

SECOND INFANTRY DIVISION



Vehicle Commander and Driver Training,
Testing, and Licensing Regulation
2ID REG 56-4
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DEPARTMENT OF THE ARMY
HEADQUARTERS, 2ND INFANTRY DIVISION
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2ND Infantry Division Regulation
No. 56-4

Vehicle Commanders and Drivers Training, Testing, and Licensing

Supplementation by subordinate commanders is prohibited, unless specifically approved by Headquarters, 2nd Infantry Division.

1. PURPOSE.

This single source regulation establishes policy, procedures and responsibilities for Vehicle Commander and driver selection, training, testing and licensing of operators on Army wheeled, tracked, and special equipment in the 2nd Infantry Division.

2. REFERENCES.

Army Regulations:

AR 600-55 The Army Driver and Operator Standardization Program (Selection, Training, Testing, and Licensing)

AR 385-55 Prevention of Motor Vehicle Accidents.

AR 190-5 Motor Vehicle Traffic Supervision.

AR 672-74 Army accident prevention awards program.

AR 600-8-22 Military Awards

AR 385-10 The army Safety Program.

AR 385-40 Accident Reporting and Records.

AR 55-355 Defense Traffic Management Regulation.

AR 350-41 Training in Units.

Department of the Army Pamphlets:

DA Pam 750-8 Functional Users Manual for The Army Maintenance Management System (TAMMS).

DA Pam 385-40 Accident Reporting Records.

DA Pam 611-120 Administering and Scoring the Army Motor Vehicle Driver Selection Battery I, MDB-I.

DA Pam 611-122 Administering and Scoring the Army Motor Vehicle Driver Selection Battery II, MDB-II.

DA Pam 750-1 Leader's Unit Level Maintenance Handbook.

Field Manuals:

FM 20-22 Vehicle Recovery Operations.

FM 21-17 Driver Selection and Training for Track Vehicles.

FM 21-305 Manual for the Wheeled Vehicle Driver.

FM 21-60 Visual Signals.

FM 7-1 Battle Focused Training.

FM 55-30 Army Motor Transport Unit Operations.

FM 55-1 Transportation Operations.

FM 55-2 Division Transportation Operations.

FM 55-10 Movement Control in a Theater of Operations.

USFK Publications:

USFK Pam 385-2 Guide to Safe Driving in Korea

USFK Pam 385-3 Safety, a Systems Approach to Seasonal Safety.

USFK Pam 190-1 Motor Vehicle Traffic Supervision.

USFK Reg 55-355 Korean Traffic Management.

8th United States Army Publications:

AK Reg 350-4 Tactical Movements in the KTO, 19 Oct 2005.

EUSA Reg 55-355 Korean Traffic Management.

EUSA Reg 600-2 Personnel-General Public with the United States.

EUSA Suppl to AR 385-55

EUSA Suppl to AR 385-10

EUSA Suppl to AR 600-55

EUSA Suppl to AR 672-74

EUSA Suppl to AR 385-40

2nd Infantry Division Publications:

2ID Reg 56-4 Vehicle Commander and Driver Training Regulation.

2ID Reg 350-1 2ID Training Program.

2ID Reg 385-7 Prevention of Vehicle Accidents.

2ID Reg 55-2 Transportation Support and Movement Procedures.

2ID Pam 55-2 Convoy Commanders Guide.

2ID Booklet Senior Occupant duties.

2ID Booklet Spring/Summer Safety Guide.

2ID Booklet Fall/Winter Safety Guide.

Department of the Army Forms:

DA Form 285 Accident Investigation Report.

DA Form 348 Equipment Operator's Qualification Record (Except Aircraft).

DD Form 626 Motor Vehicle Inspection (Transporting Hazardous Materials).

DD Form 836 Shipping Paper and Emergency Response Information for Hazardous Materials Transported by Government Vehicles.

DD Form 1384 Transportation Control and Movement Document.

DD Form 1970 Motor Equipment Utilization Record.

DA 5984-E US Government Motor Vehicle Operator's Identification Card.
(Authorized replacement of the OF 346)

SF 91 Operator Report on Motor Vehicle Accidents.

3. POLICY.

a. All US military, Department of the Army Civilians (DAC), KATUSA, and Korean National Civilian personnel selected for assignment as vehicle operators within the 2ID will be evaluated, tested and licensed IAW AR 600-55, EUSA SUPPL 1 to AR 600-55, and this regulation.

b. DA PAM 750-8 describes how to plan, manage, fill out and use forms for equipment operation, dispatch, and control of equipment when using ULLS-G or manual procedures.

- c. The ULLS-G is the Army's Unit Level Logistics System. ULLS-G collects operator licensing, dispatch, and equipment control data and provides management information at the unit level.
- d. The ULLS-G automates/replaces portions of TAMMS. Commanders will ensure that portions of TAMMS not replaced by ULLS-G are accomplished using the manual procedures outlined in DA PAM 750-8. This process will be applicable to Transportation Motor Pools (TMP) when issuing an OF 346 manual form for Non-Tactical Vehicle (NTV) and commercial vehicle use. Major Subordinate Commanders and Separate Battalion Commanders are authorized to create a users code IAW DA PAM 750-8, Chapter 2, (Class Codes, DA Form 5985-E) through ULLS to enable annotation of NTV training qualifications and licensing on the ULLS-G generated DA 5984-E.
- e. The following DA forms/DD forms/optional forms (OF) have been automated, and ULLS-G generated printouts (shown with an -E) are authorized replacements:
- f. DA Form 5823 (not required if operating with ULLS-G; this information is on the dispatch printout).
- g. DA Form 5987-E (Motor Equipment Dispatch), DA Form 5987-1E (Alert Motor Equipment Dispatch), and DD Form 1970 (Motor Equipment Utilization Record).
- h. DA Form 5982-E (Dispatch Control Log) and DA Form 2401 (Organizational Control Record for Equipment).
- i. DA Form 5984-E (Operators Permit Record) and OF 346 (U.S. Government Motor Vehicle Operators Identification Card).
- j. DA Form 348 (Equipment Qualification Record) is the only authorized record for documenting equipment operator's qualifications. ULLS-G produces a DA Form 348-E that reflects equipment qualifications that have been locally transferred into ULLS-G from the DA Form 348. This process is designed to help streamline automated dispatch procedures through the use of a relational database.
- k. Commanders document equipment qualifications using the DA Form 348 as prescribed in AR 600-55. Company Master Drivers will maintain a copy of all authorized operator's DA Form 348s on file. DA Form 348-E is used for local command purposes only.
- l. Battalion Master Drivers will review operator qualification information quarterly to ensure ULLS-G is synchronized with manning rosters and review training qualifications to ensure accuracy.
- m. Units operating ULLS-G supersede all manual procedures. In cases where there is a conflict on form disposition between this policy and the user manual, DA Pam 750-8 takes precedence.

4. GENERAL.

- a. All vehicle operators must possess a valid DA 5984-E (OF 346 for facilities without ULLS-G capability) with Accident Avoidance and Spring/Summer or Fall/Winter safe driving annotated on it (depending on the season). Training must also be annotated on the DA 348/348-E.
- b. Each unit will have a primary and alternate Master Driver. Brigade and Battalions will have a SFC or above (downgradeable to SSG upon written request to the Chief of Staff). Companies will have a SGT or above. Master Drivers will be trained IAW AR 600-55. These positions are not to be considered additional duties. Master Drivers must have passed the USFK driver test and completed the 2ID Master Driver Training and Licensing Course. Units will submit appointment orders to the 2ID Drivers Testing Station and the 2ID Master Driver within seven days of appointment.
- c. All Master Drivers must have a minimum score of 90% on the Master Driver final examination and at least nine months retainability upon appointment. Master Drivers and Examiners will be on appointment orders to road test personnel. Master Drivers will ensure that all provisions of this regulation have been met before a DA 5984-E is issued.
- d. Company Master Drivers will be checked quarterly by the Battalion Master Driver to ensure consistency of training and road testing standards. The Battalion Master Driver will compare the road test evaluations to ensure all Master Drivers use the same standards when conducting road tests. The Division Master Driver will maintain oversight of these programs through regular Staff Assistance Visits.
- e. The 2ID Drivers Testing Station (TMP) is responsible for non-tactical and commercial vehicle testing, training and licensing. Commanders will have the authority to train, test, and license noncommercial tactical vehicles and equipment. However, driver and operator training, testing, and licensing for tactical vehicles and equipment will be conducted by the Master Driver at battalion or higher.
- f. Operators of special purpose vehicles, such as construction or material handling equipment, will be trained and licensed at company level with the training verified by the company commander IAW the appropriate Training Circular (TC), FM 21-17, FM 21-305, FM 21-306.
- g. Military personnel whose duties require them to drive but who do not possess a valid U.S. state license will only be authorized to operate a tactical vehicle in connection with a military operation. Military operations are considered to be any operation required for military purposes, which has approval of the unit commander. These personnel will, under no circumstances, operate a tactical vehicle for administrative purposes or operate any administrative or commercial type vehicle.

h. Operators of government leased or rented vehicles must have a DA 5984-E with a TMP license IAW AR 385-40.

i. KATUSA Soldiers authorized to drive US military vehicles are those assigned to military occupational specialties listed in 1999 KATUSA manning documents as:

US MOS "00A"/ROK MOS "610" Light Vehicle Driver.

US MOS "88M"/ROK MOS "613" Heavy Vehicle Driver.

US MOS 71M, Chaplain's Assistant.

US MOS 88N, Movement Control.

US MOS 95B, Military Police.

j. KATUSA positions on the KATUSA Manning Document with a number in the driver section tells you how many driving slots you have in your unit. KATUSA Soldiers meeting the above requirements will be selected, trained, tested (to include the Battery II Test) and licensed as any US Soldier.

k. A Vehicle Commander (VC) Track Commander (TC) and Crew Coordination training and certification program will be conducted at Company level or higher. This program will ensure that Vehicle Commanders understand Vehicle Commander's duties and responsibilities. Training will be conducted by the Master Driver with performance and written test results reviewed by the commander and annotated on the DA 348, DA 348-E, and DA 5984-E. The results will be maintained in the Soldier's drivers training packet at unit level. At a minimum Vehicle Commanders will receive training on Korean traffic laws; Korean road signs; military traffic regulations; hazards and prevention of accidents during fall/winter and spring/summer months; risk assessment, unit dispatch procedures, 2ID Movement Mission Brief, Crew Coordination and accident/emergency reporting procedures. Personnel to be certified by the commander will be in the grade of E-4 or above and will be issued a AK Form 350-4A-E (Eight United States Army Convoy and Vehicle Commander Certification Card). Only those personnel designated by the commander will serve as a Vehicle Commander. Company commanders may not delegate this appointment authority.

l. Convoy Commanders will be trained and certified at the battalion level. Battalion commanders may delegate signature authority to the Battalion Executive Officer. Convoy Commanders will be in the grade of E-7 or above. The battalion commander may certify personnel in the grade of E-6 that are serving in the assigned position of an E-7. At a minimum certification training will consist of, Korean traffic laws; Korean road signs; military traffic regulations; hazards and prevention of accidents during fall/winter and spring/summer months; risk assessment, unit dispatch procedures, 2ID Movement Mission Brief, accident/emergency reporting procedures, Crew Coordination and Convoy Commander duties and responsibilities. Convoy Commanders will carry the AK Form 350-4A-E while performing duties as Convoy Commander.

m. The 2ID commander is the approving authority for the wear of the Master Driver Identification FOB. Non-commissioned officers that have completed the 2ID Master Drivers Training Course and who are performing duties as a Brigade, Battalion, or Company Master Driver are authorized to wear the FOB. Appointment orders will be presented to the 2ID Master Driver before the FOB will be issued or worn. The subdued 2ID Master Driver Identification FOB will be worn on the left breast pocket of the BDU, or utility uniform, suspended from the inner button. No other wear characteristics are authorized.

5. Responsibilities:

Brigade Commanders and Separate Battalion Commanders are responsible for ensuring the provisions of this regulation are met within their units.

a. Brigade and Separate Battalion Commanders:

(1) Designate Soldiers, E-7 or above by appointment orders, and alternate, to the duty position of Master Driver with the successful completion of the 2ID Master Driver Vehicle Commander and Driver Training Course.

(2) Ensure Master Drivers attend the Division Master Drivers Course. Slots for the Master Driver Course are requested through the BN S-3 to Division G-3 schools. Prior to attending the course candidate must possess a DA Form 5984-E (Army Standard Operators License), DA Form 348, DA 348-E, AK 350-4A-E (TC/VC Card) and a G3 Schools Commander's Checklist. (IAW 2ID Schools SOP). Master Drivers must be licensed on tactical equipment within their company before attending the Division Master Driver Training Course. Upon completion of the Master Driver Course, (within 7 days) forward orders appointing individuals as unit Master Driver to the Battalion Master Driver. The Battalion Master Driver will forward a copy to the Division Master Driver (within 7 days) to be maintained on file.

b. Battalion Commanders:

(1) Designate Soldiers, E-7 or above by appointment orders, and alternate, to the duty position of Master Driver with the successful completion of the 2ID Master Driver Training and Licensing Course.

(2) Send orders appointing individuals as unit Master Driver to the 2ID Drivers Testing Station (TMP), and the 2ID Master Driver within seven days of appointment.

(3) Establish Convoy Commander training and certification at battalion level.

(4) Establish Vehicle Commander (VC) Track Commander (TC) and Crew Coordination training and certification at company level.

(5) Ensure Master Drivers administer road tests for tactical vehicles, IAW AR 600-55, to driver candidates who have successfully completed the written test. Record the results of the test in Section IV, Part II, DA Form 348.

(6) Establish an on-and-off installation road course for the administration of a road test. The check ride test course will be of sufficient length to allow the driver to demonstrate proficiency in all aspects of driving. Road Test procedures will be IAW AR 600-55. Test courses for tracked vehicles will be established IAW TC 21-306.

(7) Battalion/Company Commanders will have a 2ID approved standard drivers training program for the unit which provides the training (tasks, conditions and standards) for each family of vehicles, all gasoline burning equipment and night vision devices. These Programs of Instruction (POIs) will be IAW the applicable Army Training Circular (TC).

(8) Battalion/Company Commanders will authenticate DA Form 5984-E, DA 348, and DA 348-E. Authentication means that the Soldier has received the required training to be proficient in the operation of the vehicle(s) he/she will be licensed on and all the appropriate supporting documentation is on-hand and maintained on file with the Unit Master Driver.

(9) Battalion/Company Commanders will be responsible for issuing learners permits to Soldiers training on new equipment. Learners permits will be generated by ULLS-G, DA 5984-E, with "LEARNERS PERMIT" printed on the form. Learner permits are valid for 90 days.

c. Company Commanders:

(1) Designate Soldiers, E-5 or above by appointment orders, and alternate, to the duty position of Master Driver with the successful completion of the 2ID Master Driver Training and Licensing Course. Interview, select, train, and license driver candidates IAW AR 600-55, DA Pam 750-8, 2ID Reg 56-4, and the 2ID Master Driver Training and Licensing SOP. The commander, or representative designated in writing, is the issuing official for a Military Operator's License.

(2) Ensure all records and forms are maintained according to AR 600-55 and DA PAM 750-8 Unit Level Logistics System (ULLS) and that a DA Form 5984-E and DA 348 accompanies the driver candidate to the 2ID Testing Station (TMP). Master Drivers will schedule appointments for TMP requirements.

(3) Ensure that only qualified personnel (authorized and licensed) operate military vehicles.

(4) Suspend or reinstate operator licenses IAW AR 600-55.

(5) Conduct Vehicle Commanders Training and Certification Program.

(6) Ensure Driver Training is provided by qualified personnel, managed by the Master Driver, and reflected on unit training schedules.

d. Transportation Motor Pool (TMP):

(1) Establish and operate the 2ID Drivers Testing Station IAW AR 600-55.

(2) Provide driver testing services at other 2ID installations, as required.

(3) Administer the Battery II, Physical Evaluation Measures, and the written test at the driver testing locations.

(4) Provide Non-Tactical Vehicle (NTV) and commercial vehicle training, testing, and licensing. Annotate and validate DA Form 348/348-E for driver candidates who pass all tests.

(5) Will not issue military or KATUSA personnel an OF 346 without written consent from the commander. Annotation of the DA 348 will be in compliance with AR 600-55. The unit Master Driver will utilize the Unit Level Logistics System (ULLS), to generate a DA 5984-E and DA 348-E at the unit level.

(6) Administer road qualification test for all TMP vehicles.

e. Medical Officers:

(1) Examine driver candidate referrals based on their failure to meet minimum physical/medical evaluation standards.

(2) Determine whether the driver candidate would be qualified to drive despite having been disqualified by testing. Enter findings and signature in the appropriate blocks, Section IV, Part I, DA Form 348.

f. ACofS, G-3, Training:

(1) Ensure the POI for training Master Drivers is reviewed semi annually.

(2) In accordance with Department of the Army published Training Circulars (TCs) maintain a standard Program of Instruction (POI) for each family of vehicles in 2ID, to be included as Annex M to 2ID REG 56-4.

g. Division Master Driver:

- (1) Will be a non-commissioned officer in the grade of E-8 or above.
- (2) Develop and sustain the 2ID Master Driver Training and Licensing Program.
- (3) Provide instruction of the Master Drivers Training Course and conduct Command Inspections for the 2ID Command Inspection Program,
- (4) Perform Staff Assistance Visits (SAV) and Training Inspections on a regular basis.
- (5) Advise Commanders and assist the unit trainers in the development and sustainment of a Driver Training and Licensing Program.
- (6) Maintain POIs and conduct regular POI reviews. Collaborate with the Division Safety Office, G4 Maintenance, and the Division Inspector General's Office to maintain awareness of accidents, safety concerns and maintenance trends.
- (7) Attend all Division Safety Counsel Meetings.
- (8) Be certified to conduct inspections by the Div CIP Coordinator and IG.
- (9) Attend office calls with the ADC-S for progress, compliance and updates of the Division Master Driver Training and Licensing Program.
- (10) ICW Division Safety Office, host a quarterly Master Drivers Conference to share information about accidents and safety trends with all Master Drivers within the Division.
- (11) Maintain the Division Master Driver web site. This site will contain comprehensive updated training program POIs, staff assistance inspections, publication and audio visual resources, and a two way communication tool from the Division Master Driver to Brigade, Battalion and Company level trainers.
<http://8army/sites/2id/Staff/G3/default.aspx>
- (12) Ensure POIs for Driver Training are reviewed and updated as required.

h. Division Safety:

- (1) Provide updated safety and vehicle accident statistics to the Division Master Driver.
- (2) Conduct Command Inspections for the 2 ID Command Inspection Program, Perform Staff Assisted Visits (SAV) and Training Inspections on a regular basis. Advise Commanders and assist the unit trainers in the development and

sustainment of safety awareness programs. Attend all Division Safety Counsel Meetings.

i. Driver Selection:

(1) Personnel to be identified, trained, tested and licensed as motor vehicle operators will be selected IAW FM 55-30 and AR 600-55. For experienced operators, DA Form 348/348-E indicates qualifications for previous equipment operations, a check ride will be given to ALL Soldiers on each piece of equipment they are to be licensed on. Experienced Soldiers will receive training on ROK rules of driving before an ARMY STANDARD license will be issued. Mere possession of a DA Form 348 is not sufficient for a commander to determine suitability of a driver candidate.

(2) Candidates selected for driver training must have demonstrated maturity, physical coordination and a positive attitude toward military duties. A commander's Interview will be completed and maintained on file by the Unit Master Driver.

j. Training:

(1) Standards for the training of driver candidates will be centralized under the Division Master Driver.

(2) Prior to testing at the Driver Testing Station, all driver candidates will be given the instruction specified in this regulation by the Unit Master Driver. Upon completion of the instruction, the Unit Master Driver will record the training in Section III, of DA Form 348 with the following entry: "Completed training required by 2ID REG 56-4, ROK Safe Driving, traffic laws, traffic signs." Also annotate summer and winter drivers training when applicable. The minimum preliminary driver training will not guarantee that a driver candidate will pass the Korean traffic law and Korean sign portions of the driver test. Driver candidates will complete all required classroom instruction prior to being issued a DA Form 5984-E.

(3) A driver candidate will not be licensed until he/she has demonstrated the ability to operate and control a vehicle by passing a road test check ride IAW AR 600-55 and has received a validated and authenticated DA 5984-E. A licensed and certified examiner in the grade of E-5 or above will accompany each student while driving during training. Examiners will be designated in writing by the commander. A "student driver" sign written in Hangul and English will be conspicuously attached to the front and rear of each vehicle. Students will drive cross-country only on 2ID installations or in designated driver training areas approved by the battalion commander. The unit Master Driver will oversee all unit road testing. KATUSA personnel will be used as assistant trainers for other KATUSAs to translate instruction when necessary. All training aids will have Hangul translations.

(4) Driver training will be METL based and integrated with the unit training plan.

(5) The use of a “learner permit” will allow individuals to practice and acquire necessary driving skills. Learner permits will be issued to only those personnel undergoing a course of study in driver training or a new piece of equipment. Successful completion of all tests is required before receiving a learner’s permit (DA 5984-E). The words “ARMY LEARNER” will be stamped on the front of the OF 346 and printed on the DA 5984-E. These permits are valid only during regular training periods (not to exceed 90 days), and only under the following conditions:

(6) When a qualified driver, instructor, or examiner accompanies the driver candidate in the vehicle.

(7) When the vehicle is operated within a controlled driving course or training area.

(8) When the vehicle is operated in a controlled motor column in connection with the course of driver training.

(9) All newly assigned 2ID personnel (even those possessing a valid DA Form 348/348E) will pass the Korean traffic law and road sign examination, IAW USFK/EUSA Pam 385-2 conducted by the 2ID Drivers Testing Station.

(10) DA Form 348 will be completed with all mandatory training listed and certified by the Battalion Master Driver before scheduling for testing by the Drivers Testing Station. The driver performance test, recorded in Section IV, Part II, DA Form 348 will be administered before a DA 5984-E will be issued. The Master Driver road test is the driver candidate’s performance test. Once qualification training is properly annotated into the ULLS a newly generated DA 348-E is produced. The original DA 348 will be maintained in the Soldier’s training packet with the unit Master Driver

(11) Battery I and/or II score(s) must be recorded on DA Form 348 during the training phase.

(12) Semi-annually all assigned drivers will receive spring/summer or fall/winter safety drivers training IAW 2ID spring/summer and fall/winter safety guides. Training must be recorded on DA Form 348/348-E and on OF 346/ DA 5984-E. Separate cards are no longer necessary.

(13) Remedial drivers training will be conducted to correct weak areas indicated by examinations, accidents, violations or other driver faults IAW AR 385-55. Training must be annotated on DA Form 348/348-E and DA 5984-E.

(14) All tactical vehicles driven off installations are required to have at least two personnel, one of whom is VC certified. VCs do not need to be licensed operators of the vehicle, although it is recommended.

(15) Prior to certification of Hill 754 (Casey 39), driver candidates will be given the instruction specified in Annex E of this regulation. The following entry

must be made on the DA Form 348 upon completion of instruction: "Completed training required by 2ID REG 385-7; Driver licensing Hill 754 furnished in support of this training."

(16) Company commanders will ensure that instructors and necessary resources are furnished in support of Hill 754 (Casey 39) training.

(17) Experienced drivers (those Soldiers with at least two years military driving experience) will have their DA 348 reviewed by the Master Driver and scheduled for Experienced Driver Training requirements consisting of at a minimum; TC/VC Certification, Korean driving training, seasonal training, crew coordination and complete a road test examination. Experienced operators will be given a check ride on each piece of equipment they are to be licensed on while assigned to the 2ID before annotation of the DA 348 or DA 5984-E. Commanders and Master Drivers will not deviate from these procedures.

k. Testing:

(1) Driver candidates who fail the physical evaluation will be referred to unit medical personnel for evaluation. Unit medical personnel will certify weaknesses that can be corrected by counseling or medical treatment before a candidate can be issued a license. The Unit Medical Officer will record his/hers findings in Section IV, Part I, DA Form 348 and sign in the "name of examiner" block for the appropriate tests given.

(2) The unit Master Driver must make an appointment with the Drivers Testing Station NLT 3 days in advance for driver candidate testing. Appointments may be made by telephone at 730-2275 on Camp Casey and 732-6635 on Camp Red Cloud.

(3) OF 346 with appropriate stamp may be issued for those personnel who pass all TMP tests. If the unit has a qualified Master Driver, and utilizing the Unit Level Logistics System (ULLS), an automated DA 5984-E and 348-E will be generated by the unit. Unit commanders are the issuing authority for a Military Operators License.

(4) If a unit is not able to utilize ULLS, an OF 346 will be issued and validated (stamped) by the Drivers Testing Station (TMP) and signed by the unit commander.

(5) Driver candidates will arrive at the testing station 15 minutes prior to testing time. Driver candidates will be in duty uniform, accompanied by the Unit Master Driver. No personnel will be admitted into the testing station once testing has begun. Master Drivers are required to sign in at the testing station.

(6) Upon arrival at the testing station, all driver candidates will have in their possession a DA Form 348 with the required information filled out by their Unit Master Driver IAW AR 600-55, EA SUPPL 1 to AR 600-55. DA Pam 750-8. The DA Form 348 must be typed or printed in black ink pen only. DA Form 348s that are

mutilated, illegible, have white out or correctional tape will not be accepted. The Unit Master Driver will initiate a new DA Form 348.

(7) The written test consists of three parts: Korean rules of the road; Korean road signs; and US Military driving regulations. Driver candidates must score a minimum of 80 percent on each part of the test.

(8) Driver candidates who do not have a Battery I score of 85 or better, must take the Battery II test and score at least 80, IAW AR 600-55.

(9) Driver candidates must pass the physical evaluation measures before the written test will be administered IAW AR 600-55.

(10) Upon passing all tests, an OF 346 and completed DA Form 348 will be issued to the Master Driver by the 2ID Testing Station for final preparation and control. If a unit is using the ULLS-G generated DA 5984-E the TMP will not need to produce the manual OF 346.

(11) Driver candidates failing the written test may be retested after receiving additional training. Written certification signed by the Unit Master Driver will be acceptable proof that additional training has been completed. An individual may be retested a maximum of three times. The third test will be administered only upon written request of the driver candidate's company commander.

(12) Applicants failing any portion of the physical evaluation measures will be referred to medical authorities for further evaluation.

(13) Only the Unit Master Driver will administer road tests on tactical or special purpose vehicles. This duty cannot be delegated. All other hands on training may be performed by a designated Examiner.

I. Military Licensing:

(1) OF 346 issued from a driver testing station or 2ID units in the ROK are valid for operation of a vehicle in the 2ID area. All personnel assigned or attached to 2ID units who have been issued an OF 346 or DA 5984-E from another testing station or 2ID unit within the ROK within the past 48 months will: have their DA Form 348/348-E reviewed by the Unit Master Driver and their OF 346 and DA 5984-E validated by their company commander. TDY personnel will be issued an OF 346/DA 5984-E on a case-by-case basis. (Sustainment training will be given to the experienced driver).

(2) OF 346/DA 5984-E will be completed and issued IAW the provisions of AR 600-55, EUSA SUPPL 1 to AR 600-55, and DA PAM 750-8

(3) The standard operator permit expires on the same date as the individual's state driver license or 5 years from the date of issue, which ever is sooner.

(4) DA Form 348-1-R/348-1-E (Equipment Operator's Qualification Record Continuation Sheet) will be utilized along with the individual's current DA Form 348/348-E, regardless of origin IAW AR 600-55.

(5) Upon successful completion of required testing, a 2ID OF 346 and DA Form 348 will be properly checked, validated, and returned by the 2ID Drivers Testing Station to the unit Master Driver for authentication by the Company Commander.

(6) The 2ID Drivers Testing Station and battalion/separate companies will maintain a record of OF 346s/DA 5984-E issued. Each license will be marked, numbered and entered in a record log.

(7) An expired OF 346/DA 5984-E may not be renewed after expiration. An OF 346/DA 5984-E may be renewed up to 90 days before expiration.

(8) A lost or mutilated OF 346/DA 5984-E will require the Company Commander or supervisor (if civilian) to submit a memorandum to the Drivers Testing Station or the Unit Master Driver for re-issue. The memorandum must state that the individual's driving privileges have not been suspended or revoked, before the Driver Testing Station or the Unit Master Driver re-issues an OF 346/DA 5984-E.

(9) Korean Nationals operating U.S. Government NAF vehicles must possess a valid ROK license and must pass the Battery II test IAW EUSA Supplement 1 to AR 600-55.

m. Non-US Military Operators Licensing

(1) DAC and third country national testing requirements are the same as US military and KATUSA personnel.

(2) Korean National Civilians must have in their possession a valid ROK Government Drivers License.

(3) KNC personnel will be tested in the same manner and with the same material as KATUSA Soldiers.

(4) All KNC personnel must hand carry a memorandum from their employer or Master Driver when requesting replacement of a lost, expired, stolen, or damaged license. The memorandum will contain the following information:

Name:
Position:
Korean License Number:

Identification Number:
Reason:

n. Suspension and revocation of Military License:

(1) Drivers found at fault in a motor vehicle accident resulting in injury will have their license suspended. Operators will be reinstated only by the Commanding Officer of the Major Subordinate Command or Separate Battalion/Company to which the individual is assigned.

(2) Drivers with accidents involving fatality, in which the driver is judged at fault will have their license suspended for a period of one year.

(3) Drivers identified as at fault in a traffic accident, committing serious driving offenses, misusing government vehicles, or being cited by the military police for multiple accidents or violations will have their license revoked IAW AR 600-55. Re-licensing procedures may be initiated by Battalion or Company Commanders after the driver has responded to remedial driver training and proven his/her ability to operate a motor vehicle safely.

