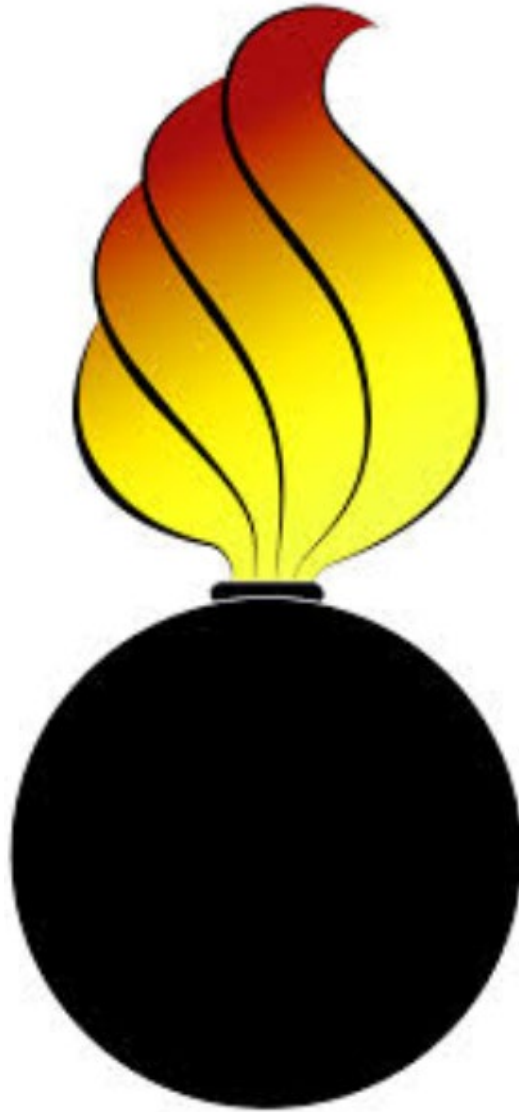


EXPLOSIVES DRIVERS COURSE



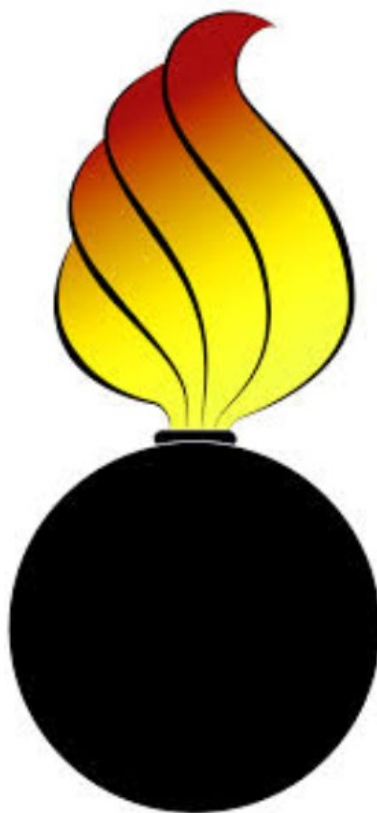
**DO NOT WRITE IN THIS
GUIDE!**

BOOK # _____

EXPLOSIVES DRIVERS COURSE

STUDENT COURSE GUIDE

GENERAL SAFETY REGULATIONS



**DO NOT WRITE IN THIS
GUIDE!**

Last update: January 2018

EXPLOSIVES DRIVERS COURSE

1. LEARNING OBJECTIVES.

a. **Terminal Learning Objective:** Given a motor vehicle, understand the requirements and qualifications in order to transport ammunition and explosives (A&E).

b. **Enabling Learning Objectives:**

(1) With the aid of references, identify the various requirements to obtain an explosives driver's license.

(2) With the aid of references, identify who can be an authorized driver.

(3) With the aid of references, identify various disciplinary actions leading to revocation of explosives driver license.

(4) With the aid of references, identify general safety rules while driving an A&E laden vehicle.

2. LICENSING.

a. **General Requirements.** All Navy and Marine Corps military, civilian and contractor personnel shall be qualified and properly licensed to operate motor vehicles transporting Ammunition and Explosives (A&E).

(1) Military drivers shall hold a valid state license when driving off-base, but are exempt from Commercial Driver's License (CDL) requirements per 49 CFR 383.3. They must also possess a Driver Improvement training documentation if under 26 years of age.

(2) Civilian and contractor drivers shall hold a valid state license with a CDL endorsement for hazardous materials when driving off-base on public roads or when crossing public roads, as cited in 49 CFR 383.121. On base only, civilians may use a valid U.S. Government Motor Vehicle Operator's Identification Card (OF-346) with "on base only" stamp in place of CDL endorsement.

(3) Both military and civilian drivers must have a Medical Examiners Certificate (OPNAV 8020/6).

EXPLOSIVES DRIVERS COURSE

(4) Drivers of government owned motor vehicles shall possess a valid U.S. Government Motor Vehicle Operator's Identification Card (OF-346).

b. Medical Examinations.

(1) Military explosives drivers, both active duty and reserve, must have a medical examination every two years until the age of 50. After age 50, a medical examination is required annually.

(2) Civilian and contractor personnel shall have a medical examination every two years until the age of 60. After age 60, a medical examination is required annually.

(3) Medical examinations will be performed by a licensed medical examiner. Medical examinations for explosives cannot be conducted by an Independent Duty Corpsman.

(4) The Medical Examiners Certificate (OPNAV 8020/6) may be found on Naval Forms Online.

(5) The OF-346 will state "**Explosives Driver-Must Hold a Current Medical Certificate.**" This is not to be confused with the additional CDL hazardous materials endorsement required on the state driver's license of civilian explosives drivers transporting A&E off-base.

c. Drugs and Alcohol.

(1) Explosives drivers found to be addicted to drugs or alcohol shall be disqualified.

(2) Military and civilian drivers are subject to random testing.

(3) Certification shall be revoked if the driver is found to be under the influence of drugs or alcohol while on duty.

(4) Prescription drugs that could potentially interfere with safe driving could cause the drivers certification to be temporarily revoked.

d. Age and Experience.

EXPLOSIVES DRIVERS COURSE

(1) An explosives drivers must be 18 years of age or older to operate a motor vehicle transporting A&E on-base.

(2) Explosives drivers must be 21 years of age or older to operate a motor vehicle transporting A&E off-base.

(3) Drivers must have a safe driving record and have training and experience with the type of equipment being operated.

e. Ability to Read and Understand Regulations.

Explosive drivers must be able to read, write, and understand the English language and understand the regulations pertaining to their duties. They must be able to complete the various forms for which they are responsible for.

3. TRAINING REQUIREMENTS.

a. **Initial.** Military, civilian, and contractor personnel selected for positions involving the transporting of A&E must attend the A&E Driver Training Course. Initial training in the driver's course is one time only.

b. **Refresher.** A refresher course is required every two years to maintain their qualifications.

4. DRIVER LIABILITY. All drivers are required to follow all Department of Transportation (DOT), DOD regulations, state and local traffic laws. Any driver in violation of any such regulation or law is subject to fines and/or imprisonment.

5. DISCIPLINARY ACTIONS AND PENALTIES. Drivers are subject to disciplinary actions and penalties for violation of civil and/or military regulations. The degree of disciplinary action and penalty which may be imposed by military authority is dependent upon the individual's past record and the discretion of the Commanding Officer (CO). Criminal penalties may also be imposed as set forth in 49 CFR 107.333.

a. Reporting.

(1) All traffic violations or accidents shall be reported to the supervisor, security officer or safety

EXPLOSIVES DRIVERS COURSE

officer, and shall be noted on the operator's driving record.

(2) The CO shall suspend or revoke a military driver's permit if, in his/her opinion, it would be in the best interest of the service.

b. **Automatic Revocation.** A military driver's permit shall be revoked automatically for any of the following violations:

(1) Drug use or alcohol abuse.

(2) Transportation or possession of alcohol or illegal drugs.

(3) Failure to report an accident.

(4) Leaving the scene an accident.

(5) Smoking within 25 feet of an A&E laden vehicle.

(6) Revocation of state driver's license.

First offenders of the first four violations listed above shall be disqualified for 1 year after the date of conviction. If convicted of a subsequent offense within 3 years of previous offense then the driver shall be disqualified for 3 years.

c. **Reinstatement.**

(1) Drivers whose permit has been suspended/revoked shall be required to pass the mental and physical examinations prior to the issuance of a new driver's permit.

(2) Drivers shall be required to pass a driving test given after a state and/or installation waiting period is met.

(3) Reinstatement shall be granted only with the permission of the unit's CO.

d. **Arrest.**

EXPLOSIVES DRIVERS COURSE

(1) If arrested, the driver (military or civilian) shall notify his/her home station immediately.

(2) If possible, the driver's immediate supervisor and Chain-of-Command shall be contacted as well.

6. PERSONNEL ASSIGNMENT.

a. **Authorized Drivers.**

(1) Each explosives driver must be officially trained before he or she is authorized to transport A&E.

(2) No persons other than those certified as explosives drivers shall operate motor vehicles carrying A&E.

b. **Off-Base Drivers/Riders.**

(1) Two explosives drivers are required for all off-base A&E movements.

Note: *An exception to this rule may be permitted during movements from the Ammunition Supply Point (ASP) to local ranges that require driving off-base to close proximity ranges.

(2) No one shall be allowed to ride in the cargo compartment of a vehicle transporting A&E.

(3) When a motor vehicle that has seating for three or more passengers is used, only the two assigned explosives drivers shall occupy the cab of the vehicle.

(4) When a six-passenger motor vehicle is used, two explosives drivers together with three authorized personnel may occupy the cab of the vehicle.

c. **On-Base Drivers/Riders.**

(1) The driver and two authorized riders may occupy the cab of a three-passenger motor vehicle.

(2) The driver and five authorized riders may occupy the cab of a six-passenger motor vehicle.

EXPLOSIVES DRIVERS COURSE

(3) No passengers are permitted to ride in the cargo area.

7. HAZARDS OF ELECTROMAGNETIC RADIATION TO ORDNANCE (HERO).

HERO is the program concerned with the prevention of accidental ignition of electrically initiated devices (EIDs) in ordnance due to Radio Frequency (RF) electromagnetic fields. NAVSEA OP 3565 VOL 2 provides the precautions and procedures for safe handling, transporting, and storing of electrically initiated ordnance when the possibility of exposure to RF environments exist.

a. Vehicle Communication Devices.

(1) A&E laden vehicles used for off-base transportation must be equipped with a HERO certified two-way telecomm device.

(2) Drivers must maintain two-way radio communication capability with the following:

- (a) Shipping activity.
- (b) Receiving activity.
- (c) Municipal law enforcement.
- (d) Emergency response officials along the planned route.

b. Distances.

(1) HERO SAFE ordnance may be transported in vehicles equipped with HERO certified electrical and electronic devices (to include cellular and satellite phones).

(2) The transmitting antenna must be 10 feet or more from the ordnance.

(3) HERO Labels must be located on all hand held devices to inform the operator of required distances.

c. Unintentional Transmit of RF Energy.

EXPLOSIVES DRIVERS COURSE

(1) Do not turn on any transmitting equipment without proper authorization from the supervisor in charge of operations.

(2) Low-power transceiver devices such as cell phones, active pagers, Computer Tablets, and some walkie-talkies automatically transmit RF energy without operator action and may cause *activation* or *degradation* of electrically initiated explosives.

8. SECURITY.

a. **General.**

(1) Drivers must follow security policies, procedures and responsibilities to safeguard A&E.

(2) All A&E items are categorized into four Security Risk Categories (SRC), based upon factors such as their readiness to fire, portability, and potential to inflict casualties and destroy property.

(3) Driver or security is never to be more than 25 feet from vehicle loaded with A&E.

b. **Security Risk Categories.**

(1) Category I: Missiles and rockets in a ready to fire configuration (i.e. AT-4, Javelin).

(2) Category II: Grenades (HE), mines, explosives used for demolition, TOW.

(3) Category III: Ammunition, .50 caliber or larger, incendiary grenades, fuses for high explosive, blasting caps, detonating cord, supplementary charges.

(4) Category IV: Ammunition with non-explosive projectiles, fuses except for HE, illumination, smoke, and CS grenades, and riot control agents.

c. **Category I Requirements.**

(1) Category I requires an officer/SNCO/GS-9 or above to receipt for and transport/escort the materiel on or off-base.

EXPLOSIVES DRIVERS COURSE

(2) Additionally, (1) armed guard is required per vehicle to provide security during the movement of the materiel. [(1) armed officer/SCNO/GS-9 or above and (1) armed guard per MCIEAST-MCB CAMLEJO 8020.1_]

d. **Category II - IV Requirements.** Categories II through IV require one armed guard per vehicle regardless of whether transporting on or off-base

e. **Temporary Storage.** Category IV (low-risk) A&E temporarily stored on vehicles requires constant surveillance by unit personnel during operating hours; one patrol per hour during non-operating hours.

f. **Weapons and Ammo Transport.**

(1) Ammo specific to the weapons will not be transported together on the same vehicle.

(2) Authorized only for transportation between ASPs and facilities for *marksmanship training*, qualification, competition, or other related requirements on or near the base.

(3) Constant surveillance is required within 25 feet from the A&E at all times.

