DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
WASHINGTON, DC 20380

MCO 8400.6
LPP-3-dt
31 Oct 1988

MARINE CORPS ORDER 8400.6 W/CH 1-3

From: Commandant of the Marine Corps
To: Distribution List

Subj: LICENSING PROCEDURES FOR ORDNANCE VEHICLE OPERATORS

Ref: (a) OPNAVINST 6260.2
(b) OPNAVINST 8023.23A
(c) MCO 6260.1C
(d) MCO 8023.2A
(e) TM 4700-15/1
(f) FM 21-306

Encl: (1) List of Ordnance Vehicles
(2) Recordkeeping
(3) License Classification and Prerequisites
(4) Administrative and Testing Requirements (By Type of Transaction)
(5) Application for Licensing
(6) Physical Requirements
(7) Vehicle Knowledge
(8) Skill Performance
(9) Dirt-Road/Cross-Country Driving
(10) Procedures for Issuing Licenses
(11) Remedial procedures
(12) Licensing Office Code Identifiers

1. Purpose. To establish standard licensing procedures for qualifying, testing, and licensing ordnance vehicle operators. Ordnance vehicles are defined as any wheeled or tracked vehicle configured to conduct a combat mission or support an ordnance/ maintenance operation. Implementation of the provisions contained herein will enhance selection and certification of qualified ordnance vehicle operators, an essential element for safe and efficient operations. A listing of ordnance vehicles requiring licensed operators is provided in enclosure (1).

2. General Information

a. Applicability. All Marine Corps personnel (regular and Reserve) and all civilian personnel who are or may be assigned to full or part-time duties involving the operation of ordnance vehicles will possess a valid U.S. Government Motor Vehicle Operator's Identification Card (OF 346), as defined by this Order. The standard license will be issued to all personnel

employed as regular, part-time, or additional duty operators upon successful completion of the requirements contained in this Order. The limited license will be issued to all personnel whose assigned duties require limited moving or operation of ordnance employed as regular, part-time, or additional duty operators upon successful completion of the requirements contained in this Order. Unless otherwise specified, the license issued to Marine Corps personnel will be valid for a period of 4 years or until their Expiration of Active Service (EAS), whichever occurs first. Licenses issued to civilian personnel employed by the Marine Corps will be valid for a period of 4 years, or until termination of employment, whichever occurs first.

b. The requirement for licensing ordnance vehicle operators will be complied with no later than 12 months from the publication date of this Order. For personnel already operating ordnance vehicles, an OF 346 can be issued for operation of ordnance vehicles upon successful completion of the written portion of the examination. See enclosure (2) for further discussion of types of permits to be issued and enclosure (3) for the license classifications and prerequisites.

c. Administrative and testing requirements by each type of license transaction are defined in enclosure (4).

d. Enclosure (5) contains the procedures for submitting applicants for licenses and completing the necessary forms.

e. Specific physical requirements are defined in enclosure (6).

f. Enclosure (7) sets forth the basic vehicle knowledge information that must be known by the applicant before the written test is administered. A sample written test is also provided.

g. Operational skill performance requirements and skill performance test are contained in enclosure (8).

h. An explanation of dirt-road and cross-country driving courses, with possible sample routes are provided in enclosure (9).

l. Enclosure (10) sets forth the procedures for issuing licenses after all screening and tests are successfully completed.

j. Remedial procedures for a change in licensing status are defined in enclosure (11).

k. Enclosure (12) provides a list by authority number of units authorized to license ordnance vehicle operators for vehicles listed in enclosure (1) only.

3. Scope. The standards and procedures set forth in this Order apply to all testing and licensing requirements for learner's permits, standard permits, limited permits, and to licensing transactions involving upgrading, renewing, or issuing duplicate permits.

4. Action

a. Commanding Generals (CG's). CG's of posts, stations, active divisions, and force service support groups shall ensure that all units under their command possessing ordnance vehicles establish a drivers licensing program per this Order.

b. CG 4th Marine Division (MarDiv). The CG 4th MarDiv may authorize units in this command to establish a drivers licensing program per this Order providing a qualified licensing officer/ examiner is on the Inspector-Instructor Staff. In the absence of an officer, a staff noncommissioned officer (SNCO) may be designated as the licensing officer. Adequate resources to administer the full range of testing for both regular and reserve personnel must be at their disposal. If adequate facilities are not readily available to support the establishment of a full licensing program, Reserve personnel should be licensed during active duty training (ATD). However, those portions of the licensing procedures that can be completed before ATD should be administered; i.e., license applications, physical evaluations, vehicle knowledge tests, etc.

c. Commanding Officers (CO's). CO's of units possessing ordnance vehicles shall initiate and authorize all licensing actions for personnel within their command per this Order. CO's may suspend or remove an OF 346 using the procedures set forth in enclosure (11).

d. Directors of Ordnance Vehicle Test Facilities. Directors of Ordnance Vehicle Test Facilities shall initiate and authorize all licensing actions for personnel within their Directorate.

5. Licensing Officer. Licensing officers shall be designated in writing, as an additional duty, by unit commanders. The

licensing officers should be knowledgeable in the operation of all ordnance vehicles under their cognizance. Their responsibilities include selecting competent licensing examiners, ensuring the completion of required training/testing, and completing the OF 346 vehicle operator permits.

6. License Examiner. The value of a licensing examination depends largely on the competence of the examiners. Examiners should have a thorough knowledge of vehicle operating techniques and test administration. The license examiners will be designated in writing, as an additional duty, by unit commanders.

a. Operator Qualifications of the Examiner. To be qualified to administer and evaluate the written test and skill performance examination for specific types of ordnance vehicles, the designated license examiner must be a fully qualified, licensed ordnance vehicle operator with supervisory status.

b. Pertinent Licensing Data/Materials. In order for the license examiner to perform the licensing procedures effectively, he must have access to the following data/equipment:

(1) References (a) through (f). These publications constitute the minimum library required for each licensing office.

(2) Operator's manuals on each ordnance vehicle assigned to the unit.

(3) Blank Forms. The administrative forms contained in enclosures (5) and (10) are available through the supply system and will be used when making an application for an operator's license. When not available through the supply system, they may be locally reproduced with the exception of the OF 346.

7. Reserve Applicability. This Order is applicable to the Marine Corps Reserve.

R. A. TIEBOUT
Deputy Chief of Staff
for Installations and Logistics

DISTRIBUTION: 10210646700

Copy to: 8145001/7000144, 049 (1)

DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
WASHINGTON, DC 20380

MCO 8400.6 Ch 1
LPP-3-dt
15 Apr 94

MARINE CORPS ORDER 8400.6 Ch 1

From: Commandant of the Marine Corps
To: Distribution List

Subj: LICENSING PROCEDURES FOR ORDNANCE VEHICLE OPERATORS

Encl: (1) New Page inserts to MCO 8400.6

1. Purpose. To transmit new page inserts to the basic Order.

2. Action

a. Remove letterhead page and pages 2, 3, and 4 of the basic Order and replace with corresponding pages in the enclosure.

b. Remove enclosure (2) and replace with corresponding enclosure contained in the enclosure.

c. Insert new enclosure (12).

3. Chance Notation. Paragraphs denoted by an asterisk (*) symbol contain changes not previously published.

4. Filing Instructions. File this Change immediately after signature page of the basic Order.

R. A. TIEBOUT
Deputy Chief of Staff
for Installations and Logistics

DISTRIBUTION: PCN 10210646701

Copy to: 8145001/7000144, 049 (1)

MARADMIN 074/99
««----------»»
Date signed: 02/23/99 MARADMIN Number: 074/99
R 230102Z FEB 99
FM CMC WASHINGTON DC//LP//
TO MARADMIN
UNCLAS //N08400//
MARADMIN 074/99
MSGID/GENADMIN/CMC LPP-3//
SUBJ/MCO 8400.6 CH2 LICENSING PROCEDURE FOR ORDNANCE VEHICLE
/OPERATORS//
POC/MIELKE/CAPT/-/LPP-3/TEL:DSN 225-8961/TEL:703-695-8962//
RMKS/1. THIS CHANGE IS APPLICABLE TO MARINE CORPS ACTIVITIES ON PCN 10210646701.
2. PURPOSE. TO DIRECT PEN CHANGES TO THE BASIC ORDER.
3. BACKGROUND. THE NUCLEAR, BIOLOGICAL AND CHEMICAL RECONNAISSANCE SYSTEM (NBCRS) WAS FIELDED DURING DESERT STORM. CURRENTLY IT IS MOUNTED IN THE FOX ARMORED VEHICLE CHASSIS, BUT MAY BE MOUNTED IN THE LIGHT ARMORED VEHICLE (LAV) CHASSIS IN THE FUTURE. THERE ARE NO CLEAR PROCEDURES ON LICENSING OPERATORS BECAUSE THE NBCRS IS ASSIGNED A CHARLIE TAM NUMBER. THE NBCRS FORMAL SCHOOL ISSUED TEMPORARY OPERATOR PERMITS. INTERIM MEASURES WERE DEVELOPED TO ISSUE STANDARD PERMITS UNTIL CHANGES COULD BE FORMALIZED IN AN ORDER. CURRENTLY PERSONNEL ATTENDING THE NBCRS MASTERS COURSE ARE ISSUED A 90-DAY OPERATORS PERMIT. UPON GRADUATION, THEY HAVE TO REQUEST A STANDARD PERMIT FROM THE ONLY QUALIFIED LICENSING OFFICIAL IN THE MARINE CORPS, CWO2 FERGUSON. THIS CHANGE ALLOWS UNITS POSSESSING A NBCRS AND QUALIFIED PERSONNEL TO ESTABLISH A COMMAND NBCRS LICENSING PROGRAM.
4. ACTION: ADD TO ENCLOSURE (1), LIST OF ORDNANCE VEHICLES, DIRECTLY UNDER M1A1 TANK E1888, THE FOLLOWING LINES:
A. FIRST LINE: "NUCLEAR, BIOLOGICAL AND CHEMICAL RECONNAISSANCE SYSTEM (NBCRS (M93 AND LAV))* C2282"
B. SECOND LINE: "*NOTE: NBCRS LICENSING EXAMINERS MUST BE MASTER NBCRS QUALIFIED (FORMAL SCHOOL TRAINED)"
5. SUMMARY/INFORMATION:
A. NBCRS LICENSE SIGNED BY CWO2 FERGUSON, D. E. ARE HEREBY INVALID AND NEED TO BE RENEWED, EXCEPT WITHIN 1ST LAR BN. RENEWED LICENSES MUST BE ISSUED IN ACCORDANCE WITH THE BASIC ORDER AND THIS CHANGE.
B. PERSONNEL ISSUED A 90-DAY TEMPORARY NBCRS LICENSE WHILE