The proponent agency of this regulation is the office of Assistant Chief of Staff, G3. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended changes to Publications) to AcofS, G3, 2ID, ATTN: EAID-GO-T, APO AP 96258-0289.

FOR THE COMMANDER:

OFFICIAL

ROSS E. RIDGE
Colonel, GS
Chief of Staff

ANNEX A

SAMPLE COMMANDER'S INTERVIEW

LETTER HEAD

1. Name, Rank _____
 2. Do you have a valid state driver license? _____ Do you have a current Military License? _____
 3. Are you able to drive a manual transmission? _____ What type of vehicles have you driven? (circle) passenger car passenger truck 4 wheeled drive 2 1/2 ton or larger tractor trailer special equipment
 4. Have you had any traffic accidents? (\$2000 or more damage) _____
 5. Have you had any traffic violations? _____ How many? _____ What type? _____
 6. Do you consider yourself to be a good driver? _____
 7. What do you think is the major cause of accidents?

 8. How could we reduce them?

 9. Do you have any physical impairments (i.e. hearing, color blindness, depth perception, etc.)

(if yes, explain) _____ medical eval required? _____
- *Note to commanders: During interview, also consider Soldier's military bearing and review records for adverse reports.
10. Age _____ Education Level _____ MOS _____ Section _____
 11. Unit Master Driver name _____ Recommendation Yes or No _____
 12. Soldier's signature and Date

 13. Comments:

Unit Commander's recommendation for license:	APPROVE	DISAPPROVE
Unit Commander designate as a TC/VC?	YES	NO
Unit Commander recommends to the Battalion Commander for Convoy Commander Certification?	YES	NO

JOHN D. DOE
CPT, FA
Commanding

ANNEX B

EXPLANATION OF TESTS

1. BATTERY I.

Driver Selection Battery I tests are given only at the time of enlistment or induction and only at a reception station as part of reception processing, never at another activity or installation. Battery I consists of three written tests to determine driving aptitude and how much each basic trainee knows about the operation of motor vehicles. Results are translated into a standard score and entered on the DA Form 348.

2. PERSONAL INTERVIEW.

Personal interviews are conducted at unit level to select personnel with a positive attitude and who can be given the responsibility to drive. Driver's DA form 348 from the last unit will be used, if the DA Form is full, a continuation sheet (DA Form 348-1) will be used. Based on the driver's experience, training and mileage, a license can be reissued. Refresher training on driving in Korea and 2ID REGS will be given based on the driver's experience. If a new DA Form 348 has to be made, all prior training will be transferred to the New DA Form 348 with Duplicate stamp or written on it, all prior training is valid unless the time has expired for the training. The following records need to be reviewed during the interview: ERB, Medical Records, DA 348.

3. BATTERY II.

Only required for personnel who scored less than 85 on the Battery I, did not take the Battery I, or do not have a valid state license. It consists of written and physical aptitude tests to determine judgment, visual attention, and eye-hand coordination. These tests are: Emergency judgment test, visual judgment test, and two-hand coordination test. Minimum score is 80.

4. PHYSICAL EVALUATION TESTS.

- a. This test is given to measure certain physical abilities. Those who fail are referred to the unit medical personnel for a decision on driving qualification. A medical officer must sign recommendations. There are six parts to the test:
- b. Visual Acuity: Minimum standard is acuity correctable to 20/30.
- c. Field of Vision: A lateral range of 75 degrees from center is the minimum.
- d. Depth Perception: Not scored.

- e. Color Perception: Red-green color blindness will disqualify candidate.
- f. Reaction Time: Maximum time allowed is 0.60 seconds.
- g. Hearing: Hearing cannot be below 15/20 in either ear (without a hearing aid).

5. WRITTEN TEST.

- a. This test consists of three parts: Korean traffic laws, Korean road signs, and Military traffic regulations. Candidate must have a minimum of 80% on each test.

ANNEX C

1. Commanders will ensure Master Drivers conduct driver training for the Non-experienced driver. Non-experienced driver training will be conducted at battalion level and will contain, but is not limited to, the topics contained in the example below. See ANNEX E for additional topics.

Non-experienced Driver Training
Program of Instruction (approximately 40 hours)

<u>SUBJECT</u>	<u>SCOPE</u>	<u>REFERENCES</u>
Sound Driving Practices	Basic rules, right of way	FM 19-25, FM 21-305
Driver Handbook	Pedestrian protection, motor cycles and farm equipment	USFK Pam 385-2
Route Selection	Classification of bridges and highways on maps, distances between points, strip maps, grids and coordinates on foreign and domestic maps.	FM 21-26, FM 21-30, FM 5-36, FM 21-305
Accident Avoidance Training	Safety practices and procedures to be utilized in city and open highway use driving.	FM 19-25, FM 21-305, TM 9 Series for vehicle
Elements of Safe Driving	Establish and reinforce a positive attitude toward driving tasks.	FM 21-305
Loads and Cargo Limits Transporting troops	Review of drivers responsibilities in transporting cargo, security of cargo, lashing of cargo, methods of planning and width distance safety practices in loading hazardous cargo.	FM 19-25, FM 55-30, FM 21-305, Command Operations REGS

SUBJECT	SCOPE	REFERENCES
Motor Vehicle OPN in Korea/INT'L Road Signs/ Vehicle Codes	Orientation on driving in Korea and conditions to include traffic laws in the ROK.	USFK Pam 385-2, USFK REG 190-2
Spring/Summer (1Hr)Fall/Winter Safety Driving in Korea (1 Hr)(Fall/Winter 1 Nov-31 Mar, Spring/Summer 1 Apr-31 Oct)	Highlight driving hazards and prevention of accidents during fall/winter and spring/summer months.	EA SUPPL 1 to AR 600-55
Accident prevention and reporting	Causes of accidents and procedures to follow if in an accident.	USFK Pam 385-2
Safety	Use of seatbelts, proper PMCS, roll-over drills, Correct use of throttle, etc.	AR 385-55
Dispatch procedures and TAMMS Forms	Proper entry of trip and DA Form 2404.	DA Pam 738-750
Awards, Unit SOPs	Good driver incentives and Driver Badges	AR 672-5-1. 2ID REG 385-7
Hands on training based on driver experience	Driving with instructor on and off installation	FM 19-25, FM 21-305, Applicable Training Circulars
Preventive, Maintenance Checks and Services (PMCS)	Hands on equipment operation and maintenance	TM -10 Manual
Night Vision Device Driving	Introduction, qualification Hands on experience driving with NVGs	AR 600-55, TC 21-305-2
Crew Coordination	Operator/Crew interaction necessary for efficient, effective and safe performance	2ID Reg 56-4 and Training Circular
Vehicle Commander (VC)	Duties and responsibilities of a vehicle commander	AK 350-4, 2ID Reg 56-4 Training Circular

ANNEX D

1. Commanders will ensure Master Drivers conduct driver training for the experienced driver. Experienced drivers training will be conducted at battalion level and will contain, but is not limited to, the topics contained in the example below. See ANNEX E for additional topics.

Experienced Driver Training
Program of Instruction (approximately 16 hours)

SUBJECT	SCOPE	REFERENCES
Guide to safe driving In Korea	Orientation on driving in Korea	USFK Pam 385-2
Seasonal Training Spring/Summer Fall/Winter	Highlight driving hazards and prevention of accidents	AK 350-4 USFK Pam 385-2
Accident avoidance Prevention	Safe driving practices Procedure to follow In the event of an accident	FM 19-25, 21-305 USFK 190-1 USFK 385-2
Loads and cargo Limits	HAZMAT	AMMO 67 CD
Safety	Use of seatbelts, proper PMCS, roll-over drills, Correct use of throttle, etc.	AR 385-55
Dispatch procedures and TAMMS Forms	Proper entry of trip and DA Form 5988-E. Movement Mission Brief	DA Pam 750-8
Awards, Unit SOPs	Good driver incentives and Driver Badges	AR 672-5-1.
Hands on training based on driver experience	Driving with instructor on and off installation	TC 21-305 TM -10 Manual
Preventive, Maintenance Checks and Services (PMCS)	Hands on equipment operation and Maintenance	TM -10 Manual

<u>SUBJECT</u>	<u>SCOPE</u>	<u>REFERENCES</u>
Night Vision Device Driving	Introduction, qualification Hands on experience driving with NVGs	AR 600-55, TC 21-305-2
Crew Coordination	Operator/Crew interaction necessary for efficient, effective and safe performance	2ID Reg 56-4 and Training Circulars
Vehicle Commander (VC)	Duties and responsibilities of a vehicle commander	AK 350-4 2ID Reg 56-4

ANNEX E

Elements of a Driver Training Program

1. Purpose: Provide guidance to Battalion / Company Commanders and Driver Trainers on program development IAW AR 600-55 and 2ID Reg 56-4.
2. Develop a Driver Training Program that includes the following training topics:
 - Mandatory classroom POI
 - Familiarization of new equipment training
 - Written testing
 - Hands on testing
 - Maintenance testing
 - PMCS training and certification
 - Dispatching procedures
 - Fall/Winter and Spring/Summer safe driving
 - Senior occupant responsibilities
 - Convoy Commander duties
 - TC/VC certification training
 - Driving habits and techniques, on and off installation
 - Proper load distribution
 - Securing cargo
 - Host nation laws additional safety precautions for host nation
 - Properly fill out report of motor vehicle accident
 - Driver Awards program
 - Vehicle movement hand signals
 - Properly complete PMCS 5988-E
 - Operation during daylight hours, night time, and limited visibility
 - Operate vehicle under normal conditions
 - Operate vehicle under adverse conditions
 - Self recovery of vehicle
 - Assisted recovery of vehicle
 - Drive using blackout drive and night vision devices
 - Actions during air attack
 - Actions at the halt
 - Actions during an ambush
 - Rollover training

Apply unit METL tasks as appropriate. Individual and Collective Training Tasks.

ANNEX F

ACCIDENT AVOIDANCE TRAINING

1. IAW AR 385-85 and AK Reg 350-4 all 2ID personnel who operate a military vehicle in the Republic of Korea (ROK) are required to attend Accident Avoidance Training prior to road testing at the Driver Testing Station. This training will be incorporated with the Battalion Master Driver Training program and conducted at the battalion level.
2. This applies to all personnel, units and activities assigned or attached to the 2ID.
3. Accident Avoidance Training is designed to cover the hazards and problems unique to the ROK. The training will cover those skills necessary to ensure that 2ID drivers are well trained in all aspects of safe vehicle operation.
4. Commanders will ensure Master Drivers annotate "Accident Avoidance Training", formerly know as Driver Improvement Training (DIT) on the DA 348, DA 348-E, and DA 5984-E IAW AR 600-55 and DA Pam 750-8.

ANNEX G

QUALIFICATION HILL 754 (CASEY 39)

1. Special qualification for operators of vehicles dispatched to Hill 754 is required.
2. Soldiers attempting qualification on Hill 754 will have a minimum of four months driving experience on the vehicle used for qualification.
3. Special Training to include:
 - a. Before-During-After operational checks (emphasize detection of faults, i.e., bad brakes, loose drive train, faulty steering).
 - b. Special instruction and practice driving on:
 - (1) Proper steering control.
 - (2) Use of clutch.
 - (3) Use of accelerator.
 - (4) Use of brakes.
 - (5) Use of throttle control.
 - (6) Determination of shift points.
 - (7) Selection of transmission/transfer range.
 - (8) Double clutching when shifting gears.
 - (9) Downhill control with brakes and gears (emphasis on braking power of the engine).
 - (10) Reaction to emergency situations.
 - c. Special training (practical exercise) on operating vehicles up and down steep inclines.
 - d. A minimum of two trips to Hill 754 communications site and back as an assistant driver.

ANNEX H**CREW COORDINATION TRAINING**

1. Crew coordination is defined as crew member interaction (communication) and actions (sequence and timing) necessary for efficient, effective, and safe performance of tasks. The essential elements of crew coordination are explained below:

- a. Communicate positively – Communication is positive when the sender directs, announces, requests, or offers, the receiver acknowledges; the sender confirms, based on the receiver's acknowledgement and/or action. Crew members must use positive communication procedures for the essential crew coordination actions identified in the description of each task. They should remain aware of the potential for misunderstandings and make positive communication a habit. Positive communication is: quickly and clearly understood; permits timely actions; makes use of a limited vocabulary of explicit terms and phrases to improve understanding in a high-ambient noise environment.
- b. Announce actions – To ensure effective and well-coordinated actions, crew members must be aware of expected vehicle movements and unexpected individual actions. Each crew member will announce any action that affects the actions of the other crew member(s). Such announcements are essential when the decision or action is unexpected and calls for the supporting action from the other crew member(s) to avoid a potentially hazardous situation.
- c. Acknowledge actions – Communications must include supportive feedback to ensure that all crew members correctly understand announcements and directives. Acknowledgements need to be short and need to positively indicate that the message was received and understood. "Roger" or "Okay" may not be sufficient. The preferred method is to repeat critical parts of the message in the acknowledgement.
- d. Be explicit – Crew members must avoid using terms that have multiple meanings, misinterpretations can cause confusion, delays and accidents. Examples of these terms are "Right", "Back up" and "I have it". Crew member also must avoid using indefinite modifiers such as "Do you see that tree?" or "You are going a little fast". In such cases, one crew member may mistakenly assume that the other crew member's attention is focused on the same object or event. More confusion arises when each crew member interprets the terms differently.
- e. Obstacle advisories – Crews must anticipate obstacles along roadways. Obstacles are even more difficult to see with the NVG. Therefore, crew members wearing NVG must consider obstacles a primary task directive.

- f. Coordinate sequence and timing – Proper sequencing and timing ensures that actions of one crew member mesh with the actions of the other crew member (s).
2. Crew coordination begins with battle roster and training, proceeds through mission planning, and culminates in the effective execution of crew tasks. Crew coordination directly relates to mission performance, and includes the following:
- a. Involvement of the entire crew in mission planning and rehearsal of critical mission events and contingencies.
 - b. Development of standardized communication techniques, including the use of confirmation and acknowledgement.
 - c. Assignment of specific task priorities and responsibilities to each crew member and their confirmation of those responsibilities as part of the crew briefing.
 - d. Involvement of each crew member in monitoring the need for assistance in coping with terrain, visual conditions, mission, and other stressors.
 - e. Development of positive team relationships to preclude overconfidence or subconscious intimidation because of rank or experience differences.

3. GENERAL CONSIDERATIONS

- a. Crews must use crew coordination procedures in the task descriptions during day operations so that they develop good habits that will transfer to more critical night and NVG operations.
- b. When operations are conducted under conditions of restricted or reduced visibility, crew coordination becomes more critical.
- c. Information reporting helps the crew maintain a high level of situational awareness.

4. EXAMPLE SENERIO FOR LEARDERS TO USE CREW COORDINATION TRAINING

Drill 1 Driver Side Contact Drill

1. A driver must continuously scan and remain alert for threats within his sector of scan (9 to 1 o'clock position) and by observing driver side, passenger side, and rearview mirrors. Early threat identification will allow the driver to move quickly and place direct fire on the threat within his sector of fire (9 to 11 o'clock position) using the following weapon engagement techniques and procedures. The driver method of engagement will be reflexive fire learned during Close Quarters Marksmanship (CQM). However, the weapon is pointed, not aimed due to the

driver primary task of controlling the vehicle. The weapon is best handled like a pistol. The right hand is controlling weapon movement and elevation by allowing the upper receiver to pivot on the driver left arm. The weapon's rate of fire will be on semi-automatic with rapid trigger squeezes. This rate of fire is recommended, as firing on burst will cause the weapon's muzzle to rise up becoming uncontrollable. This drill begins with the driver weapon stored in its proper location in the cab (unit SOP based on type of vehicle). The type of vehicle and physical size of the driver and TC will have a significant impact on this battle drill as the weapon is passed between both. Bottom line is to ensure that weapons are on safe, that positive control is maintained for each weapon, and that vocal commands are understood.

Note: M249s/M203s are not recommended for use by drivers due to possible loss of control of weapon system and vehicle.

2. Upon making treat contact, the driver will activate the left turn signal and announce "**Contact**".
3. The Truck Commander (TC) will place the driver weapon into the crook of the driver left arm by grasping the weapon by the pistol grip with the left hand and the hand-guard with the right. During placement of the weapon, the barrel should extend over the driver left arm with the magazine located against the crook of the elbow. The TC will then announce "**Secure Weapon**".
4. The Driver will grasp the pistol grip with his right hand and announce, "**Weapon Secure**". Hearing this, the TC will release the weapon and turn to scan his sector.
5. During the engagement, the driver will observe the threat area for two seconds firing rapidly on semi-automatic. He should then direct attention back to the operation of the vehicle for two seconds. This will continue until there is no longer a threat.
6. In the event the driver runs out of ammo or experiences a weapon malfunction, the following actions will take place: The Driver will announce "**Out of Ammo**" or "**Malfunction**" and place his weapon on safe. The TC ensuring his own weapon is on safe, will place his weapon between the driver body and "out of ammo" or "malfunction" weapon using the same weapon handling procedures and announce, "**Weapon**". The TC will then grasp the butt stock of the "out of ammo" or "malfunction" weapon with their right hand and announce "**Secure Weapon**". The driver will then remove his hand from the "out of ammo" or "malfunction" weapon and grasp the pistol grip of the new weapon and announce, "**Weapon Secure**". The TC will then remove the "out of ammo" or "malfunction" weapon, using two-hand control, and return to his seat. The TC is responsible for clearing misfires and reloading the driver weapon.
7. Following the reduction or elimination of the threat, the following actions will occur: The driver will place his weapon on safe and announce "**Secure Weapon**". The TC will grasp the weapon with both hands and announce

“Weapon Secure”. The driver will then place his firing hand back onto the steering wheel, resume scanning, and turn-off the turn signal.

8. Drivers should not fire when:

Vehicle is moving at speeds of 40 mph or greater.

During times of limited visibility (such as night, fog, heavy rain, dust storm, and so on).

During severe, hazardous or limited road conditions (such as bridges, narrow paths, damaged roads, road construction, and so on).

In situations where there is a passenger who could cover his sector of fire (for example, in a four-seat HMMWV).

In areas crowded with noncombatants.

ANNEX I

Movement Mission Brief (Ground)

2d INFANTRY DIVISION GROUND MOVEMENT MISSION BRIEF			
The purpose of this mission brief form is to establish a system that ensures all vehicle movements are planned, prepared, executed, and supervised to a minimum safe standard. Establishing this minimum standard ensures that leaders fulfill their supervisory responsibilities and mitigates the risk associated with vehicle operations.			
ADMINISTRATIVE DATA			I
Bumper Number Type of Vehicle: Operator (pnnt rank name (last, nra) / duty position):		Vehicle Commander (pnnt rank name (last first) / duty position):	
MISSION INFORMATION (BRIEFER - PLT SGT, PLT LDR, 1SG, CO CDR)			
Date of brief:	Task Organization (Vehicles on mission by type and number):	Origin (SP):	Destination (RP):
1. Situation: Threats	Road Conditions (circle): Green Amber	Known hazards or enemy along route:	
Weather Forecast and effects of weather:	Red Black		
	Likelihood of threat contact (circle): Imminent Highly Probable Improbable N/A		
2. Mission Statement: (Who, What When, Where, Why)			
3. Execution:	Scheduled Rest Stops:	Actions on Contact (Accident, Enemy, Loss of Commo): 8 elements of crew coordination 1. Communicate Positively 2. Direct Assistance 3. Announce Actions 4. Offer assistance 5. Acknowledge actions 6. Be explicit 7. Provide control and obstacle advisories 8. Coordinate action sequence and timing	
Mission Start Time (DTG):	Procedure for requesting deviations during mission:		
Mission End Time (DTG):			
Order of March:	Reporting Requirements:		
Route (Primary & Alternate):			
Route Recon: Y / N Date: Conducted By: Recon Notes:			
Speed Limit / Catch-up Speed / Interval:			
TCPs/CPs:	Road March Rehearsal: Y / N Date: Attendess: PLT: O-5 Commander CO/TRP/BTRY: O-6 Commander BTN/SQDN: ADC-MIS		
'CI/PCC Checked by Supervisor - SSG or above	Checklist Complete	Date Completed	Outstanding Issues
	Y/N		
Route Strip Map (Unit specific) Checked by Supervisor - SSG or above	Vehicle(s) have strip map on Restrictions Briefed	Special Route hand	Alternate Route Identified/Briefed
Strip maps are required for all vehicle movements and convoy operations	Y/N	Y/N	Y/N
Composite Risk Assessment (signed by appropriate risk decision authority)	Initial Risk	Residual Risk	Assessment Signed
Low CO/TRP Commander		Y	Initials
Medium Battalion Commander		As	IN
High Brigade Commander		Y	Assessment On Hand
Extremely High Division Commander		N	
4. Service Support	Class V:	Maintenance / Breakdown Procedures:	
Class I:	MEDEVAC Procedures (LZ locations):		

Class III:		
Class IV:		
5. Command & Signal	Frequencies and Callsigns	Emergency Phone Numbers:
Succession of Command: Convoy Commander (if applicable) Rank & Name: Convoy Commander Card on/hand: Y/N	UNIT EOC: AIR MEDEVAC: 43.200 (Dustoff)	UNIT EOC: MP Desk: 91 1 Desk: MEDEVAC: TMC:
Mission Briefer's Signature: duty position):	Supervisor's Signature: print rank name (list, first) / (print rank name (last, First) / duty position):	

ANNEX J**Dispatching Motor Vehicle Equipment**

- (1) Dispatching is the method by which a commander controls the use of equipment. However, allowing equipment to be used carries with it the responsibility for both the equipment and the operator's safety. The commander must make sure that dispatching procedures are understood. Before a dispatch can be obtained a risk assessment will be conducted. The assessment will be conducted using a 2ID Standard Movement Mission Brief (Ground) Form.

ANNEX I

- (2) All commanders must ensure the Movement Mission Brief (Ground) is completed and signed for all vehicle movements (TMP and Tactical). Vehicles are required to maintain the completed signed document in vehicle log books during operations.
- (3) All O-5 level commanders will direct, in writing, who within the unit they command is authorized to sign dispatches. This directive must specify by duty position who may sign dispatches for on post and off post movement, TMP movement, tactical vehicle movement, convoy operations, alert dispatches, night movements, and movements under other than green road conditions.
- (4) The measures contained in this regulation are minimum acceptable standards for motor vehicle operation. Commanders may enforce additional policies and procedures as deemed appropriate.
- (5) The Commander will appoint a responsible person to the duties of dispatcher. The person that is delegated as dispatcher is provided a password, and given access to ULLS-G. In the absence of the appointed dispatcher, the commander must authorize additional dispatchers in writing.
- (6) The dispatcher fills requests for equipment to be issued or used. Ensures the operator is registered as a licensed, qualified operator within ULLS-G. If the operator is not registered in ULLS-G, check for a valid OF 346 or DA Form 5984-E and update ULLS-G, as appropriate.
- (7) The dispatcher issues and collects the Equipment Record Folder and the needed forms in the folder. Ensures that the operators properly annotate required entries on the forms and printouts contained in the Equipment Record Folder.

- (8) The dispatcher ensures equipment faults are reported to maintenance personnel and records services performed during the dispatch (for example, AOAP samples taken) and updates ULLS-G accordingly.
- (9) The dispatch loop describes the procedures to be followed when dispatching equipment:
- (10) The operator reports to the dispatcher. For equipment needing licensed operators, the operator must be licensed to operate the equipment either within ULLS-G or have a valid OF 346/DA Form 5984–E.
- (11) The dispatcher gives the operator an Equipment Record Folder with all the forms and printouts needed during the mission. Both the dispatcher and operator check the dispatch for services due on equipment.
- (12) The operator uses the equipment TM to perform BEFORE operation preventive maintenance checks and services (PMCS). Any faults that the operator finds that can be repaired at that level are repaired. Other faults, not already recorded, are entered on the equipment inspection/maintenance worksheet. Non tactical (TMP) equipment may not have a PMCS. The operator uses a local produced checklist as a PMCS for that equipment. BEFORE operational checks and services are performed before the equipment leaves the maintenance facility or other dispatch point. DURING operational checks are performed while the equipment is being operated. AFTER operational checks and services are performed when the equipment completes the mission or returns to the maintenance facility or dispatch point. If possible, the operator and/or mechanic repairs faults found on the equipment. The commander or commander's representative decides if any remaining faults are keeping the equipment from being dispatched. At this time a 2ID Standard Movement Mission Brief will be completed and signed by the commander appointed representative. If equipment is ready to dispatch, the dispatcher makes necessary entries in ULLS-G. The operator leaves with the equipment and the Equipment Record Folder, which contains all needed forms and printouts. For routine dispatch, a vehicles folder will contain the Movement Mission Brief, current equipment maintenance and inspection worksheet, dispatch printout, and the accident forms: Standard Form (SF) Form 91 (Motor Vehicle Accident Report) and DD Form 518 (Accident Identification Card).
- (13) When the mission is complete, the operator performs the AFTER operation PMCS on the equipment, and annotates new faults on DA Form 5988–E (Equipment Maintenance and Inspection Worksheet). The operator and mechanic fix any faults they can, and secure the equipment.
- (14) The operator turns in the Equipment Record Folder and all forms and printouts to the dispatcher. The dispatcher checks forms for any new faults and updates ULLS maintenance records. The dispatch is closed using the operational processes menu, motor equipment dispatch return.

ANNEX K**VEHICLE COMMANDER (VC) CERTIFICATION PROGRAM**

1. VC's do not require a operator's licensing. Soldier must successfully complete the VC Certification Program. VCs will be in the grade of E-4 or above and certified and designated in writing by the Commander. Normally the senior occupant is the VC, who is the supervisor of the vehicle.
2. The VC is the person in charge of the vehicle, if there is no vehicle commander then the senior occupant will be in charge of the vehicle.
3. Unit commanders will develop a training and certification program. Program of instruction (POI) is recommended for a minimum of 8 hours. Unit commanders may adjust training to meet operational mission requirements.
4. VC Training and Certification Programs will contain the following elements:
 - a. Appendix 1 – Regulations, Pamphlets, and Policies.
 - b. Appendix 2 – Traffic Regulations and Road Signs.
 - c. Appendix 3 – Dispatching Procedures.
 - d. Appendix 4 – Vehicle Convoy Procedures.
 - e. Appendix 5 – Season Specific Hazards.
 - f. Appendix 6 – Accident Reporting.
 - g. Appendix 7 – Vehicle Commander Duties.
 - h. Appendix 8 – Vehicle Safety Equipment.
 - i. Appendix 9 – Korean Driving Hazards/Customs.
 - j. Appendix 10 – Defensive Driving.
 - k. ANNEX H – Crew Coordination

APPENDIX 1, TO ANNEX K, TO 2ID REG 56-4

VEHICLE COMMANDER (VC) CERTIFICATION REGULATIONS, PAMPHLETS, AND POLICIES

Traffic Regulations and Road Signs

- USFK Pam 385-2, 15 SEPT 93, Guide to Safe Driving in Korea.
- EUSA SUPPL 1 to AR 600-55, Motor Vehicle Driver and Equipment Operator Selection, Training, Testing, and Licensing.

Vehicle Convoy Procedures

- 2ID Pam 55-2, Convoy Commanders Guide.

Season Specific Hazards

- Driver Improvement Training – Knowledge of Adverse Conditions.
- USFK Pam 385-3, A Systems Approach to Seasonal Safety.

Accident Reporting Procedures

- Driver Improvement Training – Accident Reporting.
- USFK REG 190-1, Motor Vehicle Traffic Supervision.
- DD Form 518.
- SF 91 Operator Report of a Motor Vehicle Accident.

Vehicle Commander Duties

- 2ID REG 385-7, Prevention of Vehicle Accidents.
- EAID Form 385, 1 Senior Occupant Duties and Responsibilities.
- AR 600-55, Motor Vehicle Driver Selection, Testing, Supervision, and Licensing.

Vehicle Safety Equipment

- 2ID REG 385-7, Prevention of Vehicle Accidents.

Use of the 2ID Vehicle Safety Checklist

- 2ID REG 385-7, Prevention of Vehicle Accidents.

Ground Guide Procedures

- 2ID REG 385-7, Prevention of Vehicle Accidents.

Defensive Driving

- Driver Improvement Training.
- Memo, USFK, EUSA, 4 NOV 91, subject: Traffic Safety Sense.
- EUSA SUPPL 1 to AR 600-55, 13 SEPT 94, Motor Vehicle Driver and Equipment Operator Selection, Training, Testing, and Licensing.

APPENDIX 2, TO ANNEX K, TO 2ID REG 56-4

VEHICLE COMMANDER (VC) CERTIFICATION TRAFFIC REGULATIONS AND SIGNS

1. Traffic Signals

- a. Red: Come to complete stop before stop-line, right turn may be made, if it doesn't interfere with vehicle or pedestrian traffic.
- b. Yellow: Come to complete stop before stop-line, if already in intersection, proceed as quickly as possible, if safe.
- c. Green: Proceed straight or turn right.
- d. Green Arrow: Proceed in direction of arrow.
- e. Red X: Do not use lane shown with red X signal.

2. Traffic Lanes

- a. 4 lane roads: Travel in the lane farthest to the right, except when passing.
- b. 6 lane roads: Travel in the lane second from the right.
- c. Changing lanes:
 - (1) Clear to the rear and side before changing lanes.
 - (2) Use directional signal 30 meters prior to turning or changing lanes (100 meters on expressway).
 - (3) Is prohibited within 70 meters of the stop line of an intersection.

3. Right of way

- a. Never insist on taking the right of way.
- b. Intersections:
 - (1) Allow the first vehicle to arrive to go ahead.

(2) If two vehicles arrive at the same time, the vehicle to the right has the right of way.

c. Narrow inclined roads: The descending vehicle has the right of way; ascending vehicle must pull over to the right.

