down or stopping to ensure safe operation.

2.1.5. Police vehicles responding to emergency calls use sirens and flashing lights according to local directives or as directed by the provost marshal or the Chief of Security Forces.

2.1.6. The foregoing provisions do not relieve emergency vehicle operators from the responsibility to drive with regard for the safety of all persons and property. Nor do any of these provisions protect the operator from the consequence of any reckless disregard for the safety and wellbeing of others.

2.1.7. As an emergency vehicle operator, personnel will receive additional operator training and must be licensed IAW DoDI 6055.04 to operate emergency vehicles. **(T-1)**.

2.2. Passenger Vans. A van is a large-wheeled vehicle, intended to carry numerous people in addition to the vehicle operator. The Air Force uses a variety of different passenger vans. **NOTE:** For training and licensing on vehicles designed to carry 16 or more passengers, refer to DoDM 4500.36, *Appendix 1 to Enclosure 5*, 4(c).

2.2.1. Passenger vans vary in size, shape, and specifications, which are determined by the make and model. It is imperative that you are aware of the specifications of the passenger van prior to operation. Specification information can be found in the appropriate TO, quick reference guide, manufacturers operators manual, and/or the vehicles data plate.

2.2.2. Some passenger vans are equipped with a four-wheel drive (4WD) system.

Passenger vans with a 4WD system have the ability to use all four wheels to power itself, which increases traction for the vehicle to operate over terrain and road conditions that conventional two-wheel drive vehicles cannot.

2.2.3. Passenger vans must never exceed the maximum allowance of passengers, as outlined in the manufacturer operator's manual.

2.2.4. A passenger van can accommodate cargo in the appropriate cargo area, which is the rear of the van. Never place any cargo on the roof.

2.2.5. Rollover Risk: Do not load passengers and cargo on one side of the van only. Evenly distribute passengers and cargo to prevent a higher risk of rollovers. Being that passenger vans have a higher risk of rollovers than traditional sedans or pickup trucks, operators must slow down when traversing on sharp curves and turns. Obey posted speed signs, increase distance between you and drivers in front of you, and avoid sudden lane changes.

2.2.6. Due to rollover risks, operators must always inspect the passenger van before-, during-, and after-operations.

2.2.7. Conditions that affect the braking of all vehicles, to include passenger vans, include: Speed, reaction time, inclement weather, condition of tires and brakes, type and condition of the road surface, and the weight of the van. Know and understand these conditions and always drive safely.

2.2.8. Passenger vans typically sit taller than traditional sedans or pickup trucks. With the usual 7' height for passenger vans, operators must be aware of low hanging objects, such as parking garages, for clearance of the van's roof.

2.2.9. If a tire blow out does occur, remain calm and hold the steering wheel firmly while letting off the accelerator. Try to reduce the vehicle's speed safely. Pull the vehicle to the side of the road onto the shoulder.

2.2.10. If a tire blowout occurs, move the passenger van to a safe location, free from oncoming traffic and any other road hazards. Turn-on the four-way flashers and place warning triangles in the front and rear of the passenger van. Block the wheels; if changing the front wheels, then block the rear wheels and vice versa. Place the vehicle in park, or low gear for a standard shift, and set the parking brake prior to changing the tire. Ensure the jack is rated for the vehicle weight and placement of the jack under the passenger van. Once the passenger vehicle is jacked, never get under the vehicle. Remove the lug nuts, change the old tire, place the new tire on, and tighten the lug nuts. Once complete, place all equipment utilized back into its original location.

2.2.11. Operation of all vehicle types, seatbelts must be worn at all times (one person per seatbelt), and operators must yield to all fire responders and emergency vehicles.

2.2.12. No passengers shall be allowed to ride anywhere, except in the main cab of the passenger van.

2.2.13. Do not leave the passenger van unattended with the engine running. Shut off the engine and set the parking brake when the van is not in use.

2.2.14. Do not allow riders aboard the passenger van while the vehicle is being towed.

2.2.15. Due to the size and length of the passenger van, minimize or eliminate the need

for backing. Utilize a spotter to back the passenger van, if backing is absolutely needed. If no spotters are available, operators must conduct an inspection of the front and rear of the vehicle, and intended path of travel, to identify all potential collision concerns prior to initiating backing procedures.

Chapter 3

MAINTAINING SAFE VEHICLES

Section 3A—General Maintenance Responsibilities

3.1. General Information. This chapter contains the general maintenance responsibilities of an operator of an Air Force GMV to keep the vehicle in a safe operating condition, including preventative maintenance, necessary equipment, pre-operation inspection, and the necessary forms.

3.2. Fuel-Efficient Operations. A qualified operator of a GMV should operate a vehicle in the most fuel-efficient manner. To do so, operators must adopt a fuel-conservation attitude. Apply the following tips to help develop this attitude:

3.2.1. Plan trips to avoid unnecessary "cold starts."

3.2.2. Consolidate short trips whenever possible.

3.2.3. Reduce vehicle's cool-down time and select a route with consideration for terrain, weather, and type of vehicle.

3.2.4. Maintain the vehicle with particular attention to proper tire inflation, brakes grabbing or pulling, oil and lubrication specifications, tune-ups, and required vehicle service schedule.

3.3. DoW Fleet Card Program. Ensure program is IAW DAFI 24-302.

3.4. Use Overview. When required, the following items and services may be procured with the credit card. **NOTE:** Operators of government vehicles will use self-service pumps when available at commercial service stations to purchase the different types of fuel noted below: **(T-1).**

3.4.1. Gasoline (regular unleaded).

3.4.2. Gasoline (unleaded for boats, diesel marine fuel oil, and aviation turbine fuel).

3.4.3. Gasohol.

3.4.4. Diesel fuels.

3.4.5. Diesel Exhaust Fluids.

3.4.6. Lubricating service and lubricants (including differential and transmission lubricants).

3.4.7. Oil filter elements and servicing.

3.4.8. Ethylene Glycol Antifreeze.

3.4.9. Brake fluid.

3.4.10. Air filters (replacement of throwaway type only, cleaning of permanent type).

3.4.11. Battery charging.

3.4.12. Tire and tube repairs.

3.4.13. Mounting and dismounting snow tires or chains.

3.4.14. Emergency replacement of spark plugs, fan and generator belts, windshield wiper arms and blades, lamps, and so forth.

3.4.15. Other emergency repairs, known in the automobile trade as "road repairs."

Section 3B—Armored Vehicle and Preventative Maintenance

3.5. Armored Vehicle Maintenance. Refer to Qualification Training Package 24-3- B212.

Section 3C—Operation Inspections

3.6. Overview Operation Inspections. The operator must perform before-, during-, and after- operation inspections. **(T-1).** The operator must also provide routine service and repairs on their assigned vehicle. **(T-1).** An operator could be held liable for damages to their vehicle if they fail to properly inspect for and annotate discrepancies, refer to Technical Order 36-1-191 for further guidance.

3.6.1. The operator will notify their supervisor as soon as possible of any problem with a vehicle and keep them informed of its status. **(T-1).** Unusual noises, vibrations, and changes in engine performance detected in route, but not identified, should be reported to the supervisor.

Section 3D—Air Force Equipment and Maintenance Forms and Records

3.7. Air Force Equipment and Maintenance Forms and Records. Use the information below to perform required inspections and maintenance. In addition, perform and document inspection and maintenance using DAF Form 1800. Refer to DAFI 24-302 for specific guidance on DAF Form 1800 items to be checked. Ensure that all records created as a result of processes prescribed in this publication are maintained and disposed of IAW the AFRIMS, RDS.

3.8. Defects. If no defects are found during the before-operation checks and all cleaning and servicing requirements have been met, the operator is ready to start operating the vehicle. If vehicle defects are found, enter the details in the appropriate space on the operator's inspection guide and trouble report.

3.8.1. When correction of these defects exceeds the operator's responsibility, take the DAF Form and the vehicle to the Vehicle Management Customer Service Center for corrective action.

3.8.2. In some cases, required maintenance of the vehicle may be delayed by maintenance control due to the type of defect or to maintenance work backlog.

3.8.2.1. When maintenance is deferred, maintenance control personnel will enter the status code and initial the driver's form to show that defects have been reported, and maintenance delayed. **(T-1).** This form must be retained in the vehicle as a record of defects that have been reported to maintenance control. **(T-1).**

3.8.2.2. Any new maintenance defects not previously reported and identified as delayed maintenance must be reported to maintenance control. **(T-1).** Maintenance control will update the inspection guide when delayed maintenance items have been completed. Refer to DAFI 24-302 for reporting vehicles for maintenance information.

Chapter 4

HAZARDS AND SAFETY INFORMATION

Section 4A—General Hazards and Safety Information

4.1. General. This chapter contains general hazards and safety information pertaining to all operators of Air Force GMVs who can face many hazardous driving situations. Hazards may be the result of weather, time of day, or season of the year. They may be caused by conditions of the road, the vehicle being driven, or vehicles driven by others.

Section 4B—Hazards and Safety Measures

4.2. Vehicle Hazards. Pedestrians, bicyclists, motorcyclists, and animals pose special problems for operators. Many times, they are difficult to see, and an operator must remain alert to avoid a collision with them.

4.3. Pedestrians. In the United States, about 40,000 people are killed in traffic accidents each year. When pedestrians are involved in collisions, speeds of no greater than 15 or 20 mph often prove fatal. By being alert and aware of surroundings, an operator can avoid fatal accidents with pedestrians.

4.3.1. An operator should inform pedestrians of their intentions by using the proper signals.

4.3.2. The operator should also anticipate the pedestrian's intentions. A pedestrian's actions are not always predictable, so be prepared at all times.

- If a person is in the street or driving near pedestrians, slow down the vehicle and be ready to stop.
- Never pass a stopped vehicle that is permitting a pedestrian to cross traffic.
- Watch people on the sidewalks and at the side of the road. They may not stay there.
- The operator should allow enough space between their vehicle and the row of parked vehicles in case a pedestrian walks out from between them.
- When approaching a pedestrian from the rear, carefully pass them allowing plenty of room between them and the vehicle.

4.3.3. School Zones.

- In school zones, slow down to the posted speed limit and watch for pedestrians.
- Obey the directions given by members of the school safety patrol or by the school crossing guards.
- When stopped by the stop signal of a school bus, do not move until the bus is placed in motion and the roadway is clear of students.

4.3.4. Intersections. Observe the following rules at intersections:

- Pedestrians have the right-of-way where there are no traffic lights.

- Pedestrians should obey the same traffic light signals, at intersections, as operators. Pedestrians also obey special crossing lights at intersections (instead of traffic lights) where present. However, it will always be the operator's responsibility to yield if they do not. **(T-0).**

- When crossing on a green light, pedestrians will have the right-of-way. **(T-0).** If a light changes to yellow or red while crossing, operators must allow them to complete crossing safely. **(T-0).**

- Pedestrians crossing on a special pedestrian signal have the right-of-way just as they do when crossing on a green light.

- A blind pedestrian is entitled, by law, to special consideration at intersections with no traffic lights. When a blind pedestrian enters an intersection, all approaching vehicles must stop and must remain stopped until the blind pedestrian has completed crossing. **(T-0).**

4.4. Cyclists. Bicyclists are expected to obey the same traffic rules and regulations as GMV operators. However, many individuals may not obey or even know the rules. Another major problem for operators, especially at night, is their inability to see cyclists.

4.4.1. Be cautious because a cyclists could be in the blind spot of the vehicle. Keep on the lookout and slow down when approaching cyclists.

4.4.2. Give cyclists plenty of room when passing and be prepared to stop suddenly.

4.5. Motorcyclists. It is often difficult to see motorcyclists, especially when they are coming up from behind, coming from the side streets, and around curves. Always look out for them when approaching an intersection.

4.5.1. When passing motorcycles, give plenty of room. If they look over their shoulder, it could indicate that they intend to change lanes. Give them time and space to do so.

4.5.2. Motorcyclists may suddenly need to avoid uneven road surfaces and obstacles such as drain covers or oily, wet, or icy patches on the road. Give riders sufficient room to react.

4.6. Animals. An operator should always be alert to the possibility of a collision with an animal. A collision with even a small animal can cause serious vehicle damage and endanger human life. Operators should remain highly observant for local wildlife and domestic animals. Be thoroughly familiar with and obey all local laws. Exercise good judgment and always drive defensively to avoid endangering not only animals, but also human life and property.