ATTENDING THE MASTER NBCRS FORMAL SCHOOL WILL HAVE A STANDARD PERMIT ISSUED, PER THE BASIC ORDER AND THIS CHANGE, AS SOON AS THEY RETURN TO THEIR PARENT COMMAND.

C. COMMANDERS MAY, UNTIL APRIL 1999, WAIVE THE TESTING REQUIREMENTS AND ISSUE A STANDARD PERMIT, PER THE BASIC ORDER AND THIS CHANGE, TO PERSONNEL POSSESSING AN EXPIRED 90-DAY TEMPORARY NBCRS LICENSE ISSUED BY THE MASTER NBCRS FORMAL SCHOOL.

D. A COPY OF THIS MESSAGE WILL BE FILED DIRECTLY AFTER THE SIGNATURE PAGE OF THE BASIC ORDER UNTIL THE CHANGES CAN BE REFLECTED IN THE NEXT UPDATE OF THE BASIC ORDER.//

BT

MARADMIN 241/00
««----------»»
Date signed: 05/11/2000 MARADMIN Number: 241/00
R 110245Z MAY 00
FM CMC WASHINGTON DC//L//
TO MARADMIN
BT
UNCLAS //N08400//
MARADMIN 241/00
MSGID/GENADMIN/CMC LPP-3//
SUBJ/MCO 8400.6 CH 3. LICENSING PROCEDURES FOR ORDNANCE VEHICLE
/OPERATORS//
POC/MIELKE, D./MAJ/DSN 225-8961/-/TEL:703-695-8961//
RMKS/1. THIS CHANGE IS APPLICABLE TO MARINE CORPS ACTIVITIES ON PCN
10210646700.
2. PURPOSE: TO DIRECT PEN CHANGES TO THE BASIC ORDER.
3. ACTION: MAKE THE FOLLOWING CHANGES TO ENCLOSURE (1), LIST OF
ORDNANCE VEHICLES:
A. ADD, DIRECTLY UNDER RECOVERY VEHICLE M88A1, THE FOLLOWING
VEHICLE (READ IN TWO COLUMNS VEHICLE NOMENCLATURE/TAMCN):
RECOVERY VEHICLE (M88A2) E1378
B. CHANGE THE TAMCN OF THE ARMORED VEHICLE LAUNCHED BRIDGE TO
READ E0149 VICE E0150.
C. DELETE THE FOLLOWING VEHICLES BY DRAWING A SINGLE LINE
THROUGH THE VEHICLE NOMENCLATURE AND TAMCN (READ IN TWO COLUMNS
VEHICLE NOMENCLATURE/TAMCN):
HOWITZER (SP) (M110A2) E0692
HOWITZER (SP) (M109A3) E0663
RECOVERY VEHICLE (M578) E1375
TANK (M60A1) E1875
TANK (M60A1), M9 BULLDOZER E1876
4. FILING INSTRUCTIONS. FILE THIS CHANGE TRANSMITTAL IMMEDIATELY
BEHIND CHANGE 2 OF THE BASIC ORDER.//
BT

LIST OF ORDNANCE VEHICLES

Vehicle	TAMCN
>CH 3 Armored Vehicle Launched Bridge (AVLB)	E0I49
Assault Amphibious Vehicle - personnel (AAVP7A1)	E0846
Assault Amphibious vehicle - Communications (AAVC7A1)	E0796
Assault Amphibious Vehicle - Recovery (AAVR7A1)	E0856
>CH 3 DELETED LINE	
>CH 3 DELETED LINE	
Light Armored Vehicle - 25 (LAV-25)	E0947
Light Armored Vehicle - Communications (LAV-C 2)	E0946
Light Armored Vehicle - Mortar (LAV-M)	E0949
Light Armored Vehicle - Logistics (LAV-L)	E0948
Light Armored vehicle - Recovery (LAV-R)	E0950
Light Armored Vehicle - Anti-Tank (LAV-AT)	E0942
Recovery Vehicle (M578)	E1375
Recovery Vehicle (M88A1)	E1377
>CH 3 Recovery Vehicle (M88A2)	E1378
>CH 3 DELETED LINE	
>CH 3 DELETED LINE	
M1A1 Tank	E1888
>CH 2 Nuclear, Bioloical, and Chemical Reconnaissance System (NBCRS (M93 and LAV*	C2282

>CH 2 *NOTE: NBCRS licensing examiners must be master NBCRS qualified (formal school trained)

ENCLOSURE (1)

RECORDKEEPING

1. General. There is no standard recordkeeping procedure to follow; however, procedures instituted by the unit will include the following mandatory administrative files and transaction records:

a. Driver history file.

b. License logbook.

2. Administrative Files and Transaction Records. The following are suggested procedures which may be modified as required to satisfy local requirements:

a. Driver History File. One folder for each applicant containing application, interview notes, test scores, documentation of any special action taken, and copies of notifications and letters concerning the applicant. Upon transfer, a Marine's history will be forwarded to the Marine's new duty station.

b. License Logbook. Any hard cover book containing lined paper will adequately serve as a license logbook. When an OF 346 is issued, the following data will be recorded:

(1) License number.

(2) Issue date.

(3) Specific item(s) of equipment qualified to operate.

(4) Type of license (standard, limited, or learners).

(5) Category of license (new, renewal, upgrade, or duplicate).

(6) Restrictions (corrective lenses and/or other physical limitations dictated by applicant's physical profile).

(7) Expiration date.

(8) Applicant's name.

Any license card numbering system may be used as long as no card numbers are duplicated. The license logbook will be retained for 4 years following the last date of entry.

* Note: Enclosure (12) provides a list of authorized licensing agencies for Ordnance vehicles listed in enclosure (1). License numbering will begin with this code followed by specific number of license issued. Example M8010-001 would indicate the first license issued by CG MCLB, Barstow, CA.

LICENSE CLASSIFICATIONS AND PREREQUISITES

1. General. Applicants for an OF 346 will be issued a permit when all requirements for licensing ordnance vehicle operators are met. Requirements for all operator permits are included in this enclosure.

2. Types of Permits. The three basic types of operator permits issued by the Marine Corps are:

a. Learner's Permit. A learner's permit will be issued to all personnel undergoing operator training to qualify for either an initial OF 346 or to upgrade driving qualifications. Learner's permits are only valid for driving when the holder is accompanied by a licensed driver.

b. Standard Permit. Standard permits may be issued to all personnel employed as regular, part-time, or additional duty drivers, upon satisfactory completion of tests and attainment of qualifications prescribed in this Order.

c. Limited Permit. Limited permits may be issued to drivers whose primary duties do not normally involve driving, but who may be required to drive a vehicle from time to time in the performance of their primary duties. This permit will reflect restrictions on the back of the OF 346 at the time of issue; i.e., shop use only, test drive only, etc.

ADMINISTRATIVE AND TESTING REQUIREMENTS (BY TYPE OF TRANSACTION)

1. Initial License. Applicants for a new OF 346 or for renewal of a revoked OF 346 must undergo all applicable tests and inquiries as established in this Order.

2. Learner's Permits. Applicants for a new OF 346 must undergo all applicable tests and inquiries as set forth in enclosures (5), (6), (7), and (8). For an initial learner's permit, applicants must undergo physical screening or detailed physical examinations as applicable to the level of qualification sought.

3. Renewals. Routine renewals of operator permits will require confirmation of the applicant's ability to meet physical requirements. Vehicle knowledge and skill performance tests are optional for renewals and may be administered at the unit commander's discretion. All applicants for renewal of an expired OF 346 must undergo the following tests and inquiries:

a. Physical screening and evaluation (enclosure (6)).

b. Vehicle knowledge testing (enclosure (7)). If the renewal includes a new category of vehicle or an additional qualification, the applicant must take the applicable tests for upgrading the permit, as set forth in paragraph 4, following.