4. 2ID Speed Limits AREA I Speed limits have not changed. Refer to ANNEX N.

a. When passing a marching unit: 10 MPH (16 KPH)

b. In built up area: (There are two speed limits for wheeled vehicles & Mixed vehicles)

Wheeled vehicles only: 15 MPH (24 KPH)

Mixed Wheeled and Tactical Vehicles: 10 MPH (16 KPH)

c. Outside of built up areas: 25 MPH (40 KPH)

d. On expressways/toll roads (none in AREA 1)

e. Tactical vehicles: 25 MPH (40 KPH)

f. Non-tactical vehicles:

g. Busses/vans/trucks: 50 MPH (80 KPH)

h. Sedans/Cherokees: Daytime 55 MPH (88 KPH), Nighttime 50 MPH (80 KPH)

5. Passing

a. Ensure there is adequate clearance to pass

b. Indicate with your turn signal of your intention to pass

c. Pass to the left

d. Passing is prohibited:

(1) On or near the top of steep grades

(2) Descending a steep incline

(3) On curves

(4) In tunnels

(5) In intersections

(6) Where indicated by traffic signs or solid lines

6. Intersections

- a. Vehicles turning or going straight must be in the appropriate lane 70 meters before the intersection
- b. Yield to pedestrians:
 - (1) Crossing a road at or near an intersection
 - (2) In a crosswalk
 - (3) Or crossing on a green pedestrian crossing signal

7. Vehicle Lights

- a. Have headlights on during periods of limited visibility (night or when objects cannot be seen within 100 meters during the day) or when traveling in a convoy.
- b. Are prohibited during the daylight (unless in periods of limited visibility or in a convoy).
- c. It is Korean practice to turn off headlights when stopped at an intersection.

8. Driver Responsibilities

- a. Be especially careful when driving near small children, elderly people and/or blind people (slow down/stop if necessary).
- b. Do not smoke, eat, or wear commercial radio headsets/ear plugs when driving.
- c. Wear manufacturer installed restraint systems (seat belts)
- d. It is prohibited to drive under the influence of drugs or alcohol.

9. Traffic Signs and Markings

- a. 140 different signs/markings

APPENDIX 3, TO ANNEX K, TO 2ID REG 56-4

**VEHICLE COMMANDER (VC) CERTIFICATION
DISPATCHING PROCEDURES**

1. Policy

- a. Company Commanders will approve dispatches for on post and within the 2ID Area I. Equipment dispatching will be IAW DA PAM 750-8 and local command policies.
- b. Commanders will ensure a 2ID Movement Mission Brief (Ground) (see annex I for sample form) is completed and a copy is maintained in the log book of each motor vehicle dispatched
- c. Battalion XO's and BDE XO's will approve extended and special purpose dispatches.
- d. Under hazardous conditions:
 - (1) AMBER: BN XO and the BDE XO will approve all off post dispatches.
 - (2) RED: BN CDR and the BDE XO will approve all off post dispatches.
 - (3) BLACK: Off post travel is restricted.
- e. Approving authorities may authorize dispatch of vehicles with certain circle X safety deficiencies.
- f. Insure the operator and vehicle commander are aware of the deficiencies.
- g. Safety circle X exceptions are not authorized for brake/horn limitations or for vehicles transporting ammunition or fuel.

2. Procedures

- a. Driver will be properly licensed for vehicle to be dispatched and have an ULLS-G generated DA 5984-E with Driver Improvement Training, Spring/Summer or Fall/Winter Certification, and TC/VC Certification in his/her possession. Manual OF 346 use will require possession of hard copy cards.
- b. Driver will perform PMCS in accordance with appropriate –10 manual prior to dispatching vehicle.

- c. Company maintenance will conduct safety check in accordance with 2ID Vehicle Safety Checklist and dispatch vehicle using DD Form 1970 (ULLS Dispatch) or automated DA Form 5987-E.
- d. Vehicle Commander will be E-4 or above.
- e. Required Forms/Reports: Equipment Record Folder with Equipment ID Card, SF 91 (Report of Vehicle Accident), DD Form 518 (Accident ID Card), DA 5987-E (ULLS Dispatch), DA 5988-E (Equipment Inspection and Maintenance Worksheet), (Fault Record), EAID Form 385 (Senior Occupant Duties), EAID Form 102 (Maneuver Damage Card).

APPENDIX 4, TO ANNEX K, TO 2ID REG 56-4

VEHICLE COMMANDER (VC) CERTIFICATION VEHICLE CONVOY PROCEDURES

1. Terms of Reference

- a. March Column: All vehicles involved in a single move over the same route.
- b. Serial: A sub-element of a march column, no more than four march units per serial.
- c. March Unit: A sub-element of a serial consisting of no more than 25 vehicles.
- d. Convoy: (Outside Seoul) 10 or more wheeled vehicles, (in Seoul) five or more wheeled vehicles.

2. Road Clearance

- a. Required for all convoy movements, movement of any tracked vehicle/oversized vehicle and any vehicle towing weapons or carrying hazardous cargo (excluding small arms ammo).

3. Vehicle Gaps

- a. Cities/built up areas: 25 meters.
- b. Closed Column: 50 meters.
- c. Open Column: 100 meters (vehicles must be at open column when operating at speeds above 30 MPH).

4. Vehicle Markings

- a. All vehicles in convoy will have headlights on.
- b. Chalk convoy clearance number on both sides of each vehicle in convoy.
- c. Attach flags to left front of following vehicles:
 - (1) Convoy Commander: Black and White.
 - (2) Lead Vehicle: Blue.
 - (3) Trail Vehicle: Green.

- d. Place convoy sign on front of lead vehicle and rear of trail vehicle.

5. Route

- a. Reconnoiter Route.

6. Convoy Commander's Briefing

- a. Convoy commanders will be in the grade of E-7 or above and certified by the battalion commander. Convoy Commanders will brief all members prior to the convoy departing on a mission.
- b. Briefing will include as a minimum:

1. Situation

- a. Friendly forces
- b. Support units
- c. Enemy situation

2. Mission

- a. Type of cargo
- b. Origin
- c. Destination

3. Execution

- a. General organization of convoy
- b. Time Schedule
- c. Routes
- d. Convoy speed
- e. Catch-up speed
- f. Vehicle gaps/time gaps
- g. Identification of oversized vehicle commander if applicable
- h. Emergency Measures
 - (1) Breakdown and accident notification procedures
 - (2) Use of highway warning kits
 - (3) Separation from convoy
 - (4) Reaction to civilian dangers
 - (5) Medical support
 - (6) Emergency radio frequencies
 - (7) Rollover protection procedures
 - (8) Fire evacuation procedures
 - (9) Injured personnel evacuation procedures

4. Safety

- a. Hazards of route and weather conditions
- b. Defensive driving principles
- c. Compliance with civil traffic regulations
- d. Obedience to civil and military police escorts
- e. Critical points along the route. Specify any actions to take at these.
- f. Actions of the rear observer (for tracked vehicle moves)
- g. Actions of the oversized vehicle commander

5. Command and Signal

a. Command

- (1) Location of Convoy Commander
- (2) Location of oversized vehicle commander (for tracked vehicle movements)

b. Signal

(1) Internal

- (a) Reporting procedures (unit SOP)
- (b) Convoy Frequencies (Sqd, Plt, Co, Bn)
- (c) Call Signs (Sqd, Plt, Co, Bn)
- (d) Hand and arm signals

(2) External

- (a) Reporting procedures (Parent unit reports to DTOC SP and confirms a safety brief and risk assessment were performed to standard)
- (b) Convoy frequencies (DTOC/DTAC/DMAIN)
- (c) Call signs (DTOC/DTAC/DMAIN)
- (d) Medical support/Evacuation call signs

APPENDIX 5, TO ANNEX K, TO 2ID REG 56-4

**VEHICLE COMMANDER (VC) CERTIFICATION
SEASON SPECIFIC HAZARDS AND NIGHT TIME DRIVING**

1. Training

- a. Train/certify all vehicle operators for Fall/Winter (1 OCT-31 MAR) driving prior to 1 OCT and Spring/Summer (1 APR-30 SEPT) driving prior to 1 APR.
- b. Integrate special driver training into company level training prior to all field exercises (objective, ensure drivers can operate safely under varying climatic and road conditions in a field environment).

2. Spring/Summer

- a. Weather conditions: heavy rain (late JUN-SEPT).
- b. Road conditions.
 - (1) Paved roads are wet, increases chances of hydroplaning.
 - (2) Dirt roads can be muddy, shoulders may be unstable.
 - (3) Potholes are prevalent.
 - (4) Pedestrian and small vehicle (bicycles/tractors) traffic increases.
 - (5) School children walk to school in mid-morning (0800) and return home in early afternoon (1430-1500).
 - (6) People may sit/stand/walk on roads.
 - (7) Farm vehicles enter main roads unexpectedly and move slowly along the road.
 - (8) Water level in rivers rise, ford sites may be impassable.

3. Fall/Winter

- a. Weather conditions: Increased fog (OCT, NOV, and MAR), snow (DEC-FEB), snow/rain (MAR).
- b. Road conditions:
 - (1) Paved roads can be wet and/or icy; snow packed roads may conceal icy surfaces.

- (2) Bridges freeze before roadways.
- (3) Small vehicle traffic is greatest during the harvest season (OCT).
- (4) Visibility is reduced due to fog and lessened daylight hours.
- c. Driving hints: Start/Stop slowly, reduce speed when approaching intersections, crosswalks, and/or traveling on narrow winding roadways, etc. (more distance is required to stop in slippery conditions).
- d. Vehicles travel slower, drivers not skilled in winter driving.
- e. Carry snow chains (or have snow tires mounted), two filled sandbags, shovel, and warning triangle during winter months, 1 DEC-31 MAR.

4. Night Driving

- a. Watch out for unlit or dimly lit slow moving vehicles (bicycles/tractors, etc) and/or parked/stopped vehicles on road.
- b. Watch out for pedestrians walking alongside the road, normally dressed in dark clothing, may have been drinking – especially prevalent on a Saturday/Sunday night in good weather.
- c. Avoid weaving in traffic – keep to the right except when passing.
- d. Stay within your lane – watch for approaching drivers who may be in your lane.
- e. Keep headlights, taillights, parking lights, and turn signals clean.

APPENDIX 6, TO ANNEX K, TO 2ID REG 56-4

VEHICLE COMMANDER (VC) CERTIFICATION ACCIDENT REPORTING

1. Accidents

- a. The driver of any vehicle involved in an accident resulting in injury, death, and damage to another vehicle or property must remain at the scene of the accident until released by the investigating US law enforcement personnel.

2. Accident Procedures

- a. Render first aid – contact nearest military or civilian doctor.
- b. Prevent fire – remove driver/passengers from vehicle, extinguish flames with fire extinguisher or sand.
- c. Notify police – notify military police.
- d. Provide information to the other persons involved in accident.
 - (1) Give other party a completed DD Form 518 (Accident Identification Card).
 - (2) If other vehicle and/or property is unattended, attach the completed DD Form 518 to the vehicle/property in question.
- e. Report to your chain of command.
 - (1) Notify your supervisor and/or commander by telephone as soon as practical.
 - (2) Who, What, Where, When, How – injuries, death, damage sustained.

3. Precautions Against Further Accidents

- a. Place out warning triangles, flares, and/or guards to warn oncoming traffic.
- b. Shut off engines and avoid smoking when there is spilled gasoline present.
 - (1) Spread sand/dirt over spilled gasoline.
 - (2) Do not use water, because it causes gasoline to spread.

4. Removal of your Vehicle from the Accident Scene

- a. Do not move your vehicle from the accident scene until directed by the military or civil police or unless it is necessary to prevent further accidents or injury.
- b. Obtain all necessary data before moving vehicle – mark exact position of vehicles, personnel and/or objects before moving them.

5. Preparation of Accident Forms

a. DD Form 518 (Accident Identification Card).

- (1) Fill out this form and give it to the party involved in the accident.
- (2) If the other party is not present (i.e., vehicle was vacant at time of accident) attach the form to vehicle.

b. Standard Form 91 (Operator's Report of Motor Vehicle Accident).

- (1) Secure hard to get facts: Get names, addresses and phone numbers of all parties involved in the accident to include any witnesses.
- (2) Do not leave the scene of an accident until you have recorded the following information: Condition of road, position of vehicles, amount of damage – draw a picture.
- (3) Be exact.
- (4) Do not express an opinion.
- (5) Ensure report is complete and accurate.
- (6) Turn-in report to chain of command.

APPENDIX 7, TO ANNEX K, TO 2ID REG 56-4

**VEHICLE COMMANDER (VC) CERTIFICATION
VEHICLE COMMANDER RESPONSIBILITIES**

1. Vehicle Commander

- a. All vehicles must have a certified vehicle commander or senior occupant in the grade of E-4 or above when operating off post.
- b. The vehicle commander is not required to be licensed, but must understand US/ROK traffic regulations and the special hazards of driving in Korea.
- c. Vehicles driven off installations are required to have at least two personnel, one of whom must be a certified VC,

2. Vehicle Commander Responsibilities

- a. Ensure the driver:
 - (1) Is properly rested before operating vehicle.
 - (2) Does not operate the vehicle while under the influence of alcohol or illegal/prescribed drugs.
 - (3) Is properly licensed and the vehicle is properly dispatched.
 - (4) Operates the vehicle in a safe manner, given traffic, road and weather conditions.
 - (5) Adhere to USFK and ROK traffic rules/regulations.
- b. Ensure vehicle is used only for official business.
- c. Ensure the vehicle is mechanically safe to include:
 - (1) Proper functioning of brakes, steering, lights, horns, windshield wipers, mirrors, and restraint systems.
 - (2) Absence of fluid leaks (any gasoline leak or Class III diesel, oil or water leak deadlines vehicle).
 - (3) Serviceability of tires, safety straps, chassis and body (no exposed sharp edges) and exhaust system.
- d. Ensure restraint systems (when available) are used.
- e. Ensure loads and antennas are properly tied down.

- f. Prohibit smoking in vehicles.
- g. Vehicle commanders may be held accountable for vehicle misuse or injury/damage incurred by the driver under their supervision, if they fail to properly discharge their duties.

3. Driver Responsibilities

- a. Operate the vehicle in a safe manner in accordance with established equipment/traffic rules and regulations.
 - (1) Yield right of way whenever necessary to avoid an accident regardless who is right.
 - (2) Be constantly alert for unsafe acts of others, i.e., drive defensively.
 - (3) Adjust driving to meet road, traffic, light, and vehicle conditions.
- b. Perform before, during, and after operations checks or services, record on DA Form 2404 and provide to company maintenance section.
- c. Identify and correct safety faults before dispatching a vehicle.
- d. Ensure vehicle has appropriate records, forms, and safety equipment before dispatching.
- e. Ensure the vehicle and vehicle contents are secure when left unattended.
- f. Report all accidents to supervisor.

APPENDIX 8, TO ANNEX K, TO 2ID REG 56-4

**VEHICLE COMMANDER (VC) CERTIFICATION
VEHICLE SAFETY EQUIPMENT**

Required Equipment

- a. All vehicles will be equipped with highway warning kits (reflective warning triangle), serviceable fire extinguishers, and a chock block.
- b. Vehicles with 1 1/4 ton or greater carrying capacity will be equipped with two chock blocks.
- c. Vehicles carrying ammunition will be equipped with two fire extinguishers, one mounted inside the cab and one mounted outside the cab on the driver side.
- d. Drivers will wear protective goggles when operating a vehicle missing a windshield or when windshield is in a lowered position.
- e. During the winter driving season (1 DEC-31 MAR), vehicles will carry tire chains, two filled sandbags and a shovel.

APPENDIX 9, TO ANNEX K, TO 2ID REG 56-4

VEHICLE COMMANDER (VC) CERTIFICATION KOREAN DRIVING HAZARDS/CUSTOMS

1. Common Road Hazards

a. Road Conditions: Roads are narrow and winding, shoulders sometimes are unstable or nonexistent, and potholes are frequent during the spring thaw, seasonal – icy/snowy in winter, wet in summer monsoon.

b. Traffic:

(1) Rural: Often backed up behind slow moving vehicles on the two lane roads, vehicles are parked on roadside in villages, vehicles make unexpected sudden stops in villages and in country side, MSR 1 and 3 congested in morning rush hour (0700-0930), evening rush hour (1800-2030), and weekends.

(2) Urban: Traffic is slow moving, often congested, far right lane dedicated to bus traffic, taxi cabs weave in/out of lanes with impunity, vehicles in Seoul will regularly run red lights.

c. Vehicles

(1) Rural: Wide variety of vehicle types – bicycles, farm tractors, small cars, small/large trucks, farm vehicles are slow moving, heavy dump trucks (“Terminators”) drive too fast for conditions and normally do not yield right of way.

(2) Urban: Passenger cars, busses and taxicabs.

d. Pedestrians: Walk/sit on the roads, day or night, often in dark clothing – winter (ice/snow), spring/fall (fog), and summer (rain).

2. Driving Customs

a. Drivers: Varying level of experience, will honk horn and attempt to force into your lane.

b. Taxis and Busses: Taxi drivers weave in/out of traffic, bus drivers normally use far right lane, but will weave in/out also.

c. Koreans do drink and drive.

3. Safe Driving Practices

4. Safe Driving – Good Attitude

- a. Be patient.
- b. Be concerned for others.
- c. Cooperate on the road.
- d. Give right of way.

5. Safe Driving – Knowledge

- a. Traffic laws and regulations.
- b. Physical limitations.

6. Common Visual Failings.

- a. Faulty vision.
- b. Glare.
- c. Depth perception.
- d. Field of Vision.

APPENDIX 10, TO ANNEX K, TO 2ID REG 56-4

**VEHICLE COMMANDER (VC) CERTIFICATION
DEFENSIVE DRIVING TECHNIQUES**

1. Vehicle Positions/Actions to Take

a. Vehicle is ahead of you.

- (1) Expect other driver to stop, slow down or turn suddenly – watch out for busses and taxicabs at intersections, other driver may back up or roll back up.
- (2) ACTION – maintain proper following distance: 2-second rule.

b. Vehicle is behind you:

- (1) Expect the other driver to follow too closely.
- (2) ACTION – signal your intentions early and clear to the rear before changing lanes, turning, or stopping.

c. Approaching you (opposite direction):

- (1) Expect the other driver to give the wrong signal or drive in your lane.
- (2) ACTION – stay centered in your lane, stay in right lane (4 lane highway) or middle lane (6 lane highway) be prepared to give right of way or stop when road is too narrow for more than one car to pass.

d. Vehicle approaching you (angle):

- (1) Expect vehicles to run red lights (in the first ten seconds) after light has changed or to disregard stop signs, pedestrians to dart across street from behind parked cars or from in front of busses, or vehicles (large trucks, busses, farm tractors) to turn onto road unexpectedly from access roads.
- (2) ACTION – be prepared to stop at intersections, access roads or anyplace where cars parked alongside the road obscure or block your vision, look in all directions when entering an intersection.

e. Vehicle passing you:

- (1) Expect vehicles: To slow down after passing you, to cut in front of you when there is no room, attempt to pass you on a curve or hill, or pass you on the right (usually when you are in heavy traffic).

(2) ACTION – maintain clearance from the other vehicle and slow down when necessary.

f. Vehicle being passed by you:

(1) Expect vehicle to try to block your path and force you off the road (Terminators), to race you, to pull out unexpectedly from the roadside (busses, parked cars, taxi cabs).

(2) ACTION – signal your intentions, ensure you have enough room to pass and execute quickly, do not race the other vehicle or pass at intersections.

2. EMERGENCY SITUATIONS

3. Skid to avoid an obstacle while descending a hill on wet pavement

- a. Take foot off brake.
- b. Turn in direction of skid.
- c. Apply brakes gently/intermittently.
- d. Maneuver around obstacle.

4. Skid when rounding a curve on wet pavement

- a. Turn in direction of skid.
- b. Apply slight gas pressure.
- c. Do not brake.
- d. Return to your lane.

5. Approach a stop light/sign on wet pavement

- a. Pump brakes gently.
- b. Keep clutch engaged.
- c. Stop.

6. Drive off the road onto shoulder

- a. Ease up on gas.

- b. Continue to drive on shoulder.
- c. Regain control of vehicle.
- d. Turn back on highway, when there is no traffic approaching.

7. Tire blows out

- a. Hold wheel straight and firm.
- b. Maintain slight gas pressure.
- c. Stop gradually – pull to side of road.

8. Major Factors For Vehicle Accidents In 2id

- a. Excessive speed for road, weather, and traffic conditions
- b. Following too closely
- c. Improper passing
- d. Improper backing
- e. Failure to anticipate the actions of other drivers, bicyclists, and pedestrians

ANNEX L

CONVOY COMMANDER CERTIFICATION

1. Convoy Commander: Noncommissioned officer, warrant officer, or commissioned officer that is overall responsible for the safe movement of a military convoy and is certified under the Battalion's Convoy Commander Certification Program. Convoy commanders will be in the grade of E-7 or above. An E-6 serving in the duty position of an E-7 may be certified as a Convoy Commander as long as it is documented in a certification memorandum signed by the Battalion Commander. The Convoy Commander will not be the operator of a vehicle in a convoy for which he is the commander. Splitting wheeled-vehicle convoys in order to alleviate the requirement for Convoy Commanders is a direct violation of the spirit and intent of this regulation.

2. Convoy: A formation of military tactical vehicles that contains at least one (1) tracked vehicle, or five (5) wheeled vehicles, but less than 25 vehicles. All convoys require a certified convoy commander.

3. In addition to the classroom training required for VC certification Convoy Commanders will complete the following:

- a. Accident Avoidance Training Program (IAW AR 385-55)
- b. Winter Driving Course Video- "Winter Driving in Korea"
- c. Convoy/Type Vehicle Operational Hazards Unit (Vehicle TM)
- d. Driving Hazards in Korea Video- "Safe Driving in Korea"
- e. Convoy Commanders' Responsibilities Army in Korea Reg. 350-4 (19 Oct 05)
- f. FMTV Familiarization Video- "Operating the FMTV in the Republic of Korea"
- g. Track Vehicle Communications Requirements Unit specific (Vehicle TM)
- h. Conducting Risk Assessments Unit
- i. Conducting Running Risk Assessments Unit
- j. Common Training Route Risk Familiarization Unit

Videos can be viewed on the USFK/8th Army Command Safety Office website at <http://8tharmy.korea.army.mil/safety/motorvehicles/drivekorea.htm>

4. Commanders will ensure that the convoy commanders and vehicle commanders understand that they are directly responsible for the safety of all personnel and equipment during any convoy movement.

5. CONVOY COMMANDER RESPONSIBILITIES.

- a. Conduct convoy rehearsals.
- b. Conduct convoy briefing.
- c. Conduct safety briefing.
- d. Ensure communications between all radio-equipped vehicles in the convoy.
- e. Ensure that vehicles equipped with internal communications have their system 100% functional. If any failure of internal communications during a convoy

- movement occurs, the vehicle will stop immediately and report by external communications, hand signals, or verbally that a communications problem exists. Until corrected, a vehicle with no internal communications will not continue to move along the convoy route by its own power unless ground guided.
- f. Determine size of component elements, not to exceed 25 vehicles per march unit or four march units per serial.
 - g. Determine convoy speeds.
 - h. Receive approval before deviating from approved clearance (i.e. change of departure time, composition of convoy, etc.) prior to movement.
 - i. Maintain normal convoy intervals between vehicles.
 - j. Ensure lead and trail vehicles of a convoy are labeled properly. They will be identified by removable convoy signs, written in both Hangul and English, with black letters on a yellow reflex-reflective background.
 - k. Ensure the convoy clearance number is chalked clearly and conspicuously on both sides of each vehicle in the convoy. The convoy clearance number will be promptly removed upon completion of the movement.
 - l. Ensure placards are displayed on vehicles transporting hazardous/dangerous materials.
 - m. Ensure cargo and passengers are properly loaded and secured. Cargo must be tied down and/or blocked and braced to prevent shifting. When passengers and cargo are transported in the same vehicle, separate cargo from passengers and restrain with rope or other tie down devices. Passengers will not be permitted to ride forward or on top of cargo. Vehicle operators and passengers will use restraint systems when available.
 - n. Ensure all personnel are fully briefed on the route of march, traffic regulations, speed limits, control procedures, critical points, individual responsibilities, and hazards to military vehicles and civilians along the route.
 - o. Ensure one dedicated driver is assigned per vehicle and that an additional driver per three vehicles is on stand-by during 24 hour operations to mitigate driver fatigue.
 - p. Ensure convoy flags are displayed on the left front of each designated vehicle.
 - BLUE – Lead vehicle
 - GREEN – Trail vehicle
 - BLACK/WHITE – Convoy Commander
 - **NOTE:** The convoy commander should not be the lead vehicle but should ride where the convoy can be best controlled.
 - a. Ensure all convoy vehicles use their service drive lights.
 - b. Reconnoiter the route prior to movement to verify speeds, determine critical points, locate tracked vehicle bypasses, and ensure the safety of the route. Pay special attention to bridge crossings, bridge underpasses, and rock drops. Recon should be conducted as close to SP time as possible to mirror what the route will look like at movement time.
 - c. Ensure all convoy elements stop prior to crossing railroad tracks. The instructions of the Korean National Railroad Crossing Guard supersede any other considerations. Trains always have the right of way.
 - d. Accidents:

- Any vehicle involved in a traffic accident should immediately pull off to the side of the road to prevent blocking traffic.
 - WARTIME ONLY. If the disabled vehicle cannot move to the side of the road, the vehicle behind it will push it to the side of the road.
 - Report any accidents or damage to the Military Police (MP) and chain of command.
- a. Warning light systems such as a RAWLS or a strobe light system will be mounted to convoy lead and trail vehicles, all trucks, and all oversized vehicles defined by ROKA Regulation 139.
 - b. Receive current Threat Condition from appropriate Intelligence source, to include possible demonstrations in area of convoy.

ANNEX M**HANDS ON TRAINING**

Hands on training will be IAW the appropriate Training Circular (TC) and vehicle operators manual. Leaders will incorporate Crew Coordination Training instruction as outlined in the TC for Crew Drill procedures. Training will include, but is not limited to, the following:

1. Vehicle handling characteristics.
2. Before, during, and after operator's maintenance.
3. Vehicle operation (Distance determined by drivers experience and driving record).
 - a. Daylight, on road.
 - b. Daylight, off road.
 - c. Night, on road.
 - d. Night, off road.
 - e. MOPP Level 4.
 - f. Closed hatch (tracked vehicles).
4. Principles of motor marches.
5. Night driving (blackout, blackout marker, NVG, and no lights).
6. Military convoy operations.
7. Vehicle recovery methods.
8. On-site inspection of tactical vehicles.
9. Response to emergency situations and vehicle malfunctions.
10. How to avoid a collision with another vehicle.
11. Roll-over drills (Wheel and Tracked Vehicles).
12. Specific POIs for each type of vehicle will be standardized within each Major Subordinate Command and Separate Battalion. Division will provide family of vehicle POIs to this regulation as appendices to Annex K.

APPENDIX 1, TO ANNEX M, TO 2ID REG 56-4

POIs FOR M-1
ICW TC 21-306

1. SUBJECT: Program of Instruction (POI) for Tank, Cbt, Full Tracked, 105MM Gun or 120MM, M-1

2. PURPOSE: To provide 2ID units guidance for driver initial and sustainment training on the M-1 Abrams Tanks.

3. REFERENCES:

a. FM 21-306, Manual for the Track Vehicle Driver.

b. FM 21-306, Techniques and Procedures for the Tracked Vehicle Driver.

c. FM 20-22, Vehicle Recovery Operations.

d. TM 9-2350-264-10-1, Operator's Manual, Tank Combat Full Tracked 120MM Gun M-1, Usual Conditions.

e. TM 9-2350-264-10-2, Operator's Manual, Tank Combat Full Tracked 120MM Gun M-1, Unusual Conditions.

f. FM 17-12-1-1, Tank Gunnery (Abrams).

4. This POI consists of the following nine tasks:

a. Perform Preventive Maintenance Checks and Services (PMCS).

b. Operate Vehicle Under Usual Conditions.

c. Operate Vehicle Under Unusual Conditions.

d. Ford Vehicle.

e. Start/Stop the Engine on an M-1.

f. Slave Start M-1 Tank.

g. Extinguish a Fire on an M-1 Tank.

h. Evacuate a Wounded Driver from an M-1 Tank.

i. Tank Rollover Drills.

TASK: #1 Perform Preventive Maintenance Checks and Services.

CONDITIONS: Given an M-1 Tank, TM 9-2350-264-10-1 Operator's Manual and DA Form 2404 (or automated DA Form 5988-E), and proper tools.

STANDARDS: Each Soldier must perform all before, during, after, weekly, and monthly checks listed in TM 9-2350-264-10-1 Operator's Manual.

TRAINING AND EVALUATION: Each Soldier must complete all tasks listed in daily "walk around" PMCS procedures and identify all faults IAW Section II TM 9-2350-264-10-1.

TASK: #2 Operate Vehicle While Under Usual Conditions.

CONDITIONS: Given an M-1 Tank and TM 9-2350-264-10-1 Operator's Manual, Soldier will operate vehicle under usual conditions.

STANDARDS:

- a. Each Soldier must safely enter the tank through loader's hatch.
- b. The Soldier must put intercom in operation.
- c. The Soldier must put dome light in operation.
- d. The Soldier must demonstrate how to operate portable fire extinguishers.
- e. The Soldier must safely exit the tank.

