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<u>AND</u>

REAK DOWN OF SUBJECTS WITH ALLOTTED PERIODS TRADE TRAINING ADVANCE MTOF (MTO PART)

MID PHASE, MTO PART- I

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MID PHASE, MTO PART- II

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| | Total= | 43 | 57 | 100 | |

TRADE TRAINING ADVANCE

MTOF (MTO PART)

MID PHASE, PART-I

Course: MTOF TTA (MTO) Topic No-01

DRIVING THROUGH HAZARD

Aim

To learn driving a vehicle safely through different type of hazards. Introduction A building Constructed on weak foundation is never safe, and likewise with driving a vehicle, the basic principles must be sound if a person is every to become a good operator. The basic method of controlling a vehicle is the foundation upon which the whole technique of good driving will be built. The methods of controlling a vehicle require skill which can only be acquired by practice. The method may be define as a system or drill, each feature of which has to be considered in correct sequence by the operator at the approach to any hazard. The term hazard is used to indicate any physical feature such as cross road, round abort, road junction, crest of a hill or any potentially dangerous traffic situation developing ahead.

Method

- 2. The correct sequence, object and application of each feature of the method are as follows:
 - a. Selection of course.
 - b. Mirror and brake.
 - c. Gear.
 - d. Mirror and Signals.
 - e. Horn.
 - Normal acceleration.

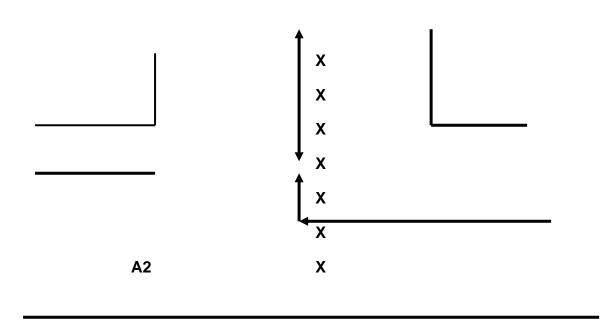
The application shown in the illustration is "Turning right" A cross is used because it presents the greatest potential danger but it can be applied to any kind of hazard. All six feature of the method are shown in the illustration.

Selection of Course

3. The object of this feature is to put the vehicle into the correct position before approaching to the hazard. It will be necessary to use the driving mirror for rear view and if necessary, to give the appropriate signal. The course selected is shown commencing at the place marked "C". Selection of course involves.

- a. noting the position of the road into which it is intended to turn.
- b. Use of driving mirror.
- c. Giving the turning right signal, if necessary.
- d. Steering on the course selected.

Turning Right



XXXXXXXXXXXXXXX C

| Other Traffic | |
|---------------|--|
| Other Hame_ | |

Mirror and Brake

4. The object of this feature is to ensure a safe speed when approaching an also at the hazard. Use the driving mirror once again before braking and necessary, give the slow down signal. This application commences at the place marked 'M&B' if the operator considers that the approached speed is too fast it must be reduced by application of foot brake. This feature involves:

- a. Use of driving mirror.
- b. Giving slowly down signals for the information of the following and approaching traffic.
- c. Apply the foot brake as necessary.

Gear

5. The object of this feature is to select the correct gear for the road speed decided upon in para6.the place of the application is shown marked 'G' on the illustration, but the position that shown is the only approximate one. A learner operator should initiate the C change of gear at a distance of 30 yards from the hazards, or when the vehicle is in line with the road sign warning of approaching to the hazard.

Mirror and Signal

- 6. The object of this feature is to inform the following and approaching traffic of the intention to deviate. It will be seen on the illustration that 'M&S' follows immediately after gear selection. This is to ensure that signals are not given late which is a common fault. this feature involves:
 - a. Use of the driving mirror.
 - b. Giving the turning right signals.

Horn

7. This feature is used to give warning to other road users. It is possible that a operator may see them but the road users may be unaware of his presence, or they may be out of view. The place where the horn should be sounded is marked 'H' on the illustration but no ruling is laid down whether the horn should be sounded or not. The operators' decision should depend upon the circumstances bearing in mind that the sounding of his horn in no way relieves him of the responsibility of taking every other safety precaution. An operator must also remember that the horn mist not be used in built up area during night time.

Normal Acceleration

8. This feature applies only to hazards which cause the vehicle to be turned from a straight course and the object is to negotiate the hazard safely having due regard to the road surface and traffic conditions. The vehicle should be driven from 'A1' to 'A2' with the engine just pulling the weight of the vehicle, that is, there will be no appreciable increase in road speed. When the vehicle is again moving on a straight course, it can be accelerated normally to increase speed.

Conclusion

9. If this method is applied correctly, it is obvious that the vehicle at all times will be in the correct place on the road, moving at the right speed and with the correct gear engaged. Further, if sufficient care is used when deciding whether or not it is safe to proceed, it will prevent may accidents which occur at hazards. After having learned to apply this method of vehicle control, an operator finds that by continuous practice it will become almost instinctive and as stated previously, will provide the foundation of the finer points of driving.

Course: MTOF TTA (MTO) Topic No-02

OBSERVATION OF SPEED LIMIT

Aim

1. To learn about the maximum speed limit of different types of MT vehicle used in BAF.

Purpose

- 2. In order to minimize the risk of accident, the maximum speed limit is imposed upon the all types of vehicle used in the BAF and is governed by the following consideration:
 - a. Size of the vehicle.
 - b. Nature of Traffic
 - c. Condition of the Road

Points to be noted by the Operator

- 3. a. Regulation prohibiting the use of certain roads and bridges by vehicle of certain types or weights is to be observed.
 - b. Any special restriction in built up areas must be completed with.
 - c. Road signs must always be observed.
 - d. Operators are to give due consideration to other road users.

Speed Regulations

- 4. The following regulations are to be strictly complied with by all operators:
 - a. The imposed speed limits are not to be exceeded.
 - b. Speed limit of the vehicle is painted in red letters and figures on the bottom corner of the wind screen in front of operator's seat.
 - c. Speed limit and instructions issued locally be displayed in all MT sqn and are included in MT Sqn order book.
 - d. Ambulances, crash tenders and fire vehicles are exempted from speed limit while driving to the scene of fire etc. However the operators are to ensure that they do not drive at a speed which may endanger the Speed limit within domestic and technical camp area is laid down but safety of their vehicles and other road users.

e. The officer commanding Base/Units and road signs indicating these speeds are to be displayed on all roads and main entrance gates.

Maximum Authorized Speeds of BAF MT Vehicle

5. The following maximum speed limits are maintained in different types of BAF MT vehicle:

| Type of Vehicle | Maximum Speed |
|--------------------------------------|---------------|
| Motor cycle | 40 MPH |
| Car passenger light & jeep | 40 ,, |
| Car passenger heavy | 45 ,, |
| Car passenger utilities light | 40 ,, |
| Car passenger utilities heavy | 35 ,, |
| Coaches all types | 30 ,, |
| Ambulance (light & heavy) | 30 ,, |
| Tender over 15 cwt up to 3 tons | 25 ,, |
| Tender over 3tons | 20 ,, |
| Crane light (up to 6 tons capacity) | 20 ,, |
| Crane heavy (over 6 tons capacity) | 15 ,, |
| Tractor articulate with trailer | 15 ,, |
| Refueled | 20 ,, |
| Tractor refueled with semi trailer | 15 ,, |
| Tractor light &heavy without trailer | 20 ,, |
| Truck forklift | 10 ,, |
| Water tender | 20 ,, |

Tender fitted with specialist equipment i.e. signal&

| Power tender etc. | 15 | ,, |
|------------------------------|----|----|
| MT breakdown vehicle | 20 | ,, |
| Tractor industrial/warehouse | 10 | ,, |
| Mechanical sweeper | 10 | ,, |
| Fire fighting vehicle | 20 | ,, |
| Tender bomb servicing | 25 | ,, |

Course: MTOF TTA (MTO) Topic No- 03

OPERATOR'S HAND SIGNALS

<u>Aim</u>

1. To learn the procedure of using correct hand signals.

Purpose

2. The purpose of operator's hand signal is to inform the rear traffic about his intention by his hand at the day time. It is essential for a operator to use hand signal when his vehicle has no or unserviceable traffic indicator.

Hand signals

- 3. An operator is to use hand signal when taking the following action:
 - a. <u>Left Turning.</u> If a vehicle is left hand drive, extend the left hand to the side parallel to the ground. All the fingers closed, palm facing to the front and keep the hand on that position at least for five seconds. If the vehicle is right hand drive, extend the right hand to the side, finger closed, palm facing to the front and start rotating the hand from rear to front making circle at least for three times.
 - b. <u>Right Turning.</u> If the vehicle is left hand drive, extend the left hand to the side, fingers close, palm facing to the front, start rotating from rear to front and make a circle at least for three times. If the vehicle is right hand drive, extend the right hand to the side parallel to the ground, palm facing to the front, all the fingers closed and keep holding on that position for at least five seconds.
 - c. <u>Over Taking.</u> If the vehicle is right hand drive, extend the right hand to the side, fingers closed, palm facing to the front and keep holding on that position at list for three second (just like right turning for a right hand drive vehicle). If the vehicle is left hand drive, extend the left hand to the front making circle at least for three times (just like right turning for a left hand drive vehicle).
 - d. **Straight Going.** This signal is going only to the police man controlling the traffic at cross road. There is no definite procedure of this signal. There are many types of signal used by the operator for this purpose. Few of them are cited below:

- (i) Put the right hand on the steering wheel, fingers closed, palm facing to the left and keep holding on that position till the police man sees it.
- (ii) Put the right hand to the side, fingers closed, head of the fingers pointing to the ground and start moving front to rear till the police man sees it.
- (iii) Put the right hand on the wind screen fingers closed head of the fingers pointing to upward, palm facing to the front and keep holding on that position till the police man sees it. This type of signal is commonly used by the operators now a days a in our country especially in our BAF.
- e. <u>Turning About.</u> Keep on giving right turning signal frequently till the turning is over.

Course: MTOF TTA (MTO) Topic No-04

TRAFFIC POLICE SIGNAL

Aim

1. To understand the signal given by the police man controlling the traffic.

Purpose

2. All the operators are to know and understand the signal given by the traffic police controlling the traffic. When a police man moves his hand it always carries some meanings. All the traffics must be well conversant with traffic police signal. The compliance of traffic police signal will certainly reduce the rate of accident to minimum.

Category of Signal

- 3. There are some categories of signal given by the traffic police controlling the traffic are given below:
 - a. <u>To Stop the Front Traffic.</u> To stop the front traffic, stand on the chowk in attention position, extend the right hand to the side, arm parallel to the ground and then bend hand upward from the elbow joint, palm facing to the front
 - b. <u>Stopping of Rear Traffic.</u> To stop the rear traffic, stand in attention position, extend the left hand to the side, arm parallel to the ground and palm facing to the front.
 - c. <u>To Stop the Front and Rear Traffic.</u> To stop the front and rear traffic, stand on the chowk in attention position. Extend the right hand to the side, arm parallel to the ground and then bend the right hand up ward from elbow joint, palm facing to the front. Extend the left hand to the side, arm parallel to the ground, palm facing to the front.
 - d. <u>To Call the Front Traffic.</u> To call the front traffic, extend the right hand to the front, then bend the hand up ward palm facing to the back. Move the hand from front to rear for some times.
 - e. <u>To Call the Rear Traffic.</u> To call the rear traffic, keep the left hand side way, make 45° angles, Fingers pointing to the ground and palm facing to the front. Move the hand from rear to front for some times.
- . f. <u>To Call the Right Hand Side Traffic.</u> Extend the right hand to the side making arm parallel to the ground, and then bend the hand from elbow joint and palm facing to the left side. Move the hand from right to hand side for some times.

g. <u>To Call the Left Hand Side Traffic.</u> To call the left hand side traffic, extend the left hand to the side, arm parallel to the ground and then bend the left hand from elbow joint palm facing to the right side. Move the hand from left to the head side for some times.

Course: MTOF TTA (MTO) Topic No-05

TRAFFIC CONTROL LIGHTS

Aim

1. To learn the meaning and sequence of colors of traffic control light.

Purpose

2. In order to facilitate the safe and smooth flow of traffic in dense traffic area. The automatic traffic lights are permanently installed. In a dense traffic area it becomes impossible for a man to regulate the traffic without delay.

Sequence of Traffic Signal Light

- 3. The automatic traffic signals are permanently installed to display lights operator in the sequence of:
 - a. Red b. Red and Amber
 - c. Green d. Amber
 - e. Red

Meaning of Color of Traffic Signal Light

- 4. The interpretation of different colors of signal lights is given below:
 - a. **Red.** Means stop behind the stop line marked on the road.
 - b. **Red and Amber.** Also means stop, do not go until green is shown.
 - c. <u>Green.</u> Means you may go if the road is clear. Take special care when you intend to turn to left or right.
 - d. <u>Amber.</u> On certain places green amber may be shown. Green amber indicates the same meaning of green light and also direction. You may go into the direction indicated by the amber without considering the other lights.