4. Upgrades. Applicants for an upgraded OF 346 must pass the following tests, as applicable to the upgraded permit classification:

a. Vehicle knowledge tests, enclosure (7).

b. Skill performance tests, enclosure (8).

5. Duplicate Issues. There is no requirement for testing when a duplicate OF 346 is issued to replace one that was lost, stolen, or destroyed. Duplicate permits will be issued per the instructions contained in enclosure (10) of this Order.

APPLICATION FOR LICENSING

1. Background. Unit commanders will submit a list of applicants to be considered for licensing to the licensing officer. The license officer will ensure that all basic medical, administrative, and background information requirements are completed and make an initial evaluation of the applicant's potential to be an ordnance vehicle operator. Particular attention should be given to, and a record made of, any limitations which may interfere with the operator's ability to operate ordnance vehicles safely.

2. Completing the Application, Parts I and II. Parts I and II of the application will be completed by the applicant.

3. Recording Action. The licensing officer will establish or update the applicant's existing operator history file. The initial entries in the file should include the application and any medical information on the applicant. The applicant may then continue with normal licensing procedures as described in this Order.

ENCLOSURE (5)

APPLICATION FORM (NAVMC 10964) U.S. GOVERNMENT MOTOR VEHICLE OPERATION IDENTIFICATION CARD (OF 346)

PART I APPLICATION

1. First Name: Garry | Middle Name: Ray | Last Name: Smith
2. Date of Birth (Mo. Day Year): Oct 2, 1965
3. Other Names Used in Applying for Driver Licenses: N/A
   (First) (Middle) (Last)
   (First) (Middle) (Last)
   (First) (Middle) (Last)
4. Social Security Number: 000-00-0000
5. Place of birth: Nashville, TN
6. Sex: Male ☒ Female ☐
7. Height: 5 Ft. 9 In.
8. Weight: 165
9. Color of eyes: blue
10. RUC: 54008
11. Organization: HQMC HQBN WASHINGTON, DC
12. Date: 1 Jun 1988
13. Category (check one): ☒ New ☐ Upgrade ☐ Renew ☐ Duplicate
14. Class of License (check all that apply): N/A ☐ Commercial Only ☐ Bus ☐ Tactical/Commercial ☐ Truck-Tractor
15. Type of License (check one): ☒ Standard ☐ Limited ☐ Learner's
16a. Classes of Vehicles (check all that apply): N/A ☐ Sedans/Station Wagons ☐ Trucks to ___ ton ☐ Truck-Tractor to ___ ton ☐ Buses to ___ passenger
16b. Special Qualifications (check all that apply):
Tank-Truck Refueler • M- ☐ Wrecker • M- ☐ Hazardous Materials ☐
Semitrailer Refueler • M- ☐ Emergency Vehicle • M- ☐ Other (specify) ___
Articulated Frame Vehicle • M- ☐ Truck with Full Trailer • M- ☐ M60 A1 Tank ☒
17. Remarks:
18. Commanding Officer's Signature. I recommend that this individual be examined for qualification to hold the SF-46.
C. A. Garbett
Lt Col Garbett — Commanding Officer's Signature
3 Jun 1988 — Date

PART II OPERATOR'S PAST DRIVING RECORD

1. Valid State Driver License — State: Tennessee — Number: 0 000 00 000 — Expiration date: 2 Oct 1989
2. Statement of experience

Vehicle Type/Size (List Each)	No. Years Exp
a. Car	9
b. Stake Truck	3
c.	
d.	

3. List Accidents, Violations & Action Taken
   a.
   b.
   c.
   d.
   e.

4. I Certify Above to be Correct — Signature of Applicant: Garry R. Smith — Date: 1 Jun 88

PART III EXAMINATION RESULTS

1. Qualification Tests (check)

Test	Sat.	Un-sat.	Test	Sat.	Un-sat.	Test	Sat.	Un-sat.
Physical	X		Hearing	X		Road	X	
Vision	20	40	Written	X		Dirt/Cross-Country	X	
Reaction Time			Skill	X		Special Qualifications		

2. Restrictions:

☒ Corrective Lenses Required ☐ Hearing Aid Required ☐ Daylight Driving Only
☐ Activity Reservation Only ☐ Other: _____

3. Vehicle/Equipment Classes Qualified to Operate (list)

M60 A1 Tank

4. Signature of License Examiner: GySgt R. E. Brown R.E. Brown

5. Date: 25 Jun 88

PART IV LICENSE ACTION

1. License Issued	2. License Number	3. Date Issued	4. Expiration Date
Yes ☒ No ☐	A-000	25 Jun 88	24 Jun 92

5. ☐ a. Enter all information in Part III, Items 2 and 3, and Part IV, Items 1 through 4, on Page 11 of the subject individual's Service Record Book/Officers Qualification Record.
☐ b. Service Record Book/Officers Qualification Record entry not required.

6. Signature of Licensing Officer: Maj D. J. Weber D J Weber

7. Date: 27 Jun 88

PART V RECORDING ACTION

1. This is to certify that all information indicated in Part IV, Item 5, has been entered as required on Page 11 of the Service Record Book/Officers Qualification Record.*

C. A. Garbett
Lt Col Garbett 28 Jun 88
Commanding Officer's Signature Date

*Sign and return to Licensing Office for disposition only if Part IV, Item 5-a, is indicated.

PART VI SUBSEQUENT RECORDING ACTION

1. National Driver Register Report Received N/A (Date)

2. Reported License Withdrawal Reason: _____

3. Subsequent Action (Enter Dates): ☐ No Action Required

a. Clarification Requested _____
b. Clarification Received _____
c. Poor driving record memo _____
d. License Revoked _____
e. License Reinstated _____
f. Cancelled memo _____

4. Remarks

PHYSICAL REQUIREMENTS

1. General. An operator must be physically able to safely control his vehicle at all times. Applicants selected for licensing will be physically sound, have visual acuity correctable to 20/40 in both eyes, and good mental and physical coordination. Poor attitude, emotional instability, or a history of substance abuse, which would render the applicant a hazard to himself or others, or which, in the opinion of the examiner, would interfere with the applicant's safe or efficient performance of vehicle operation, are sufficient causes to disqualify the applicant.

2. Screening Standards. The following subparagraphs discuss physical standards for vision, height, and weight requirements. All of these physical standards except depth perception are tested during the Marine Corps entrance physical examination, and in the periodically scheduled physical examinations. Upon age 36, a physical examination is given every year. The applicable physical requirements will be included in the initial testing and retesting for each ordnance vehicle requiring a license. The following is required for all ordnance vehicle operators:

a. Vision. The vision requirement covers two specific areas:

(1) Acuity. This test measures the applicant's ability to see details at a distance. The requirement for this test is vision correctable to 20/40. If the applicant's vision is not 20/40 with glasses or contact lenses, he is disqualified. If the applicant's vision is corrected to 20/40 with glasses or contact lenses, specify the restriction on the back of the OF 346.

(2) Depth Perception. This test determines how well an applicant can use binocular vision to judge distances. Since this test is not given routinely during physical examinations, special arrangements will have to be made to ensure that applicants receive this testing. The two preferred items of screening equipment for depth perception and the standards to be met are as follows:

(a) Armed Forces Vision Lester - Applicant is required to read through line C.

(b) American Optical Vectographic Slides - Applicant is required to read through line 3.

b. Hearing. There is no hearing requirement for operation of ordnance vehicles. But, in concern for the ordnance vehicle operator's hearing protection, unit commanders, license examiners, and all other related personnel must adhere to the hearing standards of the current editions of MCO 6260.1 and OPNAVINST 6260.2.

c. Other Restrictions. Any physical limitations which may restrict the operator will be specified in the "RestrictionS" box on the applicant's OF 346.

3. Obtaining Applicable Medical Information on the Applicant. Prior to completing Part III of the application form, applicable medical information on the applicant must be obtained. The license examiner should check the appropriate entries, sign the form, and forward it to the medical officer for verification.

VEHICLE KNOWLEDGE

1. General. Before licensing, operators must demonstrate satisfactory knowledge in all of the following areas for the specific vehicle for which an OF 346 is sought. Each potential operator will be examined in the following areas:

a. Operator's Manual and Lubrication Instruction. The applicant must be familiar with the various types of operating procedures set forth in the operator's manual, lubrication instructions, and specific precautions followed under unusual operating conditions.

b. Preventive Maintenance Service. The operator must demonstrate a sound knowledge of the preventive maintenance services and checks.

c. Safety Precautions. A sound knowledge of the vehicle, corresponding safety equipment, and procedures for its safe operation must be demonstrated by the vehicle operator.

d. Major Components. The applicant must be able to identify major components of the vehicle and their functions.

2. Written Test. The written test provides a means for determining the applicant's knowledge of data that should be mastered before the performance test is administered. Standards for this test must be high. Procedures must be impartial and thorough to insure desired results. No single written test regarding vehicle knowledge or awareness is outlined for all vehicles. This enclosure contains representative test questions on selected items of ordnance vehicles. At the licensing officer's discretion, similar tests will be prepared using data from pertinent operator's manuals.