TRAINING AND EVALUATION: Each Soldier must operate the vehicle under usual conditions following the training and evaluation outline below. Score the Soldier GO if all of the steps below are passed. If a Soldier fails any step, show what was done wrong and how to do it correctly. Ensure Soldier follows these steps:

- a. Enter tank through loader's hatch.
 - a. Climb on tank using track skirt step and hand hold at left front.
 - b. Open loader's hatch.
 - c. Enter tank through loader's hatch feet first.
 - d. Step on loader's set post and then on turret floor.
- b. Operate intercom:

- a. Operate amplifier AM 1780/VRC.
 - b. Put on CVC helmet, connect cables to intercom control box.
 - c. Set intercom monitor switch lever to INT only.
 - d. Set CVC helmet switch in rear position.
 - e. Talk into CVC microphone and turn knob to adjust volume.
- c. Operate dome light:
- a. Turn on vehicle master power.
 - b. Turn dome light knob fully counterclockwise.
 - c. Turn filter level to filtered or white light.
 - d. Turn knob clockwise until light is bright and counterclockwise to dim the light.
 - e. Turn all the way to counterclockwise to turn off.
- d. Operate portable fire extinguishers:
- a. Break wire and pull out pin.
 - b. Pull horn up to level position.
 - c. Point at base of flames and press down and hold trigger. Shoot at fire.
- e. Exit tank:
- a. Exit tank through loader's hatch.
 - b. Close and lock loader's hatch.
 - c. Dismount tank over front slopes.

TASK: #3 Operate Vehicle Under Unusual Conditions.

CONDITIONS: Given an M-1 tank and TM 9-2350-264-10-2 Operator's Manual, communications equipment and an off road driver course (between Camp Casey and Camp Hovey).

STANDARDS:

- a. Each Soldier must operate M-1 tank under unusual conditions in mud, snow, and ice.
- b. Do not cause personnel injury or damage to equipment.
- c. Soldier must operate M-1 tank for minimum of five miles.

TRAINING AND EVALUATION: Each Soldier must operate M-1 tank under unusual conditions following the guidelines below. Score the Soldier GO if none of the guidelines are violated. If a Soldier fails to comply with a guideline, show what was done wrong and how to do it correctly. Each Soldier must follow these steps in each condition:

a. Mud.

- (1) Drive with proper gear and proper speed.
- (2) Do not spin tracks when starting to move tank.
- (3) Do not make pivot turns.
- (4) Keep throttle hand grips steady after tank reaches desired speed.
- (5) Turn tank slowly when off the mud.
- (6) Steer tank straight up and down hills if possible.

b. Snow.

- (1) Drive with transmission in a low range.
- (2) Avoid grades and sharp turns when possible.
- (3) Drive as straight up or down grades as possible.

c. Ice.

- (1) Select a higher gear range, which will move vehicle steadily without imposing undue strain on engine.
- (2) Drive slowly and cautiously to avoid skidding. If vehicle skids, slow down engine and proceed with caution. Do not spin tracks.
- (3) Avoid grades and sharp turns.

- (4) Do not use brake to stop the vehicle.

TASK: #4 Ford Vehicle.

CONDITIONS: Given an M-1 Tank and necessary communications equipment and ford site not to exceed 4 feet (1.2 meters) deep of water.

STANDARDS:

- a. Each Soldier must prepare the M-1 tank to ford stream.
- b. The Soldier must safely demonstrate how to ford stream.

TRAINING AND EVALUATION: Each Soldier receives a GO if all the steps are performed correctly.

- a. Stop tank at edge of the water.
- b. Set idle switch on.
- c. Close drain valve.
- d. Release brake.
- e. Drive slowly into the water.
- f. Drive tank at 3-4 miles per hour or less through water.
- g. If crossing more than 1 foot of water:
 - (1) Stop tank after leaving water.
 - (2) Shut down tank.
 - (3) Open left and right number 1 skirts.
 - (4) Check idler and road wheels for water or oil (milky look in the site glass).
 - (5) Close left and right skirts.

TASK: #5 Start/Stop the Engine on an M-1 Tank.

CONDITIONS: Given an M-1 tank and TC with appropriate TM, perform all before operation.

STANDARDS: The Soldier must start/stop the engine on an M-1 tank and establish intercommunications, ensuring all safety precautions are observed prior to starting the engine.

TRAINING AND EVALUATION: Soldier must perform all steps below in order to receive a GO. If Soldier fails any step, show what was done wrong and how to do it correctly.

- a. Start the engine.
 - a. Check with the tank commander and make sure no one is behind the tank.
 - b. Set transmission control to NEUTRAL (N).
 - c. Press in and hold "PUSH TO START" button for 1 second.
 - d. Check engine indicators.
 - e. Check warning and caution lights.
 - f. Check hydraulics.
 - g. Check brakes.
 - h. Check transmission downshift.
- b. Shutdown engine.
 - a. Twist throttle hand grips forward to idle position.
 - b. Set transmission control to NEUTRAL (N).
 - c. Check parking brake system hydraulic pressure. It should read 1000 to 1700 psi (on green band).
 - d. Set parking brake.
 - e. Check MASTER WARNING and PARKING/SERVICE BRAKES light to see if they are lit.
 - f. Ensure tactical idle, smoke generator, and bilge pump are off.
 - g. Check to see that engine transmission and fire warning lights are not lit.
 - h. Check that MASTER CAUTION light is not lit.

- i. Pull out and set engine shutoff switch down, (engine should coast to a stop in 30 to 60 seconds).
- j. Ensure all safety procedures are observed.

TASK: #6 Slave Start an M-1 Tank.

CONDITIONS: Given a dead M-1 tank, NATO slave cables, TM 9-2350-264-10-2 Operator Manual, and a live M-1 tank, or M88/M88A1 recovery vehicle with crew available.

STANDARDS:

- a. Each Soldier must prepare a dead tank for a slave start.
- b. The Soldier must position a live tank for a slave start.
- c. The Soldier must demonstrate how to start the dead M-1 tank.

TRAINING AND EVALUATION: Refer to TM 9-2350-264-10-1 or TM 9-2350-264-10-2 for the following performance measures. Observe all warnings and cautions. Do not leave driver station once vehicle engine is started. Score the Soldier GO if all steps below are passed. If Soldier fails any step, show what was done wrong and how to do it correctly. Ensure Soldier follows these steps:

- a. Prepare the tanks for slave starting.
 - a. Position the tanks for slaving operations.
 - b. Set the parking brakes.
 - c. Make sure the MASTER POWER and all electrical equipment is off.
 - d. Connect the slave cable to the slave receptacles.
 - e. Allow the batteries of the “dead” tank to charge for 15 minutes if time permits.
 - f. Set the MASTER POWER switch to on.
 - g. Start the dead tank.

TASK: #7 Extinguish a Fire on an M-1 Tank.

CONDITIONS: Given an M-1 tank with the tank commander, the master warning light is lit and the engine fire light starts flashing.

STANDARDS: Each Soldier must successfully demonstrate the four methods of extinguishing an M-1 tank fire.

TRAINING AND EVALUATION: Each Soldier must perform all steps IAW TM 9-2350-264-10-1 pages 2-118 and 2-119.

- a. Operate the engine compartment fire extinguisher in its automatic mode.
- b. Operate the engine compartment fire extinguisher in its manual mode.
- c. Operate the crew compartment fire extinguisher in its automatic mode.
- d. Operate the crew compartment fire extinguisher in its manual mode.

TASK: #8 Evacuate a Wounded Driver from an M-1 Tank.

CONDITIONS: Given a stationary M-1 tank, crew, appropriate TM, and one wounded driver, conscious or unconscious, with turret traverse lock unlocked, and the tank engine is off.

STANDARDS:

- a. The wounded driver is removed from the tank.
- b. The wounded driver does not sustain further injuries.
- c. The wounded driver is evacuated as soon as the situation and mission permit.

TRAINING AND EVALUATION: Soldier must refer to TM 9-2350-264-10-1 or TM 9-2350-264-10-2 for the following performance measures. Remove the injured driver through the driver hatch. Three crewmen are needed to remove the injured driver through the driver hatch. Use this procedure only if medical personnel are not available. Observe all warnings, cautions, and score the Soldier GO if all steps below are passed. If Soldier fails any step, show what was done wrong and how to do it correctly. Ensure Soldier follows these steps.

- a. Traverse the turret so that the driver hatch is under the rear of the turret and the main gun is over the rear deck.
- b. Lock the turret traverse lock.
- c. Grasp the lock handle, press the button and raise the handle all the way.
- d. Turn the hand crank to open the driver hatch.

- e. Unlock the turret traverse lock.
- f. Traverse the turret so the rear of the turret is over either side of the tank.
- g. Lock the turret traverse lock.
- h. Three crewmen position themselves on the hull around the driver hatch opening.
- i. Reach into the driver hatch opening and disconnect the leads to the driver CVC helmet at the quick disconnect and stow the driver steer throttle control.
- j. Raise the headrest to stowed position and gently lower the driver's head.
- k. A crewmen on the right side of the driver hatch reaches into the driver hatch opening, grasp the injured driver right leg, pulls it out, and lays it over the hull.
- l. The remaining crewmen grasp both of the injured driver ankles.
- m. Remove the injured driver from the driver hatch opening, with all three crewmen pulling and changing their grips as necessary.
- n. Lay the injured driver on the hull and administer first aid.

TASK: #9 Tank Rollover Drills.

CONDITIONS: To allow the crew to evacuate a overturned tank safely.

STANDARDS: Follow the procedures IAW FM 17-12-1-1.

TRAINING AND EVALUATION: The crew must be in proper uniform with CVC/Helmet on, and 2/3 of body must be inside of the hatch while operating the vehicle. In the event of a tank roll over, the crew must clear the hatches, drop down inside and brace against or hold on to anything that does not move. The crew member who first notices that the tank is beginning to roll over announces "ROLLOVER."

Tank Commander	Gunner	Loader	Driver
Drops inside the turret, turns off the turret power, and braces for an impact.	Moves the turret (time permitting) so driver can exit once the tank stops rolling, and brace for an impact.	Drops inside the turret, stows the knee switch (time permitting), and braces for an impact.	Shuts down the engine (time permitting), and braces for an impact.
Announces "ABANDON TANK," disconnects CVC cord, and exits through the TC's or loader's hatch.	Moves the turret (if necessary) so driver can exit; disconnects CVC cord, and exits through TC's or loader's hatch.	Disconnects CVC cord, removes portable fire extinguisher, and exits through TC's or loader's hatch.	(No fire) Announces "SHUT DOWN," powers down engine, turns VEHICLE MASTER POWER off, disconnects CVC cord, and exits through driver hatch.
			(Fire) Announces "SHUT DOWN," activates second shot if first shot has failed to extinguish fire, disconnects CVC cord, and exits through driver hatch. If unable to activate second shot from inside tank, manually activates second shot using external handle after exiting tank.

Note: Vehicle is turned over and on its side.

(Water) Announces if vehicle is in water, assist anyone as safe as possible out of danger.

APPENDIX 2, TO ANNEX M, TO 2ID REG 56-4

POIs FOR M2A3 Bradley Fighting Vehicles (BFV)
ICW TC 21-306

1. SUBJECT: Program of Instruction (POI) for M2A3 Bradley Fighting Vehicle (BFV).
2. PURPOSE: To provide 2ID units guidance for driver initial and sustainment training on the M2A3 Bradley Fighting Vehicles.
3. REFERENCES:
 - a. FM 21-306, Manual for the Track Vehicle Driver.
 - b. FM 21-306, Techniques and Procedures for the Tracked Vehicle Driver.
 - c. TM 9-2350-252-10-1, Fighting Vehicle, Infantry M2A3.
4. This POI consists of the following six tasks:
 - a. Perform Preventive Maintenance Checks and Services IAW TM 9-2350-252-10-1 (PMCS).
 - b. Start/Stop the Engine on a BFV.
 - c. Operate Vehicle Under Usual Conditions.
 - d. Operate Vehicle Under Unusual Conditions.
 - e. Extinguish a Fire on a BFV.
 - f. Perform Roll Over Drills.

TASK: #1 Perform PMCS on a BFV IAW TM 9-2350-252-10-1.

CONDITIONS: Given a BFV parked on level ground, Basic Issue Items (BII), TM 9-2350-252-10-1, and DA Form 2404.

STANDARDS: The Soldier must perform the designated PMCS on the BFV, correcting those faults that can be corrected by the operator. The Soldier must report those faults that cannot be corrected on the DA Form 2404 (or automated DA Form 5988-E).

TRAINING AND EVALUATION: Ensure Soldier performs PMCS on the M2A3 Bradley Fighting Vehicle IAW TM 9-2350-252-10-1.

TASK: #2 Start/Stop the Engine on a BFV.

SUB TASK: Start the engine on a BFV.

CONDITIONS: Given a BFV on which the PMCS has been completed.

STANDARDS: The Soldier must start the engine and establish intercommunication, ensuring all safety precautions are observed prior to starting the engine.

TRAINING AND EVALUATION:

- a. Ensure the hand brake is set.
- b. Ensure the power unit access doors are secure.
- c. Fasten the seat belt.
- d. Plug in the CVC helmet in the driver compartment.
- e. Select INT only on the control box.
- f. Adjust the volume knob on the control box.
- g. Place the switch on the CVC helmet to the rear position.
- h. Check that fire suppression switch is in AUTO.
- i. Move master switch to ON.
- j. Move engine accessory switch to ON.
- k. Check driver instrument panel.
- l. Push fuel shut off control handle.
- m. Sound horn (if tactical situation permits).
- n. Move gear selector to START, and hold until engine starts, but no longer than 30 seconds.
- o. Check driver instrument panel.
- p. Make a common check with the evaluator using the button in the steering yoke.
- q. Avoid damage to equipment and injury to personnel.

SUB TASK: Shut down the engine on a BFV.

CONDITIONS: Given a BFV with the engine running.

STANDARD: The Soldier must shut down the engine within 1 minute.

TRAINING AND EVALUATION:

- a. Ensure hand brake is set.
- b. Pull out fuel shut off handle and leave out.
- c. Move engine accessory switch to OFF.
- d. Avoid damage to equipment and injury to personnel.

TASK: #3 Operate Under Usual Conditions.

CONDITIONS: Given a BFV, BII, assigned driving area, and both daytime and nighttime conditions.

STANDARDS: The Soldier must drive the BFV, negotiate a left and right turn, back up, pivot steer left and right, and negotiate slopes without stalling the engine. Soldier will obey all traffic regulations.

TRAINING AND EVALUATION:

- a. Release hand brake.
- b. Adjust brake pedal height.
- c. Set gear selector. Step on brake pedal, and move gear selector from N (neutral) to desired position.
- d. Sound horn.
- e. Move vehicle and control speed.
- f. Steer vehicle in forward range.
- g. Turn steering yoke slowly to the left to turn the vehicle to the left.
- h. Turn the steering yoke to the right to turn the vehicle to the right.
- i. Steer the vehicle in reverse.
- j. Post ground guides.
- k. Move gear selector to REVERSE.

- l. Turn steering yoke slowly to right to turn rear of vehicle right.
- m. Turn steering yoke slowly to the left to turn rear of vehicle left.
- n. Pivot steer vehicle.
- o. Move gear selector to PIVOT STEER and hold there until turn is completed.
- p. Press down hard on accelerator pedal.
- q. Turn steering yoke to left to pivot left.
- r. Turn steering yoke to right to pivot right.
- s. Center yoke to stop pivot.
- t. Stop vehicle.
- u. Press down on brake pedal with smooth, gradual pressure.
- v. Move gear selector to N (neutral).

TASK: #4 Operate Vehicle Under Unusual Conditions.

SUB TASK: Ford water.

CONDITIONS: Given a BFV with engine stopped and ramp down, BII, necessary operational communications equipment, and a body of water that does not exceed 42 inches in depth.

STANDARDS: The Soldier must prepare the BFV for fording operation.

TRAINING AND EVALUATION:

- a. Close front hull drain plugs.
- b. Close rear hull drain plugs.
- c. Check that two final drive hull drain plugs are in place and secured.
- d. Check that four upper hull drain plugs are in place and secured. Use adjustable wrench.
- e. Check bilge pumps operation.
- f. Raise ramp.

- g. Start engine.
- h. Move forward and rear bilge pumps switches to ON.
- i. Ford water.
- j. After bilges empty, move forward and rear pumps switches to OFF.

SUB TASK: Operate vehicle over rough terrain.

CONDITIONS: Given a BFV, engine started/transmission warm-up, Soldier will operate BFV in rough terrain.

STANDARDS: Drive vehicle IAW TM 9-2350-252-10-1 operating procedures.

TRAINING AND EVALUATION:

- a. Drive vehicle over trenches.
- b. Drive up to trench straight on at a 90-degree angle.
- c. Move gear selector to LOW.
- d. Center steering yoke and drive straight over trench.
- e. Accelerate when vehicle clears trench.
- f. Drive over obstacle.
- g. Drive vehicle up to obstacle straight on.
- h. Move gear selector to LOW.
- i. Drive vehicle on side slope.
- j. Move gear selector to LOW before driving on steep side slope.
- k. Slowly turn vehicle up hill if rear of vehicle is sliding down hill (to prevent the vehicle from rolling).
- l. Slowly turn vehicle down hill if front of vehicle is sliding down hill (to prevent the vehicle from rolling).
- m. Drive vehicle on snow, ice, or mud.
- n. Control vehicle speed, and drive as smoothly as possible.

- o. Brake vehicle gently before making a turn on ice.
- p. If vehicle breaks through crust of deep snow or soft soil, steer vehicle straight to get back on crust.
- q. Remove track shoe pads if vehicle commander directs.
- r. If mud, snow, and ice packs in track area, remove section of armor plate as needed.
- s. Clear tracks of debris.
- t. Park vehicle on snow, ice, or mud.
- u. If possible, stop vehicle on firm surface.
- v. Clear snow, ice, or mud off road wheels and track after parking.

TASK: #5 Extinguish a fire on a BFV.

CONDITIONS: Given a BFV with BII, engine running, intercom in operation, seat belts and CVC helmet on, and a fire (simulated by telling the driver the vehicle is burning), all hatches closed.

STANDARDS: The driver must take action to extinguish a fire and minimize damage to equipment and injury to personnel.

TRAINING AND EVALUATION:

- a. Alert the crew of a fire using the intercom system.
- b. Stop the vehicle.
- c. Discharge Halon bottle (simulate for training).
- d. Lower the ramp.
- e. Turn off the master power and engine accessory switches.
- f. Release seat belts.
- g. Pull the quick disconnect to release CVC helmet.
- h. Secure weapon.
- i. Evacuate vehicle.

TASK: #6 Perform Roll Over Drill.

CONDITIONS: Given an operator driving a BFV in an open hatch condition.

STANDARDS: The driver must perform roll over drill in order to prevent injuries to himself.

TRAINING AND EVALUATION: The driver must be in proper uniform with CVC helmet on, seat belt on, and 2/3 of body must be inside hatch while operating the vehicle. In the event the BFV rolls over, the driver must clear hatch, drop down inside and brace against or hold on to anything that does not move.

STANDARDS: Follow the procedures IAW FM 17-12-1-1, Abrams, Tank Gunnery -10 Manual, and 2ID.

TRAINING AND EVALUATION: The crew must be in proper uniform with CVC/Helmet on, and 2/3 of body must be inside of the hatch while operating the vehicle. In the event of the BFV roll over, the crew must clear the hatches, drop down inside and brace against or hold on to anything that does not move. The crew member who first notices that the BFV is beginning to roll over announces "ROLLOVER."

Track Commander	Gunner	Loader	Driver
Drops inside the turret, turns off the turret power, and braces for an impact.	Moves the turret (time permitting) so driver can exit once the BFV stops rolling, and brace for an impact.		Shuts down the engine (time permitting), and braces for an impact.
Announces "ABANDON BFV," disconnects CVC cord, and exits through the TC's or gunner's hatch.	Moves the turret (if necessary) so driver can exit; disconnects CVC cord, and exits through TC's or loader's hatch.		(No fire) Announces "SHUT DOWN," powers down engine, turns VEHICLE MASTER POWER off, disconnects CVC cord, and exits through driver hatch.
			(Fire) Announces "SHUT DOWN,"

			<p>activates second shot if first shot has failed to extinguish fire, disconnects CVC cord, and exits through driver hatch. If unable to activate second shot from in-side tank, manually activates second shot using external handle after exiting BFV.</p>
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Note: Vehicle is turned over and on its side.

(Water) Announces if vehicle is in water, assist anyone as safe as possible out of danger.

APPENDIX 3, TO ANNEX M, TO 2ID REG 56-4

POIs FOR M113 Family of Vehicles
ICW TC 21-306

1. SUBJECT: Program of Instruction (POI) for Carrier, Personnel, Full Tracked, and Armored, M113 Family of Vehicles.

2. PURPOSE: To provide 2ID units guidance for driver initial and sustainment training on the M113 Family Vehicles.

3. REFERENCES:

- a. FM 21-306, Manual for the Track Vehicle Driver.
- b. FM 21-306, Techniques and Procedures for the Tracked Vehicle Driver.
- c. FM 20-22, Vehicle Recovery Operations.
- a. TM 9-2350-261-10, Carrier, Personnel, Full Tracked, Armored, M113A2.
- b. TM 9-2350-277-10, Carrier, Personnel, Full Tracked, Armored, M113A3.
- c. TM 9-2350-266-10, Carrier, Personnel, Full Tracked, Armored Fire Support, M981.

4. This POI consists of the following six tasks:

- a. Perform Preventive Maintenance Checks and Services (PMCS).
- b. Operate Vehicle Under Usual Conditions.
- c. Operate Vehicle Under Unusual Conditions.
- d. Ford the Vehicle.
- e. Tow a Disabled Vehicle .
- f. Perform Roll Over Drills.

TASK: #1 Perform PMCS on a M113 Series Vehicle.

CONDITIONS: Given a M113 series vehicle, TM 9-2350-261-10 for a M113A2, TM 9-2350-277-10 for a M113A3, or TM 9-2350-266-10 for the M981, and DA Form 2404 (or automated DA Form 5988-E), perform daily and weekly PMCS under usual conditions.

STANDARDS: Perform PMCS each day vehicle is operated. If vehicle is not being operated regularly, start and run engine for ½ hour at least once a week. Perform weekly as well as daily PMCS.

TRAINING AND EVALUATION: Soldier must perform all daily and weekly checks listed in the operator's manual. Score the Soldier GO if all steps are passed. If Soldier fails any step, show what was done wrong and how to do it correctly. Ensure Soldier performs PMCS on: a M113A2 IAW TM 9-2350-261-10, M113A3 IAW TM 9-2350-277-10, or M981 IAW TM 9-2350-266-10. Soldiers must have proper tools available to perform all checks.

TASK: #2 Operate Vehicle Under Usual Conditions.

CONDITIONS: Given a M113 series vehicle with TC and necessary operational communications equipment, Soldier will operate vehicle in usual conditions. Soldier must have completed PMCS prior to operation.

STANDARDS: Drive vehicle carefully, especially if you are not familiar with the vehicle. On hard surface, avoid over steering and speeding to keep control of the vehicle. Ensure the Soldier drives for a minimum of five miles on hard surfaces. Soldier will obey all traffic regulations.

TRAINING AND EVALUATION: Soldier must operate vehicle under usual conditions following the training and evaluation outline below. Score the Soldier GO if all steps are passed. If Soldier fails any step, show what was done wrong and how to do it correctly. Ensure Soldier follows these steps:

- a. Secure driver hatch cover in either open or closed position.
- b. Ensure commander's hatch cover is secured open or closed.
- c. Cargo hatch cover closed.
- d. Driver remains in driver compartment while engine is running.
- e. The ramp is raised and locked.
- f. Use the 1-2 range until driver is used to driving the vehicle.
- g. Take care not to over steer or go to fast, on hard pavement. Driver could lose control of the vehicle.
- h. Push the air control in to open the valve and let the engine breath cooler air from the rear compartment.
- i. Accelerate as the carrier climbs a grade. Decelerate at the top of the grade and during descent (60% maximum up or down slope).

j. Use steering levers only to steer vehicle (steering wheel for M113A3).

k. Checks engine gauges while driving. If any warning light comes on, or temperature rises above 230 degrees Fahrenheit (110 C) stop engine and troubleshoot the problem.

l. Do not attempt to shift into reverse unless vehicle is at a complete stop.

TASK:#3 Operate Vehicle Under Unusual Conditions.

CONDITIONS: Given a M113 series vehicle with TC and necessary operational communications equipment, Soldier will operate vehicle in unusual conditions.

STANDARDS: Drive vehicle carefully, especially if you are not familiar with the vehicle. Excessive speed under unusual conditions can cause serious accidents. Ensure Soldier drives vehicle for a minimum of five miles in each of the following conditions: mud, snow, ice, and sand.

TRAINING AND EVALUATION: Soldier must operate vehicle under unusual conditions following the guidelines below. Score Soldier GO if none of the guidelines are violated. If Soldier fails to comply with a guideline, show what was done wrong and how to do it correctly. Ensure Soldier follows these steps in each condition.

a. Mud.

(1) Drive with transmission in a low range and keep vehicle moving steadily to avoid digging in.

(2) If vehicle becomes stuck, do not dig in further by attempting to drive out.

(3) If freezing temperatures are expected, be sure to park vehicle on solid ground to avoid having tracks freeze in the mud.

(4) Remove mud from tracks, road wheels, and drive sprockets when parked.

b. Snow.

(1) Drive with transmission in a low range.

(2) Avoid grades and sharp turns when possible.

(3) Drive as straight up or down grades to equalize track load.

(4) To climb, back onto crusted snow, reduce engine speed and shift into low range to achieve a very low track speed for forward movement without slippage.

c. Ice.

(1) Select a higher gear range, which will move vehicle steadily without imposing undue strain on the engine.

(2) Drive slowly and cautiously to avoid skidding. If vehicle skids, slow down engine and proceed with caution. Do not spin tracks.

(3) Avoid grades and sharp turns.

d. Sand.

(1) The main objective when driving in sand is to avoid spinning the tracks.

(2) Drive slowly and use a gear high enough to move vehicle steadily without imposing undue strain on the engine.

(3) Avoid sharp and pivot turns to prevent the buildup of debris in the track that would cause the track to be thrown.

TASK:#4 Conduct Fording Operations with a M113 Series Vehicle.

CONDITIONS: Given a M113 series vehicle with TC, necessary operational communications equipment, and a body of water that does not exceed 40 inches (100 cm) in depth, Soldier will ford the body of water.

STANDARDS: The M113 series of vehicles is designed to cross a body of water only up to 40 inches (100cm) deep.

TRAINING AND EVALUATION: Soldier must perform all steps listed below in order to receive a GO. If Soldier fails any step, show what was done wrong and how to do it correctly. Ensure Soldier follows these steps:

a. Check that access covers, drain covers, and final drive drain plugs are in place, straight, and tight. Use socket wrench handle and adapter to check or install final drive drain plugs.

b. Check bilge pumps operation.

c. Choose spot to enter and exit the water. Look for firm ground without rocks, stumps, or other obstacles. Avoid steep slopes and soft ground.

d. Start engine and place BILGE PUMPS switch ON.

e. Enter water at crawl speed.

- f. Proceed slowly. Watch out for obstacles under water.
- g. Exit water. After bilges empty, place BILGE PUMPS switch to OFF.

TASK:#5 Tow a Disabled Vehicle.

CONDITIONS: Given a M113 series vehicle that is disabled, a TC, and a recovery vehicle.

STANDARDS: Do not tow a disabled vehicle over 10 MPH (16 KPH). Do not shift towed vehicle into gear during towing operations. Use a tow bar. When final drives are disconnected the vehicle cannot steer or brake.

TRAINING AND EVALUATION: Soldier must be able to prepare a vehicle to be towed IAW the steps listed below. Score Soldier a GO if none of the steps are violated. If Soldier fails to comply with a step, show what was done wrong and how to do it correctly. Ensure Soldier follows these steps:

- a. Block tracks of the disabled vehicle to prevent any movement.
- b. Remove access covers to final drive couplings.
- c. Disconnect final drives on disabled vehicle.
- d. Install tow bar between towing pintle on the towing vehicle and tow lugs on the disabled vehicle.
- e. Remove blocks from tracks of towed vehicle.
- f. Shift towed vehicle into N (neutral).
- g. Release brake on disabled vehicle and signal towing vehicle to start towing.

TASK:#6 Perform Roll Over Drill.

CONDITIONS: Given an operator driving a M113 Series Vehicle in an open hatch condition.

STANDARDS: The driver must perform roll over drill in order to prevent injuries to himself.

TRAINING AND EVALUATION: The driver must be in proper uniform with CVC helmet on, seat belt on, and 2/3 of body must be inside hatch while operating the vehicle. In the event the M113 Series Vehicle rolls over, the driver must clear hatch, drop down inside and brace against or hold on to anything that does not move.

STANDARDS: Follow the procedures IAW FM 21-306, -10 Manual, and 2ID.

TRAINING AND EVALUATION: The crew must be in proper uniform with CVC/Helmet on, and 2/3 of body must be inside of the hatch while operating the vehicle. In the event the M113 rolls over, the crew must clear the hatches, drop down inside and brace against or hold on to anything that does not move. The crew member who first notices that the M113 is beginning to roll over announces "ROLLOVER."

Track Commander	Gunner	Loader	Driver
Drops inside the turret, turns off the turret power, and braces for an impact			Shuts down the engine (time permitting), and braces for an impact.
Announces "ABANDON Vehicle," disconnects CVC cord, and exits through the TC's hatch or rear door.			(No fire) Announces "SHUT DOWN," powers down engine, turns VEHICLE MASTER POWER off, disconnects CVC cord, and exits through driver hatch.
			(Fire) Announces "SHUT DOWN," activates second shot if first shot has failed to extinguish fire, disconnects CVC cord, and exits through driver's hatch. If unable to activate second shot from inside, manually activates second shot using external handle after exiting M113 series vehicle.