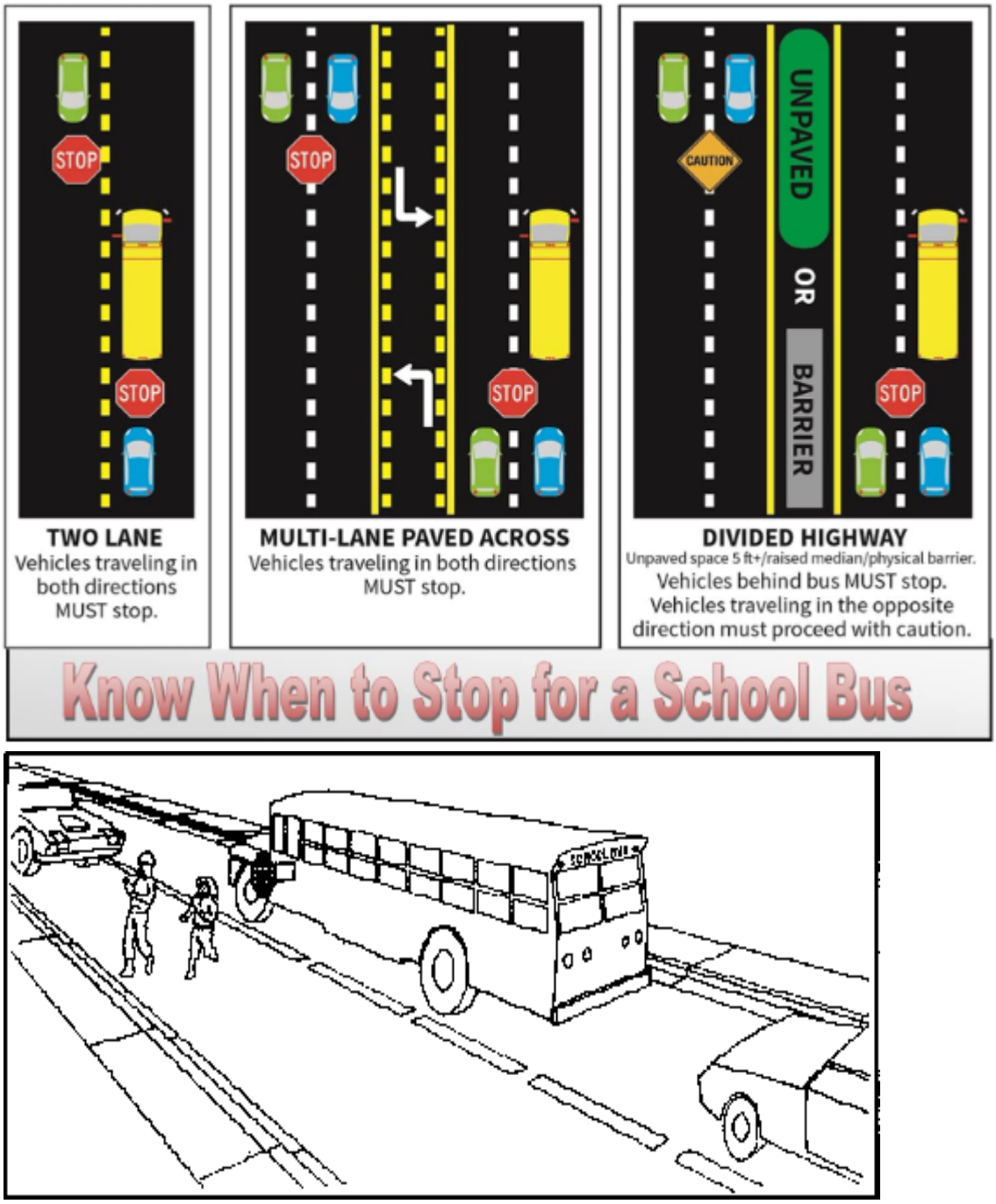
4.7. School Buses

4.7.1. Except on highways with a physical median, all traffic in both directions must come to a complete stop whenever a school bus stops to pick up or discharge passengers (**Figure 4.1**). **(T-0).**

- In some localities, this rule applies to certain other vehicles (such as city or church buses).

4.7.2. Traffic must remain stopped until the bus driver turns off the special "stop lights" on the front and rear and/or withdraws the special stop sign located on the left side of the bus. **(T-0).**

Figure 4.1. Stopping for a School Bus.



4.8. Emergency Vehicles. Emergency vehicles including, but not limited to, police cars, ambulances, and fire trucks will be entitled to the right-of-way whenever they give an audible or visual warning of their approach. **(T-0).**

4.8.1. This warning is usually a siren. Additional warnings may be given by using a bell or flashing red or blue lights.

4.8.2. The law requires that GMV operators must pull to the right-hand curb or edge of the road and come to a complete stop. **(T-0).** They must remain stopped until the emergency vehicle has passed or until they are directed to proceed by a police officer. **(T-0).**

- Though laws and regulations require that an operator pulls to the right side of the road, they do not require them to do it carelessly or without regard to consequences.
- Look before turning the steering wheel. Turning suddenly to the right without looking may cause a collision with the emergency vehicle, another driver, a pedestrian, or a bicyclist.

4.8.3. Never follow within 500 feet of a fire truck or other emergency vehicle.

4.8.4. Never drive into or park in a block where an emergency vehicle has stopped in answer to an alarm. Doing so exposes the operator to unnecessary dangers and may hinder the work of the emergency workers.

4.8.5. Never drive over a fire hose unless directed to do so by a fireman or police officer.

4.9. Weather Hazards. Bad weather means poor driving conditions. Rain, snow and ice, and fog reduce visibility and make driving dangerous. Visibility may be limited to only a few feet ahead of the vehicle. While operating a vehicle in any inclement weather, GMV operators should maintain proper tire inflation, and reduce speed as necessary to avoid accidents and ensure safety on the road.

4.9.1. **Rain.** Most operators slow down or pull off the road in a heavy downpour. However, many do not realize that roads are likely to be especially slick just after rain or drizzle begins. The first few drops of rain should act as danger signals to the safe operator.

- On wet pavements, allow at least two times the normal following distance.
- In wet weather, extra caution is necessary on mountain roads. Rocks, loosened by water seepage, may fall onto the road. Water beneath the pavement may freeze during a cold snap and cause the pavement to buckle.
- Operators may suddenly find broken pavement or rocks in their path as they round a curve. Operators rounding a curve should drive slowly and with caution to avoid broken pavement or possible obstructions.
- Wet roads may also cause hydroplaning, a condition in which directional control is partially or totally lost as the tires on the vehicle lose traction with the road.

4.9.2. **Snow and Ice.** Roads covered in snow and ice reduce traction, require three to eleven times more stopping distance, and may not be easily identifiable by the operator. Fresh snow may conceal an icy road surface, or isolated patches of ice may be on an otherwise clear road, especially in shaded areas. An operator should use extreme caution to maintain traction to avoid skidding when attempting to stop or turn.

4.9.3. **Visibility.** Good visibility is the first requirement for safe driving.

- Keep windshields, windows, mirrors, headlights, spotlights, and body clearance lights clean and free of snow and ice.

- If defrosters are not available, keep windshields clean by using the windshield wiper, wedging the rear of the hood open so motor heat is vented toward the windshield (for rear-opening hoods) or thoroughly ventilating inside the vehicle.

- Cover windshields of vehicles parked in open lots with cardboard or canvas to prevent overnight frosting.

- Use low-beam headlights to warn other vehicles when visibility is low. Stop, park off of the road, and wait for conditions to improve if there is zero visibility.

4.9.4. **Fog.** Fog is dangerous at any time, but particularly at night. It is possible that fog can be so thick that an operator can barely see the front of the vehicle.

- In dense fog, get off the road as quickly as possible.

- Thick fog can collect in small pockets at the bottom of hills on otherwise clear nights. When running into one of these pockets, slow down as quickly as possible and switch to the low-beam headlights.

- Once through the fog, continue to drive slowly. One pocket of fog is usually a warning that there may be more fog at the bottom of the next hill. Continue to drive slowly until completely out of the fog area.

4.9.5**. Operating Procedures.**

- Start driving in second or third gear rather than first or low. Engage the clutch gradually (or in D2, high, with automatic transmission) and accelerate no more than necessary to keep from stalling.

- Descend moderate grades in the gear normally used to climb the same grade. On steep or very slippery grades, use at least one gear lower and go slower.

- If unsure about a difficult stretch of road, bring the vehicle to a stop and inspect the road carefully before going across. Select a gear that can allow the vehicle to pass safely. If following a vehicle, wait until it crosses. This allows the GMV operator to render assistance to the lead vehicle if it gets stuck. It also ensures that the lead vehicle may be able to render assistance to the second vehicle if it gets stuck.

- To drive through heavy slush, downshift before entering and keep moving. If wheels begin to spin, disengage the clutch at once, back-up, and try again. If necessary, try rocking the vehicle by shifting rapidly between forward and reverse gears.

- On roads that slope toward side ditches, straddle the center or crown to avoid sliding to the side. Watch carefully for approaching traffic.

- Avoid vehicle tracks, rocks, and other objects that might throw the vehicle sideways causing a skid. Also avoid sharp turns that may make a vehicle skid.

- Drive at reduced speeds. This allows the GMV operator to bring the vehicle

to a stop more quickly. Avoid quick acceleration on slick roads to avoid skidding.

- Slow down before coming to bridges and shaded places. Be especially careful in the late afternoon and at night. Melting snow running down from the upper side of a banked curve may freeze on the pavement as the sun sets. Since bridges cool much more rapidly than other road surfaces, moisture often condenses on them and freezes quickly into thin sheets of ice when the temperature drops.

- Give turn signals sooner than usual and pump the brakes to give others an early warning of the intention to stop. This gives other operators more time to react. **NOTE:** If the vehicle is equipped with an Anti-lock Brake System, do not pump the brakes. Instead, press down firmly on the brakes and hold them.

- Maintain at least double the normal distance from the vehicle ahead.

- After driving through slush or water, test the brakes while moving at a reduced speed. If the brakes do not operate normally, continue at a slow speed while maintaining moderate pressure on the brake pedal to create a slight drag. The heat generated by friction between the brake shoe and brake drum may dry the brakes.

- Keep the cab door open when crossing frozen streams. This ensures that the GMV operator can exit the vehicle if the ice thins and they are in danger of falling through the ice.

4.9.6. **Parking.**

o Place brush, boards, or other suitable material beneath wheels when parking for an extended period on wet, slushy, or muddy surfaces. This keeps the tires from sinking, freezing to the ground, or being "pocketed" in ice.

o Do not set the parking brake. During cold weather conditions, applying the parking brake may cause the linings to freeze to the brake drums.

o Instead, block the wheels and place the transmission in the appropriate gear for parking as directed by the vehicle Manufacturer's Operator's Manual, TO and/or respective lesson plan.

4.9.7. **Vehicle Care.**

▪ **Carbon Monoxide Poisoning.** This poisoning, from inhaling the exhaust fumes of the vehicle, usually results in death. To avoid the possibility of inhaling these fumes:

o Never sleep in the cab of the vehicle with the engine or heater running.

o Inspect the vehicle exhaust manifold, muffler and tail pipe for serviceability and tightness daily.

o Never leave the engine running while working on the vehicle in a closed building.

▪ Keep all fuel tanks and containers as nearly full as possible to keep moisture from condensing inside the fuel tanks and containers. Moisture not only contaminates gasoline but also may freeze in the fuel lines.

- Drain the air tanks in the vehicle each time it is stopped (long enough for the tanks to become cold). This procedure reduces the chance of moisture collecting in the tanks, entering the brake lines, freezing, and making the brakes inoperative.
- On brief halts during extremely cold weather, let the engine run at a fast idle so that the ammeter shows a charge. Fast idle results in better burning of fuel and a more even engine temperature. On long halts, park the vehicle with the rear end toward the wind to keep snow out of the engine.
- Under normal operating conditions, stop the engine during brief halts. This can prevent plug fouling and overheating.
- When it is very cold, cover the radiator and hood with a tarpaulin or other suitable material.
- In severe cold, start the engine frequently between operating periods to keep it warm.

- Keep valve caps on all tires. **(T-1).**
- Check engine temperature and oil pressure frequently. **(T-1).**
- Check for a loose or broken fan belt if overheating occurs. **(T-1).** Correct as necessary. **(T-1).**
- Clean the oil spout before adding oil. **(T-1).** Remove any accumulation of sand or dirt around the filler hole. **(T-1)**.
- Clean the spouts of gasoline containers before using them for refueling. **(T-1).**

Under extremely dirty conditions, filter gasoline when filling tank.

- Inspect nuts, bolts, springs, mountings, and accessories frequently for evidence of looseness or damage. **(T-1).**
- Park with the rear of the vehicle toward the wind when halted overnight or for any extended period. **(T-1).**
    - If this is not possible, cover the windshield and radiator with a tarpaulin to prevent sand from accumulating in the engine compartment and damage to the windshield.

4.9.8. **Means of Traction Assistance.**

- When driving on snow or ice, make sure the vehicle is equipped with chains, snow tires, or studded tires.
- Vehicles equipped with mud and snow tires can slide more easily on icy road surfaces than those with commercial tread. Mud and snow treads are more effective on roads covered with loosely packed snow.
- All-wheel drive vehicles, without chains, generally perform better than two-wheel drive vehicles with chains on rear wheels.
- Chains give a good bite in snow or mud but tend to slip and slide on ice and packed snow.

- Sand, cinders, or dirt scattered on icy road surfaces gives more traction than chains.
- Better traction is gained when the load is distributed evenly on all wheels.

4.9.9. **Tire Chains and Tire Chain Installation.** Chains are designed to creep or move on the tires. Tighten them by hand, never with tools. Creeping or moving chains reduce the possibility of the links gouging into the tires. When using chains continuously, check their fit and condition at each halt. Install repair links as soon as one of the cross chains is broken. Do the following when installing tire chains under normal conditions:

- Check the condition of the chains. Eliminate twists. On some vehicles, tire chains must be installed on all driving wheels. **(T-0).** Check the manufacturer's operator's manual, Technical Order and/or respective lesson plan.
- Drape chains over tires with open ends of cross chain hooks away from the tire and with fasteners on the trailing ends of the side chains.
- Tuck the first cross chain under the front of the tire. Move the vehicle forward until the fasteners are hub high.
- Straighten and center the chains. Lift the ends of the side chains to determine which links may be hooked into the fasteners.
- If installed on duals, fasten the chains between the wheels, the inner chains, and finally the outer chain. If installed on singles, attach the inner chain before the outer chain.
- Do the following when the vehicle is mired:
  - Determine whether to install the chains with a forward or backward wheel motion.
- Check the condition of the chains. Eliminate twists.
  - Drape chains over tires with open ends of cross chain hooks away from the tire and with fasteners on the trailing ends of the side chains.
  - Locate the first cross chain near mud or snow line. If the chains are dual, fold the inner half of the chain over top of the outer half. This makes a doubled chain on the outer wheel. For this reason, the methods listed below then apply to either dual or single wheels.
  - Secure one end of each side chain to the wheel by a strong wire, cord, or chain passed through the opening in the wheel and fasten to the inner and outer side chains adjacent to the first cross chain.
  - Pull the chain back to take up slack and align with tire. To keep the loose chain from one wheel from being caught up by the other, pile it close behind the wheel to which it is secured.
  - Revolve wheels slowly to draw chains around tires. Stop when fasteners are at the top of the tires. Pull side chains up tight to select links to be hooked into fasteners. Hook the inner side chain first.

- When the vehicle has been moved to solid ground, loosen and remove the temporary wires, cords, or chains. Adjust the chains to their proper position.

4.9.10. **Secondary Roads.** Secondary roads, built for local transportation and not as main highways, may be hazardous. The fact that a secondary road is paved does not necessarily mean that it was designed for heavy traffic or regular highway speeds.