9. ROUTE PLAN.

a. **General.** For off-base movements of Class/Division 1.1-1.4 A&E, prior to departing the base, the driver must have in his/her possession a written route plan.

b. **Requirements.** The route plan must have:

(1) Strip Map (most direct and efficient route possible to avoid hazards).

(2) Communication Plan (HERO).

(3) Security Plan.

(4) Recovery Plan.

(5) Refueling Plan.

(6) Rest stops.

EXPLOSIVES DRIVERS COURSE

c. **Changes.** The route, established by the cognizant authority, shall not be changed except in cases of emergency. Deviations shall not be made except as follows:

(1) On the direct orders of local law enforcement authorities.

(2) Following accidents, incidents, or breakdowns in which damage to the motor vehicle justifies towing (after unloading) to another locality.

(3) On the direct order of the CO, safety officer, ordnance officer, or their designated representatives.

(4) When dangerous electrical storms are encountered.

(5) When detours have been established by traffic authorities.

(6) When safe haven is required during a civil disturbance or natural disaster.

10. GENERAL SAFETY RULES.

a. **General Safety Rules.** Explosive drivers shall observe the following general safety rules:

(1) Observe and obey all posted road signs.

(2) Maintain a safe clearance for bridges and tunnels.

(3) Exercise caution when overtaking or being passed by other vehicles.

(4) Use directional lights when passing or turning.

(5) Exercise caution when passing a stationary bus or streetcar.

(6) Exercise caution when approaching emergency vehicles.

(7) Exercise caution when backing or maneuvering.

EXPLOSIVES DRIVERS COURSE

- (8) Exercise caution when stopping or parking.
- (9) Observe right of way regulations.
- (10) Be certain vehicle and cargo is secure at all times.
- (11) Maintain a safe distance for traffic and road conditions.
- (12) Exercise caution when near or passing an open fire.
- (13) Drivers shall understand and obey all local civil regulations, as well as any on-base regulations, concerning the use (or restricting the use) of cell phones in a moving vehicle.
- (14) Wearing portable headphones, earphones, or other listening devices while operating a motor vehicle is prohibited.

EXPLOSIVES DRIVERS COURSE

THIS PAGE LEFT INTENTIONALLY BLANK

EXPLOSIVES DRIVERS COURSE

STUDENT COURSE GUIDE

PREPERATION FOR SHIPMENT



**DO NOT WRITE IN THIS
GUIDE!**

Last update: January 2018

EXPLOSIVES DRIVERS COURSE

1. LEARNING OBJECTIVES.

a. **Terminal Learning Objective:** Given a motor vehicle and a blank DD Form 626 Motor Vehicle Inspection (Transportation of Hazardous Materials), conduct an inspection of the motor vehicle in the correct manner.

b. **Enabling Learning Objectives:**

(1) With the aid of references, identify the types of vehicles authorized to transport A&E.

(2) With the aid of references, list the types of safety equipment required for an A&E laden vehicle.

(3) With the aid of references, list the responsibilities of the driver and shipping inspector during the vehicle inspection.

(4) With the aid of references, identify what the DD Form 626 is used for.

(5) With the aid of references identify what the DD Form 2890 is used for.

2. VEHICLE SPECIFICATIONS.

a. **General.**

(1) Class/Division 1.1 through 1.6 A&E transported on or off-base is authorized to be transported in trucks, full trailers, semi-trailers and double trailers equipped with closed bodies, flatbeds, pickup trucks, stake-sides, dromedary containers, and open tops.

(2) All motor vehicles must have a closed body or the A&E must be covered with a fire and water-resistant tarpaulin for transportation off-base.

(3) Military motor vehicles may be exempt from the tarpaulin requirement during clear weather while transporting A&E on-base.

(4) The tarpaulin must be securely fastened to the vehicle.

EXPLOSIVES DRIVERS COURSE

b. **Fully-Closed Vehicles:** A fully-closed vehicle is equipped with permanent sides and a permanent top.

(1) The exterior surface shall be constructed of fireproof, noncombustible materials.

(2) There shall be no exposed ferrous metal on the floors or interior walls which may come in direct contact with the explosive item.

(3) The doors shall be tight fitting, securely affixed to hinges and equipped with suitable latches and operational locks.

c. **Stake-side trucks, open-top semi-trailers, and soft-side trailers.** Side and end members or gates of such strength and design as to securely contain all units or portions of the cargo under existing road conditions.

d. **Pickup Trucks.**

(1) Use of pickup trucks should be kept to a minimum and used only when closed vehicles are not readily available.

(2) Must have hard covers securely bolted to the side rail of the cargo compartment and a lockable tailgate for off-base transportation.

(3) Cargo loaded on pickup trucks must be properly blocked and braced to guard against longitudinal or lateral movement for off-base transportation.

(4) Plastic bed liners generate static electricity and are not authorized for use in the transport of scrap or bulk explosives in any container, nor for the transport of any A&E item that is not packaged in its approved shipping container.

e. **Tactical Vehicles.** High Mobility Multipurpose Wheeled Vehicles (HMMWVs), Assault Amphibious Vehicles (AAVs), 7-ton series vehicles, Logistics Vehicle Systems (LVS's), and other approved tactical series vehicles may be authorized to transport munitions on and off-base.

3. MOTOR VEHICLE INSPECTION.

a. **DD Form 626.**

EXPLOSIVES DRIVERS COURSE

(1) The Motor Vehicle Inspection Transporting Hazardous Materials (DD Form 626) is completed every time a motor vehicle carrying A&E arrives at or leaves at any naval activity, even if it is destined to another activity.

(2) Vehicles with unsatisfactory conditions will not be accepted for loading unless deficiencies are corrected prior to loading.

(3) The driver is required to participate in the inspection and sign the form. The driver, by signing the form at the origin and destination, shares responsibility with the inspector for the suitability and safety of the load.

(4) The form consists of 3 pages. The first page is the vehicle inspection checklist. Page one is divided into three sections: Documentation, mechanical inspection, and post-loading inspection. Pages two and three are general instructions for filling out page one and conducting the inspection.

b. **Empty Vehicle Inspection.** Prior to the loading of A&E on a motor vehicle the vehicle will be inspected by a shipping inspector per the safety regulations contained in DD Form 626. The shipping inspector shall inspect for the following:

- (1) Licenses (stateside/OF-346).
- (2) Explosives driver endorsement on OF-346.
- (3) Medical certificate (OPNAV 8020/6).
- (4) Glove Box Edition (excerpt from SW020-AF-HBK-010).
- (5) Placards.
- (6) Warning Devices.
- (7) Wooden pallet (required at Camp Lejeune).
- (8) Cargo straps.
- (9) One fire extinguisher.

EXPLOSIVES DRIVERS COURSE

- (10) One set of wheel chocks.
- (11) Three red bi-directional reflective triangles.
- (12) Only two rearview mirrors are required.
- (13) A spare tire is not required, but if furnished it shall be inspected in the same manner as wheel-mounted tires. A bad spare tire is cause for rejection.
- (14) Tools for changing tires (if vehicle is equipped with spare tires).

EXPLOSIVES DRIVERS COURSE

MOTOR VEHICLE INSPECTION (TRANSPORTING HAZARDOUS MATERIALS)												
(Read Instructions before completing this form.)												
This form applies to all vehicles which must be marked or placarded in accordance with Title 49 CFR.						1. BILL OF LADING/TRANSPORTATION CONTROL NUMBER						
SECTION I - DOCUMENTATION				ORIGIN a.				DESTINATION b.				
2. CARRIER/GOVERNMENT ORGANIZATION												
3. DATE/TIME OF INSPECTION												
4. LOCATION OF INSPECTION												
5. OPERATOR(S) NAME(S)												
6. OPERATOR(S) LICENSE NUMBER(S)												
7. MEDICAL EXAMINER'S CERTIFICATE*												
8. (X if satisfactory at origin)								9. CVSA DECAL DISPLAYED ON COMMERCIAL EQUIPMENT*				
a. HAZMAT ENDORSEMENT				d. ERG OR EQUIVALENT COMMERCIAL:		YES		NO				
b. VALID LEASE*				e. DRIVER'S VEHICLE INSPECTION REPORT*				a. TRUCK/TRACTOR		YES		
c. ROUTE PLAN				f. COPY OF 49 CFR PART 387				b. TRAILER		YES		
SECTION II - MECHANICAL INSPECTION												
All items shall be checked on empty equipment prior to loading. Items with an asterisk shall be checked on all incoming loaded equipment.												
10. TYPE OF VEHICLE(S)						11. VEHICLE NUMBER(S)						
12. PART INSPECTED (X as applicable)		ORIGIN (1)		DESTINATION (2)				ORIGIN (1)		DESTINATION (2)		COMMENTS (3)
		SAT	UNSAT	SAT	UNSAT			SAT	UNSAT	SAT	UNSAT	
a. SPARE ELECTRICAL FUSES						k. EXHAUST SYSTEM						
b. HORN OPERATIVE						l. BRAKE SYSTEM*						
c. STEERING SYSTEM						m. SUSPENSION						
d. WINDSHIELDWIPERS						n. COUPLING DEVICES						
e. MIRRORS						o. CARGO SPACE						
f. WARNING EQUIPMENT						p. LANDING GEAR*						
g. FIRE EXTINGUISHER*						q. TIRES, WHEELS, RIMS						
h. ELECTRICAL WIRING						r. TAILGATE/DOORS*						
i. LIGHTS AND REFLECTORS						s. TARPULIN*						
j. FUEL SYSTEM*						t. OTHER (Specify)						
13. INSPECTION RESULTS (X one) ACCEPTED						REJECTED						
(If rejected give reason under "Remarks". Equipment will be approved if deficiencies are corrected prior to loading.)												
14. SATELLITE MOTOR SURVEILLANCE SYSTEM: (X one) ACCEPTED						REJECTED						
15. REMARKS												
16. INSPECTOR SIGNATURE (Origin)						17. INSPECTOR SIGNATURE (Destination)						
SECTION III - POST LOADING INSPECTION												
This section applies to Commercial and Government/Military vehicles. All items will be checked prior to release of loaded equipment and shall be checked on all incoming loaded equipment.												
18. LOADED IAW APPLICABLE SEGREGATION/COMPATIBILITY TABLE OF 49 CFR		ORIGIN (1)		DESTINATION (2)				ORIGIN (1)		DESTINATION (2)		COMMENTS (3)
		SAT	UNSAT	SAT	UNSAT			SAT	UNSAT	SAT	UNSAT	
19. LOAD PROPERLY SECURED TO PREVENT MOVEMENT												
20. SEALS APPLIED TO CLOSED VEHICLE; TARPULIN APPLIED ON OPEN EQUIPMENT												
21. PROPER PLACARDS APPLIED												
22. SHIPPING PAPERS/DD FORM 2890 FOR GOVERNMENT VEHICLE SHIPMENTS												
23. COPY OF DD FORM 626 FOR DRIVER												
24. SHIPPED UNDER DOT SPECIAL PERMIT 868												
25. INSPECTOR SIGNATURE (Origin)						26. DRIVER(S) SIGNATURE (Origin)						
27. INSPECTOR SIGNATURE (Destination)						28. DRIVER(S) SIGNATURE (Destination)						

EXPLOSIVES DRIVERS COURSE

INSTRUCTIONS

SECTION I - DOCUMENTATION

General Instructions.

All items (2 through 9) will be checked at origin prior to loading. Items with an asterisk (*) apply to commercial operators or equipment only. Only items 2 through 7 are required to be checked at destination.

Items 1 through 5. Self explanatory.

Item 6. Enter operator's Commercial Driver's License (CDL) number or Military OF-346 License Number. CDL and OF-346 must have the HAZMAT and other appropriate endorsements IAW 49 CFR 383.

Item 7. *Enter the expiration date listed on the Medical Examiner's Certificate.

Item 8.a. Hazardous Materials Certification. In accordance with applicable service regulations, ensure operator has been certified to transport hazardous materials. Check the expiration date on driver's HAZMAT Certification.

b. *Valid Lease. Shipper will ensure a copy of the appropriate contract or lease is carried in all leased vehicles and is available for inspection. (49 CFR 376.12 and 376.11(c)(2)).

c. Route Plan. Prior to loading any Hazard Class/Division 1.1, 1.2, or 1.3 (Explosives) for shipment, ensure that the operator possesses a written route plan in accordance with 49 CFR Part 397. Route Plan requirements for Hazard Class 7 (Radioactive) materials are found in 49 CFR 397.101.

d. Emergency Response Guidebook (ERG) or Equivalent. Commercial operators must be in possession of an ERG or equivalent document. Shipper will provide applicable ERG page(s) to military operators.

e. *Driver's Vehicle Inspection Report. Review the operator's Vehicle Inspection Report. Ensure that there are no defects listed on the report that would affect the safe operation of the vehicle.

f. Copy of 49 CFR Part 397. Operators are required by regulation to have in their possession a copy of 49 CFR Part 397 (Transportation of Hazardous Materials Driving and Parking Rules). If military operators do not possess this document, shipper will provide a copy to operator.

Item 9. *Commercial Vehicle Safety Alliance (CVSA) Decal. Check to see if equipment has a current CVSA decal and mark applicable box. Vehicles without CVSA, check documentation of the last vehicle periodic inspection and perform DD Form 626 inspection.

SECTION II - MECHANICAL INSPECTION

General Instructions.