Note: Vehicle is turned over and on its side.

(Water) Announces if vehicle is in water, assist anyone as safe as possible out of danger.

APPENDIX 4, TO ANNEX M, TO 2ID REG 56-4

POIs FOR M88 Recovery Vehicle

1. SUBJECT: Program of Instruction (POI) for M88 Recovery Vehicle.
2. PURPOSE: To provide 2ID units guidance for driver initial and sustainment training on the M88 Recovery Vehicle, fully tracked.
3. REFERENCES:
 - a. FM 21-306, Manual for the Track Vehicle Driver
 - b. FM 21-306, Techniques and Procedures for the Tracked Vehicle Driver
 - c. FM 20-22, Vehicle Recovery Operations
4. This POI consists of the following eight tasks:
 - a. Use appropriate TM/Lubrication Order.
 - b. Perform Preventive Maintenance Checks and Services (PMCS)
 - c. Operate Vehicle Under Usual Conditions
 - d. Operate Vehicle Under Unusual Conditions
 - e. Ford the Vehicle
 - f. Tow a Disabled Vehicle
 - g. Operate Crane and Spade
 - h. Perform Rollover Drills

TASK:#1 Use the appropriate vehicle Technical Manual (TM/Lubrication Order (LO) and make operator entries on DA Form 2404 (or automated DA Form 5988-E).

CONDITIONS: Given instruction, DA Form 2404, vehicle operator's manual TM/LO.

STANDARDS: Follow the instructions in the TM/LO and make the required operator entries on DA Form 2404 in the correct sequence in accordance with DA Pamphlet 738-750.

TRAINING AND EVALUATION: Ensure all Soldiers use the appropriate operator's manual TM, LO, and make the proper checks and services.

TASK:#2 Perform Preventive Maintenance Checks and Services (PMCS)

CONDITIONS: Given instruction, a DA Form 2404, a pencil, appropriate operator's manual, equipment records folder, rags, lubricants, coolant, and an M88 recovery vehicle.

STANDARDS: Inspect the vehicle according to the PMCS tables listed in the operator's level of maintenance, and record all others legibly on DA Form 2404. If no faults are found, make necessary entries on DA Form 2404.

TRAINING AND EVALUATION: Assign students an M88 recovery vehicle, operator's manuals, and a DA Form 2404. Grade students a GO if all faults are recognized and recorded. Recommended instruction time is two hours. The remaining PMCS is performed throughout the course along with the driving tasks.

TASK:#3 Drive Vehicle Under Usual Conditions.

CONDITIONS: Given an M88 fully tracked recovery vehicle, Soldier will operate the vehicle on a road.

STANDARDS: Soldier will drive the vehicle on a paved surface at least five miles safely.

TRAINING AND EVALUATION: Grade the Soldier a GO if all the procedures below are followed successfully. If Soldier fails to comply with a procedure, show what was done wrong and how to do it correctly. Ensure Soldier follows these steps in each condition:

- a. Climb into driver hatch and secure cupola in the fully opened or closed position.
- b. Fasten seat belts and ensure all members inside the vehicle secure seat belts.
- c. Release vehicle parking brake and shift vehicle out of the neutral position.
- d. Ease vehicle into motion observing the directions of ground guides when needed.
- e. Observe all gauges to determine speed and RPMs.
- f. Do not attempt to shift vehicle into reverse until the vehicle comes to a halt.

TASK:#4 Operate Vehicle Under Unusual Conditions.

CONDITIONS: Given an M88A1 Recovery Vehicle with TC, the Soldier will operate the vehicle under unusual conditions.

STANDARDS: The Soldier will drive the vehicle safely a minimum of five miles under the conditions of mud, snow, ice, and sand conditions.

TRAINING AND EVALUATION: Ensure the Soldier adheres to these steps under the specified conditions. Soldier must perform all steps listed below in order to receive a GO. If Soldier fails any step, show what was done wrong and how to do it correctly. Ensure Soldier follows these steps:

a. Mud.

- a. Drive the vehicle in low range and keep the vehicle in motion.
- b. If the vehicle becomes stuck, do not continue to run the vehicle. Use winch to move vehicle out.
- c. Park vehicle on solid ground in freezing temperatures to avoid mud freezing in the tracks.
- d. Remove mud from track and wheel contacting surfaces.

b. Snow.

- a. Drive in low range.
- b. Avoid grades and sharp turns when possible.
- c. Drive straight up and down grades as possible.
- d. To climb back into crusted snow, reduce speed and shift to low range to achieve low track speed and allow for forward movement.

c. Ice.

- a. Select higher gear range to allow vehicle to move steadily without causing strain on engine.
- b. Drive cautiously to avoid skidding.
- c. Avoid grades and sharp turns.

- d. Sand.
 - a. Drive slowly and use a gear high enough to move vehicle steadily without straining the engine.
 - b. Avoid sharp and pivot turns to prevent buildup of debris in track.
 - c. The objective is to avoid spinning tracks.

TASK:#5 Ford the M88 Recovery Vehicle.

CONDITIONS: Given an M88 recovery vehicle and a fording site not to exceed 56 inches in depth (102 inches with kit).

STANDARDS: Without accident or injury, ford the M88.

TRAINING AND EVALUATION: Grade Soldier a GO if all procedures below are followed successfully.

- a. Ensure all drain valve plugs are closed.
- b. Inspect the bottom of the hull to ensure all access areas are sealed off.
- c. Ensure the engine is warm to prevent stalling while fording.
- d. Enter water slowly and speed up vehicle when exiting the site.
- e. Inspect the vehicle after fording to ensure no damage has occurred.

TASK:#6 Tow a Disabled Vehicle.

CONDITIONS: Given an M88 recovery vehicle and TC, recover a disabled vehicle.

STANDARDS: Without causing damage to the vehicle, tow a disabled vehicle. Do not shift the towed vehicle into gear during towing operations.

TRAINING AND EVALUATION: Grade the Soldier a GO if all the procedures below are followed successfully.

- a. Use chock blocks on disabled vehicle to prevent movement.
- b. Disconnect final drives on disabled vehicle.
- c. Install tow bar from pintle to tow lugs on disabled vehicle.
- d. Remove chock blocks.

- e. Shift towed vehicle into N (neutral).
- f. Release brake on towed vehicle.
- g. Gradually accelerate until both vehicles are in motion.
- h. Maintain low, constant speed during operation.

TASK:#7 Operate Crane and Spade.

CONDITIONS: Given an M88 Recovery Vehicle with TC, the Soldier will operate the crane and spade under usual conditions.

STANDARDS: Without accident or injury, the Soldier will operate the crane and spade. Always wear gloves when handling the cable. Never allow the cable to run through bare hands. Direct all personnel to stand clear of area of operations during crane or winch operations. Arrange the appropriate signals with ground guide. Do not allow personnel to walk under a lifted load. Ensure the cable is free of kinks or frays.

TRAINING AND EVALUATION: Grade the Soldier GO if all the procedures are followed successfully. Ensure the Soldier follows these procedures:

- a. Start the hydraulic system.
- b. Emplace spade if needed.
- c. Operate boom winch.

TASK:#8 M88 recovery vehicle Rollover Drills.

CONDITIONS: To allow the crew to evacuate a overturned M88 recovery vehicle safely.

STANDARDS: Follow the procedures IAW FM 17-12-1-1.

TRAINING AND EVALUATION: The crew must be in proper uniform with CVC/Helmet on, and 2/3 of body must be inside of the hatch while operating the vehicle. In the event of a tank roll over, the crew must clear the hatches, drop down inside and brace against or hold on to anything that does not move. The crew member who first notices that the M88 recovery vehicle is beginning to roll over announces "ROLLOVER."

Track Commander	Gunner	Loader	Driver
Drops inside the turret, turns off the turret power, and braces for an impact			Shuts down the engine (time permitting), and braces for an impact.
Announces "ABANDON TANK," disconnects CVC cord, and exits through the TC's or loader's hatch.			(No fire) Announces "SHUT DOWN," powers down engine, turns VEHICLE MASTER POWER off, disconnects CVC cord, and exits through driver hatch.
			(Fire) Announces "SHUT DOWN," activates second shot if first shot has failed to extinguish fire, disconnects CVC cord, and exits through driver's hatch. If unable to activate second shot from inside, manually activates second shot using external handle after exiting.

Note: Vehicle is turned over and on its side.

(Water) Announces if vehicle is in water, assist anyone as safe as possible out of danger.

APPENDIX 5, TO ANNEX M, TO 2ID REG 56-4

POIs FOR HEMTT Family of Vehicles
ICW TC 21-305-1

1. SUBJECT: Program of Instruction (POI) for Heavy Expanded Mobility Tactical Trucks (HEMTT) Family of Vehicle.

2. PURPOSE: To provide 2ID units guidance for driver initial and sustainment training on the HEMTT Series Vehicles.

3. REFERENCES:

a. TM 9-2320-279-10-1.

b. TC 21-305-1.

4. This POI consists of the following six tasks:

a. Perform Preventive Maintenance Checks and Services (PMCS).

b. Operate Vehicle Under Usual Conditions.

c. Operate Vehicle Under Unusual Conditions.

d. PMCS the Crane on the M977 HEMTT.

e. Operate the crane on the M977 HEMTT.

f. Perform self-recovery on an M977/M978 HEMMIT using the winch.

TASK: #1 Perform Preventative Maintenance Checks and Services (PMCS).

CONDITIONS: Given a HEMTT vehicle, TM 9-2320-279-10-1 operator's manual, and DA Form 2404 (or automated DA Form 5988-E), ULLS equivalent, perform PMCS under usual conditions.

STANDARDS: Student will successfully explain the use of PMCS tables and perform PMCS using PMCS tables.

TRAINING AND EVALUATION: Have the student explain how to use the PMCS tables. Ensure student understands "Warnings" and "Notes" listed in the PMCS tables. Have the student perform a PMCS on a HEMTT vehicle and note any deficiencies on DA Form 2404. Student must pass all steps to receive a GO. Explain any steps the student failed.

TASK:#2 Operate a HEMTT Vehicle Under Usual Conditions.

CONDITIONS: Given a HEMTT vehicle, student will operate vehicle under usual conditions.

STANDARDS: Student will successfully identify vehicle controls, pressure gauges, normal operating ranges, and read and understand all “Cautions” and “Notes” listed in the vehicle operator’s manual. Student will safely operate vehicle on a hard surface obeying all traffic regulations.

TRAINING AND EVALUATION: Student should safely operate vehicle under usual conditions following the training and evaluation outline below. Score the student GO if all steps above are passed. If student fails any steps, show what was done wrong and how to perform the step correctly. Ensure the student follows these steps:

- a. Adjust mirrors, seat and installs safety belts.
- b. Pulls out parking brake control.
- c. Starting aids will not be used on the engine. Use of starting aids will cause damage to vehicle, injury, or death.
- d. Properly starts engine.
- e. Checks oil pressure gauge reading (40 to 60 PSI).
- f. Does not operate engine above 1000 RPM during warm up.
- g. Runs engine at 800 to 1000 RPM for about 3 minutes.
- h. Ensures all gauges are at proper operating range.
- i. Turns on lights as needed.
- j. Sets transfer case shift lever to HI. (Ensure transfer case shift lever is not shifted when vehicle is moving or transmission is in gear.)
- k. Shifts transmission lever to desired position.
- l. Pushes in parking brake control.
- m. Accelerates, brakes, and steers as required. (WARNING: Ensure student does not press service brake hard three or four times in a row. Air supply will be used up and service brakes will not work until air pressure is built up again. Loss of braking can result in serious personal injury or death.) (CAUTION: Maximum no load governed engine speed is approximately 2250 RPM. Full load governed engine speed is approximately 2100 RPM. Do not allow student to exceed governed engine speeds.)

n. Correctly operates Jacob's Engine Brake as required.

TASK:#3 Operating Vehicle Under Unusual Conditions.

CONDITIONS: Given a HEMTT vehicle, student must operate vehicle under unusual conditions.

STANDARDS: Student must safely operate vehicle in off road conditions, up and down steep grades, and in slippery conditions. Student must understand different vehicle characteristics under these listed conditions.

TRAINING AND EVALUATION: Student should safely operate vehicle under unusual conditions following the training and evaluation outline below. Score the student GO if all steps below are passed. If student fails any steps, show what was done wrong and how to perform the step correctly. Ensure the student follows these steps under the listed conditions:

a. Off-road.

(1) Does not shift the transfer case when vehicle is moving or when transmission is in gear.

(2) Stops vehicle and pulls parking brake control.

(3) Shifts transmission to neutral position.

(4) Shifts transfer case to L (LO).

(5) Shifts transmission to 2 or 1 depending on ground condition.

(6) Pushes in parking brake control.

(7) Slowly presses down throttle until desired speed is reached. Tachometer should read between 1650 and 2100 RPM. Shifts as necessary. (CAUTION: Maximum no load governed engine speed is approximately 2250 RPM. Full load governed engine speed is approximately 2100 RPM. Do not allow student to exceed governed engine speeds).

(8) Accelerates, brakes, and steers as required.

b. Up Steep Grades.

(1) If more speed is desired on a steep upgrade, student must press more on throttle to allow transmission to automatically downshift gears as needed.

c. Down Steep Grades.

(1) Does not allow engine speed to exceed 2100 RPM.

(2) Shifts transmission as necessary to keep engine RPM between 1650 and 2100 RPM.

(3) Uses service brake as needed to control vehicle speed. (WARNING: Ensure student does not press service brake hard three or four times in a row. Air supply will be used up and service brakes will not work until air pressure is built up again. Loss of braking can result in serious personal injury or death.)

(4) Uses Jacob's Engine Brake as needed.

d. Slippery Conditions.

(1) CAUTION: Do not shift Traction Control lever while vehicle is moving.

NOTE: After Traction Control lever is shifted, let vehicle creep forward several feet to allow shift collars to fully engage and again when it is shifted to the OFF position.

(2) Shifts transfer case to LO.

(3) Sets Traction Control lever to Inter-Axle Diff. Lock.

(4) If transfer case shift lever is set to HI, set Traction Control lever to 8X8 Drive.

(5) When vehicle gets good traction again, student should stop and set Traction Control lever to OFF position.

TASK: #4 Operate and perform operator PMCS on the M977 HEMTT crane.

CONDITIONS: Given instruction, a suitable training area, an M977 HEMTT with BII, DA Form 2404, pencil, TM 9-2320-279-10-1, equipment records folder, rags, and requirement to inspect the truck crane components according to the PMCS tables listed in the operator's manual.

STANDARDS: Correct all faults within the operator's level of maintenance and record all others legibly on DA Form 2404. If no faults are found, make necessary entries on DA Form 2404. Students will be graded on a GO/NO-GO basis.

TASK:#5 Operate the crane on the M977 HEMTT

CONDITIONS: Given instruction, a suitable training area, an M977 HEMTT with BII, several palletized loads of differing weights, and a requirement to operate the crane using both manual and remote controls; prepare the crane for use, set up the

outriggers, raise the boom to its operating position, rotate and telescope the boom, load and off load the vehicle, shut down the crane, and stow the outriggers.

STANDARDS: Without causing damage to the HEMTT or injury to personnel, operate the crane in the correct sequence in accordance with the operator's manual. Students will be graded on a GO/NO-GO basis. Paying close attention to all "Warnings" and "Cautions".

TRAINING AND EVALUATION: Use the training evaluation on pages C-7-5 through C-7-8 to train and assess Soldier on the crane operation. Score the Soldier a GO if the step is performed. If the Soldier fails a step, show what was done wrong and how to do it correctly. Ensure Soldier follows these steps.

TASK:#6 Perform self-recovery on an M977/M978 HEMTT using the winch.

CONDITIONS: Given instruction, suitable training area, suitable anchor, an M977/M978 HEMTT with operational winch and BII, and a requirement to recover the vehicle.

STANDARDS: Recover the vehicle in the correct sequence so that it is free to move under its own power without causing damage to the vehicle or injury to personnel. You must perform this task as both driver and assistant driver. Students will be graded on a GO/NO-GO basis.

TRAINING AND EVALUATION: Refer to TC 21-305-1 for training and evaluation of TASK # 6.

TASK: #7 Wheel Vehicle Rollover Drills.

CONDITIONS: To allow the crew to evacuate a overturned vehicle safely.

STANDARDS: Follow the procedures IAW 2ID REG , -10.

TRAINING AND EVALUATION: The crew must be in proper uniform 2/3 of body must be inside of the hatch while operating the vehicle. In the event of a vehicle roll over, the crew must clear the hatches, drop down inside and brace against or hold on to anything that does not move. The driver/crew or the first member who notices that the vehicle is beginning to roll over announces "ROLLOVER."

Cargo area/Passenger seats	Senior Person /Vehicle Commander	Driver
Braces for an impact waits for vehicle to stop rolling.	Braces for an impact, waits for vehicle to stop rolling, (time permitting).	Shuts down the engine/ turn off ignition switch (time permitting), and braces for an impact, waits for vehicle to stop rolling.
Announces "ABANDON VEHICLE," exits through or around vehicle to a safe location. assist in evacuation and first aid.	Removes portable fire extinguisher, and exits through or around vehicle to a safe location.	(No fire) Announces "SHUT DOWN," turns VEHICLE MASTER POWER off and exits through safe route
(Fire) Announces if there is a fire extinguish fire. With the help of the crew and Vehicle Commander.	(Fire) Announces if there is a fire extinguish fire. With the help of the crew and Vehicle Commander.	(Fire) Announces (FIRE) if there is a fire, extinguish fire with the help of the crew and Vehicle Commander.

Note: Vehicle is turned over and on its side.

(Water) Announces if vehicle is in water, assist anyone as safe as possible out of danger.

APPENDIX 6, TO ANNEX M, TO 2ID REG 56-4

POIs FOR 5-TON Truck Family of Vehicles
ICW TC 21-305-3

1. SUBJECT: Program of Instruction (POI) for 5-TON Truck Family of Vehicles.
2. PURPOSE: To provide 2ID units guidance for driver initial and sustainment training on the 5-TON Truck Family of Vehicles.
3. REFERENCES:
 - a. TC 21-305-3, Training Program for the M939 series 5 Ton Tactical Cargo Vehicles (M923 and M924).
 - b. TC 21-305-7, Training Program for Light Vehicles.
 - c. TM 9-2320-272-10.
 - d. This POI consists of the following seven tasks:
 - e. Use Appropriate Technical Manual/Lubrication Order.
 - f. Perform Preventive Maintenance Checks and Services (PMCS).
 - g. Operate Vehicle Under Usual Conditions.
 - h. Operate Vehicle Under Unusual Conditions.
 - i. Back and Park the Vehicle.
 - j. Drive Vehicle at Night.
 - k. Wheel Vehicle Rollover Drills.

TASK:#1 Use the appropriate vehicle Technical Manual, TM/Lubrication Order (LO) and make operator entries on DA Form 2404 (or automated DA Form 5988-E).

CONDITIONS: Given instruction, DA Form 2404, a practical exercise, vehicle operator's manual (-10), and LO.

STANDARDS: Follow the instructions in the TM/LO and make the required operator entries on DA Form 2404 in the correct sequence in accordance with DA Pamphlet 738-750. Each student has 15 minutes to complete the practical exercise and will be graded on a GO/NO-GO basis.

TRAINING AND EVALUATION: Ensure all Soldiers use the appropriate operator's manual TM, and LO and make the proper checks and services. The student must demonstrate proficiency in filling out the form in two situations, no-fault and fault. The recommended time for this instruction is 30 minutes each for class time and practical exercise.

TASK:#2 Perform Preventative Maintenance Checks and Services (PMCS).

CONDITIONS: Given instruction, a DA Form 2404 (or automated DA Form 5988-E), a pencil, appropriate vehicle operator's manual, appropriate trailer operator's manual, equipment records folder, rags, lubricants, coolant, a trailer, and a wheeled vehicle with Basic Issue Items (BI).

STANDARDS: Inspect the vehicle and trailer according to the PMCS tables listed in the operator's level of maintenance, and record all others legibly on DA Form 2404. If no faults are found, make necessary entries on DA Form 2404.

TRAINING AND EVALUATION: Assign students a vehicle/trailer and operator's manuals, and a DA Form 2404. Grade students GO if all faults are recognized and recorded. Recommended instruction time is two hours. The remaining PMCS is performed throughout the course along with driving tasks.

TASK:#3 Operate a 5-Ton Vehicle Under Usual Conditions.

CONDITIONS: Given instruction, DD Form 1970, DA Form 2404, pencil, appropriate vehicle operator's manual, equipment records folder, rags, lubricant, coolant, suitable training area, improved road surface, and a manual transmission vehicle.

STANDARDS: Without accident or injury, operate the vehicle. Conduct visual search, communicate intentions, manage space and speed, monitor for hazards, maneuver in emergencies, and conduct skid control and recovery. Soldier will obey all traffic regulations.

TRAINING AND EVALUATION: This process should include a 12-hour period, which includes one-hour conference, one-hour demonstration, 1.5-hour PMCS portion, and 10 hours of driving. The driving portion should entail the following activities:

- a. Conduct Visual Search.
- b. Seeing ahead and to the sides.
- c. Using the mirrors to see the scene behind the vehicle.

d. Seeing to the rear. Driver should use these mirrors not only to clear the scene but also to ensure the security of any cargo. Mirrors should also be used when changing gears or speed.

e. Communicate Intentions.

f. Communicate intention to make a turn.

g. Communicate intention to back a vehicle.

h. Communicate any lane changes to other drivers.

i. Communicate presence to other drivers using the horn.

j. Manage Space.

(1) Maintain adequate clearance to the sides of the vehicles.

(2) Deal with tail-gaters.

(3) Manage overhead space.

(4) Monitor space below the vehicle for obstructions.

(5) Ensure there is adequate space for making a left or right turn.

k. Manage speed.

(1) Control speed on slippery surfaces.

(2) Control speed when exiting an interstate highway.

(3) Control speed when descending an incline.

(4) Control speed in heavy traffic.

l. Monitor hazards.

(1) Monitor the roadway to detect hazards.

(2) Observe the driver ahead of you who may not be paying full attention.

(3) Detect posted roadway obstructions.

(4) Observe any vehicles broken down on the shoulder.

m. Maneuver in Emergencies.

- (1) Observe an oncoming car encroaching into the driver lane.
- (2) Notice any wildlife in the roadway.
- (3) Observe proper procedures when vehicle has a blowout.

n. Conduct skid control and recovery.

(1) Observe proper procedures when detecting a skid as a result of over acceleration, over braking, or over steering.

TASK # 4 Drive Vehicle Under Unusual Conditions (snow, ice, fog, rain, and bleeding tar).

CONDITIONS: Given a 5-TON truck, student will operate the vehicle under adverse conditions.

STANDARDS: Student must safely operate vehicle under adverse conditions.

TRAINING AND EVALUATION: Ensure Soldier is knowledgeable with the two major hazards associated in driving during adverse weather conditions, reduced visibility and reduced traction. The following steps should be understood and adhered to:

a. Reduced Visibility:

- (1) Travel at reduced speeds.
- (2) Do not use high beams. Switch to low beams if on high beams.
- (3) Look to the right if blinded by oncoming vehicles.
- (4) Do not overrun the headlights, and stay twice the normal distance from the vehicle ahead.
- (5) Signal turns sooner than normal.
- (6) Apply brakes sooner, and press brake pedal lightly to give early warning of impending stop.
- (7) Keep all windows, mirrors, and lights free of snow and ice.
- (8) Watch for vehicles and pedestrians pulled off to the side of the road.
- (9) Use caution when weather reduces visibility to zero. Exit the road and wait until visibility improves. Do not stop on shoulder with flashers on.

b. Reduced Traction.

- (1) Install tire chains if needed for snow or ice.
- (2) Pump brakes gradually when stopping on ice or snow.
- (3) Place transmission/transfer case in the appropriate driving range to descend/climb steep hills.
- (4) Place vehicle in motion slowly to prevent the wheels from spinning.
- (5) Press accelerator slowly when changing speed.
- (6) Keep accelerator steady after reaching desired speed.
- (7) Turn vehicle slowly and make gradual adjustments when on slippery surfaces.
- (8) Steer vehicle away from ruts and snow banks.
- (9) Steer straight up and down hills if possible.
- (10) Check for black ice.
- (11) Follow proper procedures when vehicle begins to slide or skid.
- (12) Follow proper procedures when vehicle becomes stuck.
- (13) Drive slowly and test the brakes when driving through slush or water.
- (14) When driving during hot weather, adjust your driving for bleeding tar conditions.

TASK:#5 Back and Park a 5-TON Vehicle.

CONDITIONS: Given DD Form 1970, DA Form 2404, pencil, appropriate operator's manual, equipment records folder, a wheeled vehicle and ground guides.

STANDARDS: Without causing damage to the vehicle, physical surrounding, or injury to personnel, back and park a vehicle.

TRAINING AND EVALUATION: A driver must demonstrate his ability to back and park a wheeled vehicle. The following four rules should be adhered to:

- a. Inspect your path.
- b. Back and turn toward the driver (sight) side.

- c. Use four way flashers and horn.
- d. Use ground guide(s).

TASK:#6 Drive Vehicle at Night.

CONDITIONS: Given instruction, DA Form 2404, DD Form 1970, pencil, appropriate operator's manual, equipment records folder, improved road surface, and a wheeled vehicle at night.

STANDARDS: Without accident or injury, drive the designated route at night with headlights. Use defensive driving methods. Operate the light switch. Read gauges. Up-shift and downshift the transmission. Manipulate the controls. Use correct braking procedures. Perform basic driving maneuvers.

TRAINING AND EVALUATION: The recommended time allotted to this task should be five hours. This includes a 30-minute conference and 4.5 hours of a practical exercise and PMCS. The driver must demonstrate his competence of the following factors:

- a. Driver factors, to include: glare, fatigue, and driver inexperience.
- b. Roadway factors, to include: low illumination, variation in illumination, familiarity with roads, other road users, and drunk drivers.
- c. Vehicle factors, to include: sight distance of headlights, use of auxiliary lights, use of turn signals, use of windshield wipers and washer, and the use of mirrors.
- d. Night Driving Procedures.
 - (1) Preparation for driving at night includes resting yourself, planning the route, and preparing your vehicle.
 - (2) While driving at night the driver should avoid blinding others with his lights. The driver should avoid glare and maximize his visibility.

TASK:#7 Wheel Vehicle Rollover Drills.

CONDITIONS: To allow the crew to evacuate a overturned vehicle safely.

STANDARDS: Follow the procedures IAW 2ID REG, -10.

TRAINING AND EVALUATION: The crew must be in proper uniform 2/3 of body must be inside of the hatch while operating the vehicle. In the event of a vehicle roll over, the crew must clear the hatches, drop down inside and brace against or hold on to anything that does not move. The driver/crew or the first member who notices that the vehicle is beginning to roll over announces "ROLLOVER."

Cargo area/Passenger seats	Senior Person /Vehicle Commander	Driver
Braces for an impact waits for vehicle to stop rolling.	Braces for an impact, waits for vehicle to stop rolling, (time permitting).	Shuts down the engine/ turn off ignition switch (time permitting), and braces for an impact, waits for vehicle to stop rolling.
Announces "ABANDON VEHICLE," exits through or around vehicle to a safe location. assist in evacuation and first aid.	Removes portable fire extinguisher, and exits through or around vehicle to a safe location.	(No fire) Announces "SHUT DOWN," turns VEHICLE MASTER POWER off and exits through safe route
(Fire) Announces (FIRE) if there is a fire, extinguish fire with the help of the crew and Vehicle Commander.	(Fire) Announces (FIRE) if there is a fire, extinguish fire with the help of the crew and Vehicle Commander.	Announces (FIRE) if there is a fire, extinguish fire with the help of the crew and Vehicle Commander.

APPENDIX 7, TO ANNEX M, TO 2ID REG 56-4

POIs FOR 2 1/2-TON Truck Family of Vehicles
ICW TC 21-305-8

1. SUBJECT: Program of Instruction (POI) for 2 1/2-TON Truck Family of Vehicles.
2. PURPOSE: To provide 2ID units guidance for driver initial and sustainment training on the 2 1/2-TON Truck Family of Vehicles.
3. REFERENCES:
 - a. FM 21-305, Manual for Wheeled Vehicle Driver.
 - b. TM 9-2320-361-10, Truck, Cargo, 6X6, M35 series vehicles.
4. This POI consists of the following eight tasks:
 - a. Use Appropriate Technical Manual/Lubrication Order.
 - b. Perform Preventive Maintenance Checks and Services (PMCS).
 - c. Operate Vehicle Under Usual Conditions.
 - d. Operate Vehicle Under Unusual Conditions.
 - e. Back and Park the Vehicle.
 - f. Drive Vehicle at Night.
 - g. Operate an M35 series vehicle.
 - h. Wheel vehicle rollover drills.

TASK:#1 Use the appropriate vehicle Technical Manual, TM/Lubrication Order (LO) and make operator entries on DA Form 2404 (or automated DA Form 5988-E).

CONDITIONS: Given instruction, DA Form 2404, a practical exercise, vehicle operator's manual (-10), and LO.

STANDARDS: Follow the instructions in the TM/LO and make the required operator entries on DA Form 2404 in the correct sequence in accordance with DA Pamphlet 738-750. Each student has 15 minutes to complete the practical exercise and will be graded on a GO/NO-GO basis.

TRAINING AND EVALUATION: Ensure all Soldiers use the appropriate operator's manual TM, and LO and make the proper checks and services. The student must

demonstrate proficiency in filling out the form in two situations, no-fault and fault. The recommended time for this instruction is 30 minutes each for class time and practical exercise.

TASK:#2 Perform Preventative Maintenance Checks and Services (PMCS).