- Secondary roads are recognizable by their rectangular route signs.
  - An operator who is unfamiliar with one of these roads should be on guard for sudden bends and sharp dips.
  - Secondary roads cannot be driven safely at speeds that would be normal on primary highways. Operators should adjust to a safe speed and adjust their driving and awareness.
  - Gravel roads are particularly dangerous because of their loose surface and flat (unbanked) curves. Stopping distances at all speeds are greater and skids and spinouts are more likely to occur. On gravel roads, keep the vehicle under tight control and drive at a much lower speed than would be safer on a paved road.

4.9.11. **Overloading and Overcrowding.** No vehicle is safe when it is overloaded or crowded to the point that the operator's normal vision of the road is obstructed or they have difficulty operating the vehicle.

- **Overloading.** Do not use a car as a truck. A heavy load decreases performance and increases stopping distances. A heavy load may also damage the springs, shock absorbers, tires, and transmission. A heavy load or one that is not evenly distributed may upset the trim and balance of a vehicle, making curves and stops more dangerous.
  - Loads on trucks and trailers should be securely fastened to prevent any part of them from falling off.

4.9.12. **Overcrowding.** As a general rule, an operator cannot safely drive if they allow more than three people, including themselves, in the front seat of a vehicle with the gearshift lever on the steering column, or more than two people with the gearshift on the floor of the vehicle. (In some compact vehicles, the maximum safe limit may be only two, regardless of the position of the gearshift.)

- Overcrowding in the back seat (more than three persons) is dangerous because it is likely to interfere with the line of sight from the rearview mirror.
- When a vehicle is equipped with seat belts, the number of passengers will not exceed the number of seat belts provided. **(T-0).**

Section 4C—Off-Road Driving

4.10. **General Information.** Off-road driving conditions present special challenges for the GMV operator.

4.11. **Off-Road Driving Terrain Types.** The following section discusses different types of terrain a GMV operator may encounter while driving off-road. Follow instructions for

driving under other than normal conditions. Driving techniques are different for rear-wheel drive, front- wheel drive, and all-wheel drive vehicles. Operators of large GMVs should be aware that due to vehicle weight, the shoulder of the road might give way. **NOTE:** The operator should first check the vehicle's manufacturer's operator's manual and the respective lesson plan and/or Technical Order for the equipment being operated.

- **Ditches**.
  - o Crossing shallow ditches requires shifting into low gear or range and proceeding slowly.
  - o Enter the ditch obliquely so that one wheel leaves the ditch as the other wheel on the same side enters.
  - o When crossing deep ditches, use the lowest forward gear and four-wheel drive if the vehicle is so equipped.
  - o When reaching the bottom, accelerate the motor enough to keep rolling as the vehicle goes up the other side.
  - o If the ditch is deep and has very steep sides, it may be necessary to cut away the tops of the banks before trying to cross.
- **Gullies and Ravines.** Gullies and ravines are natural formations caused by running water.
  - o Look over these formations carefully to find a place to cross and to ensure that the vehicle can get across. Examine both banks.
  - o If water is flowing in the ravine, check its depth.
  - o Put the vehicle in low gear and slowly approach the ravine at a right angle to the edge.
  - o Using the service brake, ease the front wheels into the gully; taking care to have them strike the bottom at the same time.
  - o Bring the engine up to normal operating speed as the wheels hit the bottom. Accelerate enough to climb as the front wheels touch the opposite bank.
- **Woods.** Woods help to conceal the GMV operator and their vehicle from air observation. However, woods present certain problems. Wooded areas are likely spots for guerrillas, partisans, or enemy troops. Be alert to the possibility of an ambush.
  - o Fairly open woods with trees at least as far apart as the width of the vehicle may allow passage if the GMV operator can maneuver the vehicle around the trees.
  - o Use an established trail if possible.
  - o Do not plan to return on the same route because these same saplings may stop or damage the vehicle when braced against it.
  - o If the trees are too dense and prevent passage, drive as closely as possible

to the edge of the woods using shadows for concealment.

- **Stumps.** A high tree stump, if straddled by the vehicle, can seriously damage the vehicle axles, tires, and other low parts. Check ground clearances and drive with caution.

- **Low Limbs.** When driving through wooded areas, whether on country roads or cross-country, low hanging limbs may rip the tarp, break the tarp bows or radio antennas.

    - It is usually best to remove the canvas top and the bows for field operation.

    - Survey the route to determine if the vehicle can proceed without damage from low-hanging limbs or if it is practicable to remove obstructing limbs.

- **Timber.** If necessary, driving over fallen trees is possible if angle crossings cannot be achieved. By piling dirt and other materials/debris over the fallen tree, the obstacle can become more level with the path being traveled enabling the GMV operator to pass.

- **Rocky Terrain.**

    - Do not try to straddle large boulders; they may damage axles and other low parts of the vehicle.

    - Move very slowly when driving in rocky terrain.

    - If available, operators of GMVs should carry an extra spare tire because the possibility of getting a flat is greatly increased.

    - Remove stones between dual tires as often as possible to prevent breaking the sidewalls of the tires.

- **Mud and Swamps.** Every military vehicle has enough power in its lowest gear to pull out of mud if it gets traction.

    - Try to pull out slowly in low gear or low range if the vehicle is equipped with an automatic transmission. Placing boards, brush, or similar material under the vehicle's wheels can increase traction. Remember the following:

        - Select the gear that can get the vehicle through. Roll onto the soft area at a medium speed for the selected gear. Carefully maintain a steady throttle until reaching solid ground.

        - If stopped by mud rolling up in front of the wheels, the GMV operator may have to back up and try again, this time with increased momentum.

        - Under most conditions, this technique requires prompt action. Otherwise, the mud may fill the tracks behind the wheels and slow or stop the backing. There needs to be solid footing within reach of the vehicle in order to do this.

        - If a vehicle with an automatic transmission gets stuck, pull out slowly in low gear or low range.

        - If the vehicle cannot get out, and if brush or boards do not provide the

traction needed, have another vehicle pull out the stuck vehicle.

- When other vehicles are not available and the vehicle is equipped with a winch, attach the winch cable to a tree or solid object and pull the vehicle out with winch power. Do not rock the vehicle; it may only dig in.

- **Streams.** The applicable Manufacturer's Operator's Manual and lesson plan written for the specific vehicle contain detailed instructions on fording streams. In addition to those instructions, follow these precautions before fording:

  - Check the stream bottom to determine how firm it is.

    - If some sinking is expected, determine if this sinking added to the water depth may exceed the vehicle's fording limit. If the fording limit may be exceeded, find another crossing point.

  - After reaching dry land, test the brakes while moving at a reduced speed. If the brakes do not operate properly, continue at a slow speed while maintaining a light steady pressure on the brake pedal to cause a slight drag on them. The heat should dry the brakes.

- **Sand.** When driving in sand, never drive while holding the inside of the steering wheel. The sand can grab the tires causing the steering wheel to jerk suddenly and cause injury to the operator.

  - The main objective when driving in sand is to maintain movement with the least amount of strain on the vehicle, its engine, and its power train. The GMV operator's ability to do these things well comes only through experience. To do this:
    - Estimate if a sandy area is drivable.
    - Adjust the tire pressure to meet changing conditions.
    - Use various aids to improve bearing surfaces.
    - Exercise sound driving techniques.

  - **Accessories.** To help overcome the many difficult conditions associated with extended driving in sand, the GMV operator should lubricate and service the vehicle at more frequent intervals as specified by the unit commander. Also, the GMV operator should be provided with the following:

    - A tire gauge.
    - The means to inflate tires if the vehicle is not so equipped.
    - Spare valve cores.
    - Readily available material for use under wheels in extremely soft areas.
    - Shovels and tow chains or cables.

  - Sound Driving Techniques for the Sand.

- Follow normal engine starting procedures.
- Select a gear or range that can start to move the vehicle forward with a minimum of, or no clutch slippage and wheel spinning.
- Accelerate gradually. Maintain a steady and even rate of movement.
- Avoid unnecessary shifting of gears.
- If the vehicle is equipped with an automatic transmission, keep it in low range.

o Anticipate difficult spots and try to bypass them.

- Head for a small stretch of soft sand with increased speed, when necessary, to take advantage of momentum. Stop before entering an extensive stretch of soft sand. Reduce the tire pressure, if necessary.
- As soon as the need for low tire pressure ceases, stop and re-inflate to appropriate pressure.

o Approach a dune (hill of sand piled up by the wind) from the windward (most gradual) slope at a 90-degree angle.

- Select the proper gear or range to avoid shifting while on the slope. Maintain as much momentum as possible while going up the slope.
- Be prepared to change direction upon reaching the crest. Ride the crest if necessary to seek a safe route.
- If the lee (steepest) slope may be used, select a point where the angle of approach may allow the front bumper to clear.
- Follow the tracks of preceding vehicles or break a new path depending on conditions.
- Make wide turns. Sharp turns can stall or even overturn the vehicle.

o Do the following to stop in sand:

- Let the vehicle roll to a halt if practicable. Otherwise, brake gradually. This prevents tires from digging in.
- Try to stop on a downhill slope. This gives a GMV operator an advantage when starting.

o Freeing Vehicle from the Sand. At the first sign the vehicle is bogging down, try shifting to a lower gear. Do the following if it still bogs down:

- Stop power to the driving wheels. If a GMV operator continues to use the motor to force the vehicle out of the sand, it may only sink deeper and become more difficult to get out.
- Check tires for sand operation inflation. High temperatures may have built up the pressure. Lower the tire pressure, if necessary, for emergency movement over a short distance. Check the applicable Manufacturer's

Operator's Manual and respective vehicle lesson plan for the allowable minimum tire pressure.

- As soon as the need for low tire pressure ceases, stop and re-inflate the tires to the appropriate pressure.
- If lowered tire pressure is not enough to free the vehicle, use any or all of the following procedures:
  - Shovel a clear path ahead of the wheels.
  - Lay boards, brush, canvas, wire netting, rope ladders, or some similar material under and in front of the tires for better flotation and traction.
  - Use the winch or a tow if it appears that continued operation of the vehicle under its own power would only cause it to sink deeper into the sand.
  - If a vehicle is stuck in sand and needs pulled out, unload the vehicle to the maximum extent possible.
  - As soon as the need for low pressure ceases, stop and re-inflate tire to appropriate pressure.

Chapter 5

ROADSIDE EMERGENCY AND ACCIDENT RESPONSE

Section 5A—General Information

5.1. General Information. There are some roadside emergencies and accidents that are unavoidable. However, many times the operator is the cause because they are driving carelessly, driving too fast, not obeying traffic signals or signs, or fail to take proper care of the vehicle. The techniques discussed in this chapter can assist the GMV operator in avoiding roadside emergencies and accidents and can aid in the proper response in the event that an emergency or accident were to occur.

Section 5B—Roadside Emergencies

5.2. Tire Blowouts. An operator seldom receives a warning before a tire blowout. There is usually a loud bang, and then a whooshing and flapping sound before the vehicle starts swerving to one side or swaying dangerously.

5.2.1. An operator should use all their strength on the steering wheel to keep the vehicle moving straight ahead. Let off the gas but do not apply the brakes. Let the vehicle slow down gradually and then gently apply the brakes and get the vehicle under control.

5.2.2. If in a passing lane when a blowout occurs, do not attempt to get to the highway shoulder until the lanes on the right are clear. When lanes are clear, move over as far to the right side of the road as safely possible on the shoulder and stop. If in a jurisdiction where the operator primarily drives on the left side of the road, move over as far to the left side of the road as safely possible on the shoulder and stop.

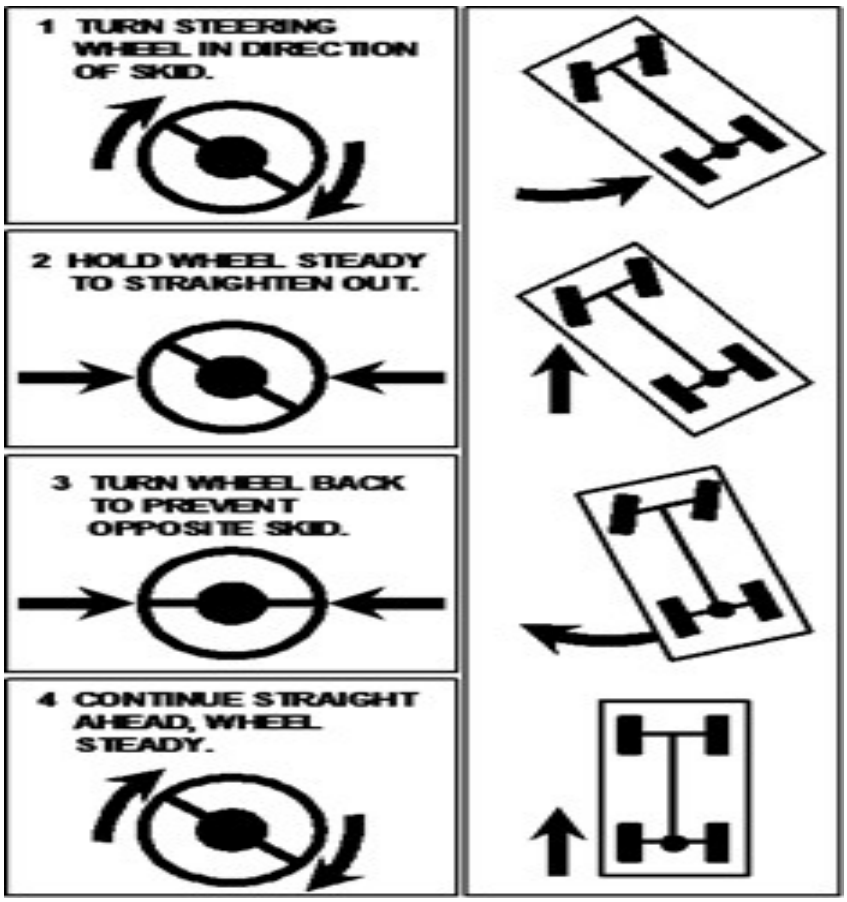
5.3. Skids. Almost all skids can be avoided if driving slowly enough and if the operator stops, starts, and turns slowly enough on slippery surfaces. If the vehicle starts to skid, the operator may be able to regain control if they ease up slowly on the accelerator and do not apply the brakes.