Course: MTOF TTA (MTO) Topic No-06

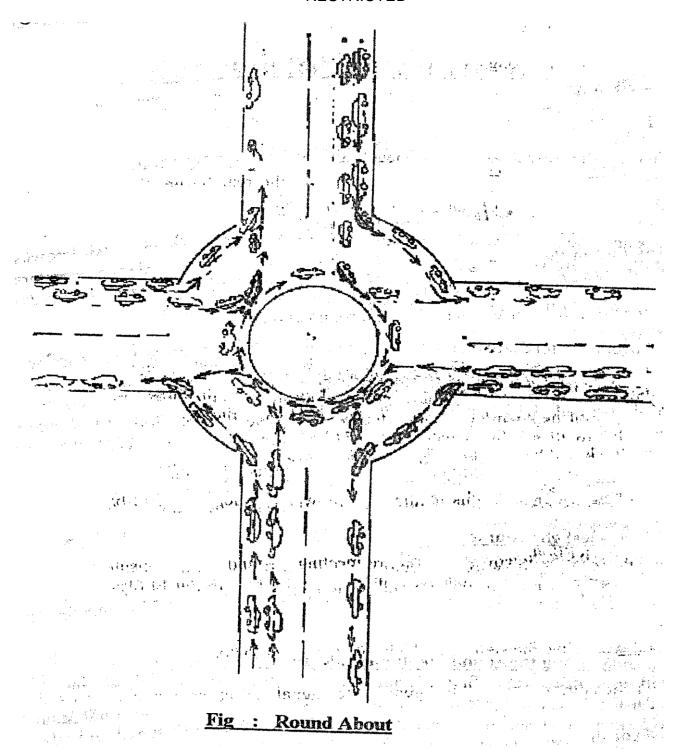
NEGOTIATING A ROUND ABOUT

Aim

1. To learn the correct sequence of negotiating a round about.

Purpose

- 2. A round about is always considered as a potential hazard. A fair knowledge of the correct sequence of negotiating a round about will enable the operators to take turn in the round about without causing any accident. Many accidents occur in the round about due to the wrong approaching to that hazard.
- 3. To avoid the road accident of this nature the following sequences are to be strictly observed
 - a. <u>Consult the Driving Mirror:</u> Before meeting a round about consult the driving mirror and be sure that no vehicle is at the rear trying to over take.
 - b. **Signal.** Give the signal in which side you want to go.
 - c. <u>Select the Course</u>. After giving the signal select course and bring the vehicle to the correct place.
 - d. **Reduce Speed.** Reduce speed to take turn to the side intended to go.
 - e. <u>Meeting the Round About and Take Turn.</u> If you want to go to the left hand side turning first, remain extreme to the left side of the road and take turn to the left side road. If you want to take turn to the next left hand side then be closer to the island, while turning comes give signal and take turn to the left side. If you want to go further, remain extreme to the right side of the road encircled with the island and select your course. If any first moving transport wants to over take he may do so from the left.



14 RESTRICTED

Course: MTOF TTA (MTO) Topic No-07

ROAD TRAFFIC SIGN AND VISUAL ROAD SIGN CHART

Aim.

1. To learn and understand about road traffic signs while driving on highway.

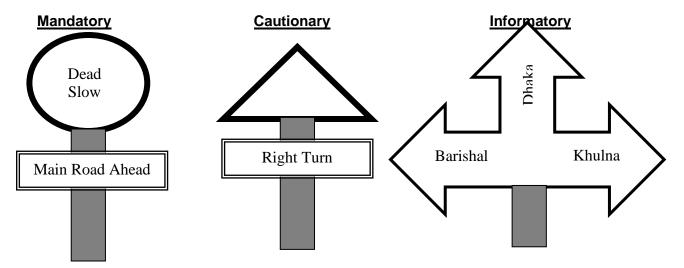
Purpose.

2. The road traffic sign gives the pre-hand information to the road users about the nature and condition of the road lying ahead. Road traffic sign is called the language of the road.

Types of Road sign.

- 3. There are three types of road signs:
 - 1. Mandatory
 - 2. Cautionary
 - 3. Informatory
- **a.** <u>Mandatory</u>: This type of sign is placed at the poin of hazard. It is a round plate encircled by a red roundel and definition plate is fitted below. Every road user must have to obey its law. Defaulters may be prosecuted by law.
- **Cautionary:** This type of sign is placed 90 feet ahead of the hazard. It is triangular plate having red line at the edge with white back ground. We always obey this sign.

C. <u>Informatory:</u> This type of sign is placed at the side of the road indicating the way to go to the desired destination. It only gives the information to the user about the road and place lying ahead easy. How far to go and where to go etc. It has no definite shape.



Course: MTOF TTA (MTO) Topic No-08

MT DAILY SERVICING PRIME MOVER (POSTER NO-34)

Aim

1. To get familiarized with the poster No-34 and to learn the daily servicing procedure of prime mover.

Object

2. The daily servicing schedule is a list of operations which are to be performed by the operators before the vehicle leaves MT Sqn on the first run of the day

Layout

- 3. The following items are to be checked for prime mover:
 - a. Check the MT servicing form 656 to ensure that items previously reported defective have been either:-
 - (1) Repaired.
 - (2) Passed as fit for service by an NCO.
 - b. Drain the condensed moisture (reduce from vapour to liquid drops of water
 - c. Check the tyre pressure by gauge.
 - d. Examine the level of oil in the sump. Replenish as required with the correct grade.
 - e. <u>Diesel Engine</u>: Check the level of oil in the injector pump and governor casings. Replenish as required with correct grade of oil.
 - f. Ensure that the radiator is full, replenish as necessary with water or antifreeze. Anti- freeze is used in extreme cold weather.
 - g. Start the engine, ensure that all starting controls function correctly:-
 - (1) Check oil pressure by gauge or warning light.
 - (2) Ensure that the ignition warning light goes out when the engine speed is increased from idling and check the charging rate of dynamo (vehicle fitted with an ammeter).

- (3) Check the reading of the brake air pressure of vacuum gauge ensuring that it is above the safe minimum (vehicle fitted with air storage or vacuum tanks).
- h. Apply the hand and foot brake separate ensure that when each brake is fully applied, the paddle or level is not at the end of its travel (on vehicle fitted with vacuum or air pressure brake, the operation of the foot brake is to be checked with the engine running).
- j. Check the operation of the lighting system, horn, wind screen wiper and traffic indicators.
- k. Carry out a general survey of the vehicle, ensure that the number plates are clear and legible, the driving mirror is serviceable and secured and the fire extinguisher is full.
- I. Check the contents of the fuel tank. Refill as required, check the fuel gauge for correct operation during the refilling.
- m. Make the necessary entries and sign the MT servicing form 656.

Notes for Operator

- 4. Besides the items of daily servicing mentioned in para 3, the following points are to be taken into consideration by the MT operators:-
- a. All information's on tyre pressure lubricants, etc. will be found on the vehicle data sheet (Poster No 32).
- b. Batteries are to be checked for leakage and tightness and ensure that the level of electrolyte is ¼ inch above the plates.
- c. Your vehicle was built to stand up to hard work. It will stand up to hard work if you play your part in looking after it make it your business to learn all you can about it, and drive it as you would want some one else to drive it if belonged to you.
- The following POL will be used for the vehicles:-
 - 1. Type of engine oil for winter in HD 30.
 - 2. Type of engine oil for summer in HD 50.
 - 3. Grade of petrol for Vehicles other than staff car is 74 Oct
 - 4. Grade of petrol for car is 80 Oct.

Condition of Vehicle Report

- 5. In order to prevent the accumulation of minor defects rendering a vehicle unserviceable, the operator completes the condition of the vehicle report at the end of the first run of the day. The condition of the vehicle report is detailed and recorded on Form 656 and is completed as follows:
- a. Insert a tick ($\sqrt{}$) when the performance is satisfactory.
- b. Insert a (X) when the performance is unsatisfactory. He should also make an entry in the repair record of Form 656.

Ref: Poster No 34 and AP 3025

TRADE TRAINING ADVANCE

MTOF (MTO PART)

MID PHASE, PART- II

Course: MTOF TTA (MTO) Topic No-01

SAKIDDING OF MT VEHICLES

Aim

1. To learn how skidding takes place, road grip, types of skidding and its prevention.

<u>Introduction</u>

2. The vehicle moves on the road because of the grip between the tyres and the road surface. If this grip is lost due to any reason, the vehicle will not move and its wheels will simply rotate at a place where they are. This phenomenon is knows as skidding. These conditions are experienced on wet, muddy and ice-bound roads. The grip between the tyres and the road surface also enables the operator to steer the vehicle once it is in the motion.

Road Grip

- 3. The grip between the tyres and the road surface depends on the followings:
 - a. <u>Condition of the Road Surface</u>. Maximum grip is obtained when the road surface is dry, hard and rough. Wet slippery, muddy or ice-bound roads are dangerous and if the operator is not careful, serious accident may occur due to skidding.
 - b. <u>Condition of Tyres</u>. If the treads of the tyre are completely worn out or partially smoothened, it will not grip road. A too high or low tyre pressure is also dangerous.
 - c. **Speed When Cornering**. If at any time the speed of the vehicle is increased while negotiating a turn, the tyres may loosen grip and thereby induce skid.

Types of Skidding

- 4. There are three types of skidding:
 - a. Front wheel skid
 - b. Rear wheel skid
 - c. Four wheel skid

Front Wheel Skid

- 5. a. <u>Cause</u>.
 - (1) Sharp turning
 - (2) Harsh braking
 - b. **Prevention**.
 - (1) Decelerate.
 - (2) Straighten the steering.
 - (3) Gently and intermittently apply hand brake.

Rear Wheel Skid

- 6. This is the most common skidding, because no steering control can be affected directly on the rear wheels.
 - a. <u>Cause</u>. Sharp turning on wet slippery roads. Thus changing the scuffing action into a skidding towards the outside of the turn.
 - b. **Prevention**. Turn the steering into the direction of skidding and accelerate gently.

Four Wheel Skid

- 7. a. **Cause**.
 - (1) Over speeding.
 - (2) Badly adjusted brakes.
 - (3) Fast driving on wet, grassy and ice-bound road.

b. **Prevention**.

- (1) Correct the front wheels first by turning them into the direction of skidding. This will help you to get the front wheels rolling and will tend to correct the rear wheels.
- (2) Accelerate gently.
- (3) Do not use brakes.

Course: MTOF TTA (MTO) Topic No-02

REGULATION FOR THE USE OF MOTOR CYCLE

<u>Aim</u>

1. To learn the followings

- a. Regulations on riding service motor cycle.
- b. Conditions for the use of MT vehicles other then motor cycle for dispatching mails.
- c. Endorsement of certificate by MT officer.
- d. Regulations on pillion riding.

Regulation

2. Motor cycles are established in the BAF for conveyance of official mail and are not to be used for conveyance of load or person. Crash helmets are to be compulsorily worn by operators both airmen and civilians when they are required to ride motor cycle as part of their duty or training. As the lies of a motor cyclist may depend upon his crash helmet, officers and NCOs in-charge of MT units and section are to ensure the strict observance of this order. Provost personnel when detailed to provide motor cycle escorts to VIPs and when detailed to carry out observation and secret investigations in civilian clothes on motor cycles may be exempted from wearing of crash helmets. Use of service MT vehicles other than motor cycle for mail. Use of service vehicle other than a motor cycle for conveyance of mail is permitted only under the following circumstances. During the inclement weather when the safety of the dispatch rider and service mail is likely to be endangered. When the motor cycles established on a unit are unserviceable. When the mail is required to be delivered by an escort or when it is bulky and cannot be conveyed on a motor cycle.

Endorsement of certificate

3. The MT officer will endorse a certificate on the F- 658 when a vehicle other than motor cycle is utilized under condition in para3, sub Para a. and b. and the adjutant of the unit will certify on the F658 when the vehicle is used under condition stated in para3, subpara c.

Pillion Riding

4. Motorcycle is forbidden. Provost personnel when required to proceed on duty is pairs may be permitted the use of a pillion seat on a motor cycle Pillion riding on service. In all such cases the particulars of the passenger is to be endorsed on F-658 (application), and for the training, the name of the trainer is to be endorsed on F-658.

Course: MTOF TTA (MTO) Topic No-03

MAP READING

<u>Aim</u>

1. To learn the object of map reading, the conventional map sign and symbols, grid reference and calculation system, North Pole and method of finding north points.

Definition

2. It is an ability to recognize the various features of land from its map and thus from a mental picture of it.

Object

3. It is a diagrammatic representation of various features of land drawn on the paper.

Knowledge Required

- 4. To read a map correctly, an operator must know the followings:
 - a. The name by which the feature of the ground is known.
 - b. How to measure or estimate distances on the ground.
 - c. Convention sign and symbols.
 - d. How to visualize hills and valleys.
 - e. The object and the use of grid references.

Conventional Map Sign and Symbols

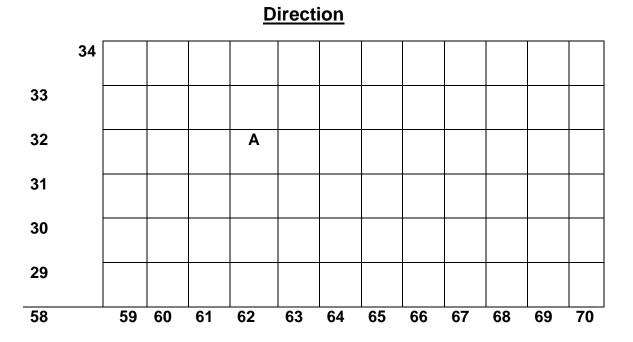
- 5. Representation of the surface grading is depicted by contours. Contours are lines drawn through places of the same height above sea level, this height being shown in figures. The smallest ring in the contour lines indicates the summit of him. The symbol to indicate the land's geographical feature and manmade feature are shown below:
 - a. River
 - b. Road
 - c. Railway
 - d. Canal
 - e. Trees
 - f. Wind Mill

- g. Railway Bridge
- h. Aerodrome
- i. Landing Ground Squadron
- j. Aircraft Depot
- k. Church with Tower

Grid References and Calculation System

- 6. Identify the point on the map. The idea of the grid system is to make easy to refer to a given spot accurately and briefly. For this purpose the maps are girded viz. vertical from west to east and horizontal from south to mouth, each tenth line is thicker than the other. To give a grid reference to a known point ("A" on the sketch below), proceed as follows:
 - a. Working east-word from a little to the west of the point, note the number of the last vertical (north and south) line crossed before reaching the point (say 61),and estimate how many tenths of the distance between two grid lines the point is to be east of the line (say 4 tenths). The first three figures of the reference are then 614.
 - b. Working north-word from a little to the south of the point, note the number of the last horizontal (east and west) line crossed before reaching the point (say31), and estimate how many more tenths the point is to be north of this line (say 7 tenths). The last three figures of the reference are then 317.

c. The complete reference is given as 614317, east-ward first and north word second



North Pole

- 7. Three north points are usually indicated on the map; they are as follows:
 - a. True north
 - b. Grid north
 - c. Magnetic north

Grid North

8. This is the direction in which the grid lines point towards the top of the map. The grids lines are always drawn parallel whereas true north lines are always converge towards the North Pole.