3. Procedures of Test Administration

a. Determine which test to administer. In general, all applicants for a new OF 346 of any type must take one of the general written knowledge tests. Applicants for a standard or limited permit must take the ordnance vehicle knowledge and skill performance tests on vehicles which they will be required to operate. Applicants for an upgraded OF 346 need to take only the vehicle knowledge and skill performance tests on the vehicles for which they will be required to operate.

b. Testing Environment. It is extremely important that the place of testing be an area where the applicants will be able to concentrate. If possible, provide a comfortable testing area that is quiet, free of distractions, properly lighted, and well ventilated.

c. Taking the Test. Prior to administering the test, ensure the following steps are completed:

(1) Provide each applicant with a pencil.

(2) Inform the applicant(s) that the test will be completed within a designated time frame.

(3) Read the instructions provided at the top of the test form and make sure that each applicant understands how to take the test. Let the applicant know what is required for a passing grade.

d. Testing Groups of Applicants. When testing more than one applicant at a time on the same item of equipment, distribute test forms with different specified questions. Emphasize that the test questions are different but equal in difficulty.

e. Scoring the Tests. The correct answers to the sample questions are on each test. It is recommended that the license examiner develop his own answer key using a method that will allow him to efficiently score each test.

SAMPLE TEST QUESTIONS

1. When checking the engine oil level on a vehicle that has been shut down overnight, or longer, the operator should:

a. Add oil if the dipstick indicates an oil level more than one-half inch below the FULL mark.

b. Never operate the engine with the oil level below the LOW mark on the dipstick.

c. Not overfill the crankcase as excessive oil can cause oil foaming and overheating.

x d. Do all the above.

2. When starting the vehicle, the operator should release the starter switch:

x a. Immediately when the engine starts.

b. Within 30 seconds after the engine starts.

c. As soon as the engine is idling smoothly.

d. At none of the above times.

3. What is the proper hot reading on the vehicle's transmission oil level?

a. Below the sight glass level line.

x b. At or above the sight glass level line.

c. At the dipstick FULL mark.

d. No more than one inch above the dipstick's FULL mark.

4. The vehicle's hydraulic oil check (hot oil check) should be made with:

a. The vehicle's engine shut off.

b. All attachments fully lowered.

c. All component's hydraulic lines (dozer blade, tilt strut, and ripper) fully charged.

x d. All the above.

5. When operating in water, the operator should maintain:

x a. Fast engine speed and slow vehicle speed.

b. Slow engine speed and fast vehicle speed.

c. Slow engine speed and slow vehicle speed.

d. Fast engine speed and fast vehicle speed.

6. The proper battery electrolyte level is _____ inch above the battery's plates.

a. 1/16 to 1/8.

b. 1/8 to 1/4.

x c. 3/8 to 1/2.

d. 9/16 to 3/4.

7. The operator would remove excess corrosion from the vehicle's battery by:

a. Reporting this deficiency to the appropriate unit maintenance.

b. Striking the battery terminals with a rubber hammer, then brushing off the loosened scales.

x c. Using a stiff wire brush and a solution of baking soda and water.

d. None of the above.

8. If you do not find any engine oil pressure indicated within 10 to 15 seconds after starting the vehicle's engine, you should:

a. Open the hand throttle two-thirds of the way and operate without a load for 5 to 10 minutes.

x b. Stop the engine and investigate the cause.

c. Operate the engine for up to an additional 10 minutes but only at a near stall speed.

d. Keep the cutout control in the disengaged position.

9. Proper fording operation actions include:

a. Attempting fords of only up to 72 inches.

b. Insuring the fan remains engaged while fording.

c. Shifting the transmission into the low-speed range and operate the engine at a near-stall speed add avoid backwashes.

x d. None of the above.

10. Before performing any maintenance or testing of the vehicle's electrical circuits:

a. The area surrounding the vehicle should be cleared of nonessential personnel.

b. The master and ignition switches must be in the "on" position.

x c. The batteries' ground connection should be disconnected.

d. All the above.

11. To clean the filter element of the air cleaner, you:

a. Remove it from the air cleaner and gently tap it on a clean, solid surface.

x b. Remove the entire unit and clean as specified by operator's manual.

c. Replace the entire air cleaner with a new unit.

d. None of the above.

12. In extremely cold temperatures, the following <u>should not</u> be used:

x a. Heavy black oils.

b. The light fuels (No. 1 and No. 2 U.S. fuel oil).

c. Lubricated gasoline.

d. Lubricated kerosene.

13. When attempting to start the engine, the starter button should not:

a. Be engaged for less than 30 seconds.

x b. Be engaged for more than 30 seconds.

c. Be engaged for less than 60 seconds.

d. Be engaged for more than 60 seconds.

14. Denatured alcohol is added to each full tank of gasoline:

a. Prior to scheduled maintenance.

x b. For cold weather operation.

c. To increase the moisture content in the gasoline.

d. Never.

15. When servicing the vehicle's batteries:

a. Open flames are dangerous but smoking is permitted in their vicinity.

b. Smoking is dangerous but open flames are permitted in their vicinity.

c. Both smoking and open flames are allowed in their vicinity.

x d. Neither smoking nor open flames are permitted in their vicinity.

16. Caution must be exercised not to overfill the fuel tanks during hot weather because:

x a. Fuel expands with heat and it could cause fuel leaks that would result in fire hazards.

b. The over-flow valves are frequently fouled with debris.

c. Overfilling will increase the likelihood of undesired condensation, fouling the fuel with water.

d. None of the above.

17. The daily services to be performed by the operator include:

a. Inspecting the fuel and coolant levels.

b. Inspecting the coolant and oil levels.

c. Inspecting the fuel and oil levels.

x d. All the above.

18. Abnormal operating conditions which cause shortened intervals between lubrication servicing, include:

a. Extreme temperatures (high or low).

b. Immersion in water.

c. Continued operation in sand or dust.

x d. All the above.

19. If, after the engine starts, the oil pressure and/or temperature indicators do not display proper readings, you should:

a. Note this on your daily operator's report so the gages can be replaced at the next scheduled maintenance period.

b. Continue operations but restrict load lifts to two-thirds of rated capacity.

x c. Shut down the engine and correct the malfunction before resuming operation.

d. Operate the engine at part throttle and no load for 15 minutes, periodically observing the gages.

20. As a precaution against lethal carbon-monoxide poisoning, especially when operating in an enclosed area, the:

a. Operators must wear protective masks.

x b. Engine exhaust fumes must be vented away from the operator.

c. Voltage regulator switch must be kept in the OFF position.

d. None of the above.

21. When a guide brings his hands together in front of him, it means:

a. Slow down.

b. Stop-your engine.

x c. Stop.

d. Go straight ahead.

22. When a vehicle approaches from the rear to pass, you should:

x a. Be warned by the vehicle commander, keep to the right, and allow it to pass.

b. Increase speed so that the vehicle cannot pass.

c. Disregard the vehicle until the next scheduled halt, when it can pass.

d. Move to the right, halt, and motion the vehicle to pass.

23. When a red warning light comes on while the vehicle is in operation, the driver should:

a. Ascertain the source of trouble at the next scheduled halt.

b. Proceed, but inform the vehicle commander and let him investigate.

x c. Stop the vehicle immediately and determine the source of trouble before proceeding.

d. Disregard the light, as most warning panels do not function properly.

24. Before-operation maintenance service is important because:

x a. It often prevents during-operation failures.

b. Overnight leaks can be detected.

c. Tampering or sabotage will be noted before extensive damage can result.

d. It permits a check to insure that equipment removed for safekeeping during the night has been returned to the vehicle.

25. Before the engine is stopped it should be cooled by idling as, prescribed in the operator's manual.

a. True x b. False

26. Permitting vehicles to stand over night with low, fuel level will cause condensation and result in water in the fuel.

a. True x b. False

27. The best way to warm up an engine is to race it several times.

a. True b. False x

28. It is necessary to check for a hydrostatic lock in diesel engines in cold weather because diesel fuel vaporizes easily at low temperatures.

a. True b. False x

29. The engine should be stopped immediately if there is no oil pressure 10 seconds after starting the engine.

a. True x b. False

30. Improper engine operation can usually be detected by listening to engine sounds and by inspecting instruments on the instrument panel.

a. True x b. False

31. The vehicle should not be operated unless all fire extinguishers are ready to use.

a. True x b. False

32. The transmission may be damaged by too much oil. Do not fill oil above FULL mark on dipstick.

a. True x b. False

33. Leaving the driver's station unattended with the engine running could result in a runaway vehicle.

a. True x b. False

34. A hydrostatically locked engine is the result of:

a. High humidity causing excess moisture to accumulate in one or more cylinders.

b. Extreme cold temperature causing contraction of the cylinder walls.

c. One or more cylinders filled with fluid such as water, fuel, or oil.

x d. All the above.

35. When approaching a hill, a tracked vehicle driver should:

a. Always place the vehicle in the lowest range.

x b. Choose the range that will carry the vehicle over the hill.

c. Leave the vehicle in the range it is in until it "lugs downs", then shift to the desired range.

d. Always bring the vehicle to a complete stop, then place the vehicle in the lowest range until the hill is negotiated.

36. Most vehicle skids are the result of:

a. Vehicles operating on steel tracks.

b. Vehicles operating on rubber tracks or pads.

c. Vehicles operating on slippery or unsafe roads.

x d. Driving too fast for the road surface conditions.

37. Unequal track tension will cause:

a. No difference in riding qualities.

b. No difference in driving qualities.

c. The vehicle to jump or steer erratically.

x d. The vehicle to lead to one side.