5.3.1. Always make sure the vehicle is kept in gear. If the skid occurs when braking, the operator should remove their foot from the brake. It may be necessary to feed gas carefully to reduce the braking effect of the engine. In either case, the reason for reducing the brake action is to keep the wheels from slowing down too quickly and making the skid worse.

5.3.2. At the same time, turn the steering wheel in the direction of the skid (see **Figure 5.1**). If the rear end of the vehicle is skidding to the right, turn the steering wheel to the right. If it is skidding to the left, turn the steering wheel to the left. Do not turn the steering wheel too sharply or keep it turned too long since this may cause the vehicle to start skidding in the opposite direction.

5.3.3. Ease the steering wheel back to the center position as the vehicle starts to recover from the skid and regain control of the vehicle. Let the engine slow the vehicle down gradually. If the brakes are applied, do not hold the pedal down. Pump the pedal gently until the vehicle comes to a complete stop. **Figure 5.1** shows how to recover from a skid.

Figure 5.1. Recovering from a Skid.



5.4. Running Off the Pavement. At some point, a vehicle may drift off the roadway onto the shoulder or may been steered onto the shoulder to avoid a collision. There may be a drop-off of several inches from the edge of the road to the shoulder. Pulling off onto the shoulder and returning to the roadway can be done safely:

5.4.1. If the two right or left wheels of the vehicle veer off the paved roadway, keep a firm grip on the steering wheel. Keep the vehicle traveling straight ahead. Straddle the edge of the pavement. Fight the tendency of the wheels to pull toward soft shoulders. Resist the urge to immediately whip the vehicle back onto the pavement.

5.4.2. Ease-off the accelerator pedal so the vehicle can slow down. If possible, avoid braking. If braking is necessary, pump the brakes lightly to help control steering.

5.4.3. Before returning to the pavement, visually check ahead, to the sides, and to the rear. Unless some object beside the road poses a serious threat of a collision, avoid trying to return to the roadway immediately. Move the off-road tires out about one and a half to two feet away from the pavement edge. When it is safe and speed is under control, turn the wheel quickly about a quarter turn to the right or left as necessary. This lets the tire climb the pavement edge and get back on the roadway.

5.5. As soon as the front tires are back on the roadway, counter steer quickly to maintain the proper lane. **Brake Failure.** In the event of brake failure, follow these general guidelines:

5.5.1. If the brakes fail and the failure is not related to engine failure, pump the brake pedal rapidly (if vehicle has hydraulic brakes) to restore braking action long enough to get off the highway.

5.5.2. If this does not work, apply steady pressure to the parking brake that controls the rear wheels. Be careful when using the parking brake to stop and be prepared to release the brake if the rear wheels lock. Reapply the parking brake if needed. Downshifting the vehicle also serves as a braking force.

5.5.3. Find an escape ramp or a safe exit from the highway. Communicate the emergency to other drivers by sounding the horn and flashing the lights. In more extreme cases, more severe methods may be required to slow down the vehicle. An operator may have to run along an embankment; scrape against a curve; or drive into bushes, hedges, or other obstructions.

5.6. Breakdowns. In the event of a vehicle breakdown, follow these general guidelines:

5.6.1. Whether day or night, the GMV operator will always turn on the four-way flasher warning lights. **(T-0).**

5.6.2. Place warning devices contained in the highway warning kit as prescribed in the kit instructional manual. If the instructions are not with the kit, follow the procedures in **paragraph 5.10**

5.6.3. Remove the vehicle from the main travel portion of the road, if possible. If it is impossible to get the vehicle off the road and it is obstructed from view by a curve or hill, walk back along the shoulder of the road to a position where it is possible to signal approaching drivers to stop in time.

5.6.4. Do not attempt to make repairs on the vehicle while it is in an exposed position on the road.

5.6.5. For disabled vehicles, GMV operators will notify Vehicle Management and their unit through the chain-of-command. **(T-1).**

5.6.6. Flat tire. If the vehicle has a flat tire, it is possible to damage the tire beyond repair if the operator continues to drive on it. The operator should gradually bring the vehicle to a stop and, if possible, pull over to the side of the road.

Section 5C—Vehicle Fires

5.7. Preventing Vehicle Fires. There are several means to prevent vehicle fires. Below are some, but not all, precautions that should be taken by the GMV operator:

5.7.1. **Refueling.** Turn-off the engine during refueling. Do not allow smoking or open flames within 50 feet of a vehicle during fueling or at an accident scene where there is danger from spilled gasoline or other flammables. If tactical refueling, ensure refueling vehicle and customer vehicle are bonded together prior to refueling. Keep the gasoline nozzle in contact with the gas tank when fueling.

5.7.2. **Flares.** When flares are authorized, issue instructions for their handling and storage on the vehicle. Since flares are a potential fire hazard, it is imperative that operators take the prescribed precautions when handling them. Ignited flares will not be attached to a vehicle. **(T-0).** Flares are prohibited on vehicles transporting explosives or flammable cargo.

5.7.3. **Transporting Flammable Cargo.** Do not allow smoking within 50 feet of the vehicle when transporting explosives or flammable cargo. Do not allow the vehicle to be exposed to open flames or explosives when it is loaded with flammables or explosives.

5.7.4. **Transporting Bulk Flammable Liquids.** Vehicles designed for transporting bulk flammable liquids will be permanently marked with warning signs. **(T-0).**

- When a general-purpose vehicle is used to transport liquid fuels or other dangerous cargo, it is the operator's responsibility to place the prescribed warning signs on the vehicle. When dispatched to transport dangerous cargo, ask a supervisor for special instructions and warning signs for the vehicle.

- Title 49 CFR Part 172, Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, Training Requirements, and Security Plans prescribes the warning placards for vehicles transporting hazardous cargo in the CONUS. When operating overseas, be sure to have the required warning signs for all the countries in which driving is required.

- Take emergency measures provided in the vehicle's lesson plan and Manufacturer's Operator's Manual when bulk fuel transporters develop leaks.

- When dispensing fuel to another vehicle or a tank, a ground cable must be secured to the dispensing vehicle and the vehicle or tank being filled (Grounding and Bonding). **(T-0).**

5.8. Fighting Vehicle Fires. Due to the limited resources available for fighting a vehicle fire, send for help from professional fire fighters when possible. Common firefighting equipment usually consists of a hand fire extinguisher and any available natural materials (such as sand and water). Those resources, when applied at the start of a fire, have a good chance of bringing it under control. However, if the fire is out of control, attempting to extinguish it with inadequate equipment not only diminishes the possibility of successfully extinguishing the fire, but it also endangers the lives of the operator and others nearby.

5.8.1. When it is discovered that a vehicle is on fire: Pull the vehicle off-the-road into an open area away from buildings, trees, brush, vehicles, or anything else that might catch fire. Do not pull into a service station. Notify the fire and police departments. Prevent the fire from spreading. With an engine fire, turn off the engine as soon as possible. Do not open the hood if avoidable.

5.8.2. Use the correct type of fire extinguisher. B- and C-rating extinguishers are designed to work on electrical and liquid fires. The A, B, and C type extinguishers are designed to work on burning wood, paper, and cloth, as well as electrical and liquid fires.

5.8.3. Know how to use the fire extinguisher. Stay far away as possible from the fire. Aim at the source or the base of the fire, not up in the flames. Take a position upwind from the fire. This can allow the wind to carry the extinguisher chemicals to the fire, limiting the possibility of the flames coming towards you, causing harm and interfering with extinguishing attempts. Do not attempt to extinguish a fire if unfamiliar with firefighting techniques and equipment.

5.8.4. Cargo fires in trucks and trailers are usually discovered by smell or observing smoke escaping from around doors and/or from under the tarpaulin. Unless an adequate source of firefighting equipment is available, do not open the cargo doors or remove the tarpaulin until the vehicle has been moved to a safe location where help (preferably from a fire department) can be obtained. After help has been obtained, the doors may be opened cautiously or the tarpaulin partially removed and the source of the fire determined. It may be necessary to remove part of the cargo to find the source of the fire.

5.8.5. Tires that are not inflated properly generate excessive heat during operation. This may result in the tires igniting, especially in dual-wheeled vehicles. Tires dragged along the road surface because of a locked wheel may begin to burn. Fires resulting from these conditions may be prevented by keeping the tires properly inflated, recognizing any difference in the performance of the vehicle that would indicate a locked wheel, and promptly taking corrective action. If a tire does start burning, it may not be possible to extinguish it with firefighting equipment. However, further damage may be prevented by employing the following measures:

- When possible, attempt to extinguish the fire by covering it with sand, mud or water.
- When the wheel cannot be safely removed, drive the vehicle into sand, mud, or water and cover any exposed parts with mud or a similar substance.
- When the fire cannot be controlled by the above procedures, use the vehicle firefighting equipment or other suitable substance to prevent the fire from spreading. Do not attempt to transport a burned tire on the vehicle unless the fire is completely extinguished and the tire has cooled to normal temperature.

Section 5D—Roadside Tool Kits

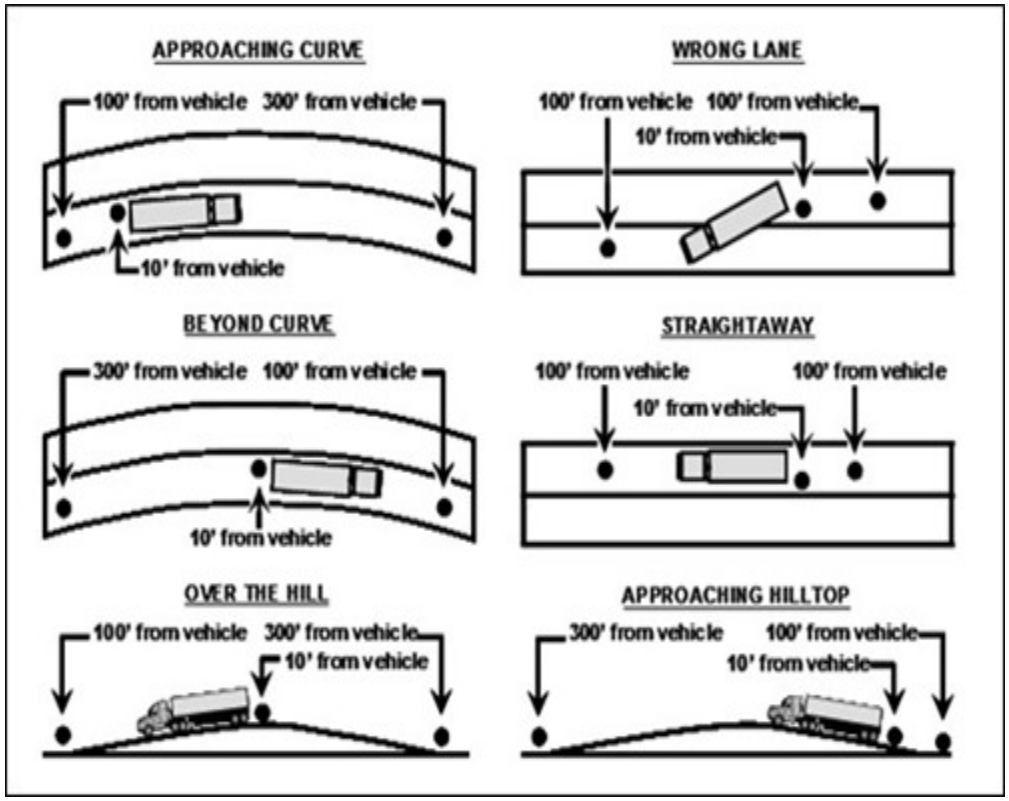
5.9. Spare Tire and Tool Kit. The operator must ensure that the vehicle is equipped with the proper tools in case of an emergency breakdown. **(T-1).** The vehicle should have a suitable jack, lug wrench, and screwdriver; as well as any additional tools based on conditions (such as bad weather, difficult terrain, warfare, and so forth). The unit Vehicle Control Official will provide a spare tire, tool kit, and basic issue items for each vehicle. **(T-1).**

5.10. Highway Warning Kit. This kit has reflectors that can be used in all cases where warning is necessary (see **Figure 5.2**).

5.10.1. All Air Force GMVs, capable of carrying ten or more persons or with a rated capacity of more than four tons, will be equipped with approved highway warning kits. **(T-0).** Vehicles of lesser capacity that regularly operate over public highways will also be equipped with warning kits. **(T-0).** These kits stay with vehicles regularly used on public highways. Additional kits are stored with Ground Transportation. The kits are issued for specific trips when required.

5.10.2. Convoys will be equipped with one kit for each ten vehicles, with a minimum of two kits per convoy. **(T-1)**. Of the total kits, at least one will be carried in the trail vehicle. **(T- 1).** Instructions for use will accompany each kit when issued. **(T-1).** The unit Vehicle Control Official will furnish the highway warning kit IAW DAFI 24-301. **(T-1).**

Figure 5.2. Use of Highway Warning Kits.



5.11. Use of Highway Warning Kit. Whenever a vehicle is inoperative or unable to move on a traveled portion of any highway, the following instructions will be complied with immediately (except in blackouts or within business or residential districts where traffic conditions do not permit or warrant the placing of warning devices): **(T-0).**

5.11.1. Make every reasonable effort to move the vehicle from the traveled portion of the roadway onto the shoulder if possible.

5.11.2. When lights are required (sunset to sunrise), place a reflector in the obstructed lane, or on the shoulder of the road if the vehicle is on or over the shoulder, between the vehicle and the approaching traffic using that lane. Do this before trying to repair the vehicle. Place the reflectors as follows:

- One reflector in the center of the lane of traffic occupied by the vehicle, not less than 40 paces (about 100 feet) from the vehicle in the direction of traffic approaching in that lane. If the vehicle is on or over the shoulder and does not occupy a traffic lane, place the warning device alongside the edge of the roadway to avoid obstructing the traffic lane.
- One reflector on the traffic side of the vehicle 4 paces (about 10 feet) to its rear, in the

direction of traffic approaching in that lane.