Magnetic North

9. This is the direction of the magnetic north pole of the earth from the observer. The position of the magnetic north pole is not fixed, but varies slightly from year to year. "Magnetic Variation" i. e. the angle between true north and magnetic north is usually indicated in the margin of the map.

Method of Finding True North

- 10. The true north can be found out by the following procedures:
 - a. <u>Compass</u>. The true north can be found if the magnetic variation is known.
 - b. <u>Sun</u>. Outside the tropics, the sun is a rough guide to orientation, if it is remembered that in spring and autumn the sun rises due east and sets due west, and at noon local mean time (LMT), it is due south in the northern hemisphere and due north in the southern hemisphere. In summer and winter, these points of rising and setting vary according to the latitude.
 - c. <u>Watch</u>. The true north can be found out by setting the watch to LMT as described below:
 - (1) A more accurate method can be used outside the tropics, if a watch is available, by setting a watch to LMT and laying it horizontally. If the north of the equator points the hour hand to the sun, then south is midway between the hour hand and 12'0 Clock.
 - (2) If south of the equator points the 12'0 Clock mark to the sun, then the true north lies midway between 12'0 Clock and hour hand.
 - d. **Stars**. On a clear night, true north can be found by pole star which is always on the true north.
 - e. <u>Church and Graves</u>. In christen countries, churches and graves usually lie east and west. The alter and the foot of the grave are in east.
 - f. <u>Vegetation</u>. In the northern hemisphere, mosses grow on the north side of the trees and boulders and bark on the southern side of the trees, is rougher on the southern side.

Method of Finding Magnetic North

11. The direction of the magnetic north is given by a freely swinging magnetic compass. A compass must never be used near iron or steel objects; otherwise it will indicate inaccurate readings.

Course: MTOF TTA (MTO) Topic No-04

RECOVERY OF MT VEHICLE

<u>Aim</u>

1. To learn the preparations and actions to be taken to recover ditched or overturned vehicle.

General

- 2. The term "Vehicle Recovery" covers any situation in which it is necessary to apply the services or additional transport, gear and man to recover a vehicle which has been rendered immobile through causality or accident. Before any recovery party is sent, the following details should be known:
 - a. Location of vehicle.
 - b. Type of vehicle and load.
 - c. Damage to the vehicle and personnel.

Action

The easiest way to extract a vehicle is back along the path it traveled into the ditch or boggy ground. In general, if the driving wheels are resting, or can be made to rest on the ground, the vehicle should be capable of pulling itself clear along a prepared path. All obstructive earths must be removed from underneath the axles, chassis and low fittings, and the path cleared so that no obstruction is offered to the vehicle. Soft ground should be prepared to give sufficient grip to the driving wheels. Bricks, rubbles, bush wood, planks of wood, sacks, in fact all sorts of things can be used to prepare the ground. Once the ground has been prepared, cautions attempts should be made to drive the vehicle out. The lowest gear ration must be used i.e. auxiliary or four wheel drive (if fitted), and the clutch engaged smoothly and slowly with the minimum engine revolutions. Should the wheels spin, further movement should not be attempted until additional material is inserted beneath the wheel or wheels. When a vehicle is ditched so badly that it is necessary to tow it out, the towing vehicle should face the ditched vehicle and use reverse gear with auxiliary or four wheel drive engaged. The pull on the tow rope must be in line with the chassis of the ditched vehicle and the path along which it is going to be pulled. When it is not possible to position the towing vehicle to give a straight pull, use an adjacent tree as a billiard (upright post), or rig some sort of ground anchorage with pulley attachment so that a straight pull is applied.

Overturned Vehicles

4. When a vehicle has been turned over on its side it can be replaced on its road wheels without causing any further damage. In preparation for this the load must be removed and the body interior shored (support by wood) with timber between the sides to prevent any external force causing distortion of the body. Two vehicles are used, one on either side or facing towards the overturned vehicle. Ropes are then passed from each vehicle over the upper most side and down the remote side and fastened to the chassis, wheels or other suitable anchorage on the under-side of the vehicle. In this manner a force can be exerted by one vehicle to pull the overturned vehicle towards the upright position and the other vehicle can be used at counteract the weight of the overturned vehicle and lower it into its other wheels once the point of balance has been passed. Ground anchors and pulley can be used for the same purpose. The most important thing is to ensure that the body of the overturned vehicle is strengthened to withstand the crushing effect of the ropes.

Course: MTOF TTA (MTO) Topic No-05

MT COLD WEATHER PRECAUTIONS

<u>Aim</u>

1. To learn about the precautions taken during the cold weather month to save certain system of MT vehicle from gating damaged.

Introduction

2. Our country does not experience any cold weather condition. But there are countries where temperature goes below to such an extent that water turns into ice, frost starts accumulation on tree tops and branches and snow starts falling like rains. It is essential that certain precautions should be taken during the winter months to prevent any damage to MT vehicle. The precautions with which most people are familiar are the use of a coolant having lower freezing point then water and known as "anti-freeze".

Drain and Flush

3. When it is required to drain the coolant system of a vehicle, ensure that drainage is complete (including the heater, if fitted), and then flush out the system with clean water until all signs of foreign matter are removed.

<u>Refilling</u>

- 4. a. The cooling system must be refilled with a mixture of water and fluid miscellaneous AL3 made up to the appropriate strength as follows: For temperature down to 0° F (-18° C) one part of AL3 to two part of water, giving a 33.33 %AL3/water mixture by volume.
 - b. For temperature down to -15° F (-26° C) nine parts of AL3 to eleven parts of water, giving a 45% AL3/water mixture by volume.

Care after Anti-Freeze

5. During refilling there is always be possibility of the formation of a lock in the system, particularly when a heater and or a thermostat are fitted. Consequently, after refilling the system, the engine should run until normal running temperature is attained. The level then should be checked and topped up, if required, with the appropriated AL3/water mixture.

Note:

- a. Care must be taken when removing the radiator filler cap of pressurized coolant system. Always adhere to the instructions on the top.
 - b. Always ensure that the system is fitted to the correct capacity and DO NOT OVER FILL, remember that space is required to allow the coolant to expand when heated.

Topping up

6. One of the operations listed in the daily servicing schedule is to check the level of the coolant in the system if the system is in good condition (No leaks) then topping-up will seldom be required. The appropriate AL3/water mixture used for occasional topping-up, but if it is found that a relatively large amount is required, the NCOIC must be informed and an inspection made to ascertain the reason.

Cooling in Specific Gravity

7. Checking of the specific gravity of the coolant (winter period only) should be done in the NCOs functional test. It can also be done at any time during the winter period if the strength of coolant was suspected. A glass cylinder, a thermometer, and a type 'B' hydrometer are used for this purpose.

Indication

- 8. The followings precautionary words are to be indicated in appropriate places of vehicle:
 - a. When a vehicle coolant system is fitted with anti-freeze mixture, BAF Form 3598 or a level which bears the word "ANTI-FREEZE, DO NOT DRAIN" is affixed to the inside of the windscreen at the bottom left hand corner so that it can be read from the front of the vehicle. For auxiliary engines, the same warning is painted on the equipment in a suitable position near the radiator filler cap.
 - b. When a vehicle or equipment is not in used and anti-freeze fluid is not available, the coolant system is drained completely and a "NO WATWER" sign is displayed prominently on the front of the vehicle or equipment.

Engines

- 9. In addition to the anti-freeze mixture, the following precautions are also to be observed:
 - a. When cold, engines are to be turned through ten revolutions by hand prior to using the electric starter.
 - b. Engine likely to be required in an emergency is to be started and warmed-up at suitable intervals.
 - c. It is essential to maintain the engine speed which will ensure full circulation of oil. Engines should not be permitted to "Idle"

Batteries

10. Batteries are to be checked regularly and recharged when necessary. Topping-up of batteries, when required, should be done immediately prior to a run.

Brakes

11. Brakes should be operated before commencing a run with a vehicle and periodically throughout the run.

Wind Screens

12. Ordinary table salt should be sprinkled on the wiper blades, and on the area of the wind screen swept by the wiper blades.

Course: MTOF TTA (MTO) Topic No-06

BAF FORMS USED IN MT SECTION

<u>Aim</u>

1. To get familiarized with the various forms used in MT operation and maintenance and to learn the use of these forms.

Purpose

2. Various BAF forms are used for smooth running of MT administration in a Base/Unit. These forms are used for MT accounting where financial aspects are involved, dispatching returns to Air Headquarters on mileage, fuel and oil consumption, recording of MT maintenance, and issue and return of MT spears/items, and information, on other MT matters etc. All MTOs are to be able to use the correct form for any particular job to be carried out.

Number and Description

| 3. | Form No | <u>Description</u> |
|----|---------|---|
| | 658 | Application for mechanical transport for duty journeys. |
| | 658E | Authority for mechanical transport for duty journeys. |
| | 658A | Mechanical transport routine run and detachment record. |
| | 658A1 | Daily servicing schedule for crash tender (Foam). |
| | 658A2 | Daily servicing schedule for domestic fire tender. |
| | 658C | Application for the hire of civil transport. |
| | 658B | MT car dairy. |
| | 658D | Indent of hire of civilian transport. |
| | 656 | MT servicing form. |
| | 814 | Record of journey of mechanical transport. |
| | 814A | Summary of miles or hours runs. |
| | 814B | Patrol consumption record. |

| 814C | Claim for over time, holiday and night duty allowance in respect |
|----------------|---|
| | of civilian drivers. |
| 813 | Vehicle log book. |
| 748 | Inventory of equipment of MT vehicle. |
| 793 | Application for equipment of MT vehicle. |
| 523A specia | Application for repair for engine of mechanical transport alist vehicles. |
| 10082 | MT daily servicing schedule. |
| 10083 | 1000 miles/monthly servicing prime mover. |
| 10087 | Trailer monthly servicing schedule. |
| 10084 | Annual servicing Trailer. |
| 10085 | 300 miles/annual servicing prime mover. |
| 10086 | 10,000miles/annul servicing prime mover. |
| 10058 | Register of mechanical transport on repayment. |
| 1629 | MT driving permit for airmen |
| 1629B | MT driving permit for civilian drivers. |
| 1839 | Mt driving permit for officer. |
| 446A | Traffic accident log card. |
| 446B | Individual MT accident log card. |
| 674 | Internal and withdrawals form. |
| 673 | Internal exchange vouchers. |
| 675 | Internal return and receipt voucher. |
| 361 | Flight petrol book. |
| 10044 | Flight oil book. |
| 458 | Store-man's petrol/oil issue book. |

| 440 | Transfer of mechanical transport. |
|-----------------------------|---|
| 668 | Record Card, Loan to Individuals/Unit. |
| 108 | Receipt for equipment on temporary loan. |
| 525 | Daily record of MT journeys. |
| 347B | MT daily progressing record summary. |
| 4115 | Routine servicing work sheet prime mover. |
| 523 | Application for repair or disposal instruction for mechanical transport. |
| 1022D | Report of failure or defect in mechanical transport. |
| 600 | Demand, issue and receipt voucher (External). |
| 604 | Packing note. |
| 37 | Inventory of BAF equipment. |
| 21 | Conversation voucher. |
| 4021 | Register of ground equipment. |
| 4021A | |
| 7021A | Record of Servicing Class- I ground equipment. |
| 1670 | Record of Servicing Class- I ground equipment. Inventory of specialist equipment MT vehicle. |
| | |
| 1670 | Inventory of specialist equipment MT vehicle. |
| 1670 1034 | Inventory of specialist equipment MT vehicle. |
| 1670 1034 <u>Army</u> | Inventory of specialist equipment MT vehicle. Application of driving permits for BAF officers. |

Course: MTOF TTA (MTO) Topic No-07

INTERMEDIATE SERVICING SCHEDULE (POSTER NO-30)

<u>Aim</u>

1. To get familiarized with the poster No-30 and to learn the system servicing and mentioned therein.

Purpose

2. A revised system of servicing has been introduced to improve the standard of servicing in a view to increasing the life of MT vehicles.

Items of Intermediate servicing schedule (Poster No-30)

3. Intermediate servicing is to be carried out after covering of 1000 miles or a period of one month. It is done as follows:-

a. **Engine**

- (1) Replenish air cleaner (Oil both type).
- (2) Lubricate starting handle shaft bearings.
- (3) Lubricate fan and water pump bearings.
- (4) Lubricate hinges and catches of engine cover.
- (5) Lubricate engine control rods, joints and linkage.
- (6) Lubricate clutch withdrawal bearings.

b. Front Axle and Steering

- (1) Lubricate shackle pins.
- (2) Lubricate track rod ball joints.
- (3) Lubricate swivel pins.

i. Rear Axles

- a. Lubricate rear spring shackles and pivots.
- b. Lubricate cross spring shackles and pivots.

j. Propeller Shaft

- a. Lubricate universal joints.
- b. Lubricate sliding spleens.
- k. Breaking System: Replenish hydraulic brake fluid tank, lubricate:
 - a. Hand brake ratchet, bearing and pivot.
 - b. Brake clevis joints and all linkage.
 - c. Foot brake paddle bearings.
 - d. Brake cam shaft bearing.