38. When one track is spinning (i.e., losing traction), power can be best applied to the opposite track by:

a. Chaining the slipping track to a roadwheel arm.

b. Applying steering control to the slipping track with the transmission in neutral.

x c. Applying steering action with the transmission in a driving range.

d. Moving the selector lever rapidly with the engine accelerated and applying no steering action.

39. To bring a vehicle out of a skid, it is best to place the range selector in:

a. Neutral.

x b. Neutral steer and pivot the vehicle in the direction of the skid.

c. Low range, accelerate, and steer in the direction of the skid.

d. Reverse, accelerate, and steer until the vehicle is brought to a stop.

40. To cross a small ditch or ravine, a driver should:

a. Back off to get a maximum speed approach, then jump the vehicle over the ditch.

x b. Be certain the ditch is narrow enough to cross, then move slowly over the edge in low range, braking until the vehicle eases over the ditch, then accelerate enough to carry the vehicle up and over the other side.

c. Move slowly to the edge of the ditch, then accelerate fully until the obstacle is cleared.

d. Move rapidly into the obstacle in high range at maximum engine RPM; maintain full acceleration until the obstacle is cleared.

41. When coming into a road from an adjoining field:

a. Go through the ditch at the right angle, turning sharply on the shoulder of the road.

b. Go through the ditch at a right angle, then pivot, turning onto the road.

x c. Cross the ditch at an oblique angle, turning gradually onto the road.

d. Go through the ditch at a right angle, pulling to the center of the road, then pivot turn in the direction you wish to go.

42. When crossing a soft field of mud or sand:

x a. Follow the tracks of the vehicle ahead.

b. Zigzag across the field as fast as possible.

c. Move as straight and steady as possible, do not track the vehicle.

d. Stop and reverse the vehicle occasionally to remove sand or mud from the tracks.

43. When crossing over a vertical obstacle:

a. Approach rapidly in high range to allow the momentum to take you over.

b. Back over the vertical obstacle, as most track vehicles climb high vertical obstacles better in reverse.

x c. Approach at slow speed in low-range, release the accelerator when the balance point is reached, then accelerate smoothly when the vehicle noses down to move away from the obstacle.

d. Approach at a steady speed in low-range; when the balance point is reached, shift to high range and fully accelerate to move down and away from the obstacle.

44. Driving along the sides of hills should be avoided as much as possible because it tends to throw the track.

a. True x b. False

45. Use of the indirect-vision devices by track vehicle drivers does not limit their ability to see.

a. True b. False x

46. Track sprocket wear on all tracked vehicles should be carefully observed and sprockets should be turned at the proper time to provide maximum sprocket life.

a. True x b. False

SKILL PERFORMANCE

1. Applicability. Applicants who have met the physical requirements and passed the vehicle written knowledge test are eligible to take the skill performance test. The purpose of this test is to give the license applicant an opportunity to demonstrate his ability to use the vehicle efficiently and safely. When vehicle operators are assigned to a new unit, validation of previously passed skill performance tests may be required at the unit commander's discretion.

2. Training. The commander is responsible for the safe use and operation of the ordnance vehicles within his unit. Training is essential for effective and safe operation of ordnance vehicles. As a result of constant improvements in vehicle design and maintenance, vehicle operators continually require additional training to maintain their proficiency.

a. Subject Areas. Training will include the following areas:

(1) Vehicle Characteristics and Components. To become an effective operator, applicants must have a thorough knowledge of the following:

(a) Characteristics, basic principles, functions of major components, and normal attachments to vehicles.

(b) Before, during, and after operational checks and preventive maintenance services that must be performed on the vehicles.

(c) The operator's manual pertaining to the vehicle on which the instructions are being conducted.

(2) Safety Procedures. Emphasis must be placed on safety throughout the course of instruction. Safety procedures should always be observed and emphasized.

(3) Publications, Forms, Reports, and Vehicle Logbook. The ordnance vehicle operator is directly concerned with publications, forms, etc. used in the daily operation and maintenance of the vehicles. Instruction should include familiarization with these publications to ensure proper maintenance and control for ordnance vehicles.

(4) Tools and Equipment. This phase of instruction must be designed for the potential operator to gain a general knowledge of the tools and equipment essential for ordnance vehicles.

(5) Fire Prevention and Fire Fighting. All prospective operators must be made aware of the danger of fire on or within the vehicles to be operated. Emphasis must be placed on fire prevention and proper use of the fire extinguisher and procedures to activate vehicle fire suppression systems.

(6) Operator Maintenance. During this phase of instruction, specific emphasis should be placed on the operator's responsibility regarding maintenance. This will normally include, as a minimum, before, during, and after operational checks.

(7) Starting, Operating, and Stopping Procedures. The prospective operator should be trained on proper procedures for starting the vehicle, placing the vehicle in normal and unusual operation, and understanding proper procedures for stopping/ shutting down the vehicle.

(8) Washing, Cleaning, and Decontaminating Operations. Procedures for washing, cleaning, or decontaminating are not identical for all vehicles. The proper washing, cleaning, and decontaminating procedures that the operator must be knowledge-able of are prescribed in the vehicle operator's manual.

(9) Hand and Arm Signals. The ordnance vehicle operator must be thoroughly familiar with hand and arm signals for the safe operation of the vehicle. This information is provided in FM 21-306, Tracked Combat Vehicle Driver's Manual.

(10) Emergency Destruction. When capture or abandonment of ordnance vehicles to an enemy is imminent, familiarity with the proper methods of destruction/demolition is crucial. The ordnance vehicle operator must be familiar with the method(s) of demolition/destruction for the vehicles he will be operating. These methods are cited in the applicable vehicle technical manual.

b. Training Methods. There are basically three means of training available: formal schooling, correspondence courses, and on-the-job training.

(1) Formal Schooling. Formal schooling for ordnance vehicle operators (crewmen) is conducted at various schools and centers at specified locations. Ordnance vehicle schools (e.g., the Assault Amphibian School, (AAS)) may issue a license to all school graduates upon successful completion of all school courses.

If the school chooses not to issue licenses, an entry on page 11 of each licence candidate's Service Record Book (SRB)/Officer's Qualification Record (OQR) must be made by the individual who certifies the applicant's completion of all required tests. This entry must state that the individual has satisfactorily completed all school requirements that qualify him to drive a specific ordnance vehicle. If a candidate has not been licensed while at one of the ordnance vehicle schools, he must be licensed within 90 days after arriving at his assigned unit. If the candidate has been certified at the school, he needs only to be issued the actual OF 346 upon arrival to his assigned unit.

(2) Marine Corps Institute Courses. Various Marine Corps Institute courses are available to the individual Marine. These courses include material on the individual's technical field and material of general interest. A listing of the available courses and the required application forms are available through the unit training officer.

(3) On-The-Job Training (OJT). This training is conducted at the unit under the supervision of qualified vehicle operators.

3. Practical Application Test Administration. As a result of OJT and/or formal training, it is assumed that the applicant is sufficiently capable of performing the various tasks required by the skill performance tests. These requirements include typical vehicle operations and should be set up and administered with economic use of equipment, man-hours, and facilities.

a. Testing Environment. The applicant should take the skill performance test in an area/environment similar to that in which the ordnance vehicle would normally be operated.

b. Scheduling the Test. Because of the lack of particular ordnance vehicles, the applicant may be required to go where the vehicle is located to take the skill performance test. This is particularly true in the case of Marine Corps Reserves license applicants. Coordinate the scheduling of the testing with the licensing examiner to ensure that all applicants are tested in an efficient and effective manner.

c. Taking the Test. When taking the skill performance test, applicants will be tested individually. The skill performance test will include before, during, and after operational checks demonstrated under conditions similar to those under which the vehicle, for which the OF 346 is sought, will operate. At the commander's discretion, checklists may be prepared for the

specific vehicle on which testing is being conducted. The license examiner will read the instructions to the applicant ensuring that the applicant clearly understands the testing procedures. The length of time involved in taking the test will depend on the item of equipment being tested. The examiner should use his judgment on the amount of time to be given for responding to test procedures. The operator should not feel pressured or rushed but he should not be allowed an excessive amount of time.

d. Termination of the Skill Performance Test. The license examiner has primary responsibility to stop a test when it is in the best interest of safety to do so. He should use his best judgment keeping in mind that the following situations require immediate termination:

(1) Equipment proves to be in bad mechanical or unsafe operating condition.

(2) Applicant has an obvious lack of skill in operating the vehicle being tested.

(3) Applicant is in unsatisfactory physical condition.

(4) Applicant demonstrates willful recklessness.

(5) Applicant is unduly nervous and/or completely lacks confidence.

(6) Applicant becomes involved in an accident.

(7) Applicant refuses or is unable to follow directions.

When terminating a skill performance test, the license examiner will note the specific reason for termination on the checklist.

e. Test Evaluation. Skill performance tests will be evaluated as either satisfactory or unsatisfactory. A short line is provided below each task item on the practical application checklist on which the examiner can make a check mark to denote that the applicant has performed or answered correctly. If the examiner feels that a short written explanation of his action is necessary, he may note this on the test sheet.

4. Unsuccessful Applicants

a. General. Applicants who fail the practical application test will be critiqued, at the time of failure, as to the reason for failure. Correct performance will be explained and/or

demonstrated. The applicant may return and be retested (on the items failed) any time within 60 days but no sooner than 48 hours following the test date. Retain the applicant's score sheet in his operator history file and mark the action date card "retest."

b. Retesting Unsuccessful Applicants. When an applicant is retested on a skill performance test, only the particular items checked as unsatisfactory on the previous checklist are mandatory. Others are optional, at the license examiner's discretion.