CONDITIONS: Given instruction, a DA Form 2404 (or automated DA Form 5988-E), a pencil, appropriate vehicle operator's manual, appropriate trailer operator's manual, equipment records folder, rags, lubricants, coolant, a trailer, and a wheeled vehicle with Basic Issue Items (BII).

STANDARDS: Inspect the vehicle and trailer according to the PMCS tables listed in the operator's level of maintenance, and record all others legibly on DA Form 2404. If no faults are found, make necessary entries on DA Form 2404.

TRAINING AND EVALUATION: Assign students a vehicle/trailer and operator's manuals, and a DA Form 2404. Grade students GO if all faults are recognized and recorded. Recommended instruction time is two hours. The remaining PMCS is performed throughout the course along with driving tasks.

TASK:#3 Operate a 2 ½-Ton Vehicle Under Usual Conditions.

CONDITIONS: Given instruction, DD Form 1970, DA Form 2404, pencil, appropriate vehicle operator's manual, equipment records folder, rags, lubricant, coolant, suitable training area, improved road surface, and a manual transmission vehicle.

STANDARDS: Without accident or injury, operate the vehicle. Conduct visual search, communicate intentions, manage space and speed, monitor for hazards, maneuver in emergencies, and conduct skid control and recovery. Soldier will obey all traffic regulations.

TRAINING AND EVALUATION: This process should include a 12-hour period, which includes one-hour conference, one-hour demonstration, 1.5-hour PMCS portion, and 10 hours of driving. The driving portion should entail the following activities:

- a. Conduct Visual Search.
- b. Seeing ahead and to the sides.
- c. Using the mirrors to see the scene behind the vehicle.
- d. Seeing to the rear. Driver should use these mirrors not only to clear the scene but also to ensure the security of any cargo. Mirrors should also be used when changing gears or speed.
- e. Communicate Intentions.

- f. Communicate intention to make a turn.
- g. Communicate intention to back a vehicle.
- h. Communicate any lane changes to other drivers.
- i. Communicate presence to other drivers using the horn.
- j. Manage Space.
 - (1) Maintain adequate clearance to the sides of the vehicles.
 - (2) Deal with tail-gaters.
 - (3) Manage overhead space.
 - (4) Monitor space below the vehicle for obstructions.
 - (5) Ensure there is adequate space for making a left or right turn.
- k. Manage speed.
 - (1) Control speed on slippery surfaces.
 - (2) Control speed when exiting an interstate highway.
 - (3) Control speed when descending an incline.
 - (4) Control speed in heavy traffic.
- l. Monitor hazards.
 - (1) Monitor the roadway to detect hazards.
 - (2) Observe the driver ahead of you who may not be paying full attention.
 - (3) Detect posted roadway obstructions.
 - (4) Observe any vehicles broken down on the shoulder.
- m. Maneuver in Emergencies.
 - (1) Observe an oncoming car encroaching into the driver lane.
 - (2) Notice any wildlife in the roadway.
 - (3) Observe proper procedures when vehicle has a blowout.

n. Conduct skid control and recovery.

(1) Observe proper procedures when detecting a skid as a result of over acceleration, over braking, or over steering.

TASK:#4 Drive Vehicle Under Unusual Conditions (snow, ice, fog, rain, and bleeding tar).

CONDITIONS: Given a 2 1/2-TON truck, student will operate the vehicle under adverse conditions.

STANDARDS: Student must safely operate vehicle under adverse conditions.

TRAINING AND EVALUATION: Ensure Soldier is knowledgeable with the two major hazards associated in driving during adverse weather conditions, reduced visibility and reduced traction. The following steps should be understood and adhered to:

a. Reduced Visibility:

(1) Travel at reduced speeds.

(2) Do not use high beams. Switch to low beams if on high beams.

(3) Look to the right if blinded by oncoming vehicles.

(4) Do not overrun the headlights, and stay twice the normal distance from the vehicle ahead.

(5) Signal turns sooner than normal.

(6) Apply brakes sooner, and press brake pedal lightly to give early warning of impending stop.

(7) Keep all windows, mirrors, and lights free of snow and ice.

(8) Watch for vehicles and pedestrians pulled off to the side of the road.

(9) Use caution when weather reduces visibility to zero. Exit the road and wait until visibility improves. Do not stop on shoulder with flashers on.

b. Reduced Traction.

(1) Install tire chains if needed for snow or ice.

(2) Pump brakes gradually when stopping on ice or snow.

- (3) Place transmission/transfer case in the appropriate driving range to descend/climb steep hills.
- (4) Place vehicle in motion slowly to prevent the wheels from spinning.
- (5) Press accelerator slowly when changing speed.
- (6) Keep accelerator steady after reaching desired speed.
- (7) Turn vehicle slowly and make gradual adjustments when on slippery surfaces.
- (8) Steer vehicle away from ruts and snow banks.
- (9) Steer straight up and down hills if possible.
- (10) Check for black ice.
- (11) Follow proper procedures when vehicle begins to slide or skid.
- (12) Follow proper procedures when vehicle becomes stuck.
- (13) Drive slowly and test the brakes when driving through slush or water.
- (14) When driving during hot weather, adjust your driving for bleeding tar conditions.

TASK:#5 Back and Park a 2 1/2-TON Vehicle.

CONDITIONS: Given DD Form 1970, DA Form 2404, pencil, appropriate operator's manual, equipment records folder, a wheeled vehicle and ground guides.

STANDARDS: Without causing damage to the vehicle, physical surrounding, or injury to personnel, back and park a vehicle.

TRAINING AND EVALUATION: A driver must demonstrate his ability to back and park a wheeled vehicle. The following four rules should be adhered to:

- a. Inspect your path.
- b. Back and turn toward the driver (sight) side.
- c. Use four way flashers and horn.
- d. Use ground guide(s).

TASK:#6 Drive Vehicle at Night.

CONDITIONS: Given instruction, DA Form 2404, DD Form 1970, pencil, appropriate operator's manual, equipment records folder, improved road surface, and a wheeled vehicle at night.

STANDARDS: Without accident or injury, drive the designated route at night with headlights. Use defensive driving methods. Operate the light switch. Read gauges. Up-shift and downshift the transmission. Manipulate the controls. Use correct braking procedures. Perform basic driving maneuvers.

TRAINING AND EVALUATION: The recommended time allotted to this task should be five hours. This includes a 30-minute conference and 4.5 hours of a practical exercise and PMCS. The driver must demonstrate his competence of the following factors:

- a. Driver factors, to include: glare, fatigue, and driver inexperience.
- b. Roadway factors, to include: low illumination, variation in illumination, familiarity with roads, other road users, and drunk drivers.
- c. Vehicle factors, to include: sight distance of headlights, use of auxiliary lights, use of turn signals, use of windshield wipers and washer, and the use of mirrors.
- d. Night Driving Procedures.
 - (1) Preparation for driving at night includes resting yourself, planning the route, and preparing your vehicle.
 - (2) While driving at night the driver should avoid blinding others with his lights. The driver should avoid glare and maximize his visibility.

TASK:#7 Operate the M35 series vehicle.

CONDITIONS: Given instruction, an M35 series vehicle student must show proficiency in operating the M35 series vehicle.

STANDARDS: Without causing damage to personnel and equipment, student must operate the vehicle.

TRAINING AND STANDARDS: The driver must demonstrate their ability to operate the M35 series vehicle. Score the Soldier GO if all steps are completed correctly. Show what was done wrong and how to do it correctly. Ensure Soldier follows these steps:

- a. Pre-starting procedures.

- (1) Perform all before PMCS tasks.
- (2) Adjust the operator's seat to ensure a good field of vision.
- (3) Adjust left and right review mirrors to provide a clearer view to the rear of the vehicle.
- (4) Ensure that the vehicle's windshield and door windows are clear.

b. Starting the 2 ½-TON Cargo Vehicle.

- (1) Set the hand brake.
- (2) Set the gear shifter to Neutral.
- (3) Set the power take off (PTO) lever to neutral and lock it with the hinge lock.
- (4) Set transfer case lever in either high or low range.
- (5) Depress the clutch pedal to the floor and hold.
- (6) Press starter button and step down on the accelerator pedal until engine starts.
- (7) As soon as the engine starts, slowly let up on the clutch pedal.
- (8) To warm up the engine, pull hand throttle out until the engine is running at 800 RPM as shown on the tachometer.
- (9) Check all gauges for proper readings.

c. Manual Transmission Operation.

- (1) Depress clutch pedal and place shift lever into lowest gear.
- (2) Slowly let up on the clutch pedal, pausing at the friction point or when driver feels it taking hold. Hesitate, then check mirrors for traffic.
- (3) Release parking brake.
- (4) Slowly release clutch pedal and, at the same time, slightly depress accelerator.
- (5) Stopping the Engine.
- (6) Place the accessory switch and all other switches in the OFF position.

(7) Ensure parking brake is ON.

(8) Pull engine stop control knob out to cut off the flow of fuel. Leave it in the out position.

(9) Do all after operations PMCS.

TASK:#8 Wheel Vehicle Rollover Drills.

CONDITIONS: To allow the crew to evacuate a overturned vehicle safely.

STANDARDS: Follow the procedures IAW 2ID REG , -10.

TRAINING AND EVALUATION: The crew must be in proper uniform 2/3 of body must be inside of the hatch while operating the vehicle. In the event of a vehicle roll over, the crew must clear the hatches, drop down inside and brace against or hold on to anything that does not move. The driver/crew or the first member who notices that the vehicle is beginning to roll over announces "ROLLOVER."

Cargo area/Passenger seats	Senior /Vehicle Commander	Driver
Braces for an impact waits for vehicle to stop rolling.	Braces for an impact, waits for vehicle to stop rolling, (time permitting).	Shuts down the engine/ turn off ignition switch (time permitting), and braces for an impact, waits for vehicle to stop rolling.
Announces "ABANDON VEHICLE," exits through or around vehicle to a safe location. assist in evacuation and first aid.	Removes portable fire extinguisher, and exits through or around vehicle to a safe location.	(No fire) Announces "SHUT DOWN," turns VEHICLE MASTER POWER off and exits through safe route
(Fire) Announces (FIRE) if there is a fire, extinguish fire with the help of the crew and Vehicle Commander.	(Fire) Announces (FIRE) if there is a fire, extinguish fire with the help of the crew and Vehicle Commander.	(Fire) Announces (FIRE) if there is a fire, extinguish fire with the help of the crew and Vehicle Commander.

Note: Vehicle is turned over and on its side.

(Water) Announces if vehicle is in water, assist anyone as safe as possible out of danger.

APPENDIX 8, TO ANNEX M, TO 2ID REG 56-4

POIs FOR HMMWV Family of Vehicles
ICW TC 21-305-4

1. SUBJECT: Program of Instruction (POI) for HMMWV Family of Vehicle.
2. PURPOSE: To provide 2ID units guidance for driver initial and sustainment training on the HMMWV Series Vehicles.
3. REFERENCES:
 - a. FM 21-305, Manual for Wheeled Vehicle Driver.
 - b. TM 9-2320-280-10, Operator's Manual for the HMMWV Series Vehicle.
4. This POI consists of the following five tasks:
 - a. Perform Preventive Maintenance Checks and Services (PMCS).
 - b. Operate Vehicle Under Usual Conditions.
 - c. Operate Vehicle Under Unusual Conditions.
 - d. Operate Cargo/Troop Carrier and S250 Shelter Carrier HMMWV.
 - e. Wheel vehicle Rollover Drills.

TASK: #1 Perform Preventative Maintenance Checks and Services (PMCS).

CONDITIONS: Given a HMMWV series vehicle, TM 9-2320-280-10 operator's manual, DA Form 2404 (or automated DA Form 5988-E), ULLS equivalent, and Safety Checklist, perform PMCS under usual conditions.

STANDARDS: Student will successfully explain the use of PMCS tables and perform PMCS using PMCS tables.

TRAINING AND EVALUATION: Have the student explain how to use the PMCS tables. Ensure student understands "Warnings" and "Notes" listed in the PMCS tables. Have the student perform a PMCS on a HMMWV vehicle and note any deficiencies on DA Form 2404 and student should correct any operator level faults. Student must pass all steps to receive a GO. Explain any steps the student failed.

- a. Before (B) checks and services of preventive maintenance must be performed prior to placing vehicle, or its components, into operation.

b. During (D) checks and services of preventive maintenance must be performed while the vehicle and/or its components/systems are in operation.

c. After (A) checks and services of preventive maintenance are performed upon completion of mission.

d. Weekly (W) checks and services of preventive maintenance are performed once every 7 days.

e. Monthly (M) checks and services of preventive maintenance are performed once every 30 days.

f. DA Form 2404 is completed correctly with copy furnished to the unit maintenance section.

TASK:#2 Operate Vehicle Under Usual Conditions.

CONDITIONS: Given a HMMWV series vehicle, TM 9-2320-280-10, vehicle basic issue items, completed DA Form 2404, and unit Safety Checklist, operate the vehicle under usual conditions.

STANDARDS: Student will successfully identify vehicle controls, pressure gauges, normal operating ranges, and read and understand all “Cautions” and “Notes” listed in the vehicle operator’s manual. Student will safely operate vehicle on a hard surface, wearing seat belt at all times, and obeying all traffic regulations.

TRAINING AND EVALUATION: Student should safely operate vehicle under usual conditions following the training and evaluation outline below. Score the student GO if all steps above are passed. If student fails any steps, show what was done wrong and how to perform the step correctly. Ensure the student follows these steps:

a. Starting the engine.

(1) Ensure the vehicle transmission is in “neutral” position, parking brake applied, driver seat adjusted correctly, and left and right mirrors provide a clear view behind the vehicle.

(2) Place rotary switch to “run” and wait until WAIT-TO-START lamp goes out. Place rotary switch to “start” and release the lever after engine starts.

(3) Soldier checks instruments for correct readings while allowing engine to warm up for approximately one minute.

b. Placing the vehicle in motion.

(1) Soldier selects appropriate transfer case position with transmission shift lever placed in neutral.

(2) Set vehicle light switch, depress service brake pedal and release parking brake lever.

(3) Place transmission shift lever in appropriate position to set vehicle in motion.

c. Stopping the vehicle and engine.

(1) Release accelerator pedal and depress service brake pedal to bring vehicle to gradual stop.

(2) Move transmission shift lever to the "NEUTRAL" position and apply parking brake lever.

(3) Turn the light switch to "OFF" and place rotary switch to ENG STOP.

(4) Soldier performs after PMCS.

TASK:#3 Operate Vehicle Under Unusual Conditions.

CONDITIONS: Given a HMMWV series vehicle, TM 9-2320-280-10, vehicle basic issue items, completed DA Form 2404, and unit Safety Checklist.

STANDARDS: Student must safely operate vehicle in unusual conditions.

TRAINING AND EVALUATION: Soldier must perform standards in correct sequence and operate the vehicle in a safe manner. If Soldier fails any step, show what was done wrong and the correct procedure.

a. Extreme cold, on ice, or snow.

(1) Remove ice and snow that has accumulated on vehicle.

(2) Properly apply tire chains.

(3) Place vehicle in motion slowly to prevent wheels from spinning.

(4) Travel at reduced speeds and be prepared to meet sudden changes in road conditions.

(5) Stop the vehicle by pumping the brakes and stopping gradually to prevent skidding.

(6) If rear skidding occurs, let up on the accelerator and turn the steering wheel in the direction of the skid.

b. Dusty, sandy areas.

- (1) Reduce tire inflation.
- (2) Accelerate slowly to prevent the wheels from spinning and digging into the sand.
- (3) Frequently check the air restriction gauge.
- (4) After operating, clean the air filter and lubricate vehicle.

c. Mud.

- (1) Place transfer case in "H/L" and transmission in "D".
- (2) Do not repeatedly shift transmission or over speed the engine during operation.
- (3) In case of skidding turn the steering wheel in the direction of the skid.
- (4) After operating in mud, wash the vehicle with low water pressure as soon as possible.
- (5) Pay close attention to the following, radiator and oil cooler, propeller shaft U joints and half-shafts, and the steering linkage and ball joints.

d. Shallow water-fording operation.

- (1) Never attempt shallow water fording unless water depth is known to be 30 inches (76 cm) or less, and surface is known to be hard.
- (2) Do not exceed 5 MPH (8 KPH) during fording operations.
- (3) Make sure oil dipstick, transmission dipstick, oil filler cap, and fuel tank cap are secure.
- (4) Secure all loose objects on vehicle before fording.
- (5) Do not rely on service brakes after fording until the brakes dry out.
- (6) Vehicles completing fording operations need to be fully lubricated.
- (7) If fording was done through salt water, the vehicle needs to be washed as soon as possible.

e. Run-flat Operations.

(1) M998 series vehicles are equipped with run-flat devices, allowing the vehicle to be driven with one or more tires flat. Do not exceed 20 MPH (32 KPH) for more than 30 miles (48 KM) with both rear tires flat.

TASK:#4 Operate components found on M998 and M1038 cargo/troop carriers and M1037 and M1042 S250 shelter carriers.

CONDITIONS: Given one of the following vehicles, an M998, M1038, M1037, or an M1042 S250 shelter carriers.

STANDARDS: Score the Soldier GO if he/she correctly operates the following components of the vehicle correctly.

TRAINING AND EVALUATION: Soldier must perform standards correctly and safely. If Soldier fails any step, show what was done wrong and the correct procedure.

a. Windshield Assembly.

(1) Correctly and safely lower and raise the windshield.

b. Troop Seat Kit.

(1) Correctly and safely lower and raise the troop seat kit.

c. Removal and Installation of the Soft-Top.

(1) Remove and install the soft-top doors.

(2) Remove and install the bows.

(3) Remove and install the troop area enclosure.

d. S250 rear suspension tie-down kit.

(1) Correctly and safely install and remove the S250.

(2) Ensure suspension tie-down bracket is fully seated to upper spring mount bracket and nut.

(3) Suspension tie-down bracket could spring free under tension.

TASK:#5 Wheel Vehicle Rollover Drills.

CONDITIONS: To allow the crew to evacuate a overturned vehicle safely.

STANDARDS: Follow the procedures IAW 2ID REG, -10.

TRAINING AND EVALUATION: The crew must be in proper uniform 2/3 of body must be inside of the hatch while operating the vehicle. In the event of a vehicle roll over, the crew must clear the hatches, drop down inside and brace against or hold on to anything that does not move. The driver/crew or the first member who notices that the vehicle is beginning to roll over announces “ROLLOVER.”

Cargo area/Passenger seats	Gunner (M996)	Senior /Vehicle Commander	Driver
Braces for an impact waits for vehicle to stop rolling.	Drops down in hatch, exits once the vehicle stops rolling, and brace for an impact.	Braces for an impact, waits for vehicle to stop rolling, (time permitting).	Shuts down the Engine/ turn off ignition switch (time permitting), and braces for an impact, waits for vehicle to stop rolling.
Announces “ABANDON VEHICLE,” exits through or around vehicle to a safe location. Assist in evacuation and first aid.	Disconnects CVC cord, and exits through or around vehicle to a safe location, assist in evacuation and first aid	Removes portable fire extinguisher, and exits through or around vehicle to a safe location.	(No fire) Announces “SHUT DOWN,” turns VEHICLE MASTER POWER off and exits through safe route
(Fire) Announces (FIRE) if there is a fire, extinguish fire with the help of the crew and Vehicle Commander.	(Fire) Announces (FIRE) if there is a fire, extinguish fire with the help of the crew and Vehicle Commander.	(Fire) Announces (FIRE) if there is a fire, extinguish fire with the help of the crew and Vehicle Commander.	(Fire) Announces (FIRE) if there is a fire, extinguish fire with the help of the crew and Vehicle Commander.

Note: Vehicle is turned over and on its side.

(Water) Announces if vehicle is in water, assist anyone as safe as possible out of danger.

APPENDIX 9, TO ANNEX M, TO 2ID REG 56-4

POIs FOR TMP Vehicles

1. SUBJECT: Program of Instruction (POI) for TMP Vehicles.
2. PURPOSE: To provide 2ID units guidance for driver initial and sustainment training on the TMP Vehicles.
3. REFERENCES:
 - a. TMP SOP.
4. This POI consists of the following five tasks:
 - a. Perform Preventive Maintenance Checks and Services (PMCS)
 - b. Operate Vehicle Under Usual Conditions.
 - c. Operate Vehicle Under Unusual Conditions.
 - d. Dispatching Procedures.
 - e. Wheel Vehicle Rollover Drills.

TASK: #1 Perform Preventative Maintenance Checks and Services (PMCS).

CONDITIONS: Given a TMP vehicle and DA Form 2404 (or automated DA Form 5988-E), ULLS equivalent, perform PMCS under usual conditions.

STANDARDS: Student will successfully complete before, during, after PMCS, and services on a TMP vehicle.

TRAINING AND EVALUATION: Have the student explain how to do PMCS. Ensure student understands “Warnings” and “Notes” listed in the owner’s manuals. Have the student perform a PMCS on a TMP vehicle and note any deficiencies on DA Form 2404. Student must pass all steps to receive a GO. Explain any steps the student failed.

TASK:#2 Operate a TMP Vehicle Under Usual Conditions.

CONDITIONS: Given a TMP vehicle, student will operate vehicle under usual conditions.

STANDARDS: Student will successfully identify vehicle controls, pressure gauges, normal operating ranges, and read and understand all “Cautions” and “Notes” listed

in the vehicle operator's manual. Student will safely operate vehicle on a hard surface obeying all traffic regulations.

TRAINING AND EVALUATION: Student should safely operate vehicle under usual conditions following the training and evaluation outline below. Score the student GO if all steps above are passed. If student fails any steps, show what was done wrong and how to perform the step correctly. Ensure the student follows these steps:

- a. Adjust mirrors, seat and installs safety belts.
- b. Start Vehicle.
- c. Place vehicle in motion.
- d. Ensures all gauges are at proper operating range.
- e. Turns on lights as needed.
- f. Shifts transmission lever to desired position.
- g. Releases parking brake control.
- h. Accelerates, brakes, and steers as required.
- i. Stopping vehicle smoothly and turning off lights and engine.

TASK:#3 Operate a TMP Vehicle Under Unusual Conditions.

CONDITIONS: Given a TMP vehicle, student must operate vehicle under unusual conditions.

STANDARDS: Student must safely operate vehicle in unusual conditions, up and down steep grades, and in slippery conditions. Student must understand different vehicle characteristics under these listed conditions.

TRAINING AND EVALUATION: Student should safely operate vehicle under unusual conditions following the training and evaluation outline below. Score the student GO if all steps below are passed. If student fails any steps, show what was done wrong and how to perform the step correctly. Ensure the student follows these steps under the listed conditions:

- a. Extreme Cold, On Ice, and Snow.
- b. Dusty Sandy Areas (Limited Visibility).
- c. Mud.

d. Rain.

TASK:#4 Dispatching Procedures.

CONDITIONS: Given a TMP vehicle to dispatch perform proper dispatching procedures IAW TMP SOP.

STANDARDS: Follow the instructions outlined in the TMP SOP and make the required entries on DA Form 2404.

TRAINING AND EVALUATION: Ensure all Soldiers know the proper procedures for dispatching a TMP vehicle. Score the Soldier a GO if all tasks are completed correctly. If a task is failed inform the Soldier what was done wrong and how to do it correctly.

- a. Perform PMCS.
- b. Have required documents.

(1) DIT Card, Spring/Summer or Fall/Winter, OF 346/5984-E, Completed DA Form 2404.

TASK:#5 Wheel Vehicle Rollover Drills.

CONDITIONS: To allow the crew to evacuate a overturned vehicle safely.

STANDARDS: Follow the procedures IAW 2ID REG, -10.

TRAINING AND EVALUATION: The crew must be in proper uniform 2/3 of body must be inside of the hatch while operating the vehicle. In the event of a vehicle roll over, the crew must clear the hatches, drop down inside and brace against or hold on to anything that does not move. The driver/crew or the first member who notices that the vehicle is beginning to roll over announces “ROLLOVER.”

Cargo area/Passenger seats	Senior /Vehicle Commander	Driver
Braces for an impact waits for vehicle to stop rolling.	Braces for an impact, waits for vehicle to stop rolling.	Shuts down the engine/ turn off ignition switch (time permitting), and braces for an impact, waits for vehicle to stop rolling.

<p>Announces "ABANDON VEHICLE," exits through or around vehicle to a safe location. assist in evacuation and first aid.</p>	<p>Removes portable fire extinguisher, and exits through or around vehicle to a safe location.</p>	<p>(No fire) Announces "SHUTDOWN," turns VEHICLE MASTERPOWER off and exits through safe route</p>
<p>(Fire) Announces (FIRE) if there is a fire, extinguish fire with the help of the crew and Vehicle Commander.</p>	<p>(Fire) Announces (FIRE) if there is a fire, extinguish fire with the help of the crew and Vehicle Commander.</p>	<p>(Fire) Announces (FIRE) if there is a fire, extinguish fire with the help of the crew and Vehicle Commander.</p>

Note: Vehicle is turned over and on its side.

(Water) Announces if vehicle is in water, assist anyone as safe as possible out of danger.

APPENDIX 10, TO ANNEX M, TO 2ID REG 56-4

POI FOR GENERATORS
ICW TC 21-305-

1. SUBJECT: Program of Instruction (POI) for Generators.
2. PURPOSE: To provide 2ID units guidance for driver training and sustainment training on Generators.
3. REFERENCES:
 - a. Appropriate Operator's Manual.
4. The POI consists of the following tasks:
 - a. Perform Preventive Maintenance Checks and Services (PMCS).
 - b. Operate a Generator Under Usual Conditions.

TASK: #1 Perform Preventive Maintenance Checks and Services (PMCS) on Generator

CONDITIONS: Given a generator, DA Form 2404, BII, and the appropriate operator's manual perform PMCS on a generator.

STANDARDS: The Soldier must perform the designated PMCS on the generator, correcting those faults that can be corrected by the operator. The Soldier must report those faults that cannot be corrected on the DA Form 2404 (or automated DA Form 5988-E).

TRAINING AND EVALUATION: Ensure the Soldier performs PMCS on a generator IAW PMCS tables in the appropriate operator's manual. Inform Soldier what was done wrong and how to do it correctly. The Soldier must receive a GO on all steps of PMCS according to the PMCS table.

TASK: #2 Operate a Generator Under Usual Conditions

CONDITIONS: Given a generator with necessary operational equipment. Soldier will operate the generator in usual conditions.

STANDARDS: Operate generator carefully, especially if you are not familiar with generators. Avoid shock hazard by grounding the generator. Ensure Soldier operates the generator for a minimum of 30 minutes.

TRAINING AND EVALUATION: Soldier must operate generator under usual conditions following the training and evaluation outline below. Score the Soldier GO if all steps below are passed. If Soldier fails any step, show what was done wrong and how to do it correctly. Ensure Soldier follows these steps:

- a. Fill crankcase (Do not overfill), and fuel tank.
- b. Ground generator.
- c. Connect load terminals.
- d. Move master switch to “preheat” position and hold for 30 seconds.
- e. Move master switch to “start” position and hold until engine fires (If engine does not start within 30 seconds repeat step d and e).
- f. After warming up, adjust frequency and voltage if necessary.
- g. Move circuit breaker to ON position.

APPENDIX 11, TO ANNEX M, TO 2ID REG 56-4

POIs FOR Night Vision Devices
ICW TC 21-305-2

1. SUBJECT: Program of Instruction (POI) for Night Vision Devices when operating vehicles.

2. PURPOSE: To provide 2ID units guidance for driver initial and sustainment training on Night Vision Devices.

3. REFERENCES:

a. TC 21-305-2.

b. Operator's Manual, TM 11-5855-238-10, TM 11-5855-262-10-1, TM 11-5855-262-10-2.

c. FM 21-305.

d. AR 600-55.

4. This POI consists of the following tasks:

a. Perform Preventive Maintenance Checks and Services (PMCS).

b. Principles of Night Vision.

c. NVG General Characteristics.

d. AN/PVS-7 Night Vision Goggle (Part I).

e. AN/PVS-7 Night Vision Goggle (Part II).

f. NVG Driving Techniques and Procedures.

(1) Driving with Night Vision Goggles, Phase I.

(2) Driving with Night Vision Goggles, Phase II.

(3) Driving with Night Vision Goggles, Phase III.

(4) Driving with Night Vision Goggles, Phase IV.

g. Perform PMCS, Phase V.

TASK:#1 Perform Preventative Maintenance Checks and Services (PMCS).

CONDITIONS: Given a set of NVG's, DA Form 2404, appropriate operator's manual, and necessary operational equipment, perform PMCS on the NVG's.

STANDARDS: Soldier will perform PMCS on NVG's IAW the appropriate operator's manual PMCS tables.

TRAINING AND EVALUATION: Ensure the Soldier performs the steps IAW PMCS tables in appropriate operator's manual. Score the Soldier a GO if all steps are passed. If Soldier fails any step, show the Soldier what was done wrong and how to do it correctly. Ensure the Soldier follows the appropriate steps.

TASK:#2 Principles of Night Vision

CONDITIONS: Given this lesson, viewgraphs, quiz, and a classroom, instruct the Soldiers on principles of night vision.

STANDARDS: Soldiers must receive this classroom portion before any NVG driving will be allowed.

TRAINING AND EVALUATION: To receive a GO on this lesson, the student must correctly answer no less than 10 out of 14 questions on the quiz within 15 minutes.

- a. Training time will be no less than 1.5 hours.
- b. Will be held in a classroom if available.
- c. All Soldiers who will be driving with NVG's will attend this course.
- d. Classes should be limited to no more than 20 students at a time.
- e. Each student should be provided with a student handout.

(1) Interest device. Obtain the students attention. State the purpose of the class and motivate the students to learn the objective.

(2) Tie-in. Knowing the principles of night vision will permit your understanding of the use and functioning of night vision goggles.