I. Body and Cab: Lubricate:-

- a. Door hinges and catches.
- b. Tail board hinges.
- c. Spring and catch of towing hook.
- d. Traffic indicators.
- m. Sign the MT Servicing Form 656.

Ref: Poster No 30 and AP 3025

Course: MTOF TTA (MTO) Topic No-08

MT DAILY SERVICING PRIME MOVER (POSTER NO-31)

Aim

1. To get familiarized with the poster No-31 and to learn the daily servicing for trailers as mentioned therein.

Purpose

2. A revised system of daily servicing schedule for trailers has been introduced to improve the standard of servicing in a view to increasing the life of the trailers.

Items of daily servicing schedule: Trailers (Poster No-31)

- 3. The following items are to be checked for MT daily servicing schedule trailers:
 - a. Check F-656 for unserviceability.
 - b. Check the parking brake for correct operation.
 - n. Connect the prime mover ensuring that the draw bar eye or attachment is secured and locked.
 - o. Ensure that the adjustable steady legs or jockey wheels are raised and secured that hand or parking brake is off.
 - p. Check the level of the fluid in the hydraulic reservoir and replenish as necessary with hydraulic fluid. The correct level is one from the top of the reservoir.
 - q. Connect the servo brake line and check it for damage and security.
 - r. Drain the condensed moistu7rte from the air reservoir tank, if fitted with air pressure brake.
 - s. With aid of an assistant check that the brake actuating arm operates correctly and that there is no leak from the reservoir. With hydraulic brakes the level of fluid will rise and fall with the brake application.
 - j. Check tyre pressure by gauge and inflect as advised in the operators hand book/operators manual.
 - k. Connect the trailer lights and see that they are secured and serviceable.
 - I. Check the registration plate for security and cleanliness.

- m. Check that 'T' plate is secured.
- n. Ensure that the jockey wheels operating handle and steering arm are correctly stowed.
- p. Sign the servicing form 656

Note:- This check is carried out with the prime mover engine running and its brakes are operated.

Ref: Poster No 31 and AP 3025

Course: MTOF TTA (MTO Topic No-09

MT SERVICING DATA SHEET (POSTER NO-32)

<u>Aim</u>

1. To get familiarized with the poster No 32 and to learn the type of lubricates, fuel and tyre pressure to be used in MT vehicles as out lined therein.

Purpose

2. It is used to familiarize the MT Operators with the type of lubricate, fuel and the tyre pressure to be used in MT vehicle.

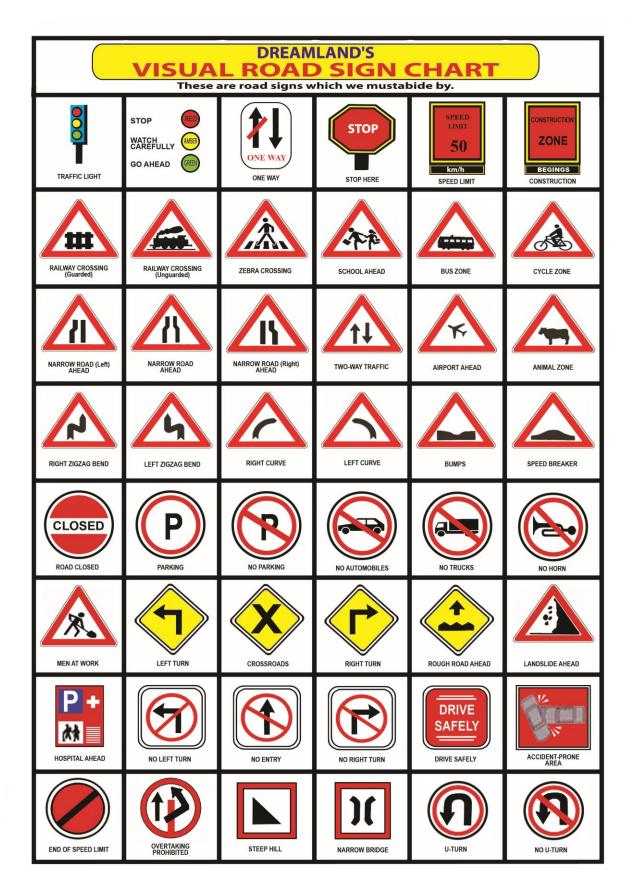
Layout

3. The specimen of the poster no-32 is laid down as follows:-

| Type of Vehicle | Engine Oil | | Tyre Pressure | | Fuel |
|------------------|------------|----------|---------------|--------|--------|
| | Type | Capacity | Front | Rear | |
| Jeep CJ3A | 30/50 HD | 3 Pints | 26 PSI | 28 PSI | 74 Oct |
| Jeep CJ5 | _"_ | -"- | _"_ | _"_ | _"_ |
| Ford 3 Ton (4X2) | _"_ | 6 Pints | 35 PSI | 69 PSI | _"_ |
| Ford 3 Ton (4X4) | _"_ | _"_ | 55 PSI | 70 PSI | _"_ |
| Triumph M/Cycle | _"_ | 4 Pints | 18 PSI | 20 PSI | _"_ |
| Coaches Austin | _"_ | 16 Pints | 55 PSI | 70 PSI | _"_ |
| Ford car | _"_ | 10 Pints | 23 PSI | 26 PSI | 80 Oct |

Note: NCOIC MT Ops Flt is to prepare this poster for various types of vehicle on charge and display it to a prominent place for the guidance of MT Operators

Ref: Poster No- 32 and AP 3025



MODED BY JAHID (474652)

INDEX

AND

REAK DOWN OF SUBJECTS WITH ALLOTTED PERIODS TRADE TRAINING ADVANCE MTOF (MTO PART)

PRE-CTTB, MTO PART- III

| SER | SUBJECT/TOPICS | Allotted Periods | | | Page No |
|-----|--|------------------|-------|-------|---------|
| NO | | Theo | Pract | Total | |
| 1. | Entry into Major Road | 80 | 16 | 24 | 01-02 |
| 2. | MT/AC Towing Regulation | 08 | 16 | 24 | 03-04 |
| 3. | AC Towing Procedure | 06 | 14 | 20 | 05-06 |
| 4. | Airfield Driving Procedure | 16 | 12 | 28 | 07-10 |
| 5. | Care and Maintenance of Tyre | 08 | 08 | 16 | 11-12 |
| 6. | Driving Regulation (Tenth Schedule) | 06 | 06 | 12 | 13-14 |
| 7. | Convention on International Road Traffic | 06 | - | 06 | 15-28 |
| | Total= | 58 | 72 | 130 | |

PRE-CTTB, MTO PART- IV

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| NO | | Theo | Pract | Total | |
| 1. | Hiring of Civil Transport | 06 | 12 | 18 | 29-30 |
| 2. | Requisition of BAF MT Vehicle | 06 | 12 | 18 | 31-35 |
| 3. | Receipt, Repair and Disposal | 04 | 80 | 12 | 36-39 |
| 4. | Collection & Allotment of MT Vehicle | 04 | 04 | 08 | 40-41 |
| 5. | Flight Section Inventory | 04 | ı | 04 | 42-43 |
| 6. | Running in New/ Reconditioned Vehicle | 04 | 06 | 10 | 44-45 |
| 7. | MT Daily Servicing Tasks (Poster No -33) | 06 | 80 | 14 | 46-47 |
| 8. | Offences, Penalties and Punishment BRTA | 06 | - | 06 | 48 |
| 9. | Offences, Penalties and Procedure | 12 | - | 12 | 49-61 |
| | Total= | 52 | 50 | 102 | |
| | | | | | |

TRADE TRAINING ADVANCE

MTOF (MTO PART)

PRE-CTTB, PART-III

Course: MTOF TTA (MTO) Topic No-01

ENTRY INTO MAJOR ROAD

Aim

To learn the correct procedure to enter into major road.

Purpose

2. It enables the operator to enter into the major road safely without endangering himself or others by adopting the correct procedure of entering in to major road. If all road users know the correct procedure for entering into the major road, the rate of accident shall be reduced to minimum.

Procedure

- 3. The following are the correct procedure to enter into the major road:
 - a. **<u>Driving Mirror.</u>** Before entering into major road consults the driving mirror, be sure that no vehicle is to close at your rear and finally select the course.
 - b. <u>Signal.</u> Giving the signal in which side you want to go. If you want to go to the right side, give the right turning signal and same give left turning signal if you intend to go to the left side.
 - c. <u>Selection of Course.</u> Select the course and be on the extreme left of the road if you intend to go to the left. If you want to go to the right, take your vehicle on the right side close to the dotted white line of the road leaving 50/ of the road to the right side.
 - d. <u>Slow Down Signal.</u> Give the slow down signal before you reduce the speed of your vehicle so that no vehicle at your rear comes close and hits the back side of your vehicle.
 - e. <u>Change Gear.</u> Change the lower gear as you reduce the speed of your vehicle and come close to the major road stopping point.
 - f. **Stopping.** Stop your vehicle pointing the front wheels to the direction you are going to take turn. Stop the vehicle in such a way that front bumper is in line with the edge of the road.
 - g. <u>Observation.</u> Observe the traffic of major road. See first **right** then **left** and again to the **right** (RLR).

- h. <u>Moving Off.</u> By observing the previous drill, take your vehicle to the major road slowly.
- j. <u>Entering Into the Major Road.</u> Enter into the major road and select the course. Don't cut short but gradually take the course.

| MAJOR ROAD | | | | |
|------------------------|----------|---|--|--|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| f. Stopping | X | X | | |
| g. Observation | | | | |
| h. Moving off | | | | |
| e. Gear changing | X | X | | |
| d. Slow down signal | X | X | | |
| c. Selection of course | | X | | |
| c. Selection of course | X | | | |
| b. Signal | | X | | |
| a Driving mirror | | X | | |

Course: MTOF TTA (MTO) Topic No-02

MT/AC TOWING REGULATIONS

Aim

1. To learn the regulations for towing various types of MT vehicle, use of different types of prime mover and towing tractor with their limitations and restriction in operation, and other precaution of towing.

Introduction

2. Towing of an aircraft or a MT vehicle is always considered a skill job for a operator. The nature of duties demands highly experienced operator to undertake the towing operation in the airfield area or on roads. The detailing of an experienced operator for towing may lead to a fatal accident. The operator for towing duties should be selected on the basis of their capability and experience on towing and towed vehicle so that the accident rate is kept always at low.

Regulations/Precautions

- 3. Officers in charge MT sqn are responsible that, except in emergency or where specially ordered, prime mover vehicle are not used to tow simultaneously more then one trailer classified as a MT vehicle. This restriction does not apply to tractors warehouse when employed to two trailers warehouse in depots. Tractors articulated, tractors works wheeled and tractors (refueled semi trailers) fitted with towing hooks or fifth wheel attachment and vacuum brake operating mechanism are only the vehicle to be used for towing trailers fitted with vacuum- operated brakes. These tractors when towing trailers are to be driven only by operators who are qualified to drive these types of vehicles. General purpose vehicles i.e. 15 cwt and 6 toner, when fitted with spring and hook towing gear and not fitted with air lines for the operation of trailer brakes, are restricted to the towing of trailer with over-run brakes and with gross maximum weight of 35 cwt. The prime mover is to carry 10 cwt of ballast while towing. Tractors aircraft towing are primarily intended for towing of aircraft and aircraft ground support equipment on airfield movement area. These vehicles are not to be used for towing MT trailers on the public highway. When aircraft are being towed, the following precautions are to be observed:
 - a. Experienced operators are to be detailed to drive the tractors.
 - b. The towing an aircraft is to be conduct under the supervision of a competent NCO.
 - c. A correct type of two bars is employed and it is engaged with the tractor at the appropriate stop and the tow bar pin makes a positive lock.
 - d. The tractor is to be fully serviceable and has no fault in slow running or brakes.

4. Certain types of vehicle are fitted with hooks at the ends of the chassis frame members to prevent damage by the incorrect attachment of towing gear when such vehicle to be 'debugged' or salvaged. The use of these hooks for towing is restricted to light units such as portable compressors, starting accumulator trolley etc (normally moved about the airfield area by hand). Load on trailers should be evenly distributed and when bulky or awkward loads are to be carried these are to be lashed down properly. Over -hang of loads or MT vehicle/trailers is not permitted Trailers 8 wheeled 'Hands' 10 tons when carrying loads exceeding 5 tons are to be towed only with tractors works wheeled. When a trailer is to be coupled to a towing vehicle, the operators is to remain in the driving seat of the vehicle and a second man is to affect the coupling of the two bar to the prime mover. The second man is to stand clear of the rear of the prime mover and direct the operator during his reverse to a position approximately one feet from the two eye. When the assistant goes behind the prime mover to left the tow bar to the required height, the operator of the vehicle is to exercise great care to ensure that he does not reverse in to his assistant. The operator is responsible to ensure the security of towing attachments prior to proceeding on a journey. Two chains/bars are to be inspected prior to the commencement of towing operations. Maximum load carrying capacity of trailers load carrying is to be painted clearly both in the front and rear. These limits are not to be exceeded. Loaded prime-mover in case of a breakdown is not to be towed until the load has been transferred to another vehicle. A wooden board 18 + 10 with words 'Caution-on Tow' painted in red over white back ground is to be hung on the tail board of the vehicle being towed. Quantity two of the board is to be held in all MT ops Flts. the distance between the two vehicles is not to exceed 15 feet. And the rope or chain must be made distinguishable for the benefit of other road users and pedestrians by the attachment of brightly colored pennants. The speed of the towing vehicle is to be governed by the condition of the towed vehicle and in no case is to exceed 20 miles per hour. Only suitable qualified and experienced MTO/MT fitter NCOs are to detail to drive tenders MT breakdown when these vehicles are employed for towing/recovery of a breakdown vehicle. These NCOs should be fully conversant with the operator of tenders MT breakdown. When it is necessary to lift-two a breakdown vehicle, it is to be ensured that the supporting legs and other tackle of tender MT breakdown are properly secured and the steering wheel of the vehicle is tied to the column with the road wheels in a straight ahead position.