All items (12.a. through 12.i.) will be checked on all incoming empty equipment prior to loading. All UNSATISFACTORY conditions must be corrected prior to loading. Items with an asterisk (*) shall be checked on all incoming loaded equipment. Unsatisfactory conditions that would affect the safe off-loading of the equipment must be corrected prior to unloading.

SECTION II (Continued)

Item 12.a. Spare Electrical Fuses. Check to ensure that at least one spare fuse for each type of installed fuse is carried on the vehicle as a spare or vehicle is equipped with an overload protection device (circuit breaker). (49 CFR 393.95)

b. Horn Operative. Ensure that horn is securely mounted and of sufficient volume to serve purpose. (49 CFR 393.81)

c. Steering System. The steering wheel shall be secure and must not have any spokes cracked through or missing. The steering column must be securely fastened. Universal joints shall not be worn, faulty or repaired by welding. The steering gear box shall not have loose or missing mounting bolts or cracks in the gear box mounting brackets. The pitman arm on the steering gear output shaft shall not be loose. Steering wheel shall turn freely through the limit of travel in both directions. All components of a power steering system must be in operating condition. No parts shall be loose or broken. Belts shall not be frayed, cracked or slipping. The power steering system shall not be leaking. (49 CFR 396 Appendix G)

d. Windshield/Wipers. Inspect to ensure that windshield is free from breaks, cracks or defects that would make operation of the vehicle unsafe; that the view of the driver is not obscured and that the windshield wipers are operational and wiper blades are in serviceable condition. Defroster must be operative when conditions require. (49 CFR 393.60, 393.78 and 393.79)

e. Mirrors. Every vehicle must be equipped with two rear vision mirrors located so as to reflect to the driver a view of the highway to the rear along both sides of the vehicle. Mirrors shall not be cracked or dirty. (49 CFR 393.80)

f. Warning Equipment. Equipment must include three bidirectional emergency reflective triangles that conform to the requirements of FMVSS No. 125. FLAME PRODUCING DEVICES ARE PROHIBITED. (49 CFR 393.95)

g. Fire Extinguisher. Military vehicles must be equipped with one serviceable fire extinguisher with an Underwriters Laboratories rating of 10 BC or more. (Commercial motor vehicles must be equipped with one serviceable 10 BC Fire Extinguisher). Fire extinguisher must be located so that it is readily accessible for use and securely mounted on the vehicle. The fire extinguisher must be designed, constructed and maintained to permit visual determination of whether it is fully charged. (49 CFR 393.95)

h. Electrical Wiring. Electrical wiring must be clean and properly secured. Insulation must not be frayed, cracked or otherwise in poor condition. There shall be no uninsulated wires, improper splices or connections. Wires and electrical fixtures inside the cargo area must be protected from the lading. (49 CFR 393.28)

EXPLOSIVES DRIVERS COURSE

INSTRUCTIONS

SECTION II (Continued)

l. Lights/Reflectors. (Head, tail, turn signal, brake, clearance, marker and identification lights, Emergency Flashers). Inspect to see that all lighting devices and reflectors required are operable, of proper color and properly mounted. Ensure that lights and reflectors are not obscured by dirt or grease or have broken lenses. High/Low beam switch must be operative. Emergency Flashers must be operative on both the front and rear of vehicle. (49 CFR 393.24, 25, and 26)

j. Fuel System. Inspect fuel tank and lines to ensure that they are in serviceable condition, free from leaks, or evidence of leakage and securely mounted. Ensure that fuel tank filler cap is not missing. Examine cap for defective gasket or plugged vent. Inspect filler necks to see that they are in completely serviceable condition and not leaking at joints. (49 CFR 393.83)

k. Exhaust System. Exhaust system shall discharge to the atmosphere at a location to the rear of the cab or if the exhaust projects above the cab, at a location near the rear of the cab. Exhaust system shall not be leaking at a point forward of or directly below the driver compartment. No part of the exhaust system shall be located where it will burn, char or damage electrical wiring, fuel system or any other part of the vehicle. No part of the exhaust system shall be temporarily repaired with wrap or patches. (49 CFR 393.83)

l. Brake System (to include hand brakes, parking brakes and Low Air Warning devices). Check to ensure that brakes are operational and properly adjusted. Check for audible air leaks around air brake components and air lines. Check for fluid leaks, cracked or damaged lines in hydraulic brake systems. Ensure that parking brake is operational and properly adjusted. Low Air Warning devices must be operative. (49 CFR 393.40, 41, 42, 43, 44, 45, 47, 48, 49, 50, 51, 52, 53, and 55)

m. Suspension. Inspect for indications of misaligned, shifted or cracked springs, loosened shackles, missing bolts, spring hangers unsecured at frame and cracked or loose U-bolts. Inspect for any unsecured axle positioning parts, and sign of axle misalignment, broken torsion bar springs (if so equipped). (49 CFR 393.207)

n. Coupling Devices (Inspect without uncoupling). Fifth Wheels: Inspect for unsecured mounting to frame or any missing or damaged parts. Inspect for any visible space between upper and lower fifth wheel plates. Ensure that the locking jaws are around the shank and not the head of the kingpin. Ensure that the release lever is seated properly and safety latch is engaged. Pintle Hook, Drawbar, Towbar Eye and Tongue and Safety Devices: Inspect for unsecured mounting, cracks, missing or ineffective fasteners (welded repairs to pintle hook is prohibited). Ensure safety devices (chains, hooks, cables) are in serviceable condition and properly attached. (49 CFR 393.70 and 71)

o. Cargo Space. Inspect to ensure that cargo space is clean and free from exposed bolts, nuts, screws, nails or inwardly projecting parts that could damage the lading. Check floor to ensure it is tight and free from holes. Floor shall not be permeated with oil or other substances. (49 CFR 393.84)

p. Landing Gear. Inspect to ensure that landing gear and assembly are in serviceable condition, correctly assembled, adequately lubricated and properly mounted.

SECTION II (Continued)

q. Tires, Wheels and Rims: Inspect to ensure that tires are properly inflated. Flat or leaking tires are unacceptable. Inspect tires for cuts, bruises, breaks and blisters. Tires with cuts that extend into the cord body are unacceptable. Thread depth shall not be less than: 4/32 inches for tires on a steering axle of a power unit, and 2/32 inches for all other tires. Mixing bias and radial on the steering axle is prohibited. Inspect wheels and rims for cracks, unseated locking rings, broken, loose, damaged or missing lug nuts or elongated stud holes. (49 CFR 393.75)

r. Tailgate/Doors. Inspect to see that all hinges are tight in body. Check for broken latches and safety chains. Doors must close securely. (49 CFR 177.835(h))

s. Tarpaulin. If shipment is made on open equipment, ensure that lading is properly covered with fire and water resistant tarpaulin. (49 CFR 177.835(h))

t. Other Unsatisfactory Condition. Note any other condition which would prohibit the vehicle from being loaded with hazardous materials.

Item 14. For AA&E and other shipments requiring satellite surveillance, ensure that the Satellite Motor Surveillance System is operable. The DTTs Message Display Unit, when operative, will display the signal "DTTS ON". The munitions carrier driver, when practical, will position the DTTs message display unit in a manner that allows the shipping inspector or other designated shipping personnel to observe the "DTTS ON" message without climbing aboard the cab of the motor vehicle.

SECTION III - POST LOADING INSPECTION

General Instructions.

All placarded quantities items will be checked prior to the release of loaded equipment. Shipment will not be released until deficiencies are corrected. All items will be checked on incoming loaded equipment. Deficiencies will be reported in accordance with applicable service regulations.

Item 18. Check to ensure shipment is loaded in accordance with 49 CFR Part 177.848 and the applicable Segregation or Compatibility Table of 49 CFR 177.848.

Item 19. Check to ensure the load is secured from movement in accordance with applicable service outload drawings.

Item 20. Check to ensure seal(s) have been applied to closed equipment; fire and water resistant tarpaulin applied on open equipment.

Item 21. Check to ensure each transport vehicle has been properly placarded in accordance with 49 CFR 172.504.

Item 22. Check to ensure operator has been provided shipping papers that comply with 49 CFR 172.201 and 202. For shipments transported by Government vehicle, shipping paper will be DD Form 2890.

Item 23. Ensure operator(s) sign DD Form 626, are given a copy and understand the hazards associated with the shipment.

Item 24. Applies to Commercial Shipments Only. If shipment is made under DOT Special Permit 868, ensure that shipping papers are properly annotated and copy of Special Permit 868 is with shipping papers.

Item 25. Ensure driver/operator signs DD Form 626 at origin.

Item 26. Ensure driver/operator signs DD Form 626 at destination.

EXPLOSIVES DRIVERS COURSE

c. **Completion of DD Form 626.** Upon completion of the inspection, the vehicle will be approved or rejected to transport A&E. The ASP may require you to get in the back of the line after deficiencies are corrected.

EXPLOSIVES DRIVERS COURSE

THIS PAGE LEFT INTENTIONALLY BLANK

EXPLOSIVES DRIVERS COURSE

STUDENT COURSE GUIDE

PLACARDS AND COMPATIBILITY



**DO NOT WRITE IN THIS
GUIDE!**

Last update: January 2018

EXPLOSIVES DRIVERS COURSE

1. LEARNING OBJECTIVES.

a. **Terminal Learning Objective:** Given a A&E laden vehicle properly placard the vehicle based on the HC/D and compatibility group.

b. **Enabling Learning Objectives:**

(1) With the aid of references, identify the hazard classification of A&E.

(2) With the aid of references, identify the six divisions of A&E.

(3) With the aid of references, identify the storage compatibility groups of A&E.

(4) With the aid of references, identify the placarding requirements for a vehicle loaded with A&E.

(5) With the aid of references, identify the proper placement of placards on an A&E laden vehicle.

2. HAZARD CLASSIFICATION/DIVISIONS.

a. **Hazard Classification.** A Hazard Classification (HC) is based on the chemical and physical characteristics of the material and its reaction under various conditions.

(1) Out of nine HCs, HC 1 pertains to ammunition, explosives substances, and explosive articles.

b. **Divisions.** HC 1 A&E materials are further grouped into Divisions 1 through 6 (1.1, 1.2, 1.3, 1.4, 1.5, and 1.6) based on the type and magnitude of the explosive hazard and associated safety risks.

(1) Hazard Class 1/Division 1 = Mass Detonation.

(2) Hazard Class 1/Division 2 = Explosion with Fragmentation.

(3) Hazard Class 1/Division 3 = Mass Fire.

(4) Hazard Class 1/Division 4 = Moderate Fire.

EXPLOSIVES DRIVERS COURSE

3. COMPATIBILITY GROUPS. A&E materials are further categorized into 13 compatibility groups (A, B, C, D, E, F, G, H, J, K, L, N, and S) based on the type and degree of risk they present in storage and transportation.

a. **General.** Compatibility groups determine what A&E can be stored or transported together without increasing the probability of an accident or magnitude of an accident.

(1) Not all A&E can be transported together in the same motor vehicle. A&E is assigned to a storage compatibility group when they can be stored and transported together without significantly increasing either the probability of an accident or, for a given quantity, the magnitude of the effects of such an accident.

(2) The following table is used to determine whether A&E items may be transported together on the same vehicle.

Table 2-6. Compatibility Requirements for Class 1 (Explosive) Materials Loaded On and Transported by Motor Vehicle Over Public Highway or by Railcar

Compatibility Group	A	B	C	D	E	F	G	H	J	K	L	N	S
A		X	X	X	X	X	X	X	X	X	X	X	X
B	X		X	X(4)	X	X	X	X	X	X	X	X	4/5
C	X	X		2	2	X	6	X	X	X	X	3	4/5
D	X	X(4)	2		2	X	6	X	X	X	X	3	4/5
E	X	X	2	2		X	6	X	X	X	X	3	4/5
F	X	X	X	X	X		X	X	X	X	X	X	4/5
G	X	X	6	6	6	X		X	X	X	X	X	4/5
H	X	X	X	X	X	X	X		X	X	X	X	4/5
J	X	X	X	X	X	X	X	X		X	X	X	4/5
K	X	X	X	X	X	X	X	X	X		X	X	4/5
L	X	X	X	X	X	X	X	X	X	X	1	X	X
N	X	X	3	3	3	X	X	X	X	X	X		4/5
S	X	4/5	4/5	4/5	4/5	4/5	4/5	4/5	4/5	4/5	X	4/5	

EXPLOSIVES DRIVERS COURSE

Numbers and symbols shown in this table are as follows:

A blank in the table indicates that no restrictions apply.

For motor vehicles the letter "X" in the table indicates that explosives of different compatibility groups may not be carried on the same motor vehicle. For rail cars the letter "X" indicates that explosives of different compatibility groups may not be carried on the same railcar unless packed in separate freight containers (e.g. two or more freight containers mounted upon the same rail car).

1 - means explosives from compatibility group L may only be carried on the same motor vehicle or rail car with an identical explosive.

2 - means any combination of explosives from compatibility group C, D, or E is assigned to compatibility group E.

3 - means any combination of explosives from compatibility group C, D, or E with those in compatibility group N is assigned to compatibility group D.

4 - means detonators and detonating primers, Division 1.4S (Class C explosives), may not be loaded in the same rail car with Division 1.1 and 1.2 (Class A explosive) materials as described in [49 CFR 174.81 \(g\)\(3\)\(iv\)](#). Also, see [49 CFR 177.835 \(g\)](#) for restrictions on detonator assemblies, boosters with detonators, and detonators when transported on public highway.