SKILL PERFORMANCE TEST INSTRUCTIONS

1. The purpose of the Skill Performance test is to provide you an opportunity to demonstrate that you can effectively and safely operate the _____(Vehicle's Name)_____.

2. Throughout the test, I will give you directions to accomplish certain tasks. The directions will be straightforward, and are not meant to lead or trick you into doing anything improper or unsafe. If you do not understand my directions, or feel that they are improper or will create unsafe conditions, discuss them with me as soon as you receive them.

3. During the test, I will ask questions for only two reasons; to gain an understanding as to why you have done something, or conversely, why you have not done something. My questions will not be asked to confuse or mislead you.

4. You will not be working under a rigid time limit. However, effective operation of this vehicle requires prompt decisions and appropriate action.

5. If, after the test begins, I observe any of the following conditions, the test will be terminated.

a. Your safety is needlessly endangered.

b. Others safety is needlessly endangered.

c. The vehicle is needlessly endangered.

d. Recklessness is apparent.

e. An accident occurs.

f. You cannot - or do not follow my instructions.

6. If the test is terminated, you will be told why and I will determine whether continuation or retesting is appropriate.

7. Do you have any questions before you begin the test?

ENCLOSURE (8)

Skill Performance Test

Name: _____ ( ) Passed ( ) Failed

Organization: _____ License Examiner: _____

Date: _____

Task: Conduct the operator's before operation check.

( ) Satisfactory ( ) Unsatisfactory

Comments:

Task: Start the vehicle engine.

( ) Satisfactory ( ) Unsatisfactory

Comments:

Task: Move the vehicle to the test site.

( ) Satisfactory ( ) Unsatisfactory

Comments:

Task: Conduct off-road driving.

( ) Satisfactory ( ) Unsatisfactory

Comments:

Task: Conduct obstacle crossing.

( ) Satisfactory ( ) Unsatisfactory

Comments:

Task: Perform the operator's during operation checks.

( ) Satisfactory ( ) Unsatisfactory

Comments:

Task: Conduct water operation.

( ) Satisfactory ( ) Unsatisfactory

Comments:

Task: Conduct vehicle movement through a wooded area.

( ) Satisfactory ( ) Unsatisfactory

Comments:

Task: Return vehicle to starting point.

( ) Satisfactory ( ) Unsatisfactory

Comments:

Task: Conduct the operator's after operation checks.

( ) Satisfactory ( ) Unsatisfactory

Comments:

DIRT-ROAD/CROSS-COUNTRY DRIVING

1. General. All applicants are required to demonstrate their ability to drive cross-country and on dirt roads.

2. Test Routed. It is the license examiner's responsibility to establish routes for both the cross-country and the dirt-road portions of this qualification test. There are no hard or fast rules regarding test routes, since test routes will vary depending on the type of terrain found in the vicinity of the licensing office. Possible types of test routes are described below. Modify the test routes as necessary to conform to the available terrain and to provide realistic testing for each vehicle.

a. Dirt-Road Course. Figure 1 illustrates a possible dirt-road course adapted from existing dirt roads in hilly terrain. Dirt-road courses should include at least 80 percent of the following features:

(1) Hills (steep enough to require shifting).

(2) Blind curves.

(3) Limited shoulder room.

(4) Water or mudholes.

(5) Varying surface materials: gravel, dirt, mud, and dust.

(6) wooded areas with overhanging trees.

(7) Obstacles such as washouts, fallen trees, and rocks.

(8) Turn-around on sloping ground.

(9) Site with limited visibility.

(10) Site with limited shoulders for simulated "repair stops."

(11) Deep ruts.

b. Cross-Country Course. Figure 2 illustrates a possible cross-country course established at a site near the licensing office. such courses should be 1 to 2 miles long and should include the following features:

(1) Combination of flat and rolling terrain, with a few hills.

(2) Gullies/ditches of varying width and depth.

(3) Weeds and tall grass.

(4) Areas with soft or marshy ground.

(5) Deep sand and/or mud.

(6) Fallen trees and/or large rocks.

(7) Wooded areas.

(8) A stream with one or two natural fords.

Where the terrain allows obvious bypassing of much of the course, limits may be established with flags and poles. Start and finish flag locations should be changed frequently to avoid establishing tracks along the "best path."

c. Combination Dirt-Road/Cross-Country Course. Figure 3 shows a possible combined dirt-road/cross-country route established by routing applicants away from existing dirt-roads for part of the test. This route should retain as many characteristics of both types of courses as possible. Applicants are directed from flag to flag in the order indicated. Flag locations should be changed frequently.

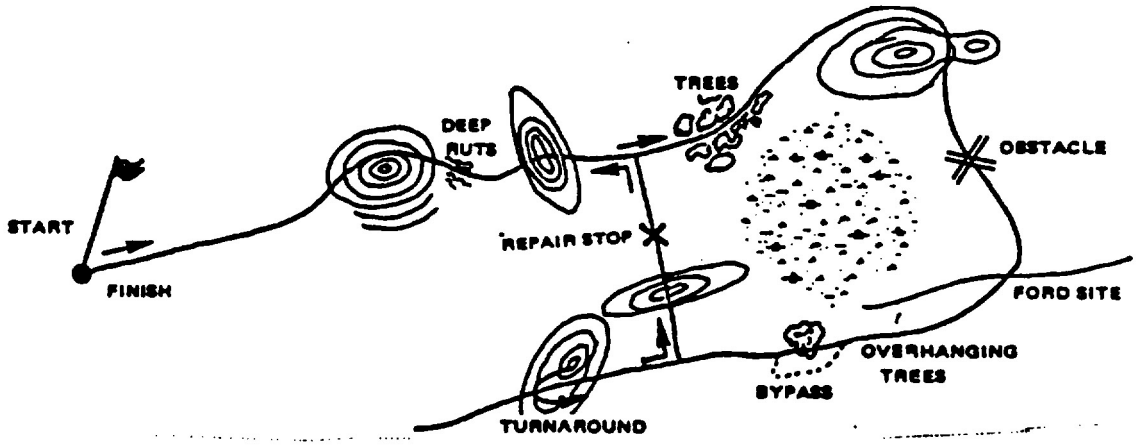


Figure 1.--Sample Dirt-Road Course.

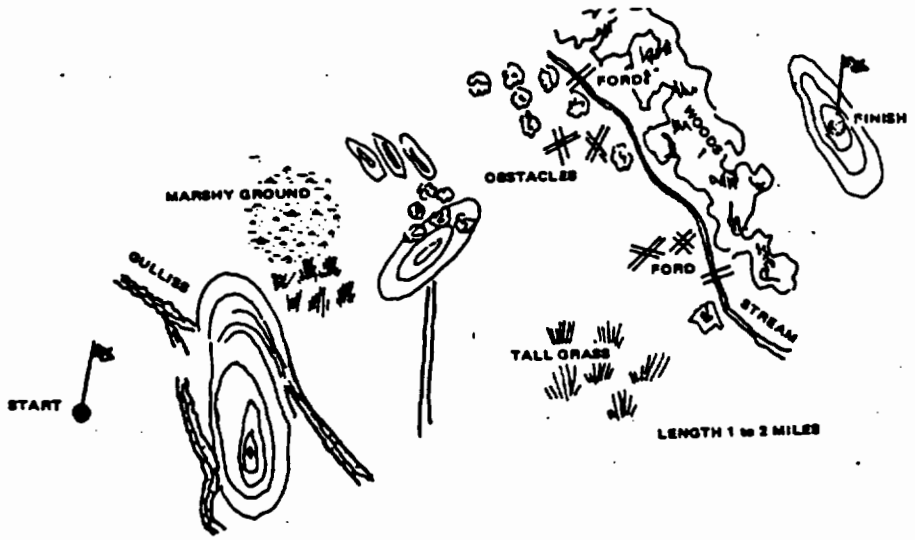
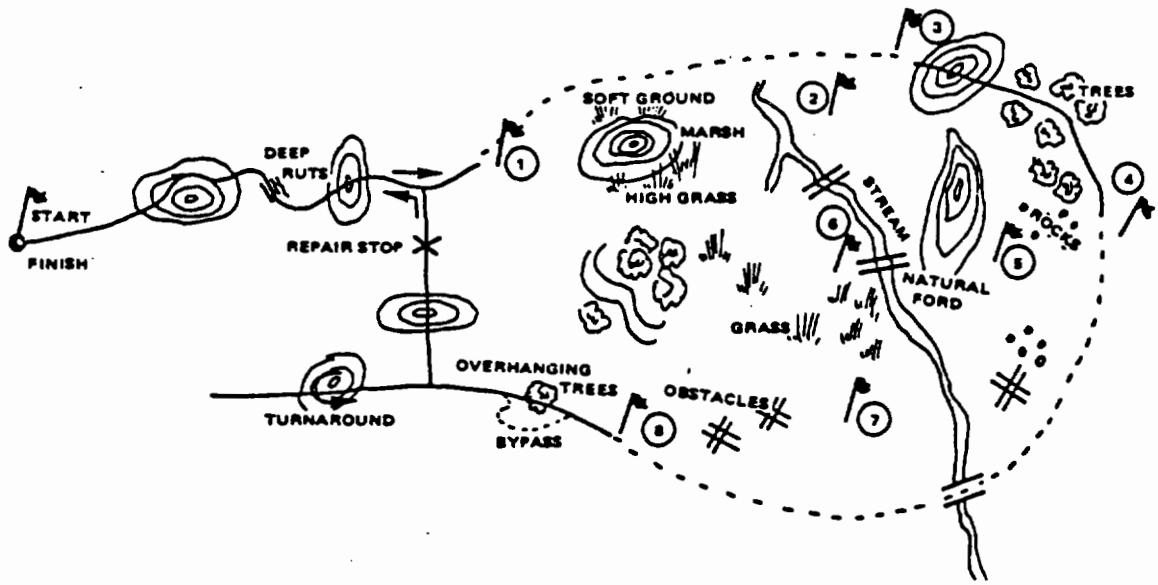


Figure 2.--Sample Cross-Country Course.