Course: MTOF TTA (MTO) Topic No-03

AIRCRAFT TOWING PROCEDURE

Aim

1. To learn the aircraft towing procedure in the airfield area.

Purpose

2. Aircraft towing is a specialized and skill job. The MT operator to tow an aircraft must have sufficient knowledge of towing characteristic of that aircraft and the existing safety regulations of towing aircraft in airfield area. An experienced MT operator, who is trained on that particular type of aircraft, is to be detailed for towing. This will obviously minimize the rate of ground accident of aircraft.

Precautions

- 3. The following precautions must be taken before towing an aircraft:
 - a. Before towing, the operator must be sure about the serviceability of his tractor.
 - a. He must be sure that the towing bar is 100% serviceable.
 - b. Two look-out men must be present on both the wings while towing an aircraft.
 - c. Reversing of tractor must be done slowly and carefully.
 - d. The man holding the tow bar must connect the bar at the 2nd or 3rd stair from the bottom of the towing member.
 - e. The tractor operator must be sure that the tractor detailed to tow the aircraft is not lighter than the specified weight.
 - f. Never tow an aircraft of which engine is running.
 - g. Tractor operator must not tow an aircraft loaded with bomb or armed for armament mission until the concerned armament switches are put to off position.
 - h. While towing an aircraft if the tow bar is broken or disconnected, never ® never stop the tractor; keep on going faster then the previous speed. Warn the crew chief and the look-out men about the happening by shouting so that they can take action to avoid an accident.

- i. While towing an aircraft in the narrow place, be cautious about the drop tanks and wings of aircraft. The drop tanks are very low to the ground. These may hit the hiding heap of ground under the bushes.
- j. Do not tow an aircraft inside the hanger where space is very less.
- k. Tractor speed must not exceed more then 5 miles per hour while towing an aircraft.
- I. Before towing an aircraft be sure that all the chocks and blocks are removed.
- m. Do not take sharp turn of more then the specified degree. If you do so then the towing bar pin or the nose, landing gear of the aircraft may get damaged. The following are the turn degrees of the various aircraft used in the BAF:

| <u>Type</u> | of Aircraft | <u>Turn Degree</u> | | |
|-------------|----------------|--------------------|--|--|
| (1) | Mig -21 | 40 ⁰ | | |
| (2) | Mig - 29 | | | |
| (3) | A - 5 | 50 ⁰ | | |
| (4) | F-6& FT- 6 | 45 ⁰ | | |
| (5) | MI - 17 | | | |
| (6) | MI - 8 | | | |
| (7) | AN -26 &AN -24 | 45 ⁰ | | |
| (8) | C - 130 | | | |
| (9) | PT - 6 | 52 ⁰ | | |
| (10) | L - 39 | | | |
| (11) | Fouga CM - 170 | 55 ⁰ | | |
| (12) | T - 37 | | | |

Course: MTOF TTA (MTO) Topic No-04

AIRFILD DRIVING PROCEDURE

Aim

- 1. To learn the followings:
 - a. The responsibilities of OIC MT Sqn, ATCO and visiting operators in respect of driving in the airfield area.
 - b. Controlling of MT by day and night in the airfield area.
 - c. The traffic regulations for airfield movement area.
 - d. The use of mechanically operated vehicle in hanger containing aircraft.

Introduction

2. The airfield movement area consists of runways, perimeter taxi-track and the aircraft servicing and parking apron. All aircraft and their costly ground support equipment's are parked, serviced and operated from these areas. In view of the activities in the airfield movement area, there is a need to have a clear airfield driving procedure which should be known to the operators detailed for airfield driving duties. The awareness of the operators and time to time briefing on airfield driving procedure by concerned agencies will certainly reduce the aircraft ground and MT accident to minimum.

Responsibilities

- 3. The responsibilities of officer in charge MT Sqn and Senior Air Traffic Officer (SATCO) in respect of driving in airfield area are outline below:
 - a. The OIC MT Sqn of a Base/Unit is responsible that vehicles operating in the airfield movement area are in the charge of operators who have been tested by him and found competent on the type, and are fully conversant with the instructions contain in this subject.
 - b. The senior Air Traffic Control Officer is the responsible authority of the airfield movement area and is responsible for the briefing of operators.

Visiting Operator

4. If it is essential for visiting operators to proceed into the airfield movement area, they are to be directed buy the NCOIC gourd room to report to Air Traffic Control for permission and briefing, if Air Traffic Control can not be reached without crossing the movement area the operator of the vehicle is to telephone Air Traffic Control and is to be directed how to reach his destination in the movement area.

Control of MT by Day

5. MT vehicle when on or inside the perimeter tracks are under the control of the Air Traffic Control Officer and operator or such vehicle is to obey any order or signal given by hi or the runway controller. When the vehicle are inside the aircraft perking areas or hangars, the operators are under the control of the officer in charge of that area, who may delegate responsibility for controlling of MT in that area to a non-commissioned officer. Operators arriving at a parking area or hanger are to report to the NCO in-charge for instruction.

Control of MT by Night

6. Before any journey in the airfield movement area in made by night, the operator of the vehicle is to obtain permission from the Air Traffic Control Officer who is to ensure that the operator is fully conversant with the type of airfield lighting in use, marshalling signals and lamp signals as given by the Runway controller. Under no circumstances the vehicles are to be parked on the perimeter track.

Traffic Regulations for Airfield Movement Area

- 7. MT vehicles are always to give right of way to aircraft even at the risk of damage to the vehicle. The following regulations of airfield driving are to be strictly obeyed by all concerned:
 - a. Ambulances, crash and fire fighting vehicles when on emergency duties are to reach the scene of accident as soon as possible.
 - b. Operators of vehicle are to keep clear of all moving aircraft and are not to drive near a stationery aircraft unless it is necessary for loading or unloading of equipment. The operator of such vehicle are to exercise extreme care and while the vehicle is approaching the aircraft either by forward movement or by reversing, a look out man is to be available with a chock which can be so placed to prevent the vehicle from striking aircraft.
 - c. Officers in charge MT Sqn are to ensure that vehicle detailed for loading and unloading of equipment on aircraft and those detailed for towing of aircraft are completely serviceable. The operators of that vehicle are to immediately report to OIC MT Sqn any unserviceability on their vehicles.
 - d. At night head lights are to be dipped whenever possible.
 - e. Vehicles being driven on the perimeter tracks are to proceed along the outer edge that is the edge farthest from the flying area. MT vehicles meeting each other on the outer edge of the perimeter track are to confirm to the normal rule of the road, but keep as close as possible to the outer edge.
 - f. The speed of all MT vehicles within the airfield movement area is restricted to 15 miles per hour or such lower speed limit as may be imposed locally. This restriction does not apply to crash vehicles when proceeding on emergency duties.

- g. Operators will not revere their vehicle in the vicinity of aircraft unless they are aided by a look out man.
- h. Operators detailed on aircraft towing tractors for towing of aircraft and ground support equipment trolley etc. on air field movement area and within hanger will work as per instructions of officer or NCO responsible for such movements.
- j. Towing of aircraft will be done under the supervision of a NCO who will accompany the operator and act as a "look out man" This NCO will be responsible to ensure that no restriction on the use of perimeter or taxi-tracks is in-force.
- k. In the event of a vehicle breaking down on the perimeter track the operator is to notify the Air Traffic Control Officer, if possible, by contacting a passing vehicle. On no account he is to leave his vehicle unattended, and he is to indicate by suitable signals to any approaching aircraft, the obstacle caused by the vehicle.
- I. Operators detailed on vehicle proceeding on the airfield at night are to be equipped with red torches which are to be used in the event of vehicle lights failing on the airfield movement area to warn nearby taxing aircraft of the observation.
- m. Red torches are to be held by MT Ops Flt to the scale shown as appendix to this order. These are to be issued on loan to operator's detailed for duty which entails proceeding on the airfield movement area at night. The scale has the financial concurrence of PA, MF vide by no 9394/AF of 1954.
- n. Operators are to be warned that any infringement of instructions laid down in this order will be severely dealt with.

Use of Mechanically Operated Vehicles in Hanger Containing Aircraft

- 8. The following precautions for towing any aircraft inside hangar are to be taken by the operators:
 - a. The operator will inspect the ignition and fuel system of the vehicle to ensure that their in no danger of fire from any defect in these systems. A vehicle with a leaking exhaust or damaged silencer box is not to be taken into a hangar
 - b. The operator will first report to officer in charge or NCO in charge hanger before driving in.
 - c. The engine of the vehicle is not to be started inside the hanger.
 - d. The vehicle is not to be brought into the hanger until it is immediately required.
 - e. The vehicle will not be left unattended during the entire period of repairs inside the hangar.

f. A vehicle will not be driven near an aircraft on which repairs to the fuel system are being carried out or if inflammable vapors are present.

SCALE OF TORCHES TO BE HELD IN OPS FLT

5A/3391 Torches Electric Type '0' Qty Ea 6

Or

5A/339 Torches Electric Type 'P' Qty Ea 6

5L/X.591156 Lamp, Filament, Red (2.5 volt, 0.3 amps) Qty Ea 6

5J/2378

Or Cells, dry 1.5 Volt No 11 Qty Ea 12

5J/3187

Qty 4 each of the first two items and qty 8 each of last items are also authorized for MT Training School.

Course: MTOF TTA (MTO) Topic No-05

CARE AND MAINTENANCE OF TYRES AND TUBES

Aim

1. To learn the proper care and maintenance of MT tyres and tubes in storage and in use.

General

2. Tyres and tubes are rubberized items which need to be stored in a dry, cool and ventilated place for longer storage life. These are also subject to constant wear and tear due to uneven road surfaces, poor maintenance, and weight of the vehicle and conveyance of varying loads. Proper care and maintenance will save tyres and tubes from early deterioration in storage and pre-matured un-serviceability while in use. The minimum life of tyres is giver below:

| 3 - | Types of vehicle | Expected life |
|------|-------------------------------------|---|
| a. C | Car, pick-up, micro-bus, ambulance, | 25,000 miles or 05yrs |
| Jeep | o, coach, coaster, and truck. | Which comes earlier? |
| b. | Motor cycle (Front Tyre) | 20,000 miles or 03yrs |
| | | Which comes earlier? |
| C. | Motor cycle (Rear Tyre) | 15,000 miles or 03 yrs |
| | | Which comes earlier? |
| d. | Spl vehicle | 10,000 miles or 05 yrs which comes earlier. |

Maintenance

- 3. The following maintenance/servicing are to be carried out on tyres and tubes:
 - a. <u>Pressure</u>. Test for correct pressure should be made daily and affected with a pressure gauge. Examination of pressure by kicking or touching and mental estimate of pressure is useless and inappropriate.
 - b. Tyre pressure gauge should be checked for accuracy against other gauge.
 - c. Valve caps are of utmost importance and no vehicle should be permitted on the road unless those are in place. This applies equally to the spare wheel.

- d. To compensate for uneven and heel to toe wear, it is advisable to interchange the position of the wheel. Assemblies and at the same time to reverse the direction of normal rotation of the wheels. Interchange of wheels must be carried out at regular mileage intervals or at any time when irregular wear is first noted.
- e. <u>Daily Servicing</u>. Before starting the first run of the day, a operator must check the air pressure of all wheel assemblies and inflate to the correct pressure as necessary. The treads must be examined, any damage noted should be recovered with immediate attention and remove all small stones and iron nails from the cover.
- f. Front wheel should be checked for alignment.
- g. Brake test should be made frequently to ensure that all brakes are operating equally.
- h. Rim should be inspected for rust and if this is apparent, the tyres should be removed and the rim is thoroughly cleaned and bride.
- j. Rubber deteriorates very rapidly after contact with oil petrol which should be immediately wiped off.
- k. <u>Matching Tyres</u>. Overall diameter of the tyres must be the same. A tolerance of ¼ inch is, however permitted. Tyres of the same treads patterns should be fitted.

Course: MTOF TTA (MTO) Topic No-06

DRIVING REGULATION (TENTH SCHEDULE)

Driving Regulations

- 1. The driver of a motor vehicle shall drive the vehicle as close to the left hand side of the road as may be expedient and shall allow all traffic which is proceeding in the opposite direction to pass him on his right hand side.
- 2. Except as provided in regulation 3, the driver of a motor vehicle, shall pass to the right of all traffic proceeding in the same direction as him.
- 3. The driver of a motor vehicle may pass to the left of a vehicle the driver of which having indicated an intention to turn to the right has drawn to the centre of the road.
- 4. The driver of a motor vehicle shall not pass a vehicle traveling in the same direction as himself-
 - (a) If his passing is likely to cause inconvenience or danger to other traffic proceeding in any direction, or
 - (b) Where a point or corner or a hill or an obstruction of any kind renders the road ahead not clearly visible.
- The driver of a motor vehicle shall not, when being overtaken or being passed by another vehicle, increase speed or do anything in any way to prevent the other vehicle from passing him.
- 6. The driver of a motor vehicle shall slow down when approaching a road intersection, a road junction or a road corner, and shall not enter any such intersection or junction until he has become aware that he may do so without endangering the safety of persons thereon.
- 7. The driver of a motor vehicle shall on entering a road intersection, if the road entered is a main road designed as such, give way to the vehicles proceeding along that road, and any other case give way to all traffic approaching the intersection on his right hand.
- 8. The driver of a motor vehicle shall, when passing or meeting a procession or a body of troops or police on the march or when passing workmen engaged on road repair, drive at a speed not greater than fifteen miles an hour.