5 - means Division 1.4S fireworks may not be loaded in the same motor vehicle or rail car with Division 1.1 or 1.2 (Class A explosive) materials.

6 - means explosive articles in compatibility group G, other than fireworks and those requiring special handling or stowage, may be loaded, transported, and stored with other explosive articles of compatibility groups C, D and E, provided that no explosive substances (such as those not contained in articles) are carried in the same vehicle or railcar.

4. PLACARDS. Every motor vehicle transporting HC/D 1.1 through 1.4 explosives on or off-base shall be properly placarded per the NAVSEA SW020-AF-HBK-010.

a. Placards.

(1) A motor vehicle must be placarded with the highest hazard of material being transported.

(2) The explosives driver is responsible for ensuring that the appropriate placards are installed on the motor vehicle before it is moved.

(3) An exception to this is when a vehicle is carrying 1.4, 1.5, and 1.6 hazard class explosives containing an aggregate gross weight of less than 1,001 pounds.

(4) The explosive 1.4 placard is not required for those HC/D 1.4 with Compatibility Group S (1.4S) materials that are not required to be labeled 1.4S.

(5) Placards must be:

(a) Orange with black lettering, diamond shaped, and printed horizontally left to right and easily legible.

EXPLOSIVES DRIVERS COURSE

(b) Placed so that it is visible on the front, rear, and both sides of the vehicle.

(c) If a trailer is attached to the vehicle, placards will be placed on all sides of the vehicle, as well as the trailer, with a total of 8 placards visible.

(d) Be securely attached to or placed in a holder.

(e) Be located clear of equipment and devices: pipes, ladders, doors, and tarpaulins etc.

(f) Be located so dirt or water is not directed to it from the wheels of the vehicle.

(g) Have its print displayed horizontally, reading from left to right.

(h) Will not be applied directly to A&E or Tarpaulins.

(i) Placards will be removed or covered only after the vehicle no longer contains the A&E it was transporting.

5. HAZARD IDENTIFICATION FOR FIRE FIGHTING.

a. **HC/D 1.1 Mass Detonation Hazard (The Most Hazardous) .**

(1) These explosives can detonate when involved in a fire and should not be fought unless a rescue attempt is being made.

(2) Withdrawal distance is 4,000 ft.

(3) Examples: Hand Grenades, general purpose bombs, 40mm HEDP, etc.



EXPLOSIVES DRIVERS COURSE

b. HC/D 1.2 Explosion With Fragmentation Hazard.

(1) Attempt to extinguish the fire if it is in an early stage.

(2) Prevent spreading of the fire if possible, detonation of items could occur.

(3) Withdrawal distance is 2,500 ft.

(4) Examples - 20mm HE, 40mm HE, M115 simulators, etc.



c. HC/D 1.3 Mass Fire Hazard.

(1) These fires may be fought if explosives are not directly involved.

(2) Withdrawal distance is 600 ft.

(3) Examples - Flares, grenades, white star signal illumination, etc.



EXPLOSIVES DRIVERS COURSE

d. HC/D 1.4 Moderate Fire Hazard (Least Hazardous).

(1) First Responder: (Security Forces) will fight these fires.

(2) Withdrawal distance is 300 ft.

(3) Examples - 7.62mm, 5.56mm, .38cal, and 9mm ammunition, 40mm TP, M25A1 grenades, etc.



EXPLOSIVES DRIVERS COURSE

THIS PAGE LEFT INTENTIONALLY BLANK

EXPLOSIVES DRIVERS COURSE

STUDENT COURSE GUIDE

FIRE PREVENTION



**DO NOT WRITE IN THIS
GUIDE!**

Last update: January 2018

EXPLOSIVES DRIVERS COURSE

1. LEARNING OBJECTIVES.

a. **Terminal Learning Objective:** Using given references, properly identify fire prevention measures, fire-fighting procedures, and actions for passing fires along a highway.

b. **Enabling Learning Objectives:**

(1) With the aid of references, identify the regulations that the driver must adhere to in regards to fire prevention.

(2) With the aid of references, identify actions to be taken when passing a fire along the highway.

(3) With the aid of references, identify proper fire-fighting procedures.

(4) With the aid of references, identify the information that the driver must know and be aware of in regards to the vehicle's load.

2. FIRE REGULATIONS. Explosive drivers shall do everything possible to prevent fires in vehicles transporting A&E.

a. **Drivers shall adhere to all regulations concerning the following:**

(1) Use of plastic bed liners.

(2) Convoy distances.

(3) Flame producing devices.

(4) Refueling.

(5) Safe driving.

(6) Smoking.

(7) Vehicle inspection.

(8) Parking.

EXPLOSIVES DRIVERS COURSE

b. **Passing and Parking.**

(1) Motor vehicles transporting A&E shall not be driven past fires of any kind burning on or near the highway until the driver has determined that such passing can be made safely and without stopping (300 feet or more).

(2) A motor vehicle containing A&E must not be parked within 300 feet of an open fire.

c. **Knowledge of Load Contents.** Each driver of a vehicle transporting A&E shall know the contents of the load and be aware of its hazards. They shall have knowledge of the following:

(1) Type of cargo, number of packages, total weight.

(2) Hazard Class and Division, Compatibility Group, UN Number, Proper Shipping Name, and Net Explosive Weight (NEW).

(3) Required placards.

(4) Safe driving regulations, i.e. safe following distances, restriction against use of flame producing devices and smoking, proper refueling practices, parking regulations, etc.

(5) Warning Instructions.

(6) Emergency response telephone numbers.

3. **DD FORM 2890 AND EMERGENCY RESPONSE GUIDE (ERG).**

Explosive drivers shall be provided with emergency response/fire-fighting information such as safe operating distances for firefighters, safe evacuation distances, etc. appropriate to the specific loads they are transporting.

a. **DD Form 2890.** The DOD Multimodal Dangerous Goods Declaration (DD Form 2890) is originated by the shipping activity and is used to provide the driver with emergency response instructions for all movements of A&E by government motor vehicles within CONUS.

(1) The information applies specifically to A&E being transported and provides safety precautions and

EXPLOSIVES DRIVERS COURSE

emergency measures to be taken in case of an accident, breakdown, or fire.

(2) The driver must keep the DD Form 2890 in the vehicle at all times while transporting A&E.

DOD MULTIMODAL DANGEROUS GOODS DECLARATION								
This form may be used as a dangerous goods declaration as it meets the requirements of SOLAS 74, Chapter VII, regulation 54; MARPOL 78/78, Annex III, Regulation 4.								
1. SHIPPER/CONSIGNOR/SENDER	2. TRANSPORT DOCUMENT NUMBER	3. PAGE 1 OF PAGES	4. SHIPPER'S REFERENCE (TCN)					
5. FREIGHT FORWARDER'S REFERENCE	6. CONSIGNEE	7. CARRIER (To be completed by the carrier)						
24-HOUR EMERGENCY ASSISTANCE TELEPHONE NUMBERS: <table border="1"> <tr> <td> DOD NON-EXPLOSIVE HAZMAT: (800) 851-8061/ (804) 279-3131 AT SEA: COLLECT: (804) 279-3131 </td> <td> DOD HAZ CLASS 1 (EXPLOSIVES) ONLY: COLLECT: (703) 697-0218/0219 or DSN: 227-0218 (Watch Officer) </td> <td> CHEMICAL/BIOLOGICAL WARFARE MATERIAL: (410) 436-6200 DSN: 584-6200 </td> <td> DOD SECURE HOLDING: (800) 826-0794 <i>(For TSP/drivers emergency secure holding issues, accidents, delays, and incidents)</i> OIL/CHEMICAL SPILLS: NRC & TERRORIST HOTLINE: (800) 424-8802 AT SEA: COLLECT: (202) 267-2675 </td> <td> DOD RADIOACTIVE MATERIALS: COLLECT ARMY: (703) 697-0218 USAF: (202) 767-4011 DLA: (800) 851-8061 AT SEA: COLLECT: (804) 279-3131 USN/NC: Use 24-hour emergency response number provided by activity. </td> </tr> </table>				DOD NON-EXPLOSIVE HAZMAT: (800) 851-8061/ (804) 279-3131 AT SEA: COLLECT: (804) 279-3131	DOD HAZ CLASS 1 (EXPLOSIVES) ONLY: COLLECT: (703) 697-0218/0219 or DSN: 227-0218 (Watch Officer)	CHEMICAL/BIOLOGICAL WARFARE MATERIAL: (410) 436-6200 DSN: 584-6200	DOD SECURE HOLDING: (800) 826-0794 <i>(For TSP/drivers emergency secure holding issues, accidents, delays, and incidents)</i> OIL/CHEMICAL SPILLS: NRC & TERRORIST HOTLINE: (800) 424-8802 AT SEA: COLLECT: (202) 267-2675	DOD RADIOACTIVE MATERIALS: COLLECT ARMY: (703) 697-0218 USAF: (202) 767-4011 DLA: (800) 851-8061 AT SEA: COLLECT: (804) 279-3131 USN/NC: Use 24-hour emergency response number provided by activity.
DOD NON-EXPLOSIVE HAZMAT: (800) 851-8061/ (804) 279-3131 AT SEA: COLLECT: (804) 279-3131	DOD HAZ CLASS 1 (EXPLOSIVES) ONLY: COLLECT: (703) 697-0218/0219 or DSN: 227-0218 (Watch Officer)	CHEMICAL/BIOLOGICAL WARFARE MATERIAL: (410) 436-6200 DSN: 584-6200	DOD SECURE HOLDING: (800) 826-0794 <i>(For TSP/drivers emergency secure holding issues, accidents, delays, and incidents)</i> OIL/CHEMICAL SPILLS: NRC & TERRORIST HOTLINE: (800) 424-8802 AT SEA: COLLECT: (202) 267-2675	DOD RADIOACTIVE MATERIALS: COLLECT ARMY: (703) 697-0218 USAF: (202) 767-4011 DLA: (800) 851-8061 AT SEA: COLLECT: (804) 279-3131 USN/NC: Use 24-hour emergency response number provided by activity.				
8. THIS SHIPMENT IS WITHIN THE LIMITATIONS PRESCRIBED FOR: (X as applicable) <input type="checkbox"/> MILITARY VESSEL <input type="checkbox"/> COMMERCIAL VESSEL <input type="checkbox"/> HIGHWAY/RAIL		9. CONTAINER PACKING CERTIFICATE OR VEHICLE PACKING DECLARATION, DD FORM 2781, IS ATTACHED (X if applicable)						
10. VOYAGE DOCUMENT NUMBER AND SAILING DATE (To be completed by the carrier)	11. PORT/PLACE OF LOADING							
12. PORT/PLACE OF DISCHARGE		13. DESTINATION						
14. SHIPPING MARKS	DESCRIPTION OF GOODS (UN No., PSN, HC, SHC, PG, number and kind of package, and additional information as required by regulations)		NET MASS/QT (kg/l) GROSS MASS (kg)					
15. CONTAINER IDENTIFICATION NO./VEHICLE REGISTRATION NO.	16. SEAL NUMBER(S)	17. CONTAINER/VEHICLE AND TYPE	18. TARE MASS (kg)					
19. ADDITIONAL HANDLING INFORMATION								
20. RECEIVING ORGANIZATION RECEIPT Received the above number of packages/containers/trailers in apparent good order and condition, unless stated hereon:								
a. RECEIVING ORGANIZATION REMARKS								
b. HAULER'S NAME	c. VEHICLE REGISTRATION NO.	d. SIGNATURE AND DATE	e. DRIVER'S SIGNATURE					
21. SHIPPER PREPARING THIS FORM								
SHIPPER'S DECLARATION. I hereby declare that the contents of this consignment are fully and accurately described above by the Proper Shipping Name, and are classified, packaged, marked, and labeled/placarded and are in all respects in proper condition for transport according to applicable international and national government regulations.								
a. NAME OF COMPANY/MILITARY UNIT		b. NAME/STATUS OF DECLARANT/CERTIFIER						
c. PLACE AND DATE		d. SIGNATURE OF DECLARANT/CERTIFIER						

DD FORM 2890, AUG 2013

PREVIOUS EDITION IS OBSOLETE.

Adobe Designer 8.0

EXPLOSIVES DRIVERS COURSE

INSTRUCTIONS FOR COMPLETING DD FORM 2890, DOD MULTIMODAL DANGEROUS GOODS DECLARATION

Item 1. Shipper/Consignor/Sender. Enter the address and telephone number where the HAZMAT was certified.

Item 2. Transport Document Number (Ocean container shipments only). The vessel manifest number to which the Multimodal Dangerous Goods Declaration will be attached may be entered in this block. The shipper need not enter this number. The accepting operator may enter it at the time it is assigned. Leave blank for breakbulk shipments. Shipper enters container "V" number.

Item 3. Page ___ of ___ Pages. Enter the page number and total number of pages. Example: Page 1 of 1.

Item 4. Shipper's Content Reference Number (TCN). Enter the 17-character TCN.

Item 5. Freight Forwarder's Reference. Leave blank.

Item 6. Consignee. Enter the six-digit DODAAC and/or the in-the-clear geographical location of the ultimate consignee (if known). For shipments of infectious substances, enter also the full address, name and telephone number of a responsible person for contact in an emergency.