- One reflector not less than 40 paces from the vehicle in the opposite direction.
- If the motor vehicle is stopped within 300 feet of a curve, crest of a hill, or other obstruction to view, place one reflector no less than 40 paces or more than 120 paces from the vehicle to afford ample warning to other highway users.
- When lights are not required (sunrise to sunset), place red flags or reflectors with flags mounted on them as prescribed for night. Since most warning kits contain only two flags, the reflector placed 20 feet behind the vehicle will not have a flag mounted on it. **(T-1).**

5.11.3. A basic vehicle highway warning kit containing three sets of reflectors and two red flags which are acceptable in most states. Some states also require items, such as flares in the kit. However, vehicles transporting compressed gases, explosives, or flammable liquids will use three red electric flashing lanterns instead of flares. **(T-0).** Check the kit and/or additional items periodically to ensure compliance with local legal requirements.

Section 5E—Off-Base Repair Service

5.12. Off-Base Repair Service. Vehicle Management can furnish local procedures and policies for the off-base area to be served by the installation's vehicle maintenance crew. When the vehicle needs service at an off-base location and it is too far away to obtain practical vehicle maintenance furnished from the base, proceed according to the instructions below:

5.12.1. Contact the vehicle's owning unit and Vehicle Management to make them aware of the needed repair and to gain additional guidance and coordination pertaining to repair services, dispatch support and vehicle recovery.

5.12.2. For most minor repair services, use of the government credit card is authorized IAW with DAFI 24-302.

Section 5F—Accident Response

5.13. Initial Accident Response Procedures. If involved in an accident, always stop and assist. Exception: The only possible exception to this rule might be in combat or in case of military necessity when operating under definite orders not to stop.

5.13.1. Assist in acquiring medical attention and/or authorities for the individuals involved in the accident.

- If anyone appears injured, render first aid.
- State laws require that police will be summoned to all motor vehicle accidents. **(T-0).** The military cooperates with civil authorities that are responsible for investigating all accidents on public highways.
- If in an area controlled by armed services police send for them or ask someone to do so. The armed services police must complete their own investigation of the accident. **(T-0).** Cooperate and assist them in every way.

5.13.2. Whenever practical, the GMV operator or assistant operator (if present) will report the accident to their unit commander using the chain-of-command by telephone as soon as duties at the scene of the accident have been completed. **(T-1).**

5.13.3. Emergency roadside repair involves replacing or repairing automotive accessories at the point of breakdown. Repair is limited to the guidelines of the region responsible for the installation Vehicle Management and the local installation policies. Repairs of this type include tires, tubes, batteries, and automotive accessories. When government facilities are nearby, use them (if possible) instead of commercial facilities. Vehicle Management will normally advise an operator if a government facility is readily available or if a commercial source must be used. **(T-1).** The operator may be held liable for the bill if this procedure is not followed.

5.13.4. The person who signs for a government credit card is solely responsible for the control and purchases made with the card. Credit card purchases must be substantiated with a copy of the service station receipt. **(T-0).** In addition to the information normally shown on delivery receipts, ensure that the speedometer reading and the registration (or license) number of the vehicle and the operator's name, grade, and organization are put on the receipt. The receipt must also show the credit card number; date of purchase; name and address of the station; the grade, quantity, and price per gallon of fuel; and the total amount charged. **(T-0).** Upon returning to the base, the operator will return the credit card issued and a copy of any credit card receipts to Vehicle Management. **(T-1).**

5.14. Precautions Against Further Accidents. After a motor vehicle accident, the vehicle or vehicles involved are frequently in dangerous locations. Often a crowd assembles around the accident.

5.14.1. To prevent additional accidents, damage, or injury; be sure to post guards, flags, flares, or lights (except in a blackout) to warn all other traffic to proceed with caution.

5.14.2. If civil or armed forces police are present, they will direct traffic. **(T-0).** If Airmen are present, they should be asked to act as guards.

5.14.3. Cargo, glass, or other debris spilled on the highway (as a result of the accident) should be cleared from the road surface as soon as possible.

5.15. Removal of Vehicle from Accident Scene.

5.15.1. Moving the vehicle from the scene of the accident is governed by laws or regulations of the state or area where the accident occurred. Obtain all the necessary data relating to the accident before moving the vehicle. If possible, the GMV operator or passengers should document (drawing, marking, photographing, or otherwise) the exact position of all vehicles and objects before moving them.

Section 5G—Preparation of Accident Forms

5.16. Preparation of Accident Forms. The following forms assist in documenting accidents:

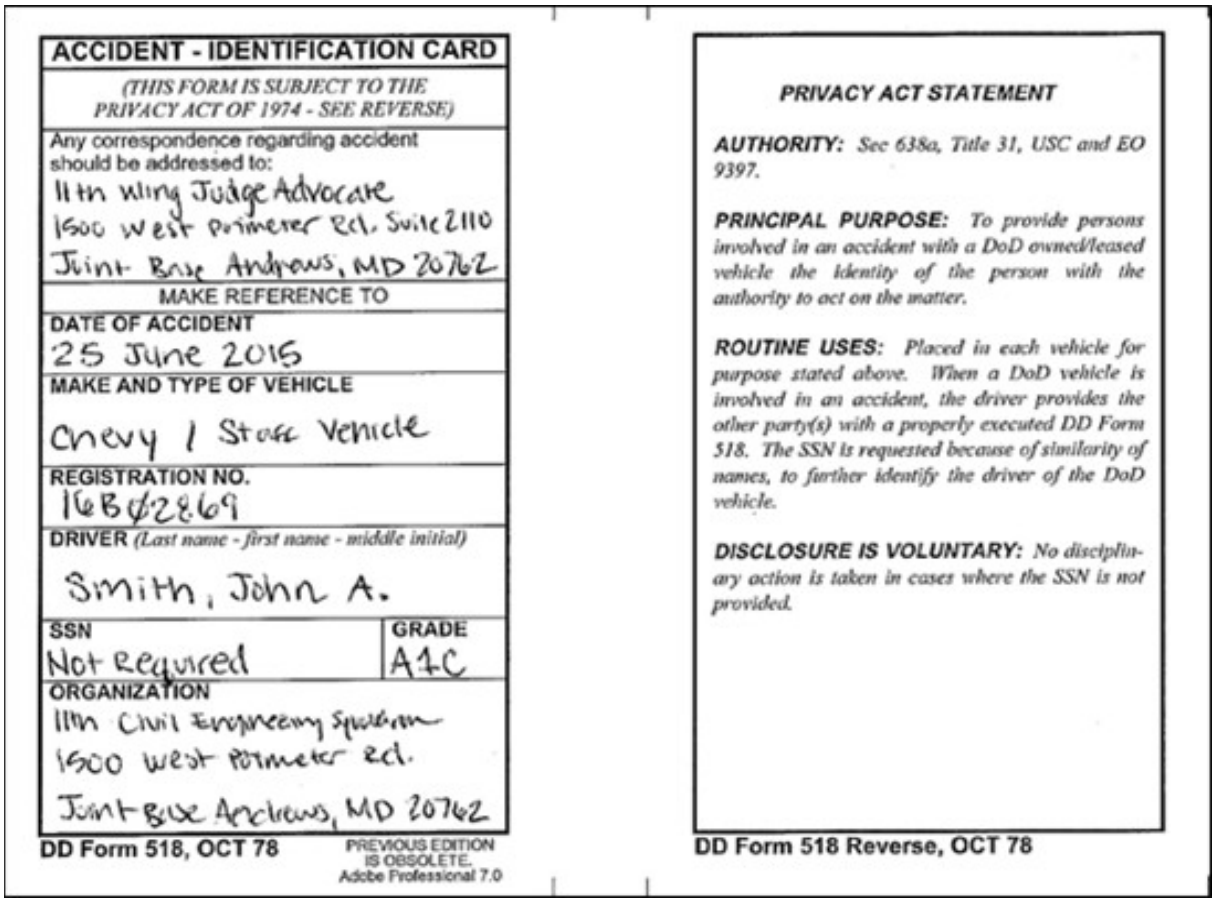
5.16.1. **DD Form 518 (Accident Identification Form)**. The purpose of the DD Form 518 (**Figure 5.3**) is to give any persons involved in an accident all of the information required by the military operator.

- This form must be filled out at the scene of the accident or as promptly as possible and given to the person directly concerned. **(T-0).** If the accident involves a parked vehicle and the person concerned is not present, place the DD Form 518 in the vehicle or secure it on the windshield. Notify local authorities and then stand by the scene of the accident for their arrival, if practical.

- Disclosure of social security number is voluntary. Based on a failure to share information, no disciplinary action will be taken in cases where the social security number is not provided. **(T-0).**

5.16.2. **SF Form 91.** Even though an accident is minor or is not the operator's fault, the operator must report it, so facts are clearly presented, and witnesses are identified. **(T-0).** This protects the operator and the government against claims and exaggerations. For the purpose of reporting an accident, use SF Form 91.

Figure 5.3. DD Form 518.



ACCIDENT - IDENTIFICATION CARD

(THIS FORM IS SUBJECT TO THE PRIVACY ACT OF 1974 - SEE REVERSE)

Any correspondence regarding accident should be addressed to:
11th Wing Judge Advocate
1500 West Perimeter Rd. Suite 2110
Joint Base Andrews, MD 20762

MAKE REFERENCE TO

DATE OF ACCIDENT
25 June 2015

MAKE AND TYPE OF VEHICLE
Chevy 1 Stone Vehicle

REGISTRATION NO.
16B02869

DRIVER *(Last name - first name - middle initial)*
Smith, John A.

SSN
Not Required

GRADE
A1C

ORGANIZATION
11th Civil Engineering Squadron
1500 West Perimeter Rd.
Joint Base Andrews, MD 20762

DD Form 518, OCT 78 PREVIOUS EDITION IS OBSOLETE. Adobe Professional 7.0

PRIVACY ACT STATEMENT

AUTHORITY: *Sec 638a, Title 31, USC and EO 9397.*

PRINCIPAL PURPOSE: *To provide persons involved in an accident with a DoD owned/leased vehicle the identity of the person with the authority to act on the matter.*

ROUTINE USES: *Placed in each vehicle for purpose stated above. When a DoD vehicle is involved in an accident, the driver provides the other party(s) with a properly executed DD Form 518. The SSN is requested because of similarity of names, to further identify the driver of the DoD vehicle.*

DISCLOSURE IS VOLUNTARY: *No disciplinary action is taken in cases where the SSN is not provided.*

DD Form 518 Reverse, OCT 78

- In completing SF Form 91 (**Figure 5.4**, **Figure 5.5**, **Figure 5.6**, **Figure 5.7**), keep the following general instructions in mind:

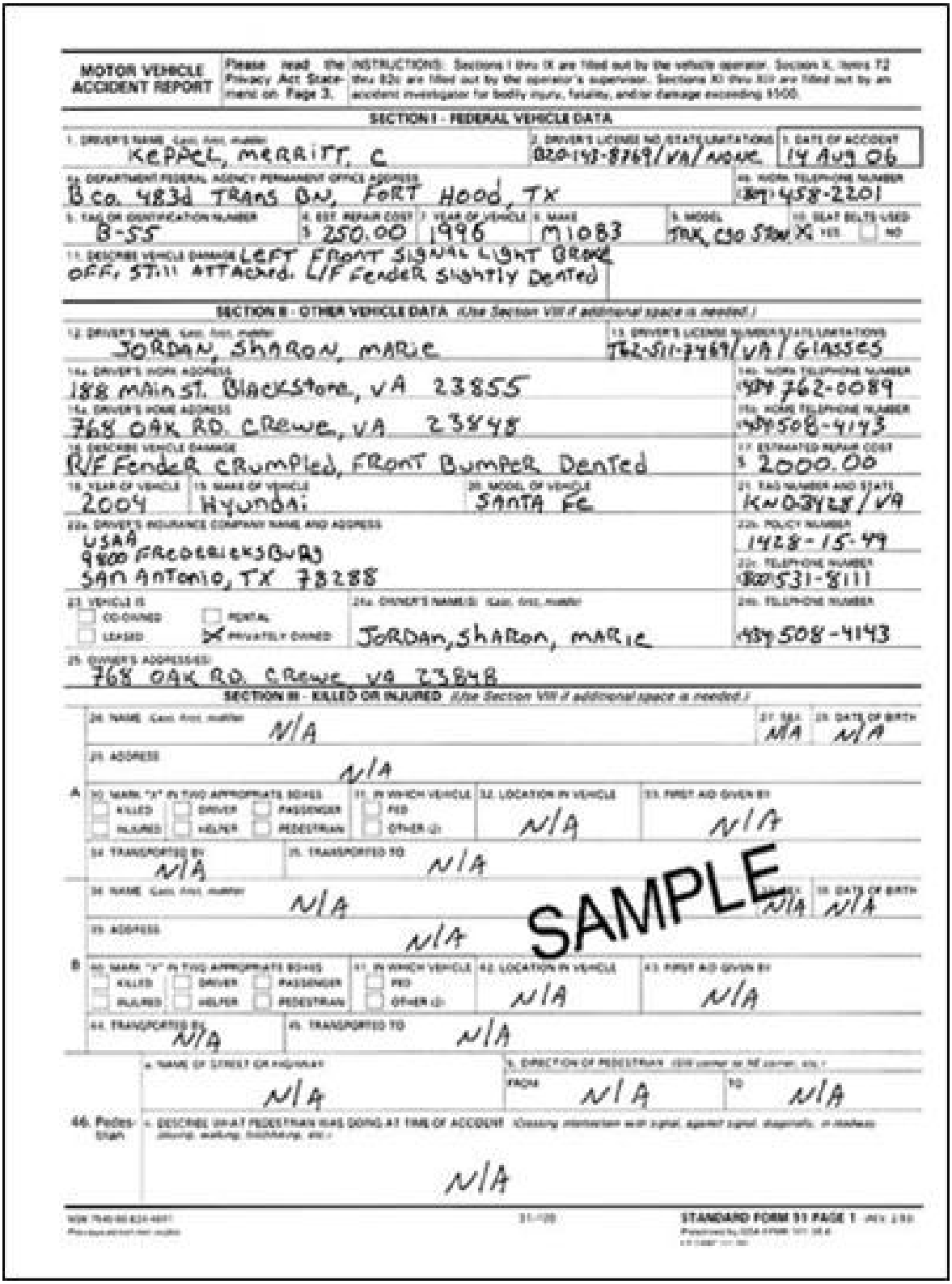
- Secure hard-to-get facts first. The first responsibility of the operator, after ensuring that the vehicle will not cause another accident, is that the injured are cared for, and other precautions are taken. **(T-1).** The operator should also get the names and addresses of the people involved in the accident and of all witnesses. If this is not done promptly, it may be impossible to later get the information.