_____ = existing dirt road (used)
- - - - - - - - - - - - = existing dirt road (not used)
= routing flag

Figure 3.--Sample Combined Dirt-Road/Cross-Country Course.

d. Permanent Driving Range. The illustration is adapted for a standard military driving range and will accommodate a variety of vehicles. This type of testing route should be constructed only when large numbers of applicants are involved and where access to true cross-country and dirt-road courses is limited. The driving range shown may be altered as necessary to meet local unit's requirements for testing.

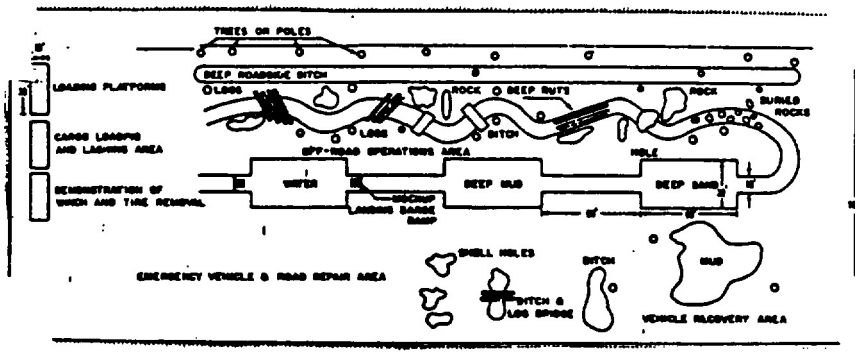


Figure 4.--Sample Permanent Driving Range.

e. Water Testing. Water testing, of applicable vehicles only, should be performed by those applicants who have previously had no water operations training. During testing, the applicant should demonstrate a thorough knowledge of the following:

(1) Pre-water operational checks.

(2) Safety procedures.

(3) Fording.

(4) Entering surf from landing craft (AAV/LAV specific).

(5) Entering and leaving water at the shoreline.

(6) Reversing in water.

(7) Driving out of water.

(8) Stopping in water.

(9) Post-water operational checks.

NOTE: Refer to the appropriate TM's for more specific details.

PROCEDURES FOR ISSUING LICENSES

1. General. The following paragraphs present basic recording requirements for issuing or denying the OF 346.

2. Completing the Documentation. This paragraph applies to all successful license applicants.

a. Completing the Application, Part III - V. Parts I and II of the application, with the exception of the commanding officer's recommendation, should have been completed during the initial interview. In part III, see enclosure (5), after receiving the-commanding officer's recommendation, ensure that all applicable test results and restrictions are entered before signing and dating. Prepare part IV of the application form, and OF 346 for signature by the licensing officer, per subparagraphs (1) and (2), following. The licensing officer should sign and date items 6 and 7 at the same time he signs the front of the applicant's new OF 346. The licensing' officer will direct the applicant to provide his approved application to the SRB/OQR clerk for appropriate page 11 entries by signing part V. The licensing officer will ensure a copy of the application is retained in the driver's history file. The applicant will return the application to the license examiner with part V signed by the commanding officer. Prepare part IV for signature as follows:

(1) Initial Licenses and Renewals. Check item 1 "yes" or "no", as applicable. If the license is being issued, assign a license number in item 2 and the date of issue in item 3. At the same time, enter the date of issue, applicant's name, and the license expiration date opposite the card number in the License Log Book. The expiration date, item 4, shall be 4 years from the date of issue designated in item 3 or his EAS, whichever occurs first. Place a check mark in the box opposite item 5a, requiring a page 11 entry in the applicant's SRB/OQR. When an operator's license is issued, record all vehicles for which a license has been issued. Also, in brief concise comments, record the following information in the License Logbook:

a. Type of license.

b. Date license becomes void.

c. Any restrictions, if applicable, imposed on the operator, i.e., operator must wear glasses/contact lenses for vision correctable to 20/40.

d. For revocation, state that the license was revoked, the date, and the reason for revoking the license. If the applicant is a civilian, strike out the reference on page 11 SRB/OQR and insert "personnel file".

(2) Duplicate Issues. Complete items 1 through 4 of part IV based on the information contained in the applicant's vehicle operator history file or in the SRB/OQR.

b. Government Vehicle Operator's Identification Card, OF 346. Complete both sides of the OF 346, giving complete information. On the front of the OF 346, in the top right-hand corner, is a block for the card (license) number. Refer to part IV, item 2, on the applicant's application or the license number. The operator's full name, sex, height, weight, date of birth, Social Security Number, and color of hair and eyes can be taken from part I of the application form, items 1 through 9. Date Issued should be completed, as appropriate, and Date Expires should be 4 years from the Date Issued or the EAS, whichever occurs first. The operator will sign in the applicable blank and the licensing officer will sign his name under "Signature and Title of Issuing Official". At this time, he will also sign and date part III, items 6 and 7, on the application form. On the back of the OF 346, ensure that applicable restrictions are entered, i.e., "corrective lenses required". Under Type Vehicle and/or Equipment, list each ordnance vehicle the license is qualified to operate and whether it is a Learner, Standard, or Restricted permit denoted by placing in parentheses an "L", "S", or an "R". The Capacity column should indicate the vehicle weight. Under "Qualifying Official", the licensing examiner will sign and date beside each vehicle. Space under "Other Records" will be used to annotate special conditions of the permit, such as "valid only when accompanied by individual qualified to operate the above vehicle."

(1) Initial License. Base all OF 346 entries on the information contained in parts I - IV of the application form.

(2) Renewal. If there are no new operator categories or additional special qualifications, complete the OF 346 with qualifications identical to those on the expired OF 346. Destroy the old OF 346 before signing the new one. If there are additional qualifications, enter them on the back of the new card in addition to the former qualifications.

(3) Duplicate. A new OF 346 will be issued upon verification that the applicant previously held a valid OF 346. To

issue the new OF 346 review his vehicle operator history file and/or the SRB/OQR, issue a new OF 346. Enter the notation "Duplicate" in the front, top margin of the OF 346. The licensing officer should sign the front of the card. The licensing officer signs the back and dates each qualification. Expiration date will be the same as on the applicant's previous license.

(4) Upgrade. When an operator becomes qualified to operate additional vehicles, these vehicles will be added to their current OF 346. The licensing examiner will sign and date beside each new entry. If an operator is licensed for more than four vehicles, another OF 346 will be issued. The additional OF 346 will have the operator's name, original license number, and original expiration date. On the back, each additional vehicle will be listed, one per line. The licensing examiner will sign and date beside each vehicle. In the "Restrictions" block on the back, enter the notation "Page 2".

3. Disqualification. When an applicant has performed poorly or has failed to meet any of the requirements in this Order, follow the procedures given in the following paragraphs:

a. Double-Check the Requirements. If the applicant is deemed in fact to be disqualified, use a copy of the application to notify their commanding officer after making the appropriate entries described in the paragraphs b through f, following.

b. Denial Because of Failure of Physical Examination. When a medical officer has declined to certify that an applicant meets the physical requirements to operate the specified vehicles, the following actions should be taken. The licensing officer will determine if the disqualification items may or may not be waived. If the items cannot be waived by the licensing officer, it is the officer's responsibility to bring this matter to the commanding officer's attention and request a decision as to whether a waiver should be granted. If the item cannot be waived under any of the above circumstances enter the following notation in item 2, part II: "Disqualified from licensing; physical requirements. Medical certification required prior to submitting for a new application".

c. Denial Because of Failure of Vehicle/Awareness Test. Enter the following notation in item 2, part III: "Not qualified. Recommend further study/training."

d. Denial Because of Failure of Practical Application Test. Applies to failure of practical application test. Enter the following notation in item 2, part III: "Not qualified. Recommend further training."

e. Denial Because of Recklessness, Attitude, Accident, Etc. Enter a brief description of the reason for denial of license in item 2, part III. If it is felt the applicant should be disqualified from operating a vehicle for the Marine Corps, add the following statement: "Recommend disqualification until applicant demonstrates the proper skill and attitude to operate vehicles safely and responsibly." If disqualification is recommended in part IV, check item 5a as requiring a Page 11 entry in the individuals SRB/OQR for the licensing officer's review and the unit commander's approval prior to requesting the SRB/OQR entries.

4. Notification Action. In all cases, the licensing officer signs part IV, "License Action", then a copy of the application is sent to the individual who signed item 18 of part I. This constitutes notification to the applicant's commanding officer or superior, of the disposition of the application.