Item 7. Carrier. Enter Vessel Carrier Name. To be completed by the carrier.

24 Hour Assistance Telephone Number(s). Circle applicable emergency number(s).

Item 8. Shipment Within the Limitations Prescribed for Military Vessel/Commercial Vessel/Highway/Rail. Mark X in the appropriate block.

Item 9. Container Certification/Vehicle Declaration. Declarant must mark X if applicable. U.S. Coast Guard or port officials may require verification of the container certification/vehicle declaration. DD Form 2781 is a detailed checklist which meets USCG/Customs requirements. DD Form 2781 must be signed and attached to DD Form 2890.

Item 10. Voyage Document Number and Sailing Date (To be completed by the carrier). Enter the voyage document number and the date of sail.

Item 11. Port/Place of Loading. Enter the three-digit POE code and/or the in-the-clear geographical location of the port of embarkation.

Item 12. Port/Place of Discharge. Enter the three-digit POD code and/or the in-the-clear geographical location of the port of debarkation.

Item 13. Destination (in the clear). Enter destination address.

Item 14. Shipping Marks.

1. The identification number prescribed for the material as shown in Column (4) of the Section 49 CFR 172.101 table;
2. The proper shipping name prescribed for the material in Column (2) of the Section 172.101 table;
3. The hazard class or division number prescribed for the material, as shown in Column (3) of the Section 172.101 table. The subsidiary hazard class or division number is not required to be entered when a corresponding subsidiary hazard label is not required. Except for combustible liquids, the subsidiary hazard class(es) or subsidiary division number(s) must be entered in parentheses immediately following the primary hazard class or division number. In addition: The words "Class" or "Division" may be included preceding the primary and subsidiary hazard class or division numbers. The hazard class need not be included for the entry "Combustible liquid, N.O.S." For domestic shipments, primary and subsidiary hazard class or division names may be entered following the numerical hazard class or division, or following the basic description.
4. The packing group in Roman numerals, as designated for the hazardous material in Column (5) of the Section 172.101 table. Class 1 (explosives) materials; self-reactive substances; batteries other than those containing lithium, lithium ions, or sodium; Division 5.2 materials; and entries that are not assigned a packing group (e.g., Class 7) are excepted from this requirement. The packing group may be preceded by the letters "PG" (for example, "PGII");
5. Enter additional information from the IMDG, chapter 5.4, as required (i.e. Marine Pollutant, Flashpoint, Toxin Inhalation Hazard, RQ, etc.).
6. Enter the number and kind of packaging.

Item 14. Shipping Marks (Continued).

7. Except for transportation by aircraft, the total quantity of hazardous materials covered by the description must be indicated (by mass or volume, or by activity for Class 7 materials) and must include an indication of the applicable unit of measurement, for example, "200 kg" (440 pounds) or "50L" (13 gallons). The following provisions also apply: For Class 1 materials, the quantity must be the net explosive mass. For an explosive that is an article, such as Cartridges, small arms, the net explosive mass may be expressed in terms of the net mass of either the article or the explosive materials contained in the article.

8. Ammunition transported by Government Vehicle, Unit will enter the total net quantity for non-explosive material in metric measure. U.S. measure may be added in parentheses underneath the metric measure. For ammunition, enter the total number of rounds/articles and NEW in kg. Exception: Net total quantity is not required for bulk packages, empty packages and cylinders of Class 2.

9. Radioactive material. The description for a shipment of a Class 7 (radioactive) material must include the following additional entries as appropriate:

- a. The name of each radionuclide in the Class 7 (radioactive) material that is listed in Section 173.435 of this subchapter. For mixtures of radionuclides, the radionuclides required to be shown must be determined in accordance with Section 173.433(g) of this subchapter. Abbreviations, e.g., "99 Mo," are authorized.
- b. A description of the physical and chemical form of the material, if the material is not in special form (generic chemical description) is acceptable for chemical form).
- c. The activity contained in each package of the shipment in terms of the appropriate SI units (e.g. Becquerels (Bq), Terabecquerels (TBq), etc.). The activity may also be stated in appropriate customary units (Curies (Ci), millicuries (mCi), microCuries (uCi), etc.) in parentheses following the SI units. Abbreviations are authorized. Except for plutonium-239 and plutonium-241, the weight in grams or kilograms of fissile radionuclides may be inserted instead of activity units. For plutonium-239 and plutonium-241, the weight in grams of fissile radionuclides may be inserted in addition to the activity units.

Item 15. Container ID Number/Vehicle Registration Number. Enter ID number of the container or vehicle registration number. A dash (-) or blank space is acceptable before the check digit.

Item 16. Seal Number(s). Enter seal number installed on container.

Item 17. Container/Vehicle and Type. Enter type and size of container (20 or 40 ft.) or vehicle description (e.g., HUMVEE).

Item 18. Tare Mass (kg). Enter tare weight of the container.

Item 19. Additional Handling Information.

If applicable, provide additional handling instructions. Enter the Emergency Response Guide (ERG) Number(s) of the HAZMAT and attach the specific ERG page to DD Form 2890. If applicable, drivers transporting regulated HAZMAT on European highways must be provided Transport Emergency Cards (TREM/CARDS) in the host nation language which must be attached to the shipping papers.

Item 20. Receiving Organization Receipt. Leave blank as this will be filled out by the receiving organization. Signing this block states that the shipment is in good order, unless otherwise noted.

Item 21. Shipper Preparing This Form.

- a. Name of Company/Military Unit. Enter the name of company.
- b. Name/Status of Declarant/Certifier. Enter the name and status of the person signing the form.
- c. Place and Date. Enter the place and date the material was certified.
- d. Signature of Declarant/Certifier. The person who certifies on behalf of DoD that the shipment complies with the applicable regulatory requirements must sign the form.

DD FORM 2890 (BACK), AUG 2013

EXPLOSIVES DRIVERS COURSE

b. **ERG.**

(1) Information extraction from the North American ERG applicable to the transportation of HC/D 1.1 through 1.6 explosives is provided as part of this form.

(2) The ERG guide sheet appropriate to the A&E being transported must be attached to the DD Form 2890. (Pages 112 or 114)

(3) Explosives drivers shall read sign and carry these instructions with them at all times from point of origin to destination.

EXPLOSIVES DRIVERS COURSE

POTENTIAL HAZARDS

FIRE OR EXPLOSION:

--MAY EXPLODE AND THROW FRAGMENTS 1600 METERS (1 MILE) OR MORE IF FIRE REACHES CARGO.

HEALTH HAZARDS:

--Fire may produce irritating, corrosive and/or toxic gases.

EMERGENCY ACTION/PUBLIC SAFETY

--CALL EMERGENCY RESPONSE TELEPHONE NUMBER ON SHIPPING PAPER FIRST. IF SHIPPING PAPER IS NOT AVAILABLE OR THERE IS NO ANSWER; CALL CHEMTREC AT 1-800-424-9300.

--Consider initial evacuation of 1/2 mile in all directions for a large spill.

--Isolate spill or leak area immediately for at least 1/3 mile in all directions. Move people out of line of sight of the scene and away from windows.

--Keep unauthorized personnel away and stay upwind.

--Ventilate closed spaces before entering.

--Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

--CARGO FIRES: DO NOT FIGHT FIRE WHEN IT REACHES CARGO. CARGO MAY EXPLODE. Stop all traffic and clear the area for at least 1 mile in all directions and let fire burn. Do not move cargo or vehicle if cargo has been exposed to heat.

--TIRE OR VEHICLE FIRES: Promptly isolate the scene by removing ALL PERSONS from the vicinity of the incident if there is a fire. First, move people out of line-of-sight of the scene and away from windows. Then, obtain more information and specific guidance from competent authorities listed on the shipping papers. Try to prevent fire from reaching the explosive cargo compartment. Flood with water, dry chemical or dirt. If possible, and WITHOUT RISK, use unmanned hose holders or monitor nozzles from maximum distance to prevent fire from spreading to cargo area. Pay special attention to tire fires, as re-ignition may occur. Stand by with extinguisher ready.

--RAILCAR OR TRAILER FIRES: If railcar or trailer is involved in a fire and heavily encased explosives such as bombs or artillery projectiles are suspected, ISOLATE for 5,280 feet (1 mile) in all directions; also, initiate evacuation including emergency responders for 5,280 feet (1 mile) in all directions.

--When heavily encased explosives are not involved, evacuate the area for 2,500 feet (1/2 mile) in all directions.

SPILL OR LEAK:

--Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area).

--All equipment used when handling the product must be grounded.

--Do not touch or walk through spilled material.

--DO NOT OPERATE RADIO TRANSMITTERS WITHIN 330 FEET (100 METERS) OF ELECTRIC DETONATORS.

--DO NOT CLEAN UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.

FIRST AID

--Move victim to fresh air. Call 911 or emergency medical service. Use first aid treatment according to the nature of the injury. Administer oxygen if breathing is difficult.

--Remove and isolate contaminated clothing and shoes.

--In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.

--Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

FIGURE 9-1. Summary of Emergency Response Information, Class/Division 1.1, 1.2, 1.3, 1.5 or 1.6 Explosives (Page 1 of 1)

EXPLOSIVES DRIVERS COURSE

POTENTIAL HAZARDS

FIRE OR EXPLOSION:

--MAY EXPLODE AND THROW FRAGMENTS 500 METERS (1/3 MILE) OR MORE IF FIRE REACHES CARGO.

HEALTH HAZARDS:

--Fire may produce irritating, corrosive and/or toxic gases.

EMERGENCY ACTION/PUBLIC SAFETY

--CALL EMERGENCY RESPONSE TELEPHONE NUMBER ON SHIPPING PAPER FIRST. IF SHIPPING PAPER IS NOT AVAILABLE OR NO ANSWER, CALL CHEMTREC AT 1-800-424-9300.

--Consider initial evacuation of 800 feet in all direction for a large spill.

--Isolate spill or leak area immediately for at least 330 feet in all directions. Move people out of line of sight of the scene and away from windows. Then, obtain more information and specific guidance from competent authorities listed on the shipping papers.

--Keep unauthorized personnel away and stay up wind.

--Ventilate closed spaces before entering.

--Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighter's protective clothing will only provide limited protection.

--CARGO FIRES: DO NOT FIGHT FIRE WHEN IT REACHES CARGO. CARGO MAY EXPLODE. Clear the area for at least 1/3 mile in all directions and let fire burn. Do not move cargo or vehicle if cargo has been exposed to heat.

--TIRE OR VEHICLE FIRES: Try to prevent fire from reaching the explosive cargo compartment. Flood with water, dry chemical or dirt. If possible, and WITHOUT RISK, use unmanned hose holders or monitor nozzles from maximum distance to prevent fire from spreading to cargo area. Pay special attention to tire fires, as re-ignition may occur. Stand by with extinguisher ready.

--RAILCAR OR TRAILER FIRES: If a railcar or trailer is involved in a fire, ISOLATE for 500 meters (1/3 mile) in all directions; also initiate evacuation including emergency responders for 500 meters (1/3 mile) in all directions.

SPILL OR LEAK:

--Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area).

--All equipment used when handling the product must be grounded.

--Do not touch or walk through spilled material.

--DO NOT OPERATE RADIO TRANSMITTERS WITHIN 330 FEET (100 METERS) OF ELECTRIC DETONATORS.

--DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.

FIRST AID

--Move victim to fresh air. Call 911 or emergency medical service. Use first aid treatment according to the nature of the injury. Administer oxygen if breathing is difficult.

--Remove and isolate contaminated clothing and shoes.

--In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.

--Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

SUPPLEMENTAL INFORMATION

--Packages bearing the 1.4S label or packages containing material classified as 1.4S are designed or packaged in such a manner that when involved in a fire, may burn vigorously with localized detonations and projections of fragments. Effects are usually confined to immediate vicinity of packages. If fire threatens cargo area containing packages bearing the 1.4S label or packages containing material classified as 1.4S, consider isolating at least 15 meters (50 feet) in all directions. Fight fire with normal precautions from a reasonable distance.

FIGURE 9-2. Summary of Emergency Response Information, Class/Division 1.4 Explosives (Page 1 of 1)

EXPLOSIVES DRIVERS COURSE

4. FIRE FIGHTING PROCEDURES. Drivers shall exert every effort to prevent fires in vehicles transporting A&E. Should a fire occur in a vehicle containing A&E, the driver shall park the vehicle as far from the highway and from a congested area as possible.

a. **Vehicle Fires.** If any part of the vehicle (other than actual cargo) catches fire, the driver shall use hand extinguishers immediately and attempt to extinguish the fire. The driver shall make every effort to prevent the fire from reaching the cargo.

b. **Cargo Fires.** Do not attempt to fight a fire that has reached the cargo area. In the event that a fire does reach the cargo area, the driver shall withdraw from the area and take the following action:

(1) Call the emergency response telephone number on the shipping papers first.

(2) Notify the police and fire departments. Upon their arrival, furnish the specific emergency response instructions listed on the shipping papers or the DD Form 836.

(3) Warn the public and evacuate any persons from the area in accordance with the approach distances specified on the shipping papers.

5. FIRE EXTINGUISHERS. Each motor vehicle used for transporting A&E shall be equipped with one portable fire extinguisher.

a. **Types of Fire Extinguishers.** Fire extinguishers will be dry chemical type with:

(1) a minimum Underwriters' Laboratory (UL) capacity rating of 10-B:C or

(2) a multi-purpose dry chemical fire extinguisher with a UL rating of 2 to 5-A/10BC.

b. **Accessibility and Inspections.**

(1) The fire extinguisher shall be properly filled, securely bracket-mounted and readily accessible for use.