- Do not leave the scene of the accident until all pertinent facts concerning the accident have been obtained. This information should include the following:
  - Condition of the road.

- Position of the vehicles.
- Amount of damage involved.
- Any other information that may be relevant, but difficult to remember at a later time.

- After obtaining the information required for the report that may include information from others, the operator should complete the sections of the SF Form 91. Be exact. Be sure the report gives a clear picture of what actually happened.
  - If another vehicle is involved, the operator's diagram of the accident should show exactly where the vehicles were before and after the crash and exactly what obstacles blocked either driver's view.
  - Every name should be spelled correctly and every street address listed by number. On highways where there are no house numbers, use mileage markers, power line or telephone pole numbers, or intersecting roads to pinpoint the location of the accident.
  - State the visible damage (for example, crushed right rear wheel, bent or broken axle, crumpled fender, and so on). If a party claims that damage has occurred, but it is not visible to the operator, a note indicating this should be made.
  - Follow the same procedures with injuries. If an injury is visible, write it down. If the injured party claims an injury that is not visible, make a note of the injured party's complaint.
  - If it is not possible to obtain the exact information on an item, write "unknown." If there is a section that does not pertain to the accident, write "N/A" or "NONE." Make an entry in every blank, to assure the reviewer that nothing was overlooked.
- Never express an opinion (either orally or in writing) to claimants or their agent's concerning liability, investigation findings, or the possibility of claim approval.
- If more space is needed, use a separate sheet of paper to answer a question. Write "see attached" in the space by the question on the report and attach the extra sheet firmly to the report form.
- Check each item. As an agent for the United States government, it is the operator's responsibility to ensure that all information is obtained and is accurate. If the information provided does not seem legitimate, do not hesitate to further question the other driver.
- Any employee of a federal agency who fails to accurately report a motor vehicle accident involving a federal vehicle may be subject to administrative action.

Figure 5.4. Sample Form of SF 91 (Page 1).



MOTOR VEHICLE ACCIDENT REPORT

Please read the Privacy Act Statement on Page 3.

INSTRUCTIONS: Sections I thru IX are filled out by the vehicle operator. Section X, items 72 thru 82c are filled out by the operator's supervisor. Sections XI thru XIII are filled out by an accident investigator for bodily injury, fatality, and/or damage exceeding $100.

SECTION I - FEDERAL VEHICLE DATA

1. DRIVER'S NAME: KEPPEL, MERRITT, C
2. DRIVER'S LICENSE NO./STATE/LIMITATIONS: B20-148-8769/VA/NONE
3. DATE OF ACCIDENT: 14 AUG 06
4a. DEPARTMENT/FEDERAL AGENCY/PERMANENT OFFICE ADDRESS: B Co. 483d TRANS BN, FORT Hood, TX
4b. WORK TELEPHONE NUMBER: (817) 458-2201
5. TAG OR IDENTIFICATION NUMBER: B-55
6. EST. REPAIR COST: $ 250.00
7. YEAR OF VEHICLE: 1996
8. MAKE: M1083
9. MODEL: TRK, C30 5TON
10. SEAT BELTS USED: X YES ☐ NO
11. DESCRIBE VEHICLE DAMAGE: LEFT FRONT SIGNAL LIGHT BROKE OFF, ST.11 ATTACHED. L/F Fender SLIGHTLY DENTED

SECTION II - OTHER VEHICLE DATA (Use Section VIII if additional space is needed.)

12. DRIVER'S NAME: JORDAN, SHARON, MARIE
13. DRIVER'S LICENSE NUMBER/STATE/LIMITATIONS: T62-511-7469/VA/GLASSES
14a. DRIVER'S WORK ADDRESS: 188 main St. Blackstone, VA 23855
14b. WORK TELEPHONE NUMBER: (434) 762-0089
14c. DRIVER'S HOME ADDRESS: 768 OAK RD. CREWE, VA 23848
14d. HOME TELEPHONE NUMBER: (434) 508-4143
16. DESCRIBE VEHICLE DAMAGE: R/F Fender CRUMPLED, FRONT Bumper Dented
17. ESTIMATED REPAIR COST: $ 2000.00
18. YEAR OF VEHICLE: 2004
19. MAKE OF VEHICLE: Hyundai
20. MODEL OF VEHICLE: SANTA FE
21. TAG NUMBER AND STATE: KNO-3428/VA
22a. DRIVER'S INSURANCE COMPANY NAME AND ADDRESS: USAA 9800 FREDERICKSBURG SAN ANTONIO, TX 78288
22b. POLICY NUMBER: 1428-15-99
22c. TELEPHONE NUMBER: (800) 531-8111
23. VEHICLE IS: ☐ CO-OWNED ☐ RENTAL ☐ LEASED ☒ PRIVATELY OWNED
24a. OWNER'S NAME(S): JORDAN, SHARON, MARIE
24b. TELEPHONE NUMBER: (434) 508-4143
25. OWNER'S ADDRESS(ES): 768 OAK RD. CREWE, VA 23848

SECTION III - KILLED OR INJURED (Use Section VIII if additional space is needed.)

A
26. NAME: N/A
27. SEX: N/A
28. DATE OF BIRTH: N/A
29. ADDRESS: N/A
30. MARK "X" IN TWO APPROPRIATE BOXES: ☐ KILLED ☐ INJURED ☐ DRIVER ☐ HELPER ☐ PASSENGER ☐ PEDESTRIAN
31. IN WHICH VEHICLE: ☐ PED ☐ OTHER (2)
32. LOCATION IN VEHICLE: N/A
33. FIRST AID GIVEN BY: N/A
34. TRANSPORTED BY: N/A
35. TRANSPORTED TO: N/A

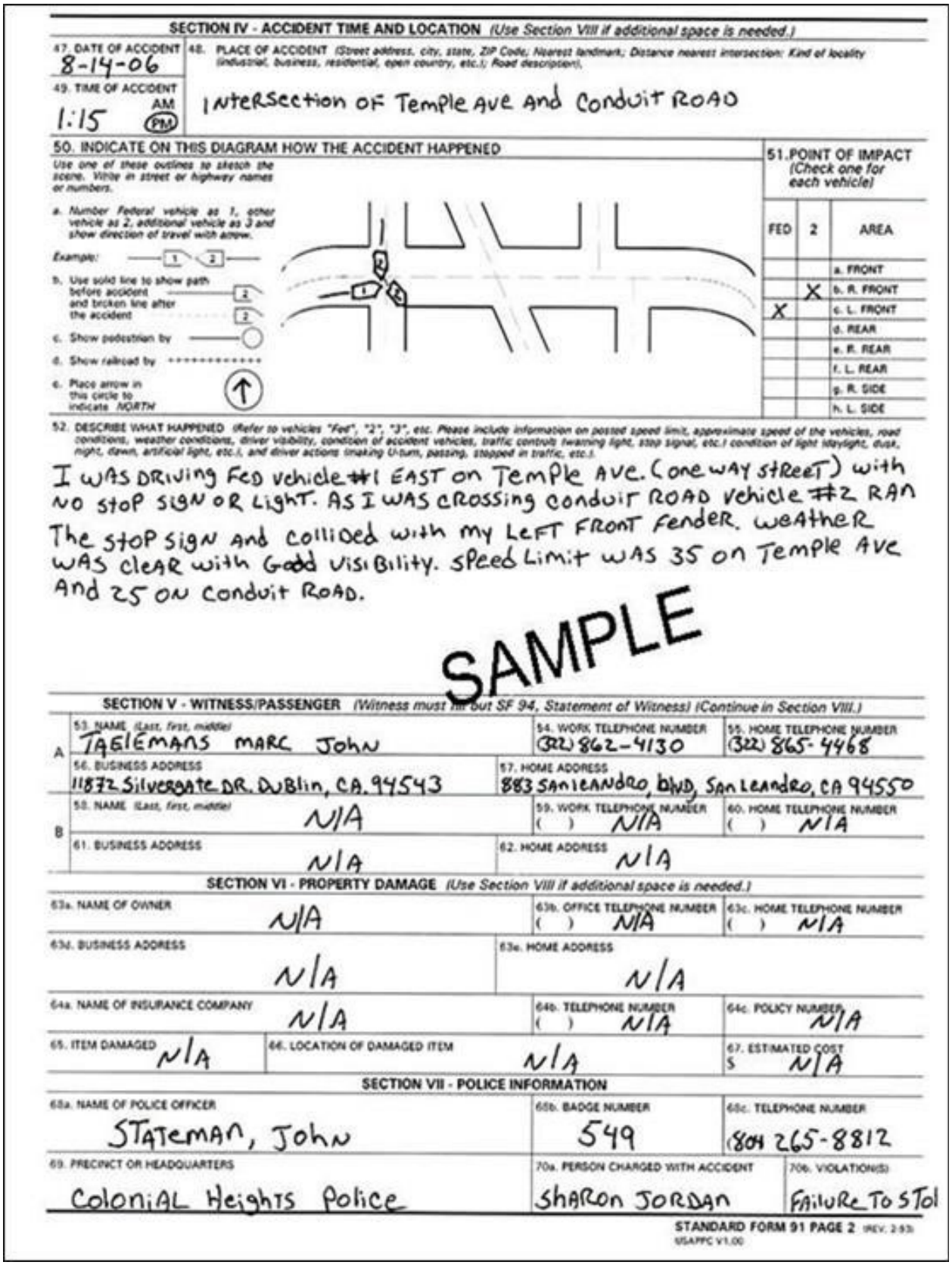
B
36. NAME: N/A
37. SEX: N/A
38. DATE OF BIRTH: N/A
39. ADDRESS: N/A
40. MARK "X" IN TWO APPROPRIATE BOXES: ☐ KILLED ☐ INJURED ☐ DRIVER ☐ HELPER ☐ PASSENGER ☐ PEDESTRIAN
41. IN WHICH VEHICLE: ☐ PED ☐ OTHER (2)
42. LOCATION IN VEHICLE: N/A
43. FIRST AID GIVEN BY: N/A
44. TRANSPORTED BY: N/A
45. TRANSPORTED TO: N/A

46. Pedestrian
a. NAME OF STREET OR HIGHWAY: N/A
b. DIRECTION OF PEDESTRIAN: FROM N/A TO N/A
c. DESCRIBE WHAT PEDESTRIAN WAS DOING AT TIME OF ACCIDENT: N/A

SAMPLE

NSN 7540-00-634-4001 — 31-120 — STANDARD FORM 91 PAGE 1 (REV. 2-91)

Figure 5.5. Sample Form of SF 91 (Page 2).



SECTION IV - ACCIDENT TIME AND LOCATION *(Use Section VIII if additional space is needed.)*

47. DATE OF ACCIDENT: 8-14-06

48. PLACE OF ACCIDENT *(Street address, city, state, ZIP Code; Nearest landmark; Distance nearest intersection; Kind of locality (industrial, business, residential, open country, etc.); Road description)*: Intersection of Temple Ave and Conduit ROAD

49. TIME OF ACCIDENT: 1:15 AM (PM)

50. INDICATE ON THIS DIAGRAM HOW THE ACCIDENT HAPPENED

Use one of these outlines to sketch the scene. Write in street or highway names or numbers.

a. Number Federal vehicle as 1, other vehicle as 2, additional vehicle as 3 and show direction of travel with arrow. Example: 1 2

b. Use solid line to show path before accident 2 and broken line after the accident 2

c. Show pedestrian by

d. Show railroad by

e. Place arrow in this circle to indicate NORTH

51. POINT OF IMPACT *(Check one for each vehicle)*

FED	2	AREA
		a. FRONT
	X	b. R. FRONT
X		c. L. FRONT
		d. REAR
		e. R. REAR
		f. L. REAR
		g. R. SIDE
		h. L. SIDE

52. DESCRIBE WHAT HAPPENED *(Refer to vehicles "Fed", "2", "3", etc. Please include information on posted speed limit, approximate speed of the vehicles, road conditions, weather conditions, driver visibility, condition of accident vehicles, traffic controls (warning light, stop signal, etc.) condition of light (daylight, dusk, night, dawn, artificial light, etc.), and driver actions (making U-turn, passing, stopped in traffic, etc.).*

I WAS DRIVING FED vehicle #1 EAST on Temple AVE. (ONE WAY STREET) with NO STOP SIGN OR LIGHT. AS I WAS CROSSING CONDUIT ROAD VEHICLE #2 RAN The STOP SIGN AND COLLIDED with my LEFT FRONT FENDER. WEATHER WAS CLEAR with Good VISIBILITY. SPEED LIMIT WAS 35 on Temple AVE AND 25 ON CONDUIT ROAD.