5. Recording Action. File copies of all documents relating to the issue or denial of license in the applicant's history file.

ENCLOSURE (10)

OF 346 U.S. GOVERNMENT MOTOR VEHICLE OPERATOR'S
IDENTIFICATION CARD

OF 346 11/85 USOPM FPM Chapter 930	U.S. Government Motor Vehicle Operator's Identification Card	Card No. A-000	Restrictions: Must Wear Glasses
Name of Operator (Not Transferable): Garry R, Smith	Sex: M	Signature of Operator (Not valid until signed): Garry R. Smith	QUALIFIED TO OPERATE
Date of Birth: 10/2/65	Social Security No: 000-00-00	Name and Location of Issuing Unit: HQMC HQBN Washington, DC	Type Vehicle and/or Equipment: M60 A1 Tank; Capacity: 60 Ton; Qualifying Official: R.E. Brown
Height: 5'9"	Weight: 165	Hair Color: Br	Eye Color: Blu
Signature and Title of Issuing Official: R.E. Brown Maj Lic Officer			OTHER RECORDS (Optional)
Date Issued: 25 Jun88	Date Expires: 24 Jun92		
The holder of this card is qualified to operate U.S. Government vehicles and/or equipment specified subject to the restrictions set forth on the other half of this card. Card must be carried at all times when operating Government vehicles.			NSN 7540-00-634-3999 50346-101

ENCLOSURE (10)

REMEDIAL PROCEDURES

1. General. This enclosure sets forth procedures for use when an applicant's licensing status must be changed after he has been issued an ordnance vehicle operator's OF 346. This type of situation includes revocation and suspension.

2. Revocation. Commanding officers are authorized to revoke OF 346 licenses held by personnel in their command for any ordnance vehicle for a period of 90 days or more. Revoked OF 346's should either be destroyed or returned to the licensing office for disposition. Revocations will be applied for the following reasons:

a. instances of being under the influence of alcohol or controlled substances, other than those prescribed by competent medical authorities.

b. Receiving a citation or being found liable for causing a reportable accident/incident while operating an ordnance vehicle.

c. At the commander's discretion, for cause; i.e., evidence of deliberate misuse or gross disregard of the equipment or safety of personnel.

3. Suspension. Commanding officers may suspend licenses, for cause, for periods of up to 90 days. The individual's commanding officer should then confiscate the OF 346 and hold it until the suspension period has expired. The OF 346 may then be returned to the individual without formal licensing office processing. No retesting is necessary unless the commanding officer requires it. If retesting is required, the individual must complete and sign an Application for Ordnance Vehicle Operator's Permit, OF 346, part I, for a new license transaction.

a. Operator History File. All documents related to an applicant's operating status should be maintained in the operator's history file. All licensing actions not accounted for on the application should be recorded and explained on the front inside cover of the applicant's ordnance vehicle operator's history file.

b. SRB/OQR Entry. Revocations by the unit commanding officer require an entry on page 11 of the individual's SRB/OQR giving the date of revocation, the period during which the individual will not be eligible for a new OF 346, and the reason(s) for the revocation.

* LICENSING OFFICE CODE IDENTIFIERS

M8010 Commanding Officer
MCLB, Barstow, CA 92311

M0291 Director
Assault Amphibian School
Schools Bn, MCB,
Camp Pendleton, CA 92055

M0450 Commanding Officer
1st LAR Bn, 1st MarDiv, FMFPAC,
Camp Pendleton, CA 92055

M3250 Commanding Officer
School of Infantry, MCB,
Camp Pendleton, CA 92055

M0102 Commanding Officer
MCTSSA, Marine Corps Base,
Camp Pendleton, CA 92055

M1410 Commanding Officer
1st Tank Bn, 1st MarDiv, FMFPAC,
Twentynine Palms, CA 92278

M1820 Commanding Officer
3d Asslt Amph Bn, 1st MarDiv, FMF,
Camp Pendleton, CA 92055

M8321 Commanding Officer
1st Maint Bn, 1st FSSG, FMFPAC,
Camp Pendleton, CA 92055

M7272 Commanding Officer
4th Tank Bn, FMF, USMCR, MCRTC,
NAS, Mirmar, San Diego, CA 92145

M0470 Commanding Officer
3d LAI Bn, 1st MarDiv, FMFPAC,
Twentynine Palms, CA 92278

M1800 Commanding Officer
Combat Support Group, 3d MarDiv, FMFPAC,
FPO San Francisco, CA 96602

M1826 Commanding Officer
AA Det, 1st MEB, FMFPAC
MCAS Kaneohe Bay, HI 96863

M9021 Commanding Officer
3d Maint Bn, 3d FSSG, FMFPAC
San Francisco, CA 96604

M1825 Commanding Officer
CO D, 3d Asslt Amph Bn, 1st MarDiv,
FMF, MCAGCC, Twentynine Palms, CA 92278

M2280 Director
LAV Test Directorate
USA YPG Yuma, AZ 85365

M8349 Commanding Officer
Det A, 1st FSSG, FMFPAC, MCAGCC,
Twentynine Palms, CA 92278

M87282 Commanding Officer
HQSVC Co, 4th LAVBn, 4th MarDiv, USMCR,
Marine Corps Reserve Center
Camp Pendleton, CA 92055

M1405 Commanding Officer
Co C, 8th Tank Bn
4th MarDiv, FMF, USMCR
Tallahassee, FL 32304

M1833 Commanding Officer
Co B, 4th Asslt Amph Bn, 4th MarDiv,
FMF, USMCR, Box 44 Bldg 411 NAS
Jacksonville, FL 32212

M3275 Commanding Officer
4th Asslt Amph Bn, FMF, USMCR,
5121 Grandy Blvd
Tampa, FL 33611

M8440 Commanding General (Code 83-2/833/834)
MCLB
Albany, GA 31704

M1444 Commanding Officer
Co C (-), 4th Tank Bn
4th MarDiv, FMF, USMCR
131 Myrtle St
Boise, ID 83706

M5014 Commanding Officer
Exercise Support Division, MCAGCC
Twentynine Palms, CA 92278

M1403 Commanding Officer
Co A (-), 8th Tank Bn, 4th MarDiv,
FMF, USMCR, P.O. Box 1132
Ft Knox, KY 40121

M4061 Officer in Charge
MarCorp Admin Det, U.S. Army Armor Center
Ft Knox, KY 40121

M0694 Officer in Charge
ORD Maint Cont TM
4th MaintBn, 4th FSSG, USMCR
North Parish Rd
Lawrence, MA 01843

M4062 Officer in Charge
Marine Corps Admin Detach, U.S. Army
Ord Ctr & School
Aberdeen, MD 21005

M82090 Commanding Officer
B-Co 4th LAVBn, 4th MarDiv, USMCR
Fort Detrick Bldg 719
Fredrick, MD 21701

M1832 Commanding Officer
Co A, 4th Asslt Amph Bn, FMF, USMCR,
Bldg 91 CBC
Gulfport, MS 39501

M0460 Commanding Officer
2d LAI Bn, 2d MarDiv, FMFLANT
Camp Lejeune, NC 28542

M1420 Commanding Officer
2d Tank Bn, 2d MarDiv, FMFLANT
Camp Lejeune, NC 28542

M1810 Commanding Officer
2d Asslt Amph Bn, 2d MarDiv,
FMFLANT, Camp Lejeune, NC 28542

M3268 Commanding Officer
4th Maint Bn, 4th FSSG, FMF, USMCR,
NMCRTC, 725 W 6th St
Charlotte, NC 28202

M7121 Commanding Officer
2d Maint Bn, 2d FSSG, FMFLANT
Camp Lejeune, NC 28542

M0173 Commanding Officer
8th Tank Bn, 4th MarDiv, FMF, USMCR
439 Paul Road
Rochester, NY 14624

M1074 Commanding Officer
Co B, 8th Tank Bn, MCRTC
E Molloy & Townline Rd
Syracuse, NY 13211

M9062 Commanding Officer
Co D, 8th Tank Bn, 4th MarDiv, FMF,
USMCR, 513 Pickens St
Columbia, SC 29201

M1835 Commanding Officer
DET Co B, 4th Asslt Amph Bn, FMF,
USMCR, MCRTC, P.O. Box 1650 Fort Point
Galveston, TX 77553

M4489 Officer in Charge
DET Co C, 4th Tank Bn, FMF, USMCR
2309 Line Ave
Amarillo, TX 79106

M4746 Commanding Officer
Ord Maint Co (-), 4th Maint Bn, 4th
FSSG, FMF, USMCR, N&MCRC 2100 N New Rd
Waco, TX 76707

M85240 Commanding Officer
C-Co 4th LAVBn, 4th MarDiv, USMCR
Toole Army Depot Bldg S 150
Toole, UT 84074

M0370 Commanding Officer
HqSvcBn, The Basic School, MCCDC
Quantico, VA 22134

0M1834 Commanding Officer
Co A, 4th Asslt Amph Bn (-), 4th MarDiv,
FMF, USMCR, NAVMCRTC, USNAB
Norfolk, VA 23520

M1443 Commanding Officer
Co B, 4th Tank Bn, 4th MarDiv, FMF,
USMCR, 1702 Tahoma Ave
Yakima, WA 98902