EXPLOSIVES DRIVERS COURSE

(2) Inspections shall include monthly fire extinguisher checks to ensure they will function properly.

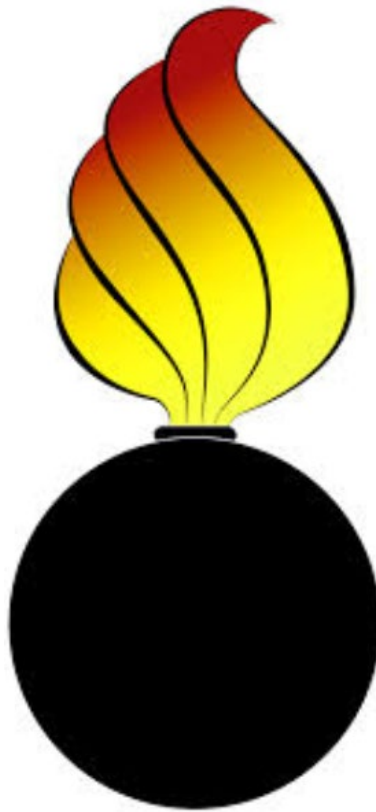
EXPLOSIVES DRIVERS COURSE

THIS PAGE LEFT INTENTIONALLY BLANK

EXPLOSIVES DRIVERS COURSE

STUDENT COURSE GUIDE

LOADING PROCEDURES



**DO NOT WRITE IN THIS
GUIDE!**

Last update: January 2018

EXPLOSIVES DRIVERS COURSE

1. LEARNING OBJECTIVES.

a. **Terminal Learning Objective:** Given a vehicle with an empty cargo area, prepare the vehicle to be loaded with A&E.

b. **Enabling Learning Objectives:**

(1) With the aid of references, identify the responsibilities of the driver for loading A&E onto a vehicle.

(2) With the aid of references, identify proper cargo handling procedures.

(3) With the aid of references, identify the proper requirements to prevent the shifting of cargo.

(4) With the aid of references, identify the responsibilities of the driver prior to the release of a loaded vehicle.

2. DRIVER'S RESPONSIBILITIES DURING LOADING OPERATIONS. The utmost care and discretion shall be exercised by all persons involved in the handling of A&E at all times. A&E shall be handled in a manner so as to protect against shock or friction that may cause a fire, explosion, or damage to the A&E.

a. **During loading Operations.**

(1) The vehicle is correctly positioned at the loading area.

(2) The engine is shut off. Never load with the engine turned on.

(3) The motor vehicle is put in the parking gear, and the parking brake is securely set.

(4) The wheels are properly chocked to prevent movement.

(5) Only nonferrous metal tools are used.

EXPLOSIVES DRIVERS COURSE

(6) The interior of the cargo space is free from any inwardly projecting parts such as protruding bolts, screws, or nails.

(7) The driver will not back up before first checking for clearance and giving warning. If rear visibility is blocked by cargo or otherwise limited, guides will be used if available. The guides must be in view of the driver at all times. If guides are not available, the driver will dismount and check clearance before backing.

(8) One person shall remain in the cab of a diesel powered vehicle. The transmission shall be left in neutral and the parking brake applied. There is a possibility that a warm engine could self-start if the vehicle should roll.

3. CARGO HANDLING PRECAUTIONS.

a. **During Loading and Unloading.**

(1) Packages or containers of A&E shall be placed carefully in the vehicle and secured so they do not slide, fall or shift during transit.

(2) Loading/unloading operations shall be under the direction of qualified personnel.

(3) Packages or containers of unloaded ordnance shall be placed a sufficient distance from the exhaust tailpipe of the vehicle to prevent sparks or hot gases from igniting the material when the vehicle is restarted.

(4) Packages or containers shall not be thrown, dropped, slid, pulled or tumbled while they are being loaded or unloaded.

4. PROTECTION AGAINST SHIFTING CARGO.

a. **General.**

(1) All vehicles transporting A&E shall have the load securely fastened or blocked and braced.

(2) The shifting of the load can be controlled by proper blocking and bracing.

EXPLOSIVES DRIVERS COURSE

(3) A&E that is to be transported off-base shall be blocked and braced or properly secured to the vehicle.

(4) Blocking and bracing shall be in accordance with MIL-STD-1320 series or A&E may be secured to the vehicle utilizing AMC DRAWING 19-48-75-5.

(5) For vehicles transporting A&E on-base a minimum of two tie-downs shall be used to secure each cargo stack. (5,000lbs resistance)

(6) Restraining capacities for tie-downs are found in the NAVSEA SW023-AG-WHM-010, On-base Movement of A&E by Truck and Railcar.

5. DRIVER'S RESPONSIBILITY PRIOR TO RELEASE OF LOADED VEHICLE. A&E loaded vehicles will be inspected and sealed by responsible personnel in accordance with base ammunition supply point standard operating procedures.

a. Post Loading Inspection.

(1) Complete Section III of DD Form 626.

(2) The driver has the same right of refusal or acceptance as the shipping inspector or the load inspector.

b. The Driver Shall Check for the Following Items:

(1) Drivers shall inspect the load to ensure that no containers are leaking, broken or appear so weak that breakage could occur during shipment.

(2) The driver shall verify that the load does not exceed the vehicles maximum weight and distribution limits. A loaded motor vehicle that exceeds maximum vehicle weight limit and/or has an improperly balanced load will not be released off-base.

(3) The driver shall inspect the load to ensure it is blocked and braced securely and will not shift during transit.

(4) Cargo Identification. The driver shall inspect the shipping documents and compare them with placards on the vehicle. It is the duty of the driver to be certain that the vehicle is placarded in compliance with DOT regulations for

EXPLOSIVES DRIVERS COURSE

the shipment of A&E according to the type of material being transported. The driver shall also check that the type and quantity of the load agrees with the bill of lading or the DD Form 2890 as applicable.

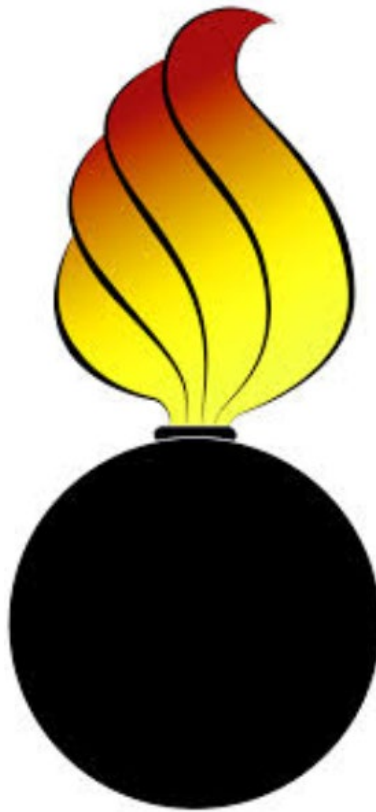
EXPLOSIVES DRIVERS COURSE

THIS PAGE LEFT INTENTIONALLY BLANK

EXPLOSIVES DRIVERS COURSE

STUDENT COURSE GUIDE

IN-TRANSIT REGULATIONS



**DO NOT WRITE IN THIS
GUIDE!**

Last update: January 2018

EXPLOSIVES DRIVERS COURSE

1. LEARNING OBJECTIVES.

a. **Terminal Learning Objective:** Given an explosives-laden vehicle, transport and deliver the load to its final destination.

b. **Enabling Learning Objectives:**

(1) With the aid of references, identify general safe driving rules.

(2) With the aid of references, identify regulations pertaining to bridges, railroad crossings, and tunnels.

(3) With the aid of references, identify procedures in case of inclement weather.

(4) With the aid of references, identify rules pertaining to the posting of warning devices.

(5) With the aid of references, identify procedures in case of an accident, breakdown, or delay in-transit.

(6) With the aid of references, identify the procedures for transferring A&E in-transit.

(7) With the aid of references, identify the regulations pertaining to the refueling of an A&E laden vehicle.

(8) With the aid of references, identify the regulations of parking an A&E laden vehicle.

2. DRIVING REGULATIONS.

a. **General Rules for Safe Driving.** Driving rules shall be followed at all times.

(1) Drivers of motor vehicles transporting A&E must adhere to the posted speed limits specific to each state, county, or municipal roadway system.

(2) The posted speed limit for a given roadway system within each state may vary with respect to cars and trucks.

EXPLOSIVES DRIVERS COURSE

(3) In addition, some states have established separate maximum speed limits for trucks transporting Hazard Class 1 A&E.

(4) Drivers shall be attentive to applicable speed limit requirements within each state and locality when transporting A&E off-base.

(5) Explosives drivers shall never operate any vehicle while under the influence of alcohol, illegal drugs, or a derivative of a narcotic drug, or the misuse of a prescription drug.

b. **Driving Hours.** Explosive Drivers shall not be required to drive for more than 8 hours.

c. **Driving Distance.** The Permissible Operating Distance (POD) established for government-owned vehicles within the continental United States (CONUS) is 100 miles or less one-way.

d. **Right Of Way.**

(1) Ambulances, firefighting equipment, police, and similar emergency vehicles using warning lights and/or sirens, shall have the right of way over all other traffic, including vehicles carrying A&E.

(2) Military formations, whether at a halt or in motion, have the right of way at all times. Drivers shall exercise caution when passing or approaching such formations.

e. **Tunnels.**

(1) Drivers of vehicles transporting A&E shall not be routed through tunnels. However, when a driver finds it necessary to use tunnels, he/she shall:

(a) Contact the local police to obtain permission.

(b) Request advice from local law enforcement authorities as to existing laws.

EXPLOSIVES DRIVERS COURSE

(c) Comply with written instructions, which shall include authorization to use the tunnel as arranged for by the cognizant government activity.

(d) Advise the proper local authorities and the originating activity if unable to meet the scheduled time for use of the tunnel.

f. **Railroad Crossings.** Drivers of vehicles carrying A&E shall exercise extreme caution when approaching railroad crossings.

(1) All drivers shall, upon approaching any railroad crossing, use the four-way flashers 300 feet from the tracks;

(2) slowly come to a full stop not more than 50 feet from, and no closer than 15 feet to, the nearest rail of the crossing.

(3) The driver will look in both directions and shall not proceed until he/she is certain that all tracks are clear.

(4) Drivers are not required to stop at:

(a) Streetcar crossings in a town's business or residential district.

(b) Railroad grade crossings, where a police officer or a crossing watchperson directs the traffic to proceed.

(c) Abandoned or exempted grade crossings marked by, or with the consent of, the proper state authority. The marking shall be clearly visible from the driver's position in the cab of the vehicle.

g. **Convoys.** In motor vehicle convoys, drivers shall not become widely separated, but shall maintain a safe distance between vehicles:

(1) No more than 300 feet apart.

(2) No closer than 50 feet.

h. **Bridges.**

EXPLOSIVES DRIVERS COURSE

(1) Motor vehicle transporting A&E shall approach a drawbridge slowly so that a stop may be made safely before the lip of the drawbridge is reached. The driver shall proceed only when the drawbridge is completely closed; and, if traffic signals are present, when the signal is green. When a prescribed route includes toll bridges, the driver shall be advised of this fact in advance of travel. The driver shall:

(2) Contact local toll bridge authorities from the starting point; or, at the most convenient scheduled stopping point along the route; or, obtain permission to use the facilities and information regarding special regulations.

(3) Cooperate with local authorities by providing them with any information required regarding the vehicle's load and schedule. Follow their instructions concerning the movement of the vehicle over the bridge.

(4) Take note of any special directions contained in the written instructions that shall include authorization to use the bridge as arranged by the cognizant activity.

i. **Heavily Populated Areas.** A motor vehicle carrying a placarded load of A&E shall be operated over routes that do not go through or near heavily populated areas, places where crowds are assembled, tunnels, narrow streets, or alleys. Drivers shall comply with state and municipal A&E laws and ordinances. Exceptions to this general rule are as follows:

(1) There is no practicable alternative.

(2) A reasonable deviation is necessary to reach terminals, points of loading or unloading, facilities for food, fuel, rest, or safe haven.

(3) A reasonable deviation is required in response to emergencies as determined by local emergency response officials.

(4) Operating convenience is not a basis for failing to avoid heavily populated areas.

(5) In response to a confirmed case of military necessity or with respect to emergency conditions conducted

EXPLOSIVES DRIVERS COURSE

by Explosive Ordnance Disposal (EOD) personnel, Navy/Marine Corps-owned motor vehicles carrying A&E may be required to travel through or near populated areas. In this case, the driver shall:

(a) Contact local law enforcement authorities to advise them of the proposed trip before approaching the perimeter of the municipality.

(b) The driver will follow the routing instructions provided by the law enforcement authorities, which may include police escort.

3. DRIVING HAZARDS.

a. **Damage to Cargo.**

(1) One of the principal reasons for the careful inspection of containers loaded with A&E is to avoid the hazards of fire and explosion.

(2) A leaking or broken container of corrosives or acids can injure the driver by causing burns, fume poisoning or suffocation.

(3) Fires and explosions may also result from careless handling of the containers or from the shifting of an improperly dunnaged load.