Vision. This is the most important sense you use while driving. It is the sense that makes you aware of the position of your vehicle in relation to the road. You need good depth perception for determining height and distance, good visual acuity for identifying terrain features and obstacles, and good night vision techniques for efficiency in night operations.

Anatomy of the eye. The cornea is the clear, protective part of the eye that covers the iris and pupil. The iris is the colored portion of the eye. The pupil is a hole in the

center of the iris. The size of the pupil varies with amount of light entering the eye. That is, it gets smaller with increased light and larger with less light. The lens can change shape to focus on objects at different distances from the eye. The retina is the lining at the back of the eye where the image is formed. The picture seen by the retina is sent to the brain along the optic nerve.

How the eye works. Light enters your eye through the pupil. The amount of light entering the eye is controlled by the iris. The light passes through the lens, which focuses it onto the retina at the back of the eye. The picture seen by the retina is upside down and the brain turns it right way up.

Visual Acuity. This is how well you see. It is determined for each eye by reading a standard eye chart. A short hand notation records acuity, with normal recorded as 20/20.

Three types of vision. Photopic vision is used during daylight hours or when a high level of artificial light exists. Mesopic vision is used at dawn, dusk, and during periods of mid-light levels. A reduction in color vision and visual acuity occurs as the light level decreases. Scotopic vision is used when low-level light conditions exist, such as night. Visual acuity decreases to 20/200 or less and total loss of color vision occurs.

Visual problems affecting night vision. Presbyopia is common in individuals over 40 years of age. Light transmission from the lens to the retina decreases. Instruments, maps, and so forth, are more difficult to read, especially in red light. This can be corrected with certain types of bifocal lenses. Night myopia occurs in a person who is nearsighted (myopic). He will experience blurred vision at night. Special lenses can be prescribed to correct this. Astigmatism is an out of focus condition in the eye. For example, if you focus on power poles, the wires will be out of focus in most cases. It can be corrected with prescription eyeglasses.

Dark adaptation. This is the process by which your eyes increase their sensitivity to low light levels. Maximum dark adaptation is reached in about 30 to 45 minutes. Exposure to a flare or lightening may require 5 to 45 minutes for night vision recovery.

Night tactical operations precautions. If a flash or high intensity light is expected from a specific direction, turn your head away from the light source. If direction is not known, close one eye. Once the light source is no longer a factor, the eye that was closed will provide enough night vision to continue driving. The reason for this is because dark adaptation occurs independently in each eye. Select routes to avoid built up areas where there is a heavy concentration of light. Maneuver your vehicle away from the flare or high intensity light source to the edge of the lighted area. Use short bursts of fire when firing automatic weapons.

Self imposed stresses. Smoking, the smoker effectively reduces his night vision ability by 20 percent. Alcohol impairs both coordination and judgment. Fatigue, when you are tired, you are not mentally alert; fatigue will slow down your response

to night situations that require immediate reaction. Nutrition, hunger pains lead to distraction and a shortened attention span. Failure to eat foods that provide sufficient vitamin A (eggs, cheese, carrots) can reduce night vision. Physical conditioning, you should exercise daily. Good physical conditioning will help you conduct night driving with less fatigue. However, too much exercise in a given day may leave you too tired. Sleep, night driving is more tiring and stressful than day driving. Therefore, it is important to get enough rest and sleep before driving.

Scanning techniques. Night vision scanning techniques are important in object identification at night. Scan from right to left, or left to right, using a slow, regular scanning movement.

Identification by shape. Because your visual acuity is greatly reduced at night, objects must be identified by their shape or outline. Being familiar with the architectural design of structures common to your area will help.

Depth perception. This is the quality of seeing objects as three-dimensional solids in space. Perhaps it gave our tree dwelling forefathers an edge when they swung from branch to branch. They knew exactly where in space that next branch was located.

Linear perspective. Parallel lines, such as railroad tracks, tend to converge as distance increases from the observer. Apparent foreshortening, the apparent shape of an object or terrain feature appears oval when viewed from a distance. Vertical position on the field, objects or terrain features at a distance from the observer appear higher on the horizon than objects or terrain features that are closer to the observer. Motion parallax, this clue to depth perception is often considered the most important. It refers to the apparent motion of still objects as seen by an observer moving across the landscape. For example, mountains in the distance appear to be moving with the vehicle. Retinal image size, the size of an image focused on the retina is perceived by the brain to be a certain size. The nearer a known object is to the observer, the larger is its retinal size. If the image decreases, the object is moving away. Comparison of an object such as a motor pool with an object of known size, such as a 5-Ton truck, will help to determine the object's relative size and distance from the observer.

Visual illusions. Autokinesis, when a person stares at a still light in the dark, the light will appear to move in about 8 to 10 seconds. Relative motion, a person sitting in a car waiting for a train to pass often experiences the illusion of relative motion. Even though the car is not moving, the person has the sensation that it is moving. Structural illusions, these are caused by heat waves, rain, snow, or other factors that obscure vision. For example, a straight line may appear to be curved when seen through a desert heat wave.

Nerve agents and night vision. Night vision is adversely affected by exposure of the eyes to small amounts of nerve agents. Leaders should assume that there will be some loss of night vision among personnel otherwise fit for duty.

Sources of ambient light. Moon, the moon provides the greatest source of ambient light at night. Light from the moon is brightest when the moon is at its highest point in the sky. Background lighting, besides the moon, other natural light sources contribute to night brightness, such as the aurora (northern lights in the Northern Hemisphere) and starlight. Artificial lights, lights from cities, cars, fires, and flares are sources of illumination. Solar light, this light is usable for certain periods following sunset and before sunrise. Lasers, lasers can affect the performance of the naked eye or night vision devices.

Weather considerations that reduce illumination. The following conditions reduce illumination: Cloud coverage of the moon and stars, High moisture content (dew), Fog, dust, haze, and smoke.

NOTE: A lightning flash is one weather phenomenon that increases illumination, although, this may have a derogatory impact on your eyes or night vision devices.

TASK:#3 NVG GENERAL CHARACTERISTICS

CONDITIONS: Given this lesson and viewgraphs, quiz, and a classroom or suitable location to give classroom activities.

STANDARDS: The student will demonstrate a basic knowledge of the general characteristics and limitations of NVG's.

TRAINING AND EVALUATION: To receive a GO on this lesson, the student must correctly answer no less than 10 out of 13 questions on the quiz within 15 minutes. Training time is a minimum of 1.5 hours.

a. Introduction. Interest device, obtain the student's attention. State the purpose of the class and motivate the students to learn the objective. Tie-in, night vision goggles overcome some of the limitations we learned in the principles of night vision.

b. Explanation.

(1) Night vision goggles. NVG's are devices that make an object more visible during periods of low light levels. Performance is directly related to the amount of available light, such as starlight and moonlight.

(a) Advantages. NVG use gives a better view of the surrounding area and object identification during low light levels. NVG's make it possible to read, patrol, provide medical aid, drive, walk, and observe the enemy at night without the help of lights.

(b) Disadvantages. NVG performance is reduced in rain, haze, fog, snow, or smoke. Also, NVG's do not magnify images viewed through the tubes.

An object viewed through the goggles at night will be the same size as if it were seen during the day without the goggles. Objects that are difficult to see during the day with the naked eye are also hard to detect at night with NVG's.

(2) Visual acuity. A driver with 20/20 vision using NVG's will have, at best—20/40 vision with the PVS-7.

(3) Field of view. The field of view with the NVG's is 40 degrees compared to 200 degrees unaided.

(4) Depth perception and distance estimation.

(a) NVG's provide their best depth perception between 20 to 500 feet.

(b) NVG's decrease depth perception at distances less than 20 feet or greater than 500 feet.

(c) Depth perception capability for NVG's will be less than daytime unaided but better than nighttime unaided.

(5) User overconfidence. This seems to be the main problem associated with NVG use. After wearing the device for a short period, the user begins to feel he has complete visual acuity and depth perception when in fact he does not.

(6) Focal range. The NVG will focus from 10 inches to infinity.

(7) IR illuminator. This feature allows viewing at close range, such as map reading. (Two major problems are created when the IR illuminator is used. First, it makes the NVG an active system that can be detected by threat's night vision devices. Second, the battery power is consumed six times faster).

(8) Nighttime use only. Operate the goggle under nighttime conditions only. To prevent damage to the tubes, operate the NVG in high light conditions only if day vision filters or objective lens caps are attached.

(9) Single color viewing. All objects viewed through the NVG's will appear as a single color, green or yellow, depending upon the NVG's construction. NVG's do not provide for color discrimination. As a result, it is difficult to distinguish between certain objects or features. Shadows, for example, are difficult to distinguish from puddles of water, walls, ditches, and vice versa when viewed through the goggles at night. It is critical that drivers take the lack of color discrimination into account when using NVG's.

(10) Monochromatic (one-color) adaptation. Upon reentering a high ambient light environment after wearing the NVG for an extended time, you may experience a

tint or discoloration of objects viewed with the unaided eye. This is a normal physical reaction that causes no discomfort and disappears after a short time.

(11) Dark adaptation. Under ideal conditions (total dark adaptation before NVG use and removal of NVG's in a dark environment), you can expect to regain full dark adaptation in about 2 minutes.

(12) Spatial disorientation. Dizziness and nausea may be caused by driving with one tube focused inside the vehicle and the other tube focused outside the vehicle.

(13) Second versus third generation tubes. There are two distinct generations (models) of NVG tubes with militarily significant performance differences: second and third.

(a) AN/PVS-7 tubes were produced in both second and third generation versions.

(b) Third generation tubes have increased performance and longer tube life (about 7,500 hours). When they eventually fail, they tend to fail quickly.

(c) Second generation tubes have a tube life projected at about 2,500 hours. They tend to fail slowly, so it is important that maintenance personnel check the devices periodically.

(d) Resolution checks are required on all NVG's every 180 days.

(14) Battery. Always remove the battery before storing the goggles. When installing or removing a battery, make sure the selector switch is in the OFF position. If the rotary switch is in the ON position when installing the batteries, it causes an electrical surge, which can damage the tubes.

WARNING: Batteries have safety vents to prevent explosion. When they are venting gas, you will smell it (very irritating) or hear the sound of gas escaping. Handle with care! Do not heat, puncture, disassemble, short circuit, recharge, or otherwise tamper with the batteries.

(15) Tube defects. Refer to the AN/PVS-7 NVG Operator's Manual for details on proper image intensifier operation. Inspect each tube for faults.

The following unacceptable faults make NVG driving unsafe:

- Shading. Both tubes should show a perfect circle. If shading is present, you will not see a fully circular image.
- Edge glow. Edge glow is a bright area in the outer portion of the viewing area. To check for this defect, block out all light by cupping your hand over the lens.

If the bright area is still visible, turn the NVG in to DS maintenance.

- Flashing, flickering, or intermittent operation. The NVG may appear to flicker on and off or the output may flash. This can occur in one or both tubes. If you see more than one flicker, consult the troubleshooting chart in the operator's manual.

The following are acceptable faults for NVG driving:

- Bright spots/white dots. This condition is caused by a pinhole in the phosphorous screen. Spots may flicker or may appear constant. Check by cupping your hand over the lens to block out all light. If bright or white spots appear, then turn the NVG in to DS maintenance. Bright spots are acceptable if they do not interfere with the ability to view the outside scene and perform the mission.
- Dark spots/black dots. Black marks that may look like spots or streaks are acceptable as long as the marks do not interfere with the mission.
- Fixed pattern noise/honeycomb. A faint honeycomb pattern occurs most often at high light levels. This condition is acceptable as long as the pattern does not interfere with the mission.

(16) Goggle operating temperature. The operating temperature for the AN/PVS-7 is from 113 degrees to -60 degrees.

TASK: #4 AN/PVS-7 NIGHT VISION GOGGLE (PART I)

CONDITIONS: Given this lesson, viewgraphs, -10 operator's manual, quiz, and classroom.

STANDARDS: The student will correctly identify and describe component nomenclatures, functions, and characteristics of NVG's.

TRAINING AND EVALUATION: To receive a GO on this lesson, the student must correctly answer no less than five out of six questions on the quiz within 10 minutes. Training time should be no less than 1.5 hours.

- a. OFF-ON-PULL IR switch/rotary switch. This switch controls goggles and IR illuminator power, ON or OFF.
- b. Image intensifier tubes. These tubes amplify available light.
- c. Objective lens/lenses. This lens focuses the light on the image intensifier.
- d. Objective lens cap/caps. This protects the objective lens.

e. Objective focus. This is used to focus objective lens/lenses independently from 10 inches to infinity. Adjust for sharpest view. The majority of driving requires the optical infinity setting.

f. Diopter adjustment rings. These are used to focus your eyes (without eyeglasses) within the compensation range of 20/10 to 20/200. Focus one eye at a time. System must be ON before making the inter-pupillary distance and focus adjustments. This adjustment accommodates some of the problems, such as farsightedness experienced by persons who wear corrective lenses. However, it will not correct for astigmatism. It is recommended that corrective lenses (eyeglasses/contact lenses) be worn with the NVG.

(5) The sharpest image will be observed only when the objective lens/lenses and both eyepieces are properly focused. These adjustments operate independently and must be made separately. Adjust distance, diopter, then distance and diopter until the best focus is achieved. When properly focused, the following lines on the eye chart (Appendix B) should be readable at these distances:

	<u>10 FEET</u>	<u>20 FEET</u>
AN/PVS-7 series	20/20	20/40

g. Inter-pupillary (eye span) adjustment. This adjusts the tubes for the desired IPD. Improper setting of the IPD will result in a distorted image and can contribute to eye fatigue. When properly set, the user should see a full circle.

h. IR illuminator. This provides light for viewing up to 3 meters in low ambient light conditions, such as for reading instruments and maps, and is invisible to the naked eye.

i. Battery compartment. This houses the various batteries. Do not use the goggles with more than one type of battery.

j. Head strap assembly and snaps. This assembly secures the goggles to the operator's head. Ensure proper adjustment for stability and comfort. (All NVG driving operations will be conducted with the NVG secured in the head harness and worn on the driver head).

k. Eyepiece lens cap. This protects the eyepiece lens and prevents light from leaking around the eyepiece.

l. Demisting shields. These are used to prevent the eyepiece lenses from becoming fogged.

m. Sacrificial window (AN/PVS-7). This is used during adverse operating conditions, such as in sandy or dusty environments, which could scratch or abrade the objective lens.

n. Latch (AN/PVS-7 only). This is used for separation of goggle assembly from head mount assembly. If ON, goggles will automatically shut off when separated from the head mount.

o. High light detector (AN/PVS-7). This automatically shuts off the goggles after 30 to 60 seconds of operation in daylight or bright room light. Individual bright lights (headlights, flashlights, or other concentrated light sources) will not activate the high light shut off unless focused directly on the detector.

TASK: #5 AN/PVS-7 NIGHT VISION GOGGLES (PART II)

CONDITIONS: Given this lesson, -10 operator's manual, NVG, eye charts, and a classroom.

STANDARDS: The student will demonstrate a basic knowledge on operational procedures and maintenance of the NVG.

TRAINING AND EVALUATION: To receive a GO on this lesson, the student must correctly perform NVG PMCS procedures, place the NVG into operation, and achieve the proper focus all within 5 minutes. Training time will be a minimum of 2.5 hours.

a. If you have the video show the video.

b. Follow the step by step procedures contained in applicable technical manual for the following activities:

(1) The pre-operational and post-operational checks do not require the student to turn the goggles on. Therefore, the checks may be conducted in a lighted classroom or during daylight hours in a field/simulated field environment.

(2) Instruction on placing the goggles in operation will require low light conditions. In a classroom, this may be done with all lights turned off except for a small light source, bright enough for the goggle to operate under, for example, a low intensity light stick or a 7-½ watt light bulb. In a field/simulated field environment, the instruction must be conducted at night. (The goggles can be used in cloudy starlight to bright moonlight.) This is the preferred method as it gives the student an appreciation for how objects are seen at night through the goggles. Make every effort to schedule this block of instruction when the moon provides not less than 25 percent illumination (quarter moon) and is positioned at least 30 degrees above the horizon.

(3) Focusing the goggles is best accomplished with the aid of an eye chart (Appendix B, FM 21-305). Hang it on a tree (or wall if in a classroom) and slightly lower than eye height. The desired distance is 20 feet from the chart to the viewing line. If in a classroom, attach the light to the ceiling about 10 feet away from the eye chart and position the light so that it will not create a glare for the viewer.

(4) Once the students conduct their pre-operational checks and have the goggles properly focused, familiarize them with the terrain as seen through the goggles. Do this by having them walk a short route (15 to 20 minutes). Make sure the route is free of any vehicular traffic. Point out ditches, shadows, gullies, ravines, signs, and so forth. (This may be the same route the students will use during driving maneuvers.)

(5) The last activity requires the student s to perform post-operational checks of the NVG.

NOTE: Explain to the students that they will be tested in this block of instruction during the driving performance test.

TASK: #6 NVG DRIVING TECHNIQUES AND PROCEDURES

CONDITIONS: Given this lesson, viewgraphs, range limitations, and speed limitation graphs, quiz, and class notes.

STANDARDS: The student will demonstrate a basic knowledge of specific driving techniques, procedures, and precautions while wearing the NVG.

TRAINING AND EVALUATION: To receive a GO on this lesson, the student must correctly answer no less than 11 out of 14 questions on the quiz within 15 minutes. Instructional time is no less than 2 hours.

a. Effects of light. NVG compatibility is best achieved by eliminating all interior and exterior vehicle lighting. Instruments and gauges can be read with NVG's without the aid of instrument lighting. No dark adaptation period is necessary for effective viewing through NVG's, but a short adjustment period will be given when changing from white light to NVG driving. Lasers will be used on the battlefield. Most lasers will degrade the performance of NVG's, but will not cause permanent damage to NVG's. Viewing an area lit by artificial lights, such as flares, will limit your ability to see objects outside the lighted area. Try to keep the light source outside the field of view of the goggles. Using goggles will allow you to detect light sources at great distances that are not visible to the unaided eye; for example, flashlights, burning cigarettes, chemical light sticks, and IR light source. The capability of goggles to detect these light sources improves as the ambient light level decreases.

b. Weather considerations when driving with NVG's. The effectiveness of NVG's is greatly reduced in rain, haze, fog, snow, and/or smoke. NVG's also have a limited ability to detect rain, haze, or fog before you enter the area of reduced visibility. Visual clues to the presence of visibility restrictions include: a halo around artificial lights as seen through the goggles, an increase in "image noise" (similar in appearance to the "snow" seen on television with poor reception).

c. Ground speed limitations.

(1) The normal tendency of most drivers is to overdrive their capability to see! To avoid obstacles, you must understand the relationship between the NVG visual range capability and speed of your vehicle.

(a) The range limitation graph (Appendix C, FM 21-305) shows how to determine the maximum range at which an object can be identified. It addresses a hazard 3 meters long, and 15 centimeters in diameter (the size of a small pole or a bare tree).

(b) To find the range at which an object can be detected in a given ambient light condition:

- (1) Enter the chart along the top at a point representing the ambient light conditions; for example, 25 percent illumination or quarter moon.
- (2) Move down until the range curve is intercepted. The range an object can be detected is read at the left, for example, 75 meters.

(c) After computing the range at which an object can be detected, use the ground speed limitation graph (Appendix C, FM 21-305) to determine a safe speed for driving with NVG's.

- (1) Enter the graph along the left side at the predetermined detection range (staying with the previous example, locate 75 meters).
- (2) Move right until the 10-second driver response line is intercepted. This line measures the time it takes for the operator to react to an object at a given distance and speed.
- (3) From the intersection, move down and read the safe speed for driving with goggles (in this example, about 15 MPH).

NOTE: These graphs are not exact; however, they give planners a good, rough estimate of the working range of the goggles for determining safe vehicle speed limits.

d. Other factors that you must consider to drive at a safe speed when wearing NVG's are:

- (1) Type of NVG being used for driving, and the generation of the image intensifier tube (second or third).
- (2) Type of vehicle used for training.
- (3) Mode of driving, such as convoy and off-road.

(4) Terrain.

(5) Amount of light available (natural and artificial).

(6) Vehicle preparation.

(a) Keep windshields clean. Remove dirt, grease, and bugs.

(b) Turn off all exterior and interior lights. Tape over those, which cannot be turned off.

(7) Driver preparation.

(a) Keep physically fit.

(b) Eat a well balanced meal.

(c) Get adequate rest.

(d) Avoid self medication.

(e) Avoid the use of tobacco and alcohol.

(f) As much as possible, avoid all bright lights (including sunlight during the day). Wear sunglasses when outside.

(g) Participate in frequent night driving.

(8) Driving with goggles.

(a) The ability to drive with goggles is developed through continuous hands on training. The key to that training lies in awareness and understanding of NVG capabilities and limitations.

WARNING: NVG's should never be used on public highways. The effect of oncoming headlights on the device may cause some very dangerous situations, as the operator will not be able to see other objects in the field of view. If the light is significantly bright, the devices all have a bright source protection feature that shuts down the NVG to protect it. If the bright source protection is activated, the NVG will be off for at least 2 seconds. In addition, drivers without NVG's are unlikely to see your vehicle.

Although unlikely to occur, drivers with NVG's may face the above situation in an NVG controlled training area. To minimize the effect on NVG's by the headlights from an oncoming vehicle while avoiding a potentially serious accident, do the following:

- Slow down.

- Look away so that the light source is just outside the goggles field of view.
- Pull off to the far right hand side of the road (use caution when pulling to the side of the road to avoid an unintended departure from the roadway).

NOTE: NVG training at this point is now compromised as other vehicles with headlights on may appear. Do not continue driving with NVG's unless authorized to do so by a responsible officer/individual, such as range control personnel.

In the event of a malfunction, follow these procedures:

- If your vehicle malfunctions or if the NVG's exhibit the faults discussed earlier in NVG general characteristics, such as shading, flashing, and flickering, slow down and pull off to the far right hand side of the road (use caution when pulling to the side of the road to avoid an unintended departure from the roadway). Warn approaching NVG equipped drivers with hand and arm signals and NVG compatible light sources (IR light stick). Do not turn on your four way flasher lights as this may blind approaching drivers equipped with NVG's.
- If your vehicle malfunctions on a road hidden from approaching drivers by a curve or hill, walk back along the shoulder of the road to a position where you can signal them to slow down in time. Do not attempt to make repairs on your vehicle while it is in an exposed position on the road.
- If you are in a vehicle and observe the scene described above, slow down and proceed with caution.
- If the NVG's low battery indicator turns on, replace the batteries. Do not wait until the goggles shut down while driving because of weak or dead batteries. Slow down and pull off to the far right hand side of the road (be very careful). Make sure you (or the assistant operator) warn approaching traffic first before attempting to switch batteries from another NVG or replacing the batteries if spares are available. Do not switch goggles, as you will have to refocus the device to suit your eyesight.

(9) Other Considerations:

(a) Since the field of view is greatly reduced, you must use a slow, continual scanning pattern to compensate for this.

(b) Operating a vehicle with the goggles over the NBC mask will further reduce your field of vision to about 20 degrees. (This practice is not recommended)

(c) Driving with one lens focused inside and one focused outside the vehicle can cause spatial disorientation, and is not recommended.

(d) When driving in convoy, the major concern is to keep a safe distance between vehicles and to maintain proper speed discipline. Speed limits should not exceed those established for blackout driving without NVG's. For safety reasons, permit convoy driving with NVG's only if every driver and assistant driver is NVG equipped. If there are not enough NVG's for this, a mix of NVG and blackout drive may be used. The NVG equipped vehicles should be grouped together in the rear of the convoy, rather than being dispersed and intermixed with other vehicles not equipped with NVG's. If grouped in this manner, make sure that the last non-NVG equipped vehicle has its rear blackout drive lights off.

(e) All NVG driving operations will be conducted with the NVG secured in the head harness and worn on the driver's head.

(f) Assistant (shotgun) drivers with NVG's can assist primary drivers by compensating for lack of peripheral vision. They must keep the driver informed of any obstacles in or outside his field of view. Communication is a must! Drivers, on the other hand, must keep assistant drivers informed of any deterioration in vision caused by weather, eye fatigue, or goggle malfunction.

(g) Primary operators must focus their goggles for distance vision even though this will make instrument reading difficult. Assistant drivers can compensate for this by alternating between distance and close up viewing and keeping the primary operator informed of any critical instrument lights that may turn on. Depending on vehicle configuration, the assistant driver may need to sit directly behind the driver to gain a better view of the instrument panel.

(h) Motorcycles and ATVs may be operated with NVG's. In general, the motorcycle or ATV should be operated with headlights off, or at most, with blackout marker lights on. The additional weight that the goggles place on the operator's head and the position of this weight may require ATV and motorcycle operators to redevelop their sense of balance during training.

(i) The limited field of view of NVG's will have a greater impact on motorcycle and ATV operators than on other vehicles. Operators will have to practice and train to turn their heads from side to side to compensate for the loss of peripheral vision.

(j) Degraded NVG lighting countermeasures. Refer students to FM 21-305 and talk them through each condition in the following table.

<u>SPECIFIC CONDITIONS</u>	<u>IMPACT ON NVG'S</u>	<u>COUNTERMEASURES</u>
Driving with external and internal lights off. (Vehicles without NVG's may not see you).	None	N/A
Blue-green instruments panel lights on. (vulnerable to threat detection w/NVGs)	Minimum on third generation tubes. Will reduce performance of second generation tubes.	Turn to lowest light level or off. Tape cover of non-critical lights
Instrument lights on. (vulnerable to threat Detection)	Will cause all NVGs to have degraded performance.	Turn to lowest level
Headlights on. (vulnerable to threat detection)	Not recommended will shorten life of NVG and blind oncoming drivers	Tape over part of chemlight use BO lights
Blackout marker lights on (vulnerable to threat detection with NVGs)	Low light levels (heavy overhead canopy or starlight) will degrade performance	Tape over all but one of the four markers on the rear of the vehicle
Blackout markers with Blackout drive (threat detection easy with NVGs)	Will enhance near vision but degrade distance vision. May blind on coming drivers with NVGs	Turn off BO drive or ensure BO hood is adjusted so light shines down
Normal parking brake lights (vulnerable to threat detection)	Will seriously degrade all NVG performance and may blind oncoming drivers with NVGs	Use BO lights

HANDS ON DRIVER TRAINING AND TESTING NVG

TASK:#1 Driving without Night Vision Goggles (Phase I)

CONDITIONS: Given a vehicle and suitable training area, during daylight conditions.

STANDARDS: The licensed student will become familiar with actual road and terrain

TRAINING AND EVALUATION: To receive a GO on this lesson, the student must correctly perform vehicle PMCS, obey the designated speed limit, and maintain control of the vehicle at all times over a designated route. Soldier should spend a minimum of 45 minutes driving this course to get familiar with the route for the night portion.

a. The intent of this phase is to familiarize the students with the road and terrain during daylight hours. Make them aware that this will be the same route they will be evaluated on during the driver performance test.

b. Explain the procedures for this practical exercise; for example, vehicle speed, ground guide, and length of route. Instructors/assistant instructors should point out to students any obstruction along the route, as well as signs, ditches, and other terrain features.

c. Make sure that students perform PMCS on their vehicle, as they will be required to do this at night while wearing goggles.

TASK:#2 Driving with Night Vision Goggles (Phase II)

CONDITIONS: Given a vehicle the licensed student will drive vehicle at night

STANDARDS: The student will drive an assigned vehicle at night with headlights on, and without NVG.

TRAINING AND EVALUATION: To receive a GO on this lesson, the student must correctly perform vehicle PMCS, obey the designated speed limit, and maintain control of the vehicle at all times over a designated route. This lesson will not be less than 1.5 hours of training.

a. In this phase, the student will drive over the route, previously driven in daylight, at night with vehicle headlights on. The purpose of this phase is to give the student an appreciation for how the route and objects along the route appear at night without the goggles.

b. Explain the procedures for this practical exercise, including vehicle PMCS, speed, ground guide, and length of route. Instructors/assistant instructors should

point out to the students any obstructions along the route as well as signs, ditches, and other terrain features.

TASK:#3 Perform pre-operation NVG system check, check for proper wear and fitting, focus the device, perform vehicle PMCS while wearing the NVG, refocus the NVG, prior to phase IV. (Phase III)

CONDITIONS: Given a pair of NVG's at night .

STANDARDS: The student will perform pre-operation NVG system check, check for proper wear and fitting, focus the device, perform vehicle PMCS while wearing the NVG, refocus the NVG, prior to phase IV.

TRAINING AND EVALUATION: To receive a GO on this lesson, the student must perform all pre-operation NVG system checks, check for proper wear and fitting, focus the device, perform vehicle PMCS while wearing the NVG, and refocus the NVG, prior to phase IV.

TASK:#4 Drive vehicle on same range during the hours of darkness using NVG's (Phase IV)

CONDITIONS: At night with all internal and external lights turned off

STANDARDS: The student must ensure that vehicle distance is maintained and become familiar with the appearance of objects to his front while wearing NVG's.

TRAINING AND EVALUATION: To receive a GO on this lesson, the student must:

- a. Keep the vehicle at a steady, constant speed.
- b. Identify and obey any traffic signs and detect markers.
- c. Identify and negotiate ditches or other rough road conditions along the route.
- d. Judge distances to road junctions or potholes.
- e. Be able to see the edge of the road.
- f. Distinguish shadows from objects, such as puddles of water.
- g. Use proper night vision scanning techniques.
- h. Upon return to the tactical site, the student will perform the following activities in sequence, while wearing the NVG:
 1. Park the vehicle.
 2. Perform post-operational vehicle PMCS.
 3. Perform post-operational procedures.
- i. Perform post-operational NVG PMCS.

At the conclusion of this phase, instructors and AI's should conduct an AAR with the students. The purpose of the AAR is to provide two-way feedback between instructor and student on positive and negative aspects encountered in this phase.