- 9. The driver of a motor vehicle shall-
 - (a) When turning to the left, drive as close as may be to the left side of the road from which he is making the turn and of the road which he is entering;
 - (b) When turning to the right, as near as may be to the centre of the road along which he is traveling and cause the vehicle to move in such a manner that-
 - (1) As far as may be practicable it passes beyond, and so as to leave on the driver's right hand, a point formed by the intersection of the centre lines of the intersecting roads; and
 - (2) it arrives as near as may be at the left hand side of the road which the driver is entering.

Course: MTOF TTA (MTO) Topic No-07

CONVENTION ON INTERNATIONAL ROAD TRAFFIC

Definitions

- 1. Definition of convention on international road traffic has the following expressions:
 - a. A vehicle is said to be "in international traffic" in the territory of a State if:
 - (i) It is owned by a natural or legal person normally resident outside that State.
 - (ii) It is not registered in that State.
 - (iii) It is temporarily imported into that State.
 - b. A combination of vehicles is said to be "in international traffic" if at least one of the vehicles in the combination conforms to the above definition.

Glossary of terms

- 2. a. <u>Motor vehicle</u>. Motor vehicle means any power-driven vehicle which is normally used for carrying persons or goods. It does not cover vehicles, such as agricultural tractors, which are only incidentally used for carrying persons or goods by road or for drawing, on the road, vehicles used for the carriage of persons or goods;
 - b. <u>Trailer</u>. Trailer means any vehicle designed to be drawn by a power-driven vehicle and includes semi-trailers.
 - c. <u>Semi-trailer</u>. Semi-trailer means any trailer designed to be coupled to substantial part of its mass and of the mass of its load is borne by the motor vehicle.
 - d. <u>Light trailer</u>. Light trailer means any trailer of a permissible maximum mass not exceeding 750 kg.
 - e. <u>Combination of vehicles</u>. Combination of vehicles means coupled vehicles which travel on the road as a unit.
 - f. <u>Articulated vehicle</u>. Articulated vehicle means a combination of vehicles comprising a motor vehicle and semi-trailer coupled to the motor vehicle.

Rules of the International Road Article

- a. <u>Status of signs and signals.</u> Road-users shall comply with the instructions conveyed by road signs, traffic light signals and road markings even if the instructions appear to contradict other traffic regulations. Instructions conveyed by traffic light signals shall take precedence over those conveyed by road signs regulating priority.
 - b. <u>Instructions given by authorized officials.</u> When one is directing traffic, authorized officials shall be easily identifiable at a distance, at night as well as by day.

- (1) Road-users shall promptly obey all instructions given by authorized officials directing traffic.
- (2) It is recommended that domestic legislation should provide that directions given by authorized officials directing traffic shall include the following:
 - (i) <u>Arm raised upright:</u> This gesture shall mean "attention, stop" for all road-users except drivers who are no longer able to stop with sufficient safety; further, if made at an intersection, this gesture shall not require drivers already on the intersection to stop.
 - (ii) Arm or Arms outstretched Horizontally: This gesture shall constitute a stop signal for all road-users approaching from any direction which would cut across that indicated by the outstretched arm or arms; after making this gesture, the authorized official directing traffic may lower his arm or arms; this gesture shall likewise constitute a stop signal for drivers in front of or behind the official.
 - (iii) <u>Swinging red light:</u> This gesture shall constitute a stop signal for road-users towards whom the light is directed.
- (3) The instructions given by authorized officials directing traffic shall take precedence over those conveyed by road signs, traffic light signals and road markings, and over traffic regulations.

General rules

- 4. a. Road-users shall avoid any behavior likely to endanger or obstruct traffic, to endanger persons, or to cause damage to public or private property.
- b. It is recommended that domestic legislation should provide that road-users shall not obstruct traffic or risk making it dangerous by throwing, depositing or leaving any object or substance on the road or by creating any other obstruction on the road. If road-users have been unable to avoid creating an obstruction or danger in that way, they shall take the necessary steps to remove it as soon as possible and, if they cannot remove it immediately, to warn other road-users of its presence.
 - c. Drivers shall show extra care in relation to the most vulnerable road-users, such as pedestrians and cyclists and in particular children, elderly persons and the disabled.
 - d. Drivers shall take care that their vehicles do not inconvenience road-users or the occupants of properties bordering on the road, for example, by causing noise or raising dust or smoke where they can avoid doing so.
 - e. The wearing of safety belts is compulsory for drivers and passengers of motor vehicles, occupying seats equipped with such belts, save where exceptions are granted by domestic legislation.
 - f. <u>Position on the carriageway.</u> The direction of traffic shall be the same on all roads in a State except, where appropriate, on the roads used solely or principally by through traffic between two other States.

- (i) Animals moving along the carriageway shall be kept as close as possible to the edge of the carriageway appropriate to the direction of traffic.
- (ii) Without prejudice driver of a vehicle shall extent permitted by circumstances, keep his vehicle near the edge of the carriageway appropriate to the direction of traffic. Thereof may lay down more precise rules concerning the position of goods vehicles on the carriageway.
- (iii) Where a road comprises two or three carriageways, no driver shall take the carriageway situated on the side opposite to that appropriate to the direction of traffic.
 - (1) On two-way carriageways having four or more lanes, no driver shall take the lanes situated entirely on the half of the carriageway opposite to the side appropriate to the direction of traffic.
 - (2) On two-way carriageways having three lanes, no driver shall take the lane situated at the edge of the carriageway opposite to that appropriate to the direction of traffic.
- g. Without prejudice when an additional lane is indicated by a sign, drivers of vehicles moving slowly shall use that lane.

h. Overtaking and movement of traffic in lines.

- (1) Drivers overtaking shall do so on the side opposite to that appropriate to the direction of traffic.
- (2) Drivers shall overtake on the side appropriate to the direction of traffic if the driver to be overtaken has signaled his intention to turn to the side of the carriageway opposite to that appropriate to the direction of traffic and has moved his vehicle or animals over towards that side in order to turn to that side for the purpose of taking another road, to enter a property bordering on the road, or to stop on that side.
- (3) No driver who is following him has begun to overtake him.
- (4) The driver ahead of him in the same lane has not given warning of his intention to overtake another.
- (5) He can do it without endangering or interfering with the oncoming traffic making sure in particular that the lane which he will enter is free over a sufficient distance and that the relative speed of the two vehicles allows overtaking within a sufficiently short time.
- (6) Except when using a lane closed to oncoming traffic, he will be able, without inconvenience to the road-user or road-users overtaken, to resume the position.
- j. Overtaking on two-way carriageways is in particular prohibited when approaching the crest of a hill, if visibility is inadequate, on bends, unless there are at these points lanes defined by longitudinal road markings and overtaking is carried out without leaving the lanes marked as closed to oncoming traffic.
- k. When overtaking, a driver shall give the road-user or road-users overtaken a sufficiently wide berth.

- (1) On carriageways with at least two lanes reserved for traffic moving in the direction in which he is proceeding, a driver who should be obliged, immediately or shortly after moving back to the position to overtake provided he makes sure he can do so without undue inconvenience to the drivers of faster vehicles approaching from behind, remain in the lane he has occupied.
- (2) The drivers of motor vehicles whose permissible maximum mass exceeds 3,500 kg or whose maximum speed, by design, cannot exceed 40 km (25 miles) per hour.
- I. The density of traffic is such that vehicles not only occupy the entire width of the carriageway reserved for traffic taking the direction in which they are moving but also are moving only at a speed which is governed by that of the vehicle preceding in the line. A driver not in the lane nearest to the edge of the carriageway appropriate to the direction of traffic may change lanes only in order to prepare to turn right or left or to park.
- m. When moving in lines, if the lanes are indicated on the carriageway by longitudinal markings, drivers are forbidden to straddle these markings.
- n. No driver shall overtake at intersections and level-crossings, other than a two-wheeled cycle, a two-wheeled moped or a two-wheeled motor cycle without side-car;
 - (1) Immediately before or on an intersection other than a roundabout.
 - (2) Where the road on which overtaking takes place has priority at the intersection.
 - (3) Where traffic is directed at the intersection by an authorized official or by traffic light signals;
 - (4) Immediately before or on a level-crossing not equipped with gates or half-gates, shall be free to permit such overtaking at a level-crossing where road traffic is regulated by traffic light signals incorporating a positive signal authorizing vehicles to proceed.
- o. A vehicle shall not overtake another vehicle which is approaching a pedestrian crossing marked on the carriageway or signposted as such, or which is stopped immediately before the crossing, otherwise than at a speed low enough to enable it to stop immediately if a pedestrian is on the crossing. Prohibiting overtaking within a prescribed distance from a pedestrian crossing, or from imposing stricter requirements on a driver of a vehicle proposing to overtake another vehicle stopped immediately before such a crossing.
- p. A driver who perceives that a driver following him wishes to overtake him shall, keep close to the edge of the carriageway appropriate to the direction of traffic and refrain from accelerating. If, owing to the narrowness, profile or condition of the carriageway, taken in conjunction with the density of oncoming traffic, a vehicle which is slow or bulky or is required to observe a speed limit cannot be easily and safely overtaken, the driver of such vehicle shall slow down and if necessary pull in to the side as soon as possible in order to allow vehicles following him to overtake.

- (1) On one-way or two-way carriageways where at least two lanes in built-up areas and three lanes outside built-up areas are reserved for traffic in the same direction and are indicated by longitudinal markings:
- (2). Allow vehicles in one lane to overtake on the side appropriate to the direction of traffic vehicles in another lane.

q. Passing of oncoming traffic

- (1) When passing oncoming traffic, a driver shall leave sufficient lateral space and, if necessary, move close to the edge of the carriageway appropriate to the direction of traffic. If in doing so he finds his progress impeded by an obstruction or by the presence of other road-users, he shall slow down and if necessary stop to allow the oncoming road-user or road-users to pass.
- (2) On mountain roads and steep roads with characteristics similar to those of mountain roads, where the passing of oncoming traffic is impossible or difficult, it is the driver of the vehicle travelling downhill who should pull in to the side of the road in order to allow any vehicle proceeding uphill to pass, except where the arrangement of lay-bys to enable vehicles to pull in to the side of the road is such that, having regard to the speed and position of the vehicles, the vehicle proceeding uphill has a lay-by ahead of it and the need for one of the vehicles to reverse could be avoided if the vehicle proceeding uphill pulled in to that lay-by.

r. Speed and distance between vehicles

- (1) Every driver shall in all circumstances have his vehicle under control so as to be able to exercise due and proper care. When adjusting the speed of his vehicle, pay constant regard to the circumstances, in particular the lie of the land, the state of the road, the condition and load of his vehicle, the weather conditions and the density of traffic, so as to be able to stop his vehicle within his range of forward vision and short of any foreseeable obstruction. He shall slow down and if necessary stop whenever circumstances so require, and particularly when visibility is not good.
- (2) Domestic legislation shall establish maximum speed limits for all roads. Domestic legislation shall also determine special speed limits applicable to certain categories of vehicles presenting a special danger, in particular by reason of their mass or their load. They may establish similar provisions for certain categories of drivers, in particular for new drivers.
- (3) No driver shall impede the normal progress of other vehicles by travelling abnormally slowly without proper cause.
- (4) The driver of a vehicle moving behind another vehicle shall keep at a sufficient distance from that other vehicle to avoid collision if the vehicle in front should suddenly slow down or stop.

s. Outside built-up areas, in order to facilitate overtaking, drivers of vehicles or combinations of vehicles of more than 3,500 kg permissible maximum mass, or of more than 10 m overall length, shall, except when they are overtaking or preparing to overtake, keep at such distance from power-driven vehicles ahead of them that other vehicles overtaking them can without danger move into the space in front of the overtaken vehicle. However, this provision shall not apply in very dense traffic or in circumstances where overtaking is prohibited. In addition, the competent authorities may exempt certain conveys of vehicles from this provision, or may similarly make it inapplicable on roads where two lanes are allotted to traffic in the direction concerned.