(4) Drivers shall avoid sharp braking during downhill travel. This operation is one of the principal causes of load shifting and usually results in damage to the cargo.

b. **Weather Conditions.**

(1) Drivers must be extremely cautious during severe weather such as snow, rain, and fog.

(2) Do not expose A&E to inclement weather such as rain and lightning.

(3) A&E shall not be exposed unnecessarily to the direct rays of the sun or to inclement weather, i.e. rain or electrical storms.

EXPLOSIVES DRIVERS COURSE

(4) The Installation Commander/Unit Commander or Convoy Commander will make the determination to cease operations if necessary.

4. SAFETY MEASURES.

a. **Flame-Producing Devices.**

(1) Drivers, ammo handlers, or guards on or near an explosives-loaded vehicle shall never carry matches, a lighter, or any other fire, flame or spark producing devices in the vehicle or on their persons while they are transporting A&E.

(2) Explosives drivers shall comply with DOT regulations and state and local laws governing the use of snow chains during inclement weather, as snow chains have the potential for creating sparks.

(3) Smoking is prohibited while driving.

(4) Smoking is prohibited within 25 feet of vehicles carrying A&E.

b. **Stops.** Do not make any unscheduled stops, except in emergency cases.

c. **In-Transit Inspection.** Vehicles shall be stopped and inspected at checkpoints enroute. Check closely for:

(1) General condition of the vehicle and clean placards.

(2) Condition of the tires.

(3) Cargo securement inspection within the first 50 miles and then every 150 miles.

c. **Posting Warning Devices.**

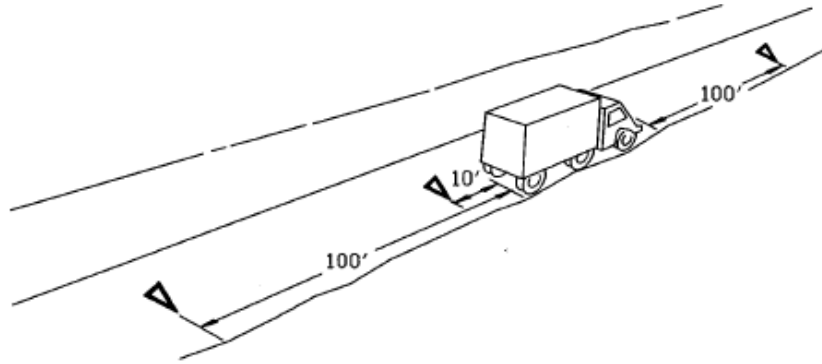
(1) In case of accident, incident, breakdown, or stops made for any reason on public highways, each motor vehicle carrying A&E shall have three bi-directional emergency reflective triangles as warning devices to approaching traffic. These devices eliminate the need for flags and reflectors and are effective during the day and night.

EXPLOSIVES DRIVERS COURSE

(2) Flares and signals that produce flame shall not be used as warning devices for disabled vehicles carrying A&E.

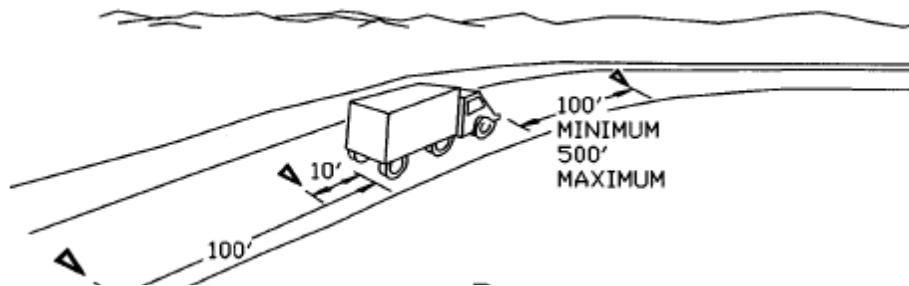
(3) Immediately upon stopping, the driver shall set turn signals to flash simultaneously, and place three red emergency reflective triangles on the traffic side of the vehicle in accordance with the following directions:

(a) One warning device shall be placed 100 feet in front of the motor vehicle and one 100 feet in back of the vehicle in the center of the traffic lane it occupies. One warning device shall be placed on the traffic side of the vehicle, not more than 10 feet to the front or to the rear of the vehicle.

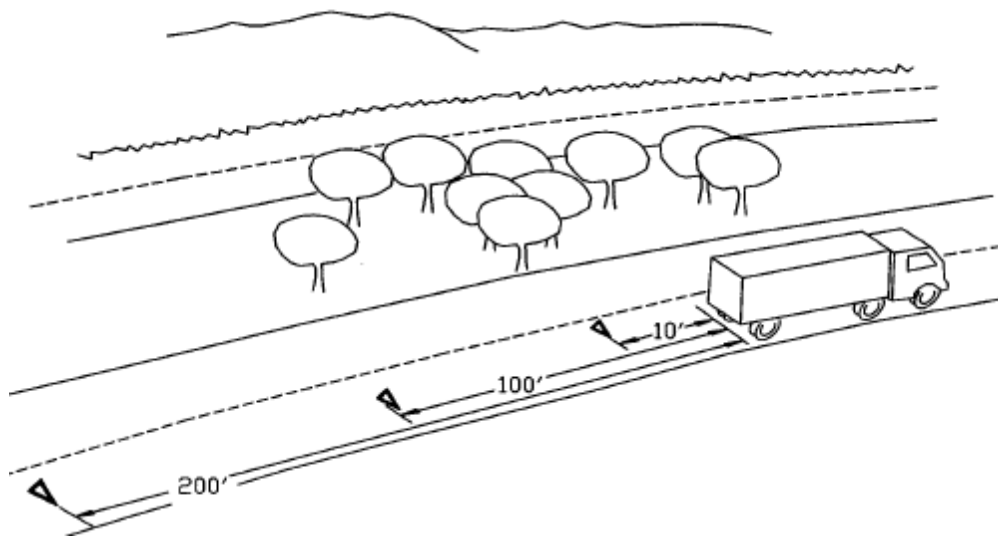


(b) If the stop is made within 500 feet of the crest of a hill, a curve, or any object obstructing the vehicle from the view of approaching traffic, the warning devices shall be placed not less than 100 feet, or more than 500 feet, from the vehicle in the direction of the hill, curve, or obstruction. One warning device shall be placed on the traffic side of the vehicle not more than 10 feet to the front or to the rear of the vehicle.

EXPLOSIVES DRIVERS COURSE



(c) If the stop is made on any lane of a divided highway, one warning device shall be placed 200 feet in back of the stopped vehicle in the center of the traffic lane it occupies; one warning device shall be placed 100 feet in back of the vehicle in the center of the traffic lane it occupies; and, one warning device shall be placed on the traffic side of the vehicle within 10 feet from the rear of the vehicle.



(4) When any motor vehicle used in the transportation of A&E is disabled or stopped entirely off the roadway on an adjacent shoulder, the warning devices shall be placed as near as practicable on the shoulder at the edge of the roadway.

5. PROCEDURES FOLLOWING AN ACCIDENT/BREAKDOWN.

EXPLOSIVES DRIVERS COURSE

a. **Procedures Following an Accident.** When a motor vehicle loaded with A&E becomes involved in an accident, the driver shall:

- (1) Stop the vehicle immediately.
- (2) Turn off the ignition.
- (3) Set the brake and chock the vehicle to prevent movement.
- (4) Post warning devices. Ensure that all turn signals are flashing simultaneously while warning devices are being posted.
- (5) If fire results, the driver shall follow the firefighting instructions found on the shipping papers (DD Form 836).
- (6) Notify local law enforcement authorities.
- (7) Render first aid. Do not move badly injured persons unless it is absolutely necessary.
- (8) Notify both shipping and receiving activities by the fastest available means.
- (9) Notify the Army Operations Center (AOC) at (703) 697-0218/0219 Collect, or DSN 227-0218/0219 in the event that DOD/EOD assistance may be needed to assist in the clean-up operations (call this number only when transporting off base to another location other than the Camp Lejeune area). EOD personnel must be dispatched to the scene of an accident involving damaged A&E materials.
- (10) Provide emergency response information (bill of lading and/or DD Form 2890) to law enforcement authorities and firefighting personnel. This data will provide the type of cargo, dangerous characteristics, firefighting techniques, operating distances for firefighters and equipment, and personnel evacuation distances.
- (11) Do not attempt to handle damaged A&E cargo or unload a disabled vehicle. Assist emergency first responders as necessary. Handling of damaged A&E cargo will begin after the damaged cargo has been declared safe

EXPLOSIVES DRIVERS COURSE

to move and transport by EOD personnel or other competent on-scene DOD officials.

(12) Do not sign any insurance or release forms or express any opinions as to who is to blame for the accident.

(13) Stand-by to assist emergency first responders and/or DOD personnel in clean-up operations as required.

b. **Unattended Vehicle.** If an unattended vehicle is struck, make a reasonable effort to locate the missing driver, while maintaining constant surveillance over your vehicle and its A&E cargo. If you are not successful in locating the missing driver, post the following information for the owner of the unattended vehicle:

- (1) Name
- (2) Address or home station
- (3) State and Government license numbers.
- (4) Destination.
- (5) Any other information pertinent to the accident.

c. **Preparation of Motor Vehicle Accident Report, Standard Form (Sf) 91.** Every accident, major and minor, involving a Navy/Marine Corps vehicle shall be reported by the driver of the vehicle on the Motor Vehicle Accident Report, SF 91, Rev 2-93.

(1) Drivers are required to carry a copy of this form in the vehicle at all times. This form is divided into 13 sections.

- (a) Federal vehicle data
- (b) Other vehicle data
- (c) Killed or injured
- (d) Accident time and location

EXPLOSIVES DRIVERS COURSE

- (e) Witness/Passenger
- (f) Property damage
- (g) Police information
- (h) Extra details
- (i) Federal driver certification
- (j) Details of trip during which accident occurred.
- (k) Accident investigation data
- (l) Attachments
- (m) Comments/Approvals

EXPLOSIVES DRIVERS COURSE

MOTOR VEHICLE ACCIDENT REPORT	Please read the Privacy Act State- ment on Page 3	INSTRUCTIONS: Sections I through IX are filled out by the vehicle operator. Section X, items 72 thru 82c are filled on by the operator's supervisor. Section XI thru XIII are filled out by an accident investigator for bodily injury, fatality, and/or damage exceeding \$500.
----------------------------------	---	--

SECTION I - FEDERAL VEHICLE DATA

1. DRIVER'S NAME (Last, first, middle)		2. DRIVER'S LICENSE NO./STATE/LIMITATIONS		DATE OF ACCIDENT	
4a. DEPARTMENT/FEDERAL AGENCY PERMANENT OFFICE ADDRESS				4b. WORK TELEPHONE NUMBER	
5. TAG OR IDENTIFICATION NUMBER	6. EST. REPAIR COST \$	7. YEAR OF VEHICLE	8. MAKE	9. MODEL	10. SEAT BELTS USED <input type="checkbox"/> YES <input type="checkbox"/> NO
11. DESCRIBE VEHICLE DAMAGE					

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

12. DRIVER'S NAME (Last, first, middle)		13. SOCIAL SECURITY NO./ TAX IDENTIFICATION NO.		14. DRIVER'S LICENSE NO./STATE/LIMITATIONS	
15. a. DRIVER'S WORK ADDRESS				15b. WORK TELEPHONE NUMBER	
16a. DRIVER'S HOME ADDRESS				16b. HOME TELEPHONE NUMBER	
17. DESCRIPTION OF VEHICLE DAMAGE				18. ESTIMATED REPAIR COST \$	
19. YEAR OF VEHICLE	20. MAKE OF VEHICLE	21. MODEL OF VEHICLE		22. TAG NUMBER AND STATE	
23a. DRIVER'S INSURANCE COMPANY NAME AND ADDRESS				23b. POLICY NUMBER	
				23c. TELEPHONE NUMBER	
24. VEHICLE IS <input type="checkbox"/> CO-OWNED <input type="checkbox"/> RENTAL <input type="checkbox"/> LEASED <input type="checkbox"/> PRIVATELY OWNED		25a. OWNER'S NAME(S) (Last, first, middle)		25b. TELEPHONE NUMBER	
26. OWNER'S ADDRESS(ES)					

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

27. NAME (last, first, middle)		28. SEX		29. DATE OF BIRTH	
30. ADDRESS					
A	31. MARK "X" IN TWO APPROPRIATE BOXES <input type="checkbox"/> KILLED <input type="checkbox"/> DRIVER <input type="checkbox"/> PASSENGER <input type="checkbox"/> INJURED <input type="checkbox"/> HELPER <input type="checkbox"/> PEDESTRIAN		32. IN WHICH VEHICLE <input type="checkbox"/> FED <input type="checkbox"/> OTHER (2)		34. FIRST AID GIVEN BY
	33. LOCATION IN VEHICLE				
35. TRANSPORTED BY		36. TRANSPORTED TO			
37. NAME (last, first, middle)		38. SEX		39. DATE OF BIRTH	
40. ADDRESS					
B	41. MARK "X" IN TWO APPROPRIATE BOXES <input type="checkbox"/> KILLED <input type="checkbox"/> DRIVER <input type="checkbox"/> PASSENGER <input type="checkbox"/> INJURED <input type="checkbox"/> HELPER <input type="checkbox"/> PEDESTRIAN		42. IN WHICH VEHICLE <input type="checkbox"/> FED <input type="checkbox"/> OTHER (2)		44. FIRST AID GIVEN BY
	43. LOCATION IN VEHICLE				
45. TRANSPORTED BY		46. TRANSPORTED TO			

47. Pedes- trian	a. NAME OF STREET OR HIGHWAY		b. DIRECTION OF PEDESTRIAN (SW corner to NW corner, etc.)	
			FROM	TO
	c. DESCRIBE WHAT PEDESTRIAN WAS DOING AT TIME OF ACCIDENT (crossing intersection with signal, against signal, diagonally, in roadway playing, walking, hitchhiking, etc.)			