- a. Properly perform pre-operational NVG PMCS procedures, place the NVG into operation, and achieve the proper focus, all within 5 minutes.
 - b. Correctly perform vehicle PMCS (before operation) while wearing the NVG within 15 minutes.
 - c. Maintain control of the vehicle at all times and obey the designated speed limit.
 - d. Successfully negotiate and correctly identify selected terrain features, route markers, and/or signs along the route and distinguish shadows from other features such as water puddles, walls, and ditches as seen through the NVG.
 - e. Correctly perform vehicle PMCS (after operation) while wearing the NVG within 15 minutes.
 - f. Correctly perform post-operational NVG PMCS procedures within 5 minutes.
 - g. This training lesson will not be less than 6 hours in length.
 - h. The success of this training phase depends largely on effective preplanning, briefings, and coordination of support requirements (refer to Appendixes D and E, FM 21-305)
- b. Students will receive a safety briefing before the start of this phase (see Safety Restrictions below).

1. Students will perform the following activities in sequence before driving with NVG's:

- (1) Perform pre-operational NVG procedures
 - (2) Check for proper wear and fitting
 - (3) Focus the device properly for near viewing
 - (4) Perform vehicle PMCS while wearing the NVG (includes reading the instrument panel and gauges with engine running).
 - (5) Refocus the NVG for distance viewing immediately before driving.
- a. With all external and internal lights off, the student will drive the vehicle over the same range while wearing the NVG and under the supervision of an NVG equipped instructor or AI. (It may be necessary before driving to tape over certain exterior lights such as the brake lights.) All NVG driving operations will be conducted with the NVG secured in the head harness and worn on the driver head.

TASK:#5 Perform post-operations vehicle PMCS while wearing NVG's, and perform post-operations NVG system checks (Phase V)

CONDITIONS: Given a set of NVG's and a vehicle during the hours of darkness.

STANDARDS: The student will drive an assigned vehicle during the hours of darkness while wearing NVG's.

TRAINING AND EVALUATION: To receive a GO on this lesson, the student must:

- a. Perform post-operation vehicle PMCS while wearing the NVG.
- b. Perform post-operation NVG systems

APPENDIX 12, TO ANNEX M, TO 2ID REG 56-4

POIs FOR M109A3 Howitzer and M992A2 FAASV

1. SUBJECT: Program of Instruction (POI) for Howitzers and FAASV.
2. PURPOSE: To provide 2ID units guidance for driver initial and sustainment training on Howitzers and FAASV.
3. REFERENCES:
 - a. Appropriate Operator's Manual.
4. This POI consists of the following three tasks:
 - a. Perform Preventive Maintenance Checks and Services (PMCS).
 - b. Operate Vehicle Under Usual Conditions.
 - c. Recovery vehicle Rollover Drills.

TASK:#1 Perform Preventative Maintenance Checks and Services (PMCS).

CONDITIONS: Given a Howitzer or FAASV, DA Form 2404, appropriate operator's manual, and necessary operational equipment perform PMCS on the vehicle.

STANDARDS: Soldier will perform PMCS on the vehicle IAW the appropriate operator's manual PMCS tables.

TRAINING AND EVALUATION: Ensure the Soldier performs the steps IAW PMCS tables in appropriate operator's manual. Score the Soldier a GO if all steps are passed. If Soldier fails any step, show the Soldier what was done wrong and how to do it correctly. Ensure the Soldier follows the appropriate steps.

TASK:#2 Operate Vehicle Under Usual Conditions

CONDITIONS: Given a M109A3 Howitzer or M992A2 FAASV Vehicle with a VC and necessary operational communications equipment. Soldier will operate vehicle in usual conditions.

STANDARDS: Drive vehicle carefully, especially if you are not familiar with vehicle. On hard pavement, avoid over steering and speeding to keep control of the vehicle. Ensure Soldier drives vehicle for a minimum of five miles on hard pavement. Soldier will obey all traffic regulations.

TRAINING AND EVALUATION: Soldier must operate vehicle under usual conditions following the training and evaluation outline below. Score the Soldier GO if all steps below are passed. If Soldier fails any step, show what was done wrong and how to do it correctly. Ensure Soldier follows these steps:

- a. Secure driver seat and hatch.
- b. Fasten seat belts, and turn off all communication accessory switches.
- c. Ensure that the tube is center and secure with both traverse-locking device (M109 only).
- d. Ensure that all basic issue items are stowed and secure.
- e. Adjust driver seat, and steering wheel as necessary.
- f. Set vehicle brake by pressing down on service brake pedal.
- g. Turn MASTER switch to ON. Indicator lamp will illuminate.
- h. Pull out FUEL SHUTOFF handle (to OFF position) before checking for hydrostatic lock.
- i. Check for hydrostatic lock by intermittently actuating STARTING switch.
- j. Push FUEL SHUTOFF handle in.
- k. Place throttle control lever in IDLE position.
- l. If fuel filters have been drained, turn on FUEL PRIME switch, and hold for 45 seconds, then release.
- m. Push GLOW PLUG switch to ON position. Glow plug WAIT lamp will light.
- n. If the glow plug wait lamp does not turn on as indicated, notify unit maintenance.
- o. Push engine STARTER switch to START position and hold for 2 or 3 seconds, but not more than 5 seconds until engine starts.
- p. If engine does not start in four attempts, engage starter protection override switch as determined by the chief of your section. If engine still does not start, notify unit maintenance.
- q. With engine running watch your ENGINE OIL PRESSURE gauge. If engine oil pressure does not register within 15 seconds (approximately 5 to 30 PSI at idle of 550-600 RPM) immediately pull FUEL SHUTOFF handle and stop engine. Notify unit maintenance.

- r. Idle engine about 2 minutes. Adjust hand throttle control lever and set to 1000 RPM (fast idle) on tachometer. Warm up engine until water temperature gauge reaches 170 degrees F.
- s. During engine warm up, perform portable instrument panel checkout procedure.
- t. Do not attempt to shift into reverse gear, unless vehicle is at a complete stop.

TASK:#3 M109/992 recovery vehicle Rollover Drills.

CONDITIONS: To allow the crew to evacuate a overturned M109/vehicle safely.

STANDARDS: Follow the procedures IAW FM 17-12-1-1.

TRAINING AND EVALUATION: The crew must be in proper uniform with CVC/Helmet on, and 2/3 of body must be inside of the hatch while operating the vehicle. In the event of a tank roll over, the crew must clear the hatches, drop down inside and brace against or hold on to anything that does not move. The crew member who first notices that the M 109/ vehicle is beginning to roll over announces "ROLLOVER."

Vehicle Commander	Gunner N/A	Loader N/A	Driver
Drops inside the turret, turns off the turret power, and braces for an impact	Moves the turret (time permitting) so driver can exit once the gun stops rolling, and brace for an impact.	Drops inside the turret, tucks the knee switch (time permitting), and braces for an impact.	Shuts down the engine (time permitting), and braces for an impact.
Announces "ABANDON gun/vehicle," disconnects CVC cord,	Moves the gun (if necessary) so driver can exit; disconnects CVC cord, and exits through TC's hatch.	Disconnects CVC cord, Removes portable fire extinguisher, and exits Through TC's hatch.	(No fire) Announces "SHUT DOWN," powers down engine, turns VEHICLE MASTER POWER off, disconnects CVC cord, and exits through driver hatch.

			<p>(Fire) Announces "SHUT DOWN," activates second shot if first shot has failed to extinguish fire, disconnects CVC cord, and exits through driver hatch. If unable to activate second shot from in-side tank, manually activates second shot using external handle after exiting gun.</p>

Note: Vehicle is turned over and on its side.

(Water) Announces if vehicle is in water, assist anyone as safe as possible out of danger.

APPENDIX 13, TO ANNEX M, TO 2ID REG 56-4**POIs FOR M1941 Space Heater (Pot Belly)**

1. SUBJECT: Program of Instruction (POI) for M1941 Space Heater.
2. PURPOSE: To provide 2ID units guidance for driver initial and sustainment training on M1941 Space Heater.
3. REFERENCES:
 - a. Appropriate Operator's Manual.
4. This POI consists of the following tasks:
 - a. Operate Heater Under Usual Conditions.

TASK: #1 Operate Heater Under Usual Conditions.

CONDITIONS: Given a M1941 Space Heater with necessary operational equipment. Soldier will operate heater in usual conditions IAW appropriate operator's manual. Soldier must have completed PMCS prior to operation.

STANDARDS: Operate stove carefully, especially if you are not familiar with the heater. Ensure the Soldier operates the stove for a minimum of ten minutes.

TRAINING AND EVALUATION: Soldier must operate heater under usual conditions following the training and evaluation outline below. Score the Soldier a GO if all steps are passed. If Soldier fails any step, show what was done wrong and how to do it correctly. Ensure Soldier follows these steps:

- a. Perform the before-operation service.
- b. Remove the heater lid.
- c. Turn the ON-OFF valve knob to the ON position and turn the flow adjustment knob up to 9. When the burner bottom is wet with fuel, turn the flow adjustment knob back to 0.
- d. If gasoline is used as fuel, drop a lighted match or paper into the burner before turning the flow adjustment knob to 9. If oil is used, drop a small wad of lighted paper or oily rag into the burner after the bottom is wet with oil.

WARNING (keep face and hands away from the opening). When the bottom is blazing, replace the top lid. After 5 minutes when using gasoline and after 15 minutes when using oil (time for the heater to warm up), set the adjustment knob for the size of the flame desired. Maintain a clean, smokeless flame. The range of

adjustment for gasoline is indicated by an arrow on the dial from 0 to 7. Any setting above 7 will waste fuel and cause heavy smoke. The oil operating range is 0 to 9.

e. Turn the flow adjustment knob to 0, and then turn the ON-OFF valve to OFF.

APPENDIX 14, TO ANNEX M, TO 2ID REG 56-4

POIs FOR FORKLIFTS

1. SUBJECT: Program of Instruction (POI) for Forklifts.
2. PURPOSE: To provide 2ID units guidance for driver initial and sustainment training on Forklifts.
3. REFERENCES:
 - a. Appropriate Operator's Manual.
4. The following POI contains these two tasks:
 - a. Perform Preventive Maintenance Checks and Services (PMCS).
 - b. Operate Vehicle Under Usual Conditions.

TASK: #1 Perform Preventive Maintenance Checks and Services (PMCS).

CONDITIONS: Given a forklift, appropriate operator's manual, and DA Form 2404 perform PMCS on this vehicle.

STANDARDS: Score the Soldier GO if he/she performs correctly the maintenance as outlined in the technical manual.

TRAINING AND EVALUATION: Soldier must correctly perform all maintenance checks in the proper sequence and correct any operator level faults. If Soldier fails any step, show what was done wrong and the correct procedures.

- a. BEFORE (B) checks and services of PMCS must be performed before vehicle is placed into operation.
- b. DURING (D) checks and services of PMCS must be performed while the vehicle is in operation.
- c. AFTER (A) checks and services of PMCS must be performed upon completion of the mission.
- d. WEEKLY (W) checks and services of PMCS must be performed once every 7 days.
- e. MONTHLY (M) checks and services of PMCS must be performed once every 30 days.

TASK: #2 Operate Vehicle Under Usual Conditions

CONDITIONS: Given a forklift, a pallet of equipment, appropriate technical manual, and DA Form 5988.

STANDARDS: Score the operator a GO if he/she correctly starts the engine, places the vehicle in motion, and stops the vehicle and engine. Soldier will wear seatbelt at all times and obey the appropriate traffic laws and safety regulations.

TRAINING AND EVALUATION: Soldier must correctly perform all maintenance checks in the proper sequence and operate vehicle in a safe manner. If Soldier fails any step, show what was done wrong and how to do it correctly.

a. Starting the engine.

- (1) Understand the location of all controls and their use.
- (2) Ensure the vehicle transmission is in neutral position, parking brake is applied, driver seat is adjusted correctly, and seat belt is used.
- (3) Ensure forks are placed according to the pallet to be lifted.
- (4) Turn on ignition switch and then press start switch.
- (5) Set vehicle light switch, depress brake pedal and release the parking brake. Place the transmission in the appropriate gear.
- (6) Operator correctly lifts pallets and moves them to another location.

b. Stopping the Vehicle and Engine.

- (1) Release accelerator pedal and depress the service brake, bringing the vehicle to a gradual stop. Place transmission selector back into Neutral.
- (2) Applies the vehicle parking brake.
- (3) Turns off light switch
- (4) Turns off ignition switch.
- (5) Chocks vehicle wheels.
- (6) Straps down load if necessary.

APPENDIX 15, TO ANNEX M, TO 2ID REG 56-4

POIs FOR LMTV, Light-Medium Tactical Vehicle
ICW TC 21-305-11

1. SUBJECT: Program of Instruction (POI) for LMTV.
2. PURPOSE: To provide 2ID units guidance for driver initial and sustainment training on LMTV.
3. REFERENCES:
 - a. FM 21-305, Manual for the Wheeled Vehicle Operator.
 - b. TC 21-305-7, Training Program for Light Vehicles.
 - c. TM 9-2320-365-10, Operator's Instruction Manual for the M1078 Series, 2 ½ Ton, 4X4, Light Medium Tactical Vehicle (LMTV).
4. This POI consists of the following four tasks:
 - a. Perform Preventive Maintenance Checks and Services (PMCS).
 - b. Drive Vehicle Under Usual Conditions.
 - c. Drive Vehicle Under Unusual Conditions.
 - d. Vehicle Rollover Drills.

TASK:#1 Perform Preventive Maintenance Checks and Services (PMCS).

CONDITIONS: Given instruction, an LMTV, a TM, a DA Form 2404 (or automated DA Form 5988-E), equipment records folder, rags, lubricants, coolant, a trailer, and a wheeled vehicle with BII.

STANDARDS: Student will successfully explain the use of PMCS tables and perform PMCS using PMCS tables.

TRAINING AND EVALUATION: Have the student explain how to use the PMCS tables. Ensure the student reads and understands "WARNINGS" and "NOTES" listed in the PMCS tables. Have the student perform a PMCS on an LMTV and note any deficiencies on DA Form 2404/5988-E. Student must pass all steps to receive a GO. Explain any steps the student failed.

TASK:#2 Operate Vehicle Under Usual Conditions.

CONDITIONS: Given an LMTV, student will operate vehicle under usual conditions.

STANDARDS: Student will successfully identify vehicle controls, pressure gauges, normal operating ranges, and reads and understands all “CAUTIONS” and “NOTES” listed in the vehicle operators manual. Student will safely operate vehicle on a hard surface obeying all traffic regulations.

TRAINING AND EVALUATION: Student should safely operate vehicle under usual conditions following the training and evaluation outline below. Score the student GO if all steps above are passed. If student fails any steps, show what was done wrong and how to do it correctly. Ensure the student follows these steps:

- a. Adjust mirrors, seat and installs safety belts.
- b. Insures that parking brake control is set.
- c. Starting aids will not be used on the engine. Use of starting aids will cause damage to the vehicle, injury or death.
- d. Properly start engine.
- e. Runs engine at the appropriate idle for about three minutes.
- f. Ensures all gauges are at proper operating ranges.
- g. Turns on lights as needed.
- h. Sets transfer to proper range.
- i. Shifts transmission lever to desired position.
- j. Releases parking brake.
- k. Accelerates, brakes and steers as required. Ensure student does not press service brake hard three or four times in a row. The air supply will be used up and service brakes will not work until air pressure is built up again. Do not allow student to exceed governed engine speeds.

TASK:#3 Operate Vehicle Under Unusual Conditions

CONDITIONS: Given an LMTV, student must operate vehicle under unusual conditions.

STANDARDS: Student must safely operate vehicle in off road conditions, up and down steep grades, and in slippery conditions. Student must understand different vehicle characteristics under these listed conditions.

TRAINING AND EVALUATION: Student should safely operate vehicle under unusual conditions following the training and evaluation outline below. Ensure the student reads and understands “CAUTIONS” and “NOTES” listed in the vehicle operator’s manual. Score the student a GO if all steps above are passed. If student fails any steps, show what was done wrong and how to do it correctly. Ensure the student follows these steps under the listed condition:

a. OFF ROAD.

- (1) Selects proper gear on transmission.
- (2) Selects normal or off road mode as situation dictates.
- (3) Properly adjusts tire pressure for the situation using the Central Tire Inflation System (CTIS).
- (4) Releases parking brake control.
- (5) Slowly presses down throttle until desired speed is reached.
- (6) Accelerates, brakes, and steers as required.
- (7) Does not exceed water fording depth with/without fording kit.

b. UP STEEP GRADES.

- (1) If more speed is desired on a steep up grade, student must press more on the throttle to allow transmission to automatically downshift gears.

c. DOWN STEEP GRADES.

- (1) Does not allow LMTV to coast or free roll.
- (2) Shifts transmission as necessary.
- (3) Uses service brake as needed to control vehicle speed. Ensure student does not press service brake hard three or four times in a row. Air supply will be used up and service brakes will not work until air pressure is built up again.

d. SLIPPERY CONDITIONS.

- (1) Selects proper gear on transmission.
- (2) Select normal or off road mode as necessary.
- (3) Select proper tire air pressure using the CTIS.

- (4) Release brakes and allow LMTV to move forward and gently apply pressure to accelerator pedal to avoid loss of traction.
- (5) Travel speed should be selected as the situation/road condition dictates.
- (6) Steer and brake as necessary. Do not lock brakes as this will cause skidding and loss of control.
- (7) Allow LMTV to roll to a stop if possible. Excessive braking could cause skidding and loss of control.

TASK:#4 Vehicle Rollover Drills.

CONDITIONS: To allow the crew to evacuate a overturned vehicle safely.

STANDARDS: Follow the procedures IAW -10.

TRAINING AND EVALUATION: The crew must be in proper uniform 2/3 of body must be inside of the hatch while operating the vehicle. In the event of a vehicle roll over, the crew must clear the hatches, drop down inside and brace against or hold on to anything that does not move. The crew member who first notices that the vehicle is beginning to roll over announces “ROLLOVER.”

Vehicle Commander	Gunner	Crew	Driver
Braces for an impact	Drops down in hatch (time permitting) can exit once the vehicle stops rolling, and brace for an impact.	Braces for an impact.	Shuts down the engine (time permitting), and braces for an impact.
Announces “ABANDON VEHICLE,” exits through the a safe route.	Disconnects CVC cord, and exits through a safe route	Removes portable fire extinguisher, and exits through a safe route.	(No fire) Announces “SHUT DOWN,”, turns VEHICLE MASTER POWER off and exits through Safe route

			(Fire) Announces "SHUT DOWN," activates halon to extinguish fire.
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Note: Vehicle is turned over and on its side.

(Water) Announces if vehicle is in water, assist anyone as safe as possible out of danger.

ANNEX N, Speed Limits for Expressways in Areas II, III, and IV

1. SITUATION.

a. There are a total of 24 expressways in Areas II, III, and IV (two 80 kph, three 110 kph, and all other expressways are 100 kph). The current speed limit of 40 kph/25 mph for convoys traveling on expressways in Areas II, III, and IV poses an extreme hazard to both civilian and military vehicular traffic. This Annex is to align USFK Reg 190-1 and Republic of Korea (ROK) law regarding speed limits on expressways.

b. This order supersedes 2ID Reg 55-2 until further guidance from DTO.

2. MISSION.

2 (US) ID units comply with the speed limits set for expressways in Areas II, III, and IV **effective immediately** IOT comply with ROK law and ensure safety of civilian and 2 (US) ID military personnel and equipment.

3. EXECUTION.

a. **Concept of the Operations.** Increase speed limits on 100 km and 110 km expressways to ensure 2 (US) ID is in compliance with ROK Road Law. There is no change to the speed limit on 80 kph expressways. All MSCs will ensure the following:

<u>Expressways</u>	<u>New Speed Limit</u>
80 kph Expressways (Expressways 10 and 12)	40 kph/25 mph (no change)
100 kph Expressways	50 kph/31 mph
110 kph Expressways (Expressways 15, 25, 35)	60 kph/36 mph

This adjustment of speed limits applies only to tactical wheeled vehicles. Tracked vehicles will continue to comply to current speed limit of 32 kph/20 mph.

ANNEX O**2D INFANTRY DIVISION MASTER DRIVER COURSE POI**

DAY ONE:	SCOPE	REFERENCE
<i>0900-0950</i>		
In-processing, Eligibility, Attendance roster	Identify legibility of Master Drivers	AR 600-55, 2ID Reg 56-4 G3 Schools SOP
<i>1000-1050</i>		
Introduction, Purpose, Benefits 2ID SOP, Duties and Responsibilities Regulations	Introduce Master Driver roles and responsibilities. Introduce training Pubs and reference material.	AR 600-55, 2ID Reg 56-4
<i>1100-1145</i>		
Selection process and Commander's interview	Driver candidate selection and evaluation	AR 600-55, 2ID reg 56-4
LUNCH		
<i>1300-1350</i>		
DA 5984-E / OF 346 Military Licensing	Introduce DA Pam 740-8 and form completion.	AR 600-55, DA Pam 750- 8
<i>1400-1450</i>		
Road Test Score sheet Equipment Operations Qualification Practical Exercise	Testing measures training requirements for equipment operation	AR 600-55, DA Pam 750- 8, 2ID Reg 56-4
<i>1500-1550</i>		
Unit Driver Training Program Driver Testing Station	Teach Master Drivers how to implement a drivers training program	2ID Reg 56-4
<i>1600-1650</i>		
Homework assignment Create Management	Practical exercises for completing DA Form 348,	

Matrix	DA 348-E and DA 5984-E.	
DAY TWO:	SCOPE	REFERENCE
<i>0900-0950</i>		
Safety and Awards	Introduce unit and individual safety and driver awards.	AR 385-55, AR 672-5-1
<i>1000-1050</i>		
Vehicle Commander Certification	Introduce required training programs for TC/VC certification.	AR 600-55, AK 350-4, 2ID Reg 56-4
<i>1100-1150</i>		
Convoy Commanders	Introduce required training programs for Convoy Cdr certification.	AK 350-4, 2ID Reg 56-4
LUNCH		
<i>1300-1350</i>		
2ID Road Side Inspection Program	Introduce Roadside Inspections. Operator, VC, and maintenance requirements.	G4 Maint SOP, 2ID 56-4, Roadside Inspection Sheet.
<i>1400-1450</i>		
Off road operations Vehicle Recovery Transporting Troops	Driving off installation requirements, safety, and troop transportation.	Applicable Training Circulars, 2ID Reg 56-4
<i>1600-1650</i>		
Battle Focused METL Training Review homework assignment	Implement drivers training into unit training plan.	FM 7-1, 2ID Reg 56-4
DAY THREE:	SCOPE	REFERENCE
<i>0900-1030</i>		
Night Division Device Training	Training requirements to implement NVG training.	TC 21-305-2, 2ID Reg 56-4
<i>1040-1130</i>		
HAZMAT	Hazmat familiarization	AR 600-55, 2ID Reg 56-4

<p>LUNCH</p> <p><i>1300-1450</i></p> <p>AMMO 67 Computer Based Training Distance Learning Center for certification</p>	<p>Hazmat familiarization and safety requirements for operators. Certification</p>	<p>AR 600-55, 2ID Reg 56-4, AMMO 67 DVD</p>
<p>DAY FOUR:</p> <p><i>0900-0950</i></p> <p>Spring/Summer Fall/Winter Training Safe Driving in Korea</p> <p><i>1000-1130</i></p> <p>Accident avoidance</p> <p>LUNCH</p> <p><i>1300-1350</i></p> <p>Safe Driving Practices</p> <p><i>1400-1545</i></p> <p>PMCS, Dispatch procedures, Convoy Operations</p> <p><i>1600-1645</i></p>	<p>SCOPE</p> <p>Introduce the seasonal differences of driving. Identify accident prevention measures.</p> <p>Accident awareness. Identify accident prevention measures.</p> <p>Driving in Korea. Characteristics of safe operations.</p> <p>Instruct procedures per ULLS-G. Understanding effect of vehicle movements.</p>	<p>REFERENCE</p> <p>2ID Seasonal Training manuals, 2ID Reg 56-4</p> <p>AR 600-55, USFK Pam 385-2, AK 350-4</p> <p>USFK 385-2, 2ID Reg 56-4, 2ID Reg 55-2</p> <p>DA Pam 750-8, AK Reg 350-8</p>
<p>DAY FOUR Cont.</p> <p>Risk Assessment Operating the FMTV Video</p>	<p>SCOPE</p> <p>Perform risk management and assessments.</p>	<p>REFERENCE</p> <p>AK Reg 350-4, 2ID Reg 56-4</p>

DAY FIVE:	SCOPE	REFERENCES
<p><i>0900-1030</i></p> <p>Crew Coordination</p>	<p>Introduce crew coordination training.</p>	<p>POI Battle Drills, 2ID Reg 56-4</p>
<p><i>1030-1100</i></p> <p>FINAL EXAM Preview</p> <p>LUNCH</p>	<p>Preview for final exam.</p>	<p>2ID Reg 56-4, 2ID Master Driver SOP</p>
<p><i>1300-1445</i></p> <p>FINAL EXAM</p>		
<p><i>1500-1530</i></p> <p>FINAL EXAM Review</p> <p>Present Course Certificates</p>		

ANNEX P**CHECKLIST FOR THE MASTER DRIVER**

Operator Selection, Training, Testing, and Licensing Procedures Checklist

Selecting Driver Candidates:

- Has the Soldier completed a Commander's interview?
- Is the Commander's interview on file?
- Is the Soldier a non-experienced or experienced driver?
- Does the Soldier have a valid state drivers license?
- Will the Soldier be required to drive off the installation?
- Is the Soldier medically cleared to operate a vehicle?

Training:

- Has the Soldier completed a Battalion/Unit Drivers Training Program?
- Will the Soldier be required to attend Non-Tactical Vehicle training at the TMP?
- Has the Soldier attended Vehicle Commander Certification training?
- Has the Soldier attended Convoy Commander Certification training?
- Will the Soldier require Special Equipment training?
- Has the Soldier completed PMCS Certification training?

Testing:

- Has the Soldier passed a written drivers training test with score on file?
- Has Soldier passed a hands on PMCS test or evaluation?
- Has Soldier completed an on, and off, the installation road test for each type of equipment they are to be licensed on?
- Does the Soldier have a DA Form 6125-R, Road Test Score Sheet on file for each type or largest series vehicle they are licensed on?

Licensing:

- Has the Soldier met all prerequisites for obtaining a Military Operators License IAW AR 600-55 and 2ID Reg 56-4?
- Has a DA Form 348, Record of Military Training and Qualification, been produced for the Soldier?
- If an OF 346 (manual form) has been issues by the TMP, has the Master Driver converted training to ULLS-G DA 348-E?
- Does the Master Driver maintain the Soldier's DA 348 on file?
- Has the Master Driver issued a DA Form 5984-E, Army Standard Operators License to the Soldier?

ANNEX P (continued)

- Is the Soldier's copy of the DA 5984-E signed by the current Commander or authorized representative?

Certification:

- Convoy Commanders: Must complete Convoy Commander's Certification Training and be designated in writing by the Battalion Commander or designated authority as a Convoy Commander. Convoy Commanders will carry the Convoy Commander's Certification Card, AK Form 350-4A-E, when performing these duties.
- Vehicle Commanders (VCs): Must complete Vehicle Commander Certification Training and be designated in writing by the Company Commander as a Vehicle Commander. VCs must be E-4 or above and carry the Vehicle Commander Certification Card, AK Form 350-4A-E when performing these duties.
- PMCS Certification: Supervisors or designated Systems Trainers will complete a unit level PMCS Certification course IAW 2ID Reg 56-4. This certification will be recorded on the Soldier's DA 348 with a memorandum on file.
- Examiners: Equipment Examiners do not need to be qualified Master Drivers. Examiners must be E-5 or above, designated by the Commander as an Examiner due to their equipment operation and proficiency, and a licensed operator of that equipment. Master Drivers will use Examiners to conduct hands on training, PMCS, and operation training. Examiners are not authorized to issue a Military Operator's License.

ANNEX Q**AMMO 67 CERTIFICATION**

1. Any driver hauling HAZMAT in amounts requiring placards must have a hazardous material endorsement on their driver license. HAZMAT employees (i.e. drivers) who are NOT required to certify shipments need to comply with par 172.704 of the 49 CFR.49 CFR section 172.704 specifies that HAZMAT employee training shall include the following:
 - (1) General Awareness/Familiarization training.
 - (2) Function-specific training.
 - (3) Safety training,
 - (4) Security Awareness training
 - (5) In-depth Security training.
2. The Defense Ammunition Center's AMMO-67, **HAZMAT Familiarization and Safety in Transportation is a Web-based Training (WBT) product that may be used to satisfy (1) and (3) above.** This course may be accessed through our web site at <http://www.dac.army.mil/as>. Function-specific training for a vehicle driver might mean some training concerning proper vehicle operation, blocking and bracing, placard requirements, vehicle route restrictions, required documentation, actions in the event of an accident/incident, and emergency notification procedures etc. Function-specific training and In-depth Security training will normally be accomplished locally.
3. The Office of Hazardous Materials Safety at DOT has produced a CBT training module that personnel may take to satisfy requirements for the Security Awareness training. This product may be ordered or downloaded from their web site at <http://hazmat.dot.gov/>.
4. **Completion of above training is then sufficient to obtain a HAZMAT endorsement to a license which is then issued locally.**
5. The AMMO 67 Certification is taught at the Division Master Driver Course. A Master Driver that has the AMMO 67 Certification is authorized to instruct the required training at the battalion and company level.
6. Refresher training is necessary every 2 years. This is often confusing as the 49 CFR states that it only needs to be done every 3 years. However, the DoD 4500.9-R states that it will be done every 2 years....and for the military and DoD civilians, this takes precedence.