Special regulations relating to regular public-transport service vehicles

- a. It is recommended that domestic legislation should provide that in built-up areas, in order to facilitate the movement of regular public-transport service vehicles, the drivers of other vehicles shall slow down and if necessary stop in order to allow the public-transport vehicles. Thereof shall in no way affect the duty incumbent on drivers of public-transport vehicles to take, after having given warning by means of their direction-indicators of their intention to move off, the precautions necessary to avoid any risk of accident.
 - b. <u>Change of direction:</u> Before turning right or left for the purpose of entering another road or entering a property bordering on the road, a driver shall do the following practices:
 - (1) If he wishes to turn off on the side appropriate to the direction of traffic, keep as close as possible to the edge of the carriageway appropriate to that direction and make as tight a turn as possible;
 - (2) If he wishes to turn off on the other side, and subject to move as close as possible to the centerline of the carriageway if it is a two-way carriageway or to the edge opposite to the side appropriate to the direction of traffic if it is a one-way carriageway and, if he wishes to enter another two-way road, make his turn so as to enter the carriageway of such other road on the side appropriate to the direction of traffic.
 - (3) While changing direction, the driver shall allow oncoming vehicles on the carriageway he is preparing to leave, and cycles and mopeds moving on cycle tracks crossing the carriageway he is about to enter, to pass.

c. **Slowing down:**

- (1) No driver of a vehicle shall brake abruptly unless it is necessary to do so for safety reasons.
- (2) Every driver intending to slow down to an appreciable extent shall, except where his slowing down is in response to an imminent danger; first make sure that he can do so without danger or undue inconvenience to other drivers. Unless the driver has made sure that there is no vehicle following him or that any following vehicle is a long way behind, give clear and timely warning of his intention by making an appropriate signal with his arm.

d. Intersections and obligation to give way:

- (1) Every driver approaching an intersection shall exercise such extra care as may be appropriate to local conditions. Drive at such a speed as to be able to stop to allow vehicles having the right of way to pass.
- (2) Every driver emerging from a path or an earth-track (dirt road) on to a road other than a path or an earth-track shall give way to vehicles travelling on that road.
- (3) Every driver emerging on to a road from a property bordering thereon shall give way to vehicles travelling on that road.
- (4) Even if traffic light signals authorize him to do so, a driver shall not enter an intersection if the density of traffic is such that he will probably be obliged to stop on the intersection, thereby obstructing or preventing the passage of cross traffic.
- (5) A driver who has entered an intersection where traffic is regulated by traffic light signals may clear the intersection without waiting for the way to be opened in the direction in which he wishes to proceed, provided that this does not impede the progress of other road-users moving in the open direction.

Level-crossings

- 6. Road-users shall exercise extra care in approaching and traversing level- crossings. In particular:
 - a. Every driver shall drive at a moderate speed.
 - b. Without prejudice to the obligation to obey an instruction to stop given by a light signal or a sound signal, no road-user shall enter a level- crossing at which the gates or half-gates are across the road or in process of being placed across the road.
 - c. If a level-crossing is not equipped with gates, half-gates or light signals, no road-user shall enter it without making sure that no rail-borne vehicle is approaching.
 - d. No driver shall enter a level-crossing without first ascertaining that he may not be obliged to stop on it.
 - e. No road-user shall linger while traversing a level crossing; if a vehicle is compelled to stop, its driver shall move it off the track, and, if he is unable to do so, immediately do everything he can to ensure that the drivers of rail-borne vehicles are warned of the danger in time.

Standing and parking

- a. Outside the built-up areas, standing or parked vehicles and halted and outside built-up areas they shall not be stationed on cycle tracks.
 - (1) Animals halted and vehicles standing or parked on the carriageway shall be kept as close as possible to the edge of the carriageway.

A driver shall not stand or park his vehicle on a carriageway save on the side appropriate, to the direction of traffic; nevertheless, standing or parking on the other side shall be permitted where standing or parking on the side appropriate to the direction of traffic is prevented by the presence of rail tracks.

- (2) Refrain from prohibiting standing and parking on one side or the other in certain conditions, for instance where standing on the side appropriate to the direction of traffic is prohibited by road signs.
- (3) On one-way carriageways, authorize standing and parking on the other side as well as or instead of on the side appropriate to the direction of traffic.
- (4) Authorize standing and parking in the middle of the carriageway at places specially marked.
- b. Vehicles other than two-wheeled cycles, two-wheeled mopeds and two-wheeled motor cycles without side-car shall not stand or be parked two abreast on the carriageway. Standing or parked vehicles shall, unless the layout of the area permits otherwise, be placed parallel to the edge of the carriageway. The standing or parking of a vehicle on the carriageway shall be prohibited:
 - (1) On pedestrian crossings, on crossings for cyclists, and on level-crossings.
 - (2) On tramway or railway tracks on a road or so close to such tracks that the movement of trams or trains might be impeded.
- c. The standing or parking of a vehicle at any point where it would constitute a danger shall be prohibited, more particularly:
 - (1) Save in such spaces as may be specially marked, under flyovers and in tunnels.
 - (2) On the carriageway, close to the crests of hills, and on bends where visibility is not sufficient for the vehicle to be overtaken in complete safety, having regard to the speed of vehicles on the section of the road in question.
 - (3) At any place where the vehicle would conceal road signs or traffic light signals from the view of road-users.
 - (5) On an additional lane indicated by a sign for slowly moving vehicles.

d. The parking of a vehicle on the carriageway shall be prohibited:

- (1) On approaches to level-crossings, to intersections and to bus, trolley-bus or rail-vehicle stops; within the distances prescribed by domestic legislation.
- (2) In front of vehicle entries to properties.
- (3) At any point where the parked vehicle would prevent access to another vehicle properly parked or prevent such other vehicle from moving out.

- e. A driver shall not leave his vehicle or his animals without having taken all suitable precautions to avoid any accident and, in the case of a motor vehicle, to prevent its unauthorized use.
- f. It is recommended that domestic legislation should provide as follows:
 - (1) Every power-driven vehicle other than a two-wheeled moped or a two-wheeled motor cycle without side-car, and every trailer coupled or uncoupled shall when stationary on the carriageway outside a built-up area be signaled to approaching drivers at a sufficient distance by means of at least one appropriate device placed at the most suitable point to give them adequate advance warning:
 - (2) If the vehicle is stationary at night on the carriageway in circumstances such that approaching drivers cannot be aware of the obstacle which the vehicle constitutes.
 - (3) If the driver, in other cases, has been compelled to halt his vehicle at a place where standing is prohibited.

Opening of doors

8. It shall be prohibited to open the door of a vehicle, to leave it open, or to alight from the vehicle without having made sure that to do so cannot endanger other road-users.

Motorways and similar roads

- 9. On motorways and, if so provided in domestic legislation, on special approach roads to and exit roads from motorways:
 - a. The use of the road shall be prohibited to pedestrians, animals, cycles, mopeds unless they are treated as motor cycles, and all vehicles other than motor vehicles and their trailers, and to motor vehicles or motor-vehicle trailers which are incapable, by virtue of their design, of attaining on a flat road a speed specified by domestic legislation;
 - b. Drivers shall be forbidden:
 - (1) To have their vehicles standing or parked elsewhere than at marked parking sites; if a vehicle is compelled to stop, its driver shall move it off the carriageway and also off the flush verge, if he is unable to do so, immediately signal the presence of the vehicle at a distance so as to warn approaching drivers in time.
 - (2) To make U-turns, to travel in reverse, and to drive on to the central dividing strip, including the crossovers linking the two carriageways.
 - c. Drivers emerging on to a motorway shall give way to vehicles travelling on it. If there is an acceleration lane, they shall use it.
 - d. A driver leaving a motorway shall move into the traffic lane appropriate to the motorway exit in good time and enter the deceleration lane, if there is one, as soon as he can.

Special regulations for tunnels indicated by special road signs

- 10. In tunnels indicated by the special road signs, the following rules shall apply:
 - a. All drivers are forbidden:
 - (1) To reverse.
 - (2) To make a U-turn.
 - (3) To stop or to park a vehicle except at the places indicated for that purpose.
 - b. Even if the tunnel is lit, all drivers must switch on the driving or passing lamps.

Special rules applicable to cyclists, moped drivers and motor cyclists

- 11. a. Thereof shall be free not to prohibit cyclists from travelling two or more abreast.
 - b. It shall be prohibited for cyclists to ride without holding the handlebars with at least one hand, to allow themselves to be towed by another vehicle, or to carry, tow or push objects which hamper their cycling or endanger other road- users.
 - c. It shall be prohibited for cyclists and moped drivers to carry passengers on their vehicle. Motor cyclists shall not be permitted to carry passengers except in the side-car, if there is one, and on the additional saddle (pillion), if any, fitted behind the driver.
 - d. Where cycle tracks exist, cyclists are forbided to use the rest of the carriageway. In the same circumstances they may authorize moped drivers to use the cycle track and, if they consider it advisable, prohibit them from using the rest of the carriageway.

Behaviour in case of accident

- 12. a. Without prejudice to the provisions of domestic legislation concerning the obligation to assist the injured, every driver or other road-user involved in a traffic accident shall:
 - (1) Stop as soon as he can do so without causing an additional danger to traffic.
 - (2) To ensure traffic safety at the site of the accident and, if a person has been killed or seriously injured in the accident, to prevent, in so far as such action does not affect traffic safety, any change in conditions at the site, including the disappearance of traces which might be useful for determining responsibilities.
 - (3) If so requested by other persons involved in the accident, identify him.
 - (4) If a person has been injured or killed in the accident, notify the police and remain on the scene of the accident or return to it and wait there until the arrival of the police, unless he has been authorized by the police to leave or has to assist the injured.

Rules of the use of lamps

- 13. a. Between nightfall and dawn and in any other circumstances when visibility is inadequate on account, for example, of fog, snowfall or heavy rain, the following lamps shall be lit on a moving vehicle and mopeds the driving lamp(s) or passing lamp(s) and the rear position lamp(s), according to the vehicle of each category.
 - b. Driving lamps shall be switched off and replaced by passing lamps:
 - (1) In built-up areas where the road is adequately lighted and outside builtup areas where the carriageway is continuously lighted and the lighting is sufficient to enable the driver to see clearly for an adequate distance and to enable other road-users to see the vehicle far enough away.
 - (2) When a driver is about to pass another vehicle, so as to prevent dazzle far enough away to enable the driver of the other vehicle to proceed easily and without danger.
 - (3) In any other circumstances in which it is necessary to avoid dazzling other road-users or the users of a waterway or railway running alongside the road.
 - c. When a vehicle is following closely behind another vehicle, driving lamps may be used to give a luminous warning.
 - d. Fog lamps may be lit only in thick fog, falling snow, heavy rain or similar conditions and as regards front fog maps, as a substitute for passing lamps. Domestic legislation may authorize the simultaneous use of front fog lamps and passing lamps and the use of front fog lamps on narrow, winding roads.
 - e. On vehicles equipped with front position lamps, such lamps shall be used together with the driving lamps, the passing lamps or the front fog lamps.
 - f. During the day, a motor cycle moving on the road shall display at least one passing lamp to the front and a red lamp to the rear. Domestic legislation may permit the use of daytime running lamps instead of passing lamps.
 - g. Domestic legislation may make it compulsory for drivers of motor vehicles to use during the day either passing lamps or daytime running lamps. Rear position lamps shall in this case be used together with the front lamps.

- h. Between nightfall and dawn and in any other circumstances when visibility is inadequate, the presence of power-driven vehicles and their trailers standing or parked on a road shall be indicated by front and rear position lamps. In thick fog, falling snow, heavy rain or similar conditions passing lamps or front fog lamps may be used. Rear fog lamps may in these conditions be used as a supplement to the rear position lamps.
- j. In a built-up area the front and rear position lamps may be replaced by parking lamps, provided that:
 - (1) The vehicle does not exceed 6 meter in length and 2 meter in width.
 - (2) No trailer is coupled to the vehicle.
 - (3) The parking lamps are placed on that side of the vehicle which is furthest from the carriageway edge alongside which the vehicle is standing or parked.
- k. Notwithstanding a vehicle may be standing or parked without any lamps lit:
 - (1) On a road lit in such a way that the vehicle is clearly visible at an adequate distance.
 - (2) Away from the carriageway and hard shoulder.
- I. Reversing lamps may be used only when the vehicle is reversing or about to reverse.
- m. Hazard warning signal may be used only to warn other road-users of a particular danger:
 - (1) When a vehicle which has broken down or has been involved in an accident cannot be moved immediately, so that it constitutes an obstacle to other road-users.
 - (2) When indicating to other road-users the risk of an imminent danger.

Identification marks

14. Every motor vehicle and every trailer in international traffic shall bear the identification marks specified in this Convention.

Technical requirements and inspection of vehicles

- 15. a. Every motor vehicle, every trailer and every combination of vehicles in international traffic shall satisfy this Convention. It shall also be in good working order.
- b. Domestic legislation shall require periodic technical inspections of:
 - (1) Motor vehicles used for the carriage of persons and having more than eight seats in addition to the driver's seat;

(2) Motor vehicles used for the carriage of goods whose permissible maximum mass exceeds 3,500 kg and trailers designed to be coupled to such vehicles.

c. **Driving permits**

- (1) Every driver of a motor vehicle must hold a driving permit.
- (2) It is to be ensured that driving permits are issued only after verification by the competent authorities that the driver possesses the required knowledge and skill.
- (3) Domestic legislation must lay down requirements for obtaining a driving permit.
- d. <u>Technical Conditions Concerning Motor Vehicles and Trailers.</u> All vehicles in international traffic must meet the technical requirements in force in their country of registration when they first entered into service.
- e. <u>Driving (rear-view) mirror.</u> Every motor vehicle shall be equipped with one or more driving (rear-view) mirrors; the number, dimensions and arrangement of these mirrors shall be such as to enable the driver to see the traffic to the rear of his vehicle.
- f. <u>Audible warning device.</u> Every motor vehicle shall be equipped with at least one audible warning device of sufficient power. The sound emitted by the warning device shall be continuous and uniform, but not strident. Priority vehicles and public passenger-transport vehicles may have additional audible warning devices which are not subject to these requirements.
- g. <u>Windscreen-wiper</u>. Every motor vehicle having a windscreen of such dimensions and shape that the driver cannot normally see the road ahead from his driving position except through the transparent part of the windscreen, shall be equipped with at least one efficient and strongly built windscreen-wiper in an appropriate position, the functioning of which does not require constant action by the driver.
- h. <u>Windscreen-washer.</u> Every motor vehicle required to be equipped with at least one windscreen- wiper shall also be equipped with a windscreen washer.
- j. **Windscreen and windows.** On all motor vehicles and on all trailers:
 - (1) Transparent substances forming part of the vehicle's body-work, including the windscreen and any interior partition, shall be such that in case of breakage, the risk of physical injury will be minimized.
 - (2) The transparent parts of the windscreen shall be made of a substance whose transparency does not deteriorate, they shall be such that they do not cause any appreciable distortion of objects seen through the windscreen, and that, in case of breakage, the driver still has a sufficiently clear view of the road.