EXPLOSIVES DRIVERS COURSE

SECTION IV - ACCIDENT TIME AND LOCATION (Use section VII if additional space is needed.)

48. DATE OF ACCIDENT	49. 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).
50. TIME OF ACCIDENT <input type="checkbox"/> AM <input type="checkbox"/> PM	

51. 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.

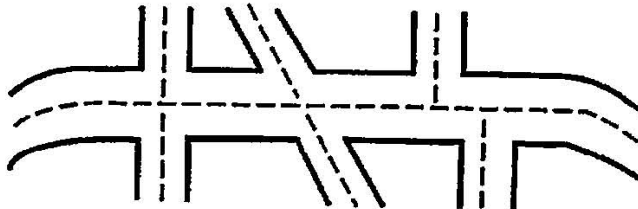
Example: → 1 → 2 ←

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

c. Show pedestrian by → ○

d. Show railroad by ++++++

e. Place arrow in the circle to indicate NORTH



52. POINT OF IMPACT (Check one for each vehicle)

FED	2	AREA
		a. Front
		b. R. Front
		c. L. Front
		d. Rear
		e. R. Rear
		f. L. Rear
		g. R. Side
		h. L. Side

53. DESCRIBE WHAT HAPPENED (Refer to vehicles as "Fed", "2", "3", etc. Please include information on posted speed limit, approximate speed of 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 a U-turn, passing, stopped in traffic, etc.)

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

A	54. NAME (Last, first, middle)	55. WORK TELEPHONE NUMBER	56. HOME TELEPHONE NUMBER
	57. WORK ADDRESS	58. HOME ADDRESS	
B	59. NAME (Last, first, middle)	60. WORK TELEPHONE NUMBER	61. HOME TELEPHONE NUMBER
	62. WORK ADDRESS	63. HOME ADDRESS	

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

64a. NAME OF OWNER (Last, first, middle)	64b. WORK TELEPHONE NUMBER	64c. HOME TELEPHONE NUMBER
64d. WORK ADDRESS	64e. HOME ADDRESS	
65a. NAME OF INSURANCE COMPANY	65b. TELEPHONE NUMBER	65c. POLICY NUMBER
66. ITEM DAMAGED	67. LOCATION OF DAMAGED ITEM	68. ESTIMATED COST

SECTION VII - POLICE INFORMATION

69a. NAME OF POLICE OFFICER	69b. BADGE NUMBER	69c. TELEPHONE NUMBER
70. PRECINCT OR HEADQUARTERS	71a. PERSON CHARGED WITH ACCIDENT	71b. VIOLATION(S)

EXPLOSIVES DRIVERS COURSE

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.

PRIVACY ACT STATEMENT

The information on this form is subject to the Privacy Act of 1974 (5 U.S.C. section 552a). Authority to collect the information is Title 40 U.S.C. Section 491 and the title 31 U.S.C. Section 7701. The formation is required by federal Government agencies to administer motor vehicle programs, including maintaining records on accidents involving privately owned and Federal fleet vehicles, and collecting accident claims resulting from accidents. Federal employees, and employees under contract, will use the information only in the performance of their official duties. Routine uses of the collected information may include disclosures to: appropriate Federal, State, or local agencies or contractors when relevant to civil, criminal, or regulatory investigations or prosecutions; the Office of personnel Management and the General Accounting Office for program evaluation purposes; a Member of Congress or staff in response to a request for assistance by the individual of record; another Federal agency, including the Department of Treasury and Justice, or a court under judicial proceedings; agency Inspectors General in conducting audits; private insurance and the collection agencies (including agencies under contract to Treasury to collect debt), and to other agency finance offices for federal management and debt collection. Furnishing the requested information is mandatory, including the Social security Number or Taxpayer's Identification Number (TIN) for use as a unique identifier to ensure accurate identification for individuals or firms in the system.

SECTION IX - FEDERAL DRIVER CERTIFICATION

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

72a. NAME AND TITLE OF DRIVER

72b. DRIVER'S SIGNATURE AND DATE

SECTION X - DETAILS OF TRIP DURING WHICH ACCIDENT OCCURRED

73. ORIGIN

74. DESTINATION

75. EXACT PURPOSE OF TRIP

76. TRIP BEGAN	DATE	TIME (Include AM or PM)	77. ACCIDENT OCCURRED	DATE	TIME (Include AM or PM)
78. AUTHORITY FOR THE TRIP WAS GIVEN TO THE OPERATOR <input type="checkbox"/> ORALLY <input type="checkbox"/> IN WRITING (Explain)			79. WAS THERE ANY DEVIATION FROM DIRECT ROUTE? <input type="checkbox"/> NO <input type="checkbox"/> YES (Explain)		
80. WAS THE TRIP MADE WITHIN ESTABLISHED WORKING HOURS? <input type="checkbox"/> YES <input type="checkbox"/> NO (Explain)			81. DID THE OPERATOR, WHILE ENROUTE, ENGAGE IN ANY ACTIVITY OTHER THAN THAT FOR WHICH THE TRIP WAS AUTHORIZED? <input type="checkbox"/> NO <input type="checkbox"/> YES (Explain)		
82. COMPLETED BY DRIVER'S SUPERVISOR	a. DID THIS ACCIDENT OCCUR WITHIN THE EMPLOYEE'S SCOPE OF DUTY				
	<input type="checkbox"/> YES <input type="checkbox"/> NO	b. COMMENTS			
83a. NAME AND TITLE OF SUPERVISOR			83b. SUPERVISOR'S SIGNATURE AND DATE		83c. TELEPHONE NUMBER

STANDARD FORM 91 (2/2004) PAGE 3

EXPLOSIVES DRIVERS COURSE

SECTION XI - ACCIDENT INVESTIGATION DATA

84. DID THE INVESTIGATION DISCLOSE CONFLICTING INFORMATION. ☐ NO ☐ YES (If checked, explain below.)

85. PERSONS INTERVIEWED

NAME	DATE	NAME	DATE
a.		c.	
b.		d.	

86. ADDITIONAL COMMENTS (Indicate section and item number of each comment).

SECTION XII - ATTACHMENTS

87. LIST ALL ATTACHMENTS TO THIS REPORT

SECTION XIII - COMMENTS/APPROVALS

88. REVIEWING OFFICIAL'S COMMENTS

89. ACCIDENT INVESTIGATOR			90. ACCIDENT REVIEWING OFFICIAL		
a. SIGNATURE	b. DATE		a. SIGNATURE	b. DATE	
c. NAME (First, middle, last)			c. NAME (First, middle, last)		
d. TITLE			d. TITLE		
e. OFFICE			e. OFFICE		
f. OFFICE TELEPHONE NUMBER			f. OFFICE TELEPHONE NUMBER		
AREA CODE	NUMBER	EXTENSION	AREA CODE	NUMBER	EXTENSION

STANDARD FORM 91 (2/2004) PAGE 4

EXPLOSIVES DRIVERS COURSE

d. Procedures Following a Breakdown While In-Transit.

When a vehicle loaded with A&E is disabled due to a mechanical failure or reasons other than an accident, the driver is required to take action to ensure the safety of the public and to protect the cargo.

(1) Do not attempt to jump-start a motor vehicle that has A&E cargo onboard.

(2) If safe and practicable to do so, drive the vehicle to a safe parking place as far off the highway as possible and away from congested areas.

(3) Immediately turn on the vehicle's hazard warning signals and post the emergency warning devices.

(4) Notify state/local (as applicable) law enforcement authorities.

(5) Contact command to report the breakdown and request guidance/assistance as necessary; contact destination activity to report delay in-transit due to breakdown.

(6) If applicable arrange for on-site repair work.

(7) If on-site repair work is not feasible arrange to have an alternate motor vehicle, along with qualified A&E handling personnel and equipment dispatched to the scene of the breakdown and transfer the A&E.

(8) A complete report shall be made for the safety officer or duty officer at the driver's home activity to include all pertinent details. The report shall be presented to the driver's supervisor, who shall forward it to the safety officer or duty officer.

e. Procedures in Case of Delay of More Than 5 Hours.

If the vehicle is delayed for more than 5 hours, the driver shall report the delay to the transportation manager or the duty officer of the parent command. If the delay results from delivery being restricted to normal working hours the delay does not need to be reported.

EXPLOSIVES DRIVERS COURSE

6. TRANSFER OF LOAD IN TRANSIT/REFUELING/PARKING.

a. **Transfer of Load in Transit.** The transfer of A&E HC/D 1.1, 1.2 and 1.3 A&E and/or Poisons 6.1, shall not be transferred from one container to another or from one vehicle to another on any public highway, street or road, except in cases of emergency. If transfer of A&E is required, the following actions shall be taken:

(1) Drive vehicle to a safe parking place as far off the highway as possible and away from congested areas.

(2) Turn off the engine and set the handbrakes. If the vehicle is diesel-powered, set the transmission in neutral.

(3) Turn on the vehicle's hazard warning signals and post the emergency warning devices.

(4) Provide constant surveillance over the vehicle and its A&E cargo while awaiting the arrival of qualified DOD emergency response A&E cargo handling supervisor and crew members.

b. **Procedures for Refueling.** All motor vehicle that are transporting A&E on and off-base shall be fueled prior to loading. While enroute to destination, if contingency factors beyond the driver's control that require refueling should arise, then the following safety precautions shall be followed:

(1) Compressed Natural Gas (CNG) powered vehicles shall not be refueled within 100 feet of A&E.

(2) The engine shall be turned off.

(3) The lights shall be turned off.

(4) One driver shall stand by with a fire extinguisher.

(5) Under no circumstances shall the vehicle be fueled simultaneously with other vehicles.

(6) The nozzle of the fuel hose shall be in continuous and firm contact with the intake pipe of the

EXPLOSIVES DRIVERS COURSE

fuel tank or be otherwise grounded (grounding cable is included in safety equipment required on vehicles).

(7) A person must be in constant control of the fueling process at the point where the fuel tank is filled.

(8) In the event of a fuel spill during refueling, motors on the equipment or refueling unit shall not be started until the fuel tank is capped, and the spill is thoroughly washed down with water; or, the equipment is first moved manually at least 50 feet from the spill.

(9) No person may smoke or carry a lighted cigarette, pipe or cigar within 25 feet of the fueling operation.

(10) In the event of a fire use the appropriate fire extinguisher, at a minimum a Underwriters' Laboratory (UL) capacity rating of 10-B:C, or a multi-purpose dry chemical fire extinguisher with a UL rating of 2 to 5-A/10BC.

c. **Parking.** In the interest of protecting the public well-being to the maximum extent, special federal and DOD safety regulations have been established for driving and parking motor vehicles loaded with Class/Division 1.1, 1.2, and 1.3 A&E. Military and civilian drivers tasked to operate motor vehicles engaged in transporting these hazardous materials must comply with the following requirements:

(1) Under no circumstances shall the driver of a vehicle carrying Class 1.1, 1.2, or 1.3 explosives park in a public garage or on a public parking lot, or leave the vehicle unattended.

(2) Only essential vehicles shall be operated within 100 feet of fuel storage areas and transfer operations (except service stations), where low-lying accumulations of flammable vapors or hazardous ignition-combustible material sources are present. Drivers of vehicles transporting Class/Division 1.1 through 1.3 explosives shall not park near fuel pumps or similar areas, except when refueling. In addition, vehicles shall not be parked over any grassy area or unpaved surfaces which may be oil-soaked.

EXPLOSIVES DRIVERS COURSE

(3) The following regulations shall be adhered to for parking Class/Division 1.1, 1.2 and 1.3 A&E loaded motor vehicles in the public domain:

(a) The motor vehicle shall not be parked within 300 feet of a bridge, tunnel, dwelling, or place where people work, congregate, or assemble, except for brief periods when the necessities of operation require the vehicle to be parked and make it impracticable to park the vehicle in any other place.

(b) The motor vehicle shall not be parked within 5 feet of the traveled portion of a public street or highway.

(c) The motor vehicle shall not be parked on private property (including premises of fueling or eating facilities) without the knowledge and consent of the person who is in charge of the property and who is aware of the nature of the hazardous materials the vehicle contains.

(4) Parking vehicles loaded with Class/Division 1.1, 1.2 and 1.3 explosives on-base shall only be parked in locations identified in approved site plans and associated fire maps.

7. SHIPMENT DELIVERY.

a. Incoming Inspection.

(1) Upon reaching your destination, vehicles will be inspected using Sect III, of DD Form 626.

(2) All shipping documents will be delivered to authorized personnel.

(3) Keep a signed copy of the shipping doc. Provide a copy to the proper authority at your home activity/unit.

(4) Discrepancies in shipment and paper work will be reported IAW NAVSEA SW020-AF-HBK-010.