SAMPLE

SECTION V - WITNESS/PASSENGER *(Witness must fill out SF 94, Statement of Witness) (Continue in Section VIII.)*

A

53. NAME *(Last, first, middle)*: TAGLEMANS MARC John

54. WORK TELEPHONE NUMBER: (322) 862-4130

55. HOME TELEPHONE NUMBER: (322) 865-4468

56. BUSINESS ADDRESS: 11872 Silvergate DR. DUBlin, CA. 94543

57. HOME ADDRESS: 883 SAN LEANDRO, BLVD, San Leandro, CA 94550

B

58. NAME *(Last, first, middle)*: N/A

59. WORK TELEPHONE NUMBER: ( ) N/A

60. HOME TELEPHONE NUMBER: ( ) N/A

61. BUSINESS ADDRESS: N/A

62. HOME ADDRESS: N/A

SECTION VI - PROPERTY DAMAGE *(Use Section VIII if additional space is needed.)*

63a. NAME OF OWNER: N/A

63b. OFFICE TELEPHONE NUMBER: ( ) N/A

63c. HOME TELEPHONE NUMBER: ( ) N/A

63d. BUSINESS ADDRESS: N/A

63e. HOME ADDRESS: N/A

64a. NAME OF INSURANCE COMPANY: N/A

64b. TELEPHONE NUMBER: ( ) N/A

64c. POLICY NUMBER: N/A

65. ITEM DAMAGED: N/A

66. LOCATION OF DAMAGED ITEM: N/A

67. ESTIMATED COST: $ N/A

SECTION VII - POLICE INFORMATION

68a. NAME OF POLICE OFFICER: STATEMAN, John

68b. BADGE NUMBER: 549

68c. TELEPHONE NUMBER: (804 265-8812

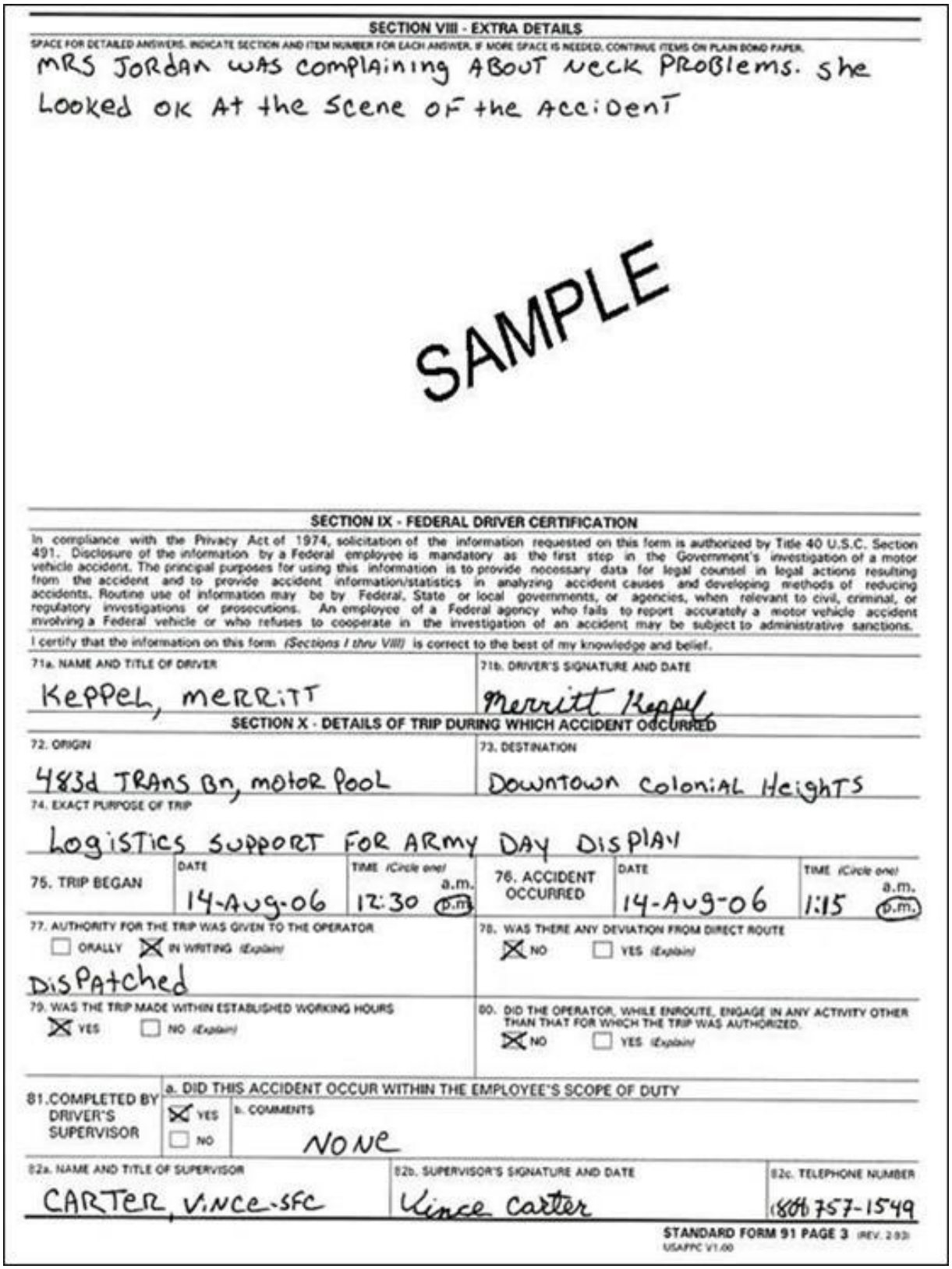
69. PRECINCT OR HEADQUARTERS: Colonial Heights Police

70a. PERSON CHARGED WITH ACCIDENT: SHARON JORDAN

70b. VIOLATION(S): FAILURE TO STOP

STANDARD FORM 91 PAGE 2 (REV. 2-93)
USAPPC V1.00

Figure 5.6. SF Form 91 (Page 3)



SECTION VIII - EXTRA DETAILS

SPACE FOR DETAILED ANSWERS. INDICATE SECTION AND ITEM NUMBER FOR EACH ANSWER. IF MORE SPACE IS NEEDED, CONTINUE ITEMS ON PLAIN BOND PAPER.

MRS JORDAN WAS COMPLAINING ABOUT NECK PROBLEMS. SHE LOOKED OK AT THE SCENE OF THE ACCIDENT

SAMPLE

SECTION IX - FEDERAL DRIVER CERTIFICATION

In compliance with the Privacy Act of 1974, solicitation of the information requested on this form is authorized by Title 40 U.S.C. Section 491. Disclosure of the information by a Federal employee is mandatory as the first step in the Government's investigation of a motor vehicle accident. The principal purposes for using this information is to provide necessary data for legal counsel in legal actions resulting from the accident and to provide accident information/statistics in analyzing accident causes and developing methods of reducing accidents. Routine use of information may be by Federal, State or local governments, or agencies, when relevant to civil, criminal, or regulatory investigations or prosecutions. An employee of a Federal agency who fails to report accurately a motor vehicle accident involving a Federal vehicle or who refuses to cooperate in the investigation of an accident may be subject to administrative sanctions.

I certify that the information on this form *(Sections I thru VIII)* is correct to the best of my knowledge and belief.

71a. NAME AND TITLE OF DRIVER	71b. DRIVER'S SIGNATURE AND DATE
KEPPEL, MERRITT	Merritt Keppel

SECTION X - DETAILS OF TRIP DURING WHICH ACCIDENT OCCURRED

72. ORIGIN	73. DESTINATION
483d TRANS BN, MOTOR POOL	DOWNTOWN COLONIAL HEIGHTS

74. EXACT PURPOSE OF TRIP

LOGISTICS SUPPORT FOR ARMY DAY DISPLAY

75. TRIP BEGAN	DATE	TIME (Circle one)	76. ACCIDENT OCCURRED	DATE	TIME (Circle one)
	14-AUG-06	12:30 a.m. (p.m.)		14-AUG-06	1:15 (a.m.) p.m.

77. AUTHORITY FOR THE TRIP WAS GIVEN TO THE OPERATOR
☐ ORALLY ☒ IN WRITING *(Explain)*
DISPATCHED

78. WAS THERE ANY DEVIATION FROM DIRECT ROUTE
☒ NO ☐ YES *(Explain)*

79. WAS THE TRIP MADE WITHIN ESTABLISHED WORKING HOURS
☒ YES ☐ NO *(Explain)*

80. DID THE OPERATOR, WHILE ENROUTE, ENGAGE IN ANY ACTIVITY OTHER THAN THAT FOR WHICH THE TRIP WAS AUTHORIZED.
☒ NO ☐ YES *(Explain)*

81. COMPLETED BY DRIVER'S SUPERVISOR

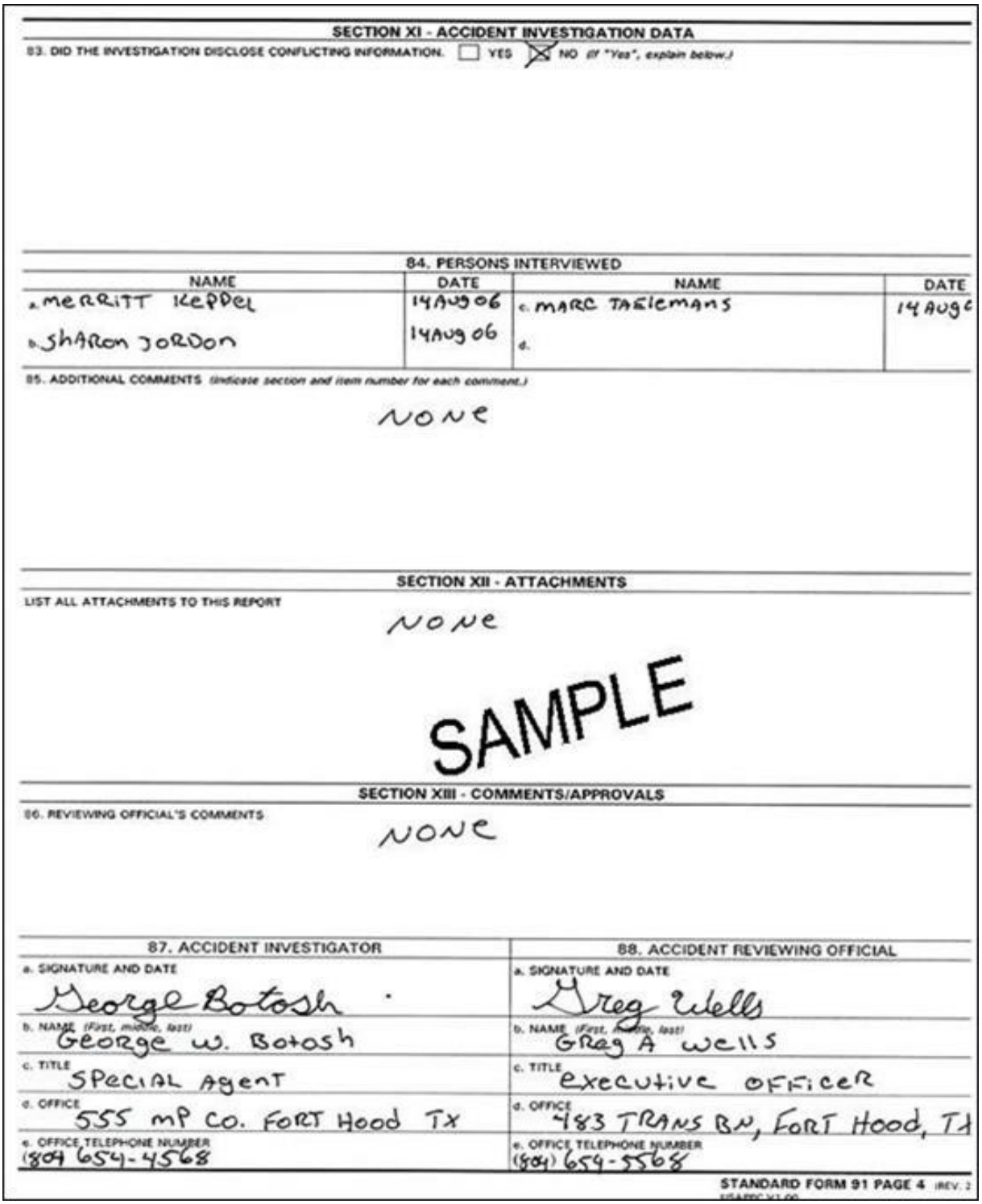
a. DID THIS ACCIDENT OCCUR WITHIN THE EMPLOYEE'S SCOPE OF DUTY
☒ YES ☐ NO

b. COMMENTS
NONE

82a. NAME AND TITLE OF SUPERVISOR	82b. SUPERVISOR'S SIGNATURE AND DATE	82c. TELEPHONE NUMBER
CARTER, VINCE-SFC	Vince Carter	(804) 757-1549

STANDARD FORM 91 PAGE 3 (REV. 2-93)
USAPPC V1.00

Figure 5.7. SF Form 91 (Page 4).



SECTION XI - ACCIDENT INVESTIGATION DATA

83. DID THE INVESTIGATION DISCLOSE CONFLICTING INFORMATION. ☐ YES ☒ NO (If "Yes", explain below.)

84. PERSONS INTERVIEWED

NAME	DATE	NAME	DATE
a. MERRITT KEPPEL	14AUG06	c. MARC TAELMANS	14AUG0
b. SHARON JORDON	14AUG06	d.	

85. ADDITIONAL COMMENTS (Indicate section and item number for each comment.)

NONE

SECTION XII - ATTACHMENTS

LIST ALL ATTACHMENTS TO THIS REPORT

NONE

SAMPLE

SECTION XIII - COMMENTS/APPROVALS

86. REVIEWING OFFICIAL'S COMMENTS

NONE

87. ACCIDENT INVESTIGATOR	88. ACCIDENT REVIEWING OFFICIAL
a. SIGNATURE AND DATE: George Botosh	a. SIGNATURE AND DATE: Greg Wells
b. NAME (First, middle, last): GEORGE W. BOTOSH	b. NAME (First, middle, last): GREG A WELLS
c. TITLE: SPECIAL AGENT	c. TITLE: EXECUTIVE OFFICER
d. OFFICE: 555 MP CO. FORT HOOD TX	d. OFFICE: 483 TRANS BN, FORT HOOD, TX
e. OFFICE TELEPHONE NUMBER: (804 654-4568	e. OFFICE TELEPHONE NUMBER: (804) 654-5568

STANDARD FORM 91 PAGE 4 (REV. 2

5.16.3. **SF Form 94.** This form must be filled out at the scene of the accident or as promptly as possible and given to the person directly concerned. **(T-0).** If the accident involves a parked vehicle and the person concerned is not present, place the SF 94 in the vehicle or secure it on the windshield. Notify local authorities and then stand by the scene of the accident for their arrival, if practical. See **Figure 5.8** available at **https://www.gsa.gov/cdnstatic/SF94-17a.pdf?forceDownload=1**.