- k. <u>Reversing device</u> Every motor vehicle shall be equipped with a reversing device controlled from the driving position. This device shall not, be compulsory on motor cycles or on motor vehicles having three wheels arranged symmetrically in relation to the vehicle's median longitudinal plane unless their permissible maximum mass exceeds 400 kg.
- I. <u>Exhaust silencer.</u> Every internal combustion engine used for propelling a motor vehicle shall be equipped with an efficient exhaust silencer.

TRADE TRAINING ADVANCE

MTOF (MTO PART)

PRE-CTTB, PART- IV

Course: MTOF TTA (MTO) Topic No-01

HIRING OF CIVIL TRANSPORT

Aim

1. To learn the hiring procedure of civil mechanical transport.

General

2. Civil transport may be hired for BAF duty when service transport is not available.

Action by Base/Unit

- 3. The following action is to be taken by Base/Unit for hiring of civil transports:
 - a. Base/Units required to hire civil transport are to complete the application form at appendix 'A' to this order and forward the same to Air Headquarters so as to reach from 658C fifteen days in advance of the date of which the conveyance is required.
 - b. On receipt of approved application form, the Base/Unit MT Officer will raise the indent BAF Form 658D (Appendix 'B' to this order) in triplicate and forward the original and duplicate copy to the contractor concerned. The triplicate copy will be held by the MT Officer in safe custody.

Action by the Contractor

4. On receipt of the indent the contractor will supply the required transport. On completion of the job, the contractor will complete the original and duplicate copies of the indent. The duplicate copy will be returned duly signed by MT Officer. The original will be attached to the bill and submitted to the officer commanding who will authorize payment.

Action by Accountant Officer

5. The Base/Unit accountant officer on receipt of the bill will scrutinize it and take necessary action for its payment. The bill will however not be paid until the duplicate copy of the indent duly certified by the MTO, has been received by the accountant officer. After payment of the bill has been made, the accountant officer will forward the duplicate copy of the indent to the Air Headquarters.

Action by Base/Unit MT Officer

- 6. The following action is to be taken by the Base/Unit MT Officer:
 - a. Base/Unit MT Officer will maintain a record register of all civilian transports hired by the unit. The register will be titled "RECORD OF CIVILIAN TRANSPORT HIRED BY AIR FORCE, and will be maintained under the heading as per Appendix 'C' to this order. The officer commanding Base/Unit is to examine each entry on this register and is to certify that entries contained there in are correct. MT officer is to be responsible for the safe custody of the register, and produces it to the local audit officer or visiting staff officers, if called upon to do so.
 - b. Each indent raised by the Mt officer will be given a serial number from the record register in the following manner:

MTR/1/87/MT

7. In which MTR denotes the Base concerned, 1 is the entry number on the record register and 87 the year. If an indent is cancelled after the entries have been made in the register, the serial number thus allotted will not be used for another indent. All cancelled entries be signed by the MT officer and counter signed by the officer commanding. The MT Officer is to ensure that the transport provided by a contractor is as required by the indent and that it is used for prescribed purpose. Civil transport will only be hired from reputable firms or approved government contractors.

Course: MTOF TTA (MTO) Topic No-02

REQUISITION OF BAF MT VEHICLE

<u>Aim</u>

1. To learn the detail of requisition of BAF MT.

General

- 2. The commanding officer of a Base/Unit is responsible for the proper authorization of all duty journeys, privilege and repayment journeys, and duty journeys in privately owned motor vehicles. Normally the responsibility for authorizing duty journey is exercised through the MT Officer or Warrant Officer MTO/MTF if one is established or if no MT Officer or Warrant Officer is established, an officer who is to be detailed in Base/Unit routine orders. The Officer or Warrant Officer thus detailed is to be solely responsible to the Officer Commanding and is to have direct access to him on matters affecting MT under there operational control. The following Mt runs are to be personally authorized by Officer Commanding Base/Unit or OC Maint Wing when authorized by the Officer Commanding:
 - Routine duty journeys.
 - b. Repayment runs.
 - c. Out station duty journeys for distances exceeding 40 miles one way.
 - d. Free recreational/Liberty runs.
 - e. Officer Commanding are responsible for the economical use of service MT in their formations and except for staff cars established for the use of senior officer, other personnel may not demand a particular vehicle even though it is established for the post which they occupy. Where there is any doubt whether the proposed use of service MT should be charged against public or non-public funds, the matter may be referred to Air Headquarters for prior approval. The Base/Unit MT Officer may also refer a particular application for use of service transport to local audit officer for his comments.

Routine Duty Journeys

- 3. A routine duty journey is a journey is essential to the functions of the unit and which takes place at regular intervals, follows the same route and has a fixed mileage and destination e.g. collection of rations, conveyance of children to school, conveyance of patients to hospital etc. The following action is to be taken by the Base/Unit for routine duty journeys:
 - a. Applications for general authority to use service MT for routine duty journeys are to be made to Air Headquarters (Dte of Egg) in duplicate in accordance with appendix "A" to this order. Air Headquarters after approval will dispatch one copy of routine run application to Base/Unit.

- b. Immediately authorization is received for the institution of routine runs, these are to be published in Base/Unit routine orders.
- c. Authorized route runs will be valid for a period of one year. All current routine runs are published in Base/Unit routine orders during the first week of January each year.
 - d. The Mt detail is to prepare a F-658E "Authority for Mechanical Transport for duty journeys" and a F-658A "Mechanical Transport routine run or detachments record" on the first day of each month to cover every routine runs which has been authorized. These F-658E will remain in force until the last day of the month and will not in a protective cover and details of the authorized operator and vehicle will be entered on F- 658A before issue to the operator. The entries on F-658A are to be made in the MT Detail office on completion of the routine journey.
 - e. Variation on approved routine runs is not permitted unless authorized by Air Headquarters. In case of a routine run being no longer required, Air Headquarters is to be informed.

Repayment Journeys

4. The Authority competent to sanction the hire of service transport is the Officer Commanding of a Base/Unit. Before approving a repayment run the Officer Commanding will ensure that the service requirement for which the transport is established is in no way prejudiced. An individual desires of hiring a service transport is to approach the MT officer who will issue a certificate in accordance with appendix 'B' to this order. This certificate is also to be signed by the Base/Unit accountant, and is to be a attached with the requisition. Application for hire of service MT is to be made on F-793 (Application for the use of BAF MT on repayment) in triplicate. These forms are to be held in custody by the Base/Unit adjutant, to whom all application for use of MT on repayment is to be submitted. Form 793 is to be approved by the Officer Commanding before any repayment journey is undertaken. The privilege of hiring service transport is to be given sparingly. An application or members of a party who have not cleared their previous repayment runs are not to be authorized to hire service transport. Original copy of F-793 is to be dispatched to MT Ops Flt and the duplicate to the Base/Unit accounts section. The triplicate is to be retained in the pad. On receipt of approved F-793 the MT Detail will detail a operator by name who is to remain on duty throughout the period the vehicle remains out of MT Sqn. Change of operators after the vehicle has been booked out of MT Sqn is not permitted. No service transport is to be used on a repayment journey without a operator (service or civilian) in-charge who in employed as such in the BAF. After completion of the journey, all particulars will be entered on F-793, F-814 in red ink and on the repayment register, signed by the MT Officer and the F-793is to be forwarded to the accountant officer. Thereafter, it is the responsibility of the individual hiring transport to clear the debit.

Recreational Run-Privilege Use of MT

5. The provisions for recreational runs are outlined as follows:

- a. Free use of service transport is authorized for conveyance of airmen for the purpose of recreational visits vides AFI268/46. Instruction as laid down in this AFI is to be strictly complied with.
- b. Recreational runs will not be authorized for distance of less then 2 miles or more then 10 miles from BAF Base/Unit. Special recreational runs may, however, be authorized by Air Headquarters. Requests for such special runs are to be forwarded to Air Headquarters (Dte of Egg) well in advance of the dates on which journeys are required to be made.
- c. F-658E in respect of recreational runs are to be approved by the Officer Commanding Base/Unit and details are to be published at least a day earlier in the routine orders. The Base MT Officer will ensure that only experienced Mt operator is detailed to drive vehicle on recreational runs.
- d. All airmen on the strength of a Base /Unit are to be given equal opportunity to avail this privilege. A list of airmen authorized to travel on a particular run will be attached with the F- 658E. A senior NCO will be detailed as in-charge party for the purpose of maintaining the discipline.
- e. The operator of a vehicle detailed on recreational run will not proceed until he has satisfied himself that the vehicle is fully serviceable. Additional passengers over and above the carrying capacity of a vehicle are not to be carried as overloading has shown itself to be a big casualty factor in MT accident to the responsibility of carrying a live load and must in no circumstances exceed the permissible speed limits.

Use of Service Transport for Sports

6. The provisions for the use of service MT for sports are outlined as follows:

- a. Base/Unit Commander are authorized to approve F-658E for use of MT for the carrying of airmen taking parts in competition, tournament or practices held at a place which is beyond 2 miles but within 15 miles from the Base/Unit as laid down in AFI 22/47.
- b. <u>Distance Beyond 15 miles one way</u>. Use of service MT beyond 15 miles for the practice or tournament matches for the other ranks will from a part of recreational run authorized under AFI 268/46. Authority for such fixture will be accorded by BAF sports control board at Air Headquarters. Base/Unit is to submit a maximum of four fixtures in a month or 12 fixtures in a quarter, to Air Headquarters for approval two weeks in advance of the ensuing of quarter.

c. <u>Special Authority</u>. Authority for use of service MT for special sports fixture for participating of BAF or Base/Unit teams in all Bangladesh Tournament will be accorded by BAF sports Control Board at Air Headquarters in addition to the quarterly requirement as authorized in sub-Para b, above.

Use of Service Ambulance for the Conveyance of Sick and injured BAF Personnel

- 7. Sick and injured officers, others ranks and their families may be conveyed free by service ambulances from their quarters, place of duty and/or scene of accident and hospital provided:
 - a. An ambulance is available.
 - b. The medical officer considers that conveyance by other means will be detrimental to the health of the patient.
 - c. The standby ambulance will normally be parked in the hospital/MI Room premises. This concession will also be admissible to all civilians employed in various services, workshops and stores etc. within the meaning of the factories Act, when the injury sustained takes place in the course of duty and it becomes necessary to remove the injury to hospital by service ambulance. Service ambulance may also be used on payment for the conveyance of sick and injured civilian employees and their families other then those referred to in pares 20 and 21 above, between their residence, place of duty and/or scene of accident and hospital provided.
 - d. That service requirements are in no way prejudiced and that conveyance otherwise than by ambulance would be detrimental to health of the patient.
 - e. Service ambulance may be hired out to civilians other then those mentioned in pares 20,21 and 22 above in the real cases of emergency provided the conditions laid down in a. and b. of Para 20 above and that service requirements are in no way prejudiced.
 - f. No bonus shall be payable to operator of ambulance employed in this work.
 - g. A flat rate of Tk 0.56 per mile (irrespective of the type of ambulance used) will be charged in the case of individuals mention in pares 22 and 23 above.
 - h. Service ambulance or service transport may be used from the scene of accident to the nearest civil or military hospital for the conveyance of civilians who are injured in a service MT accident.

Use of Service MT by Duty Medical Officer (DMO)

8. Service transport may be providing to the duty medical officer for conveyance to visit entitled patients in their quarters and to carry out medical duties in camp area. This will include conveyance from residence provided the duty medical officer is permitted to stay at his residence when on duty after normal working hours. All journeys up to be recorded in part III of F-658E.

Use of Stand by Ambulance for Crash Duty

9. On ambulance is to remain standby for crash duties whenever flying is in progress.

Conveyance of BAF Officers from Their Residences

10. Officers Commanding Base/Units are authorized for free conveyance by service MT from their residence to the place of duty and back vide Para 10 of AFI 22/47. In case where BAF Officer are necessarily housed at a distance exceeding 2 miles from their place of duty, authority for their conveyance to and from their work by service transport may be given by the Officer Commanding Base/Unit vide Para 10 of AFI22/47.

Misuse of Service Transport

11. Any person using service vehicle for an unauthorized journey is not only guilty of misusing the vehicle but may also be guilty of stealing the patrol in the same way as if he had extracted it from the service vehicle and used it in a private car. This, in some cases, may also constitute a court martial offence.

Course: MTOF TTA (MTO) Topic No-03

RECEIPT, REPAIR AND DISPOSAL

<u>Aim</u>

1. After studying, the students are expected to learn the procedure on:

- a. Receipt of common user vehicles.
- b. Allotment of vehicles to the user unit.
- C. Repair and disposal of user vehicles.
- d. Classification of vehicles.

Receipt of Common User Vehicles

2. The provisioning of BAF MT vehicle is done by Air Headquarters. After the contract is finalized and procurement action is taken, the MT vehicles are received by No 201 MU.BAF from the local agent/manufacture of the vehicles. On receipt of the vehicle No201 MU, BAF intimates No212MU, BAF through a letter for carrying out the necessary initial/storage inspection of the vehicle. A SNCO MT fitter accompanied by the