Figure 5.8. SF Form 94.

STATEMENT OF WITNESS
(Attach additional sheets if necessary)

1. DID YOU SEE THE ACCIDENT?

2. WHEN DID THE ACCIDENT HAPPEN?
A. TIME ___ a.m. ___ p.m.
B. DATE

3. WHERE DID THE ACCIDENT HAPPEN? *(Give street location and city)*

4. TELL IN YOUR OWN WAY HOW THE ACCIDENT HAPPENED

5. WHERE WERE YOU WHEN THE ACCIDENT OCCURRED?

6. WAS ANYONE INJURED, AND IF SO, EXTENT OF INJURY IF KNOWN?

7. DESCRIBE THE APPARENT DAMAGE TO PRIVATE PROPERTY

8. DESCRIBE THE APPARENT DAMAGE TO GOVERNMENT PROPERTY

9. IF TRAFFIC CASE GIVE APPROXIMATE SPEED OF:
a. GOVERNMENT VEHICLE MPH
b. OTHER VEHICLE MPH

10. GIVE THE NAMES AND ADDRESSES OF ANY OTHER WITNESSES TO THE ACCIDENT *(If known)*

A. NAMES	B. ADDRESSES

WITNESS COMPLETING THIS FORM

11. HOME ADDRESS *(INCLUDE ZIP CODE)*

12. WITNESS (PRINT OR TYPE NAME)

A. HOME TELEPHONE NO.

SIGN HERE

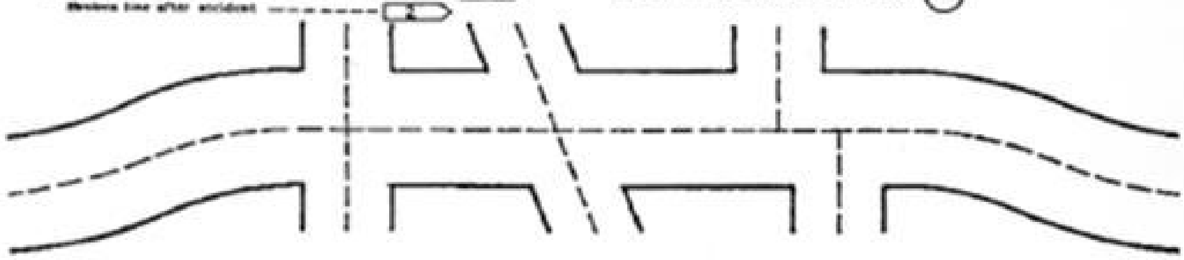
B. TODAY'S DATE

13. BUSINESS ADDRESS *(INCLUDE ZIP CODE)*

TELEPHONE NO.

14. INDICATE ON THE DIAGRAM BELOW WHAT HAPPENED:

1. Number Federal vehicle as 1—other vehicle as 2—additional vehicle as 3, and show direction of travel by arrow (Example: → 1 2 ←)
2. Use solid line to show path before accident; Broken line after accident
3. Show pedestrians by
4. Show railroad by
5. Give names or numbers of streets or highways
6. Indicate north by arrow in this circle



NSN 7540-00-634-4045
94-105

STANDARD FORM 94 (REV. 2-

Chapter 6

FALL SAFETY

Section 6A—General Walking-Working Information

6.1. **Walking-Working Surface.** According to OSHA, a walking-working surface is defined as any surface you work on to include:

- Floors.
- Aisles.
- Stairs
- Platforms

Section 6B—Falls, Slips, and Trips

6.2. **Falls**. According to OSHA, a fall happens when your center of gravity shifts unexpectedly.

6.2.1. Falls are divided into two different categories:

- A same-level fall is when someone falls to the floor they are standing on or against a nearby object or wall.
- An elevated fall is when someone falls from one level to another, like from a ladder, scaffold, building, or through an opening. Falling from any vehicles (i.e., back of a pickup truck, 60K Loader, Scissor platform, etc.) are examples of elevated falls.

6.2.2. **Slips.** IAW OSHA guidance, a slip happens when there's insufficient traction between your foot and the walking-working surface, causing a sudden loss of balance.

- Slip hazards can be found indoors and outdoors. The following examples may decrease the friction between your foot and the walking-working surface, which increases the risk of slipping:
  - Water, ice, snow, mud, grease, oil, food, or other wet products on smooth floors.
  - Dust powders, plastic wrapping, granules, or other dry products that are slippery on smooth floors.
  - Freshly waxed surfaces.
  - Highly polished surfaces that remain slick when dry (like concrete, marble, or ceramic).
  - Loose or irregular surfaces, like gravel or unanchored floors.
  - Sloped walking surfaces without slip- or skid-resistance.
  - Muddy terrain.

- Wet or dry leaves, pine needles, or plant debris.
- Shoes with inadequate traction.
- Shoe soles that are wet, muddy, or greasy.

6.2.3. **Trips.** IAW OSHA guidance, a trip is when your leg or foot comes into contact with a hazard (either an object or an uneven surface) that arrests the movement of your lower body while momentum carries your upper body forward.

- The trip hazard height is a quarter inch. Any change in floor level that is ¼ inch or more constitutes a tripping hazard. Examples of common tripping hazards include:
  - Uncovered hoses, cables, wires, or cords across walking surfaces.
  - Obstacles or clutter on walking surfaces.
  - Furniture drawers/door left open.
  - Unmarked steps or ramps.
  - Damaged or irregular steps.
  - Rumpled carpets or mats (or curled edges).
  - Thresholds, gaps, and other irregularities in walking surfaces.
  - Speed bumps and curb drops.
- There are other factors that contribute to likelihood or tripping, to include:
  - Lack of coordination.
  - Obstructed view.
  - Fatigue.
  - Being under the influence.
  - Poor lighting.
  - Poor vision.

6.3. **Slip, Tip, and Fall Prevention.** Prevention of slips, trips, and falls rely heavily on the ability of the workforce to recognize hazards, how to mitigate them, and how to use safe work practices to minimize their risks.

6.3.1. Permanent fall prevention measures are those measures where vehicles, structures, and/or walkways have been modified to permanently reduce the risk of injury stemming from falls. Examples of permanent slip, trip, and fall prevention measures are:

- Adequate lighting.
- Handrails.
- Slip-resistant surfaces in high-risk areas.
- Effective drainage, ventilation, and other methods to keep surfaces dry.

- Marking the edges of steps or elevations changes.

6.3.2. On-going participation towards fall prevention are non-permanent, mostly personal methods that help reduce the risk of falls and the impact from falls if one were to occur. Examples of on-going participation to prevent slips, trips, and falls are:

- Proper footwear.
- PPE.
- Safe work practices.
- Frequent cleaning.
- Good housekeeping practices that keep walkways free of clutter.
- Noticing and marking slip or trip hazards.

Section 6C – Mounting and Dismounting

6.4. **Mounting and Dismounting.** When mounting or dismounting a vehicle, ladder, or elevated surface, the potential of slips, trips, and falls is heightened.

6.4.1. When mounting or dismounting a vehicle, assure you:

- Read the Manufacturers Operators Manual on specific safety points (i.e. handholds), such as safety grips, handles, and slip resistant surfaces, prior to engaging in operations with vehicle during familiarization or refamiliarization training. These safety points should be easily visible and accessible.
- Ensure that your hands are clean and dry to prevent slipping when reaching for safety points.
- Check your shoes for grease before entering into or onto the vehicle.
- Grasp safety points firmly and ensure you have a good grip when entering or exiting the vehicle.
- Never grab the steering wheel when mounting or dismounting a vehicle. This may cause the vehicle to move, which may cause injury from slipping and/or falling.
- Are wearing the proper PPE and IAW applicable training packages, instructions, and manuals.
    - If the operator of the vehicle experiences any issues surrounding traction due to worn out PPE, the operator must contact the shop lead to ensure that PPE is replaced accordingly.
- Pull your lower body upwards in a smooth, controlled motion. Dismounting should occur as smoothly as possible. Never jump into, onto, or out of any vehicle.

Section 6D – Unprotected Sides and Edges

6.5. **Fall Safety: Unprotected Sides and Edges.** IAW 29 CFR 1926, Subpart M, each employee on a walking/working surface (horizontal and vertical surface) with an unprotected side or edge which is 6 feet (1.8 m) or more above a lower level shall be protected from falling by the use of guardrail systems, safety net systems, or personal fall arrest systems.

6.5.1. Each employee in a hoist area shall be protected from falling 6 feet (1.8 m) or more to lower levels by guardrail systems or personal fall arrest systems.

6.5.2. If guardrail systems, [or chain, gate, or guardrail] or portions thereof, are removed to facilitate the hoisting operation (e.g., during landing of materials), and an employee must lean through the access opening or out over the edge of the access opening (to receive or guide equipment and materials, for example), that employee shall be protected from fall hazards by a personal fall arrest system.

6.5.3. Utilize the Manufacturers Operators Manual for the height of working surfaces.

6.5.4. In conjunction with the Manufacturers Operators Manual, utilize 29 CFR 1926 and OSHA 1910.29, *Fall Protection Systems and Falling Object Protection - Criteria and Practices*, to determine what fall protection is required for specific working areas or vehicle assets.

Section 6E – Falling Objects

6.6. **Falling Objects.** Beyond personal fall arrest systems, such as guardrail systems, safety net systems, or personal fall arrest systems for employees working in heights 6 feet or greater, the utilization of falling object protection is required IAW OSHA 1910, Subpart D.

6.6.1. Toeboards must be utilized on assets to maximize protection from falling objects. IAW OSHA 1910, Subpart D, toeboards:

- Have a minimum vertical height of 3.5 inches (9 cm) as measured from the top edge of the toeboard to the level of the walking-working surface.
- Do not have more than a 0.25-inch (0.5-cm) clearance or opening above the walking-working surface.
- Are solid or do not have any opening that exceeds 1 inch (3 cm) at its greatest dimension.
- Have a minimum height of 2.5 inches (6 cm) when used around vehicle repair, service, or assembly pits. Toeboards may be omitted around vehicle repair, service, or assembly pits when the employer can demonstrate that a toeboard would prevent access to a vehicle that is over the pit.
- Are capable of withstanding, without failure, a force of at least 50 pounds (222 N) applied in any downward or outward direction at any point along the toeboard.

6.6.2. Elevated surfaces, such as the Halvorsen and Southwest 25K Loaders, elevate risks associated with falling objects. IAW 29 CFR 1926, Subpart M:

- Barricade the area to which objects could fall, prohibit employees from

entering the barricaded area

- Keep objects that may fall far enough away from the edge of a higher level so that those objects would not go over the edge if they were accidentally displaced.
- Follow all applicable Technical Orders, Manufacturers Operators Manuals, and guidance surrounding operations of assets that present falling object risks.

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

DAFI 24-301, *Ground Transportation.* 9 January 2026

DAFI 24-302, *Vehicle Management,* 23 January 2026

TO 36-1-191, *Technical and Managerial Reference for Motor Vehicle Maintenance,* 7 February 2019

TO 36M-1-141*, 463 L Material Handling Equipment System,* 1 June 2018

Department of Defense Regulations, Directives, and Instructions

DoDI 6055.04, *DoD Motor Vehicle and Traffic Safety*, 27 August 2021

DoDM 4500.36, *Acquisition, Management, and Use of DoD Non-Tactical Vehicles,* 20 December 2018

Code of Federal Regulations (CFR)

Title 29 CFR, *Labor*, Part 1926, Subpart M

Title 49 CFR, Subchapter C, *Hazardous Materials Regulation, Parts 171-179*

DoT-SP 3498*, Driver Exemption Programs,* 16 October 2018

OSHA 1910.29, *Fall Protection Systems and Falling Object Protection - Criteria and Practices*

United States Code (U.S.C.)

Title 31 U.S.C. § 1344, *Passenger Carrier Use*

Title 40 U.S.C. § 601-611, *Motor Vehicle Pools and Transportation Systems*

Adopted Forms

DAF Form 1800, *Operator's Inspection Guide and Trouble Report*

DD Form 518, *Accident Identification Card*

SF 91, *Motor Vehicle Accident Report*

SF 94, *Statement of Witness*

Abbreviations and Acronyms

AFI—Air Force Instruction

BO—Blackout

CONUS—Continental United States

DoD—Department of Defense

DoDI—Department of Defense Instruction

DoT—Department of Transportation

DoW—Department of War

GMV—Government Motor Vehicle

GSA—General Services Administration

IAW—In Accordance With

MPH—Miles per Hour

TDY—Temporary Duty

USC—United States Code

VCO—Vehicle Control Official

Terms

Employee—An employee of an agency in either the competitive or excepted service or an enrollee of the Job Corps established by Title 42 U.S.C § 102.

Installation—Real property owned or leased by the United States and under the jurisdiction of one of the DoD Components, including family housing designed for rent for residential use by civilian or military personnel of the Army, Navy, Marine Corps or Air Force, and constructed under the National Housing Act.

Motor Vehicle Accident—An occurrence involving a motor vehicle resulting from a collision with another moving or stationary objects. Mechanical failures resulting from operator abuse or negligence are not accidents under this definition.

Official Purposes—Any application of a motor vehicle in support of authorized DoD functions, activities or operations.

Operations—Those functions associated with the organization responsible for administering, planning, directing and controlling the assignment and movement of transportation equipment and operators in the transporting of personnel and cargo.

Operator's Inspection and Service—Those maintenance inspections and functions performed by the operator, before, during and after operation to ensure the vehicle is safe and serviceable.

Vehicle Abuse—Damage caused by neglect or willful acts of improper operation or care.

Vehicle Misuse—Use of GMVs, including those rented or leased, for any purpose other than that of official purposes only (e.g., in support of authorized DoD functions, activities, or operations). Vehicle misuse includes, but is not limited to, use of a GMV solely to enhance the comfort or convenience of member(s), or transportation by a GMV for reasons of rank, position, prestige or personal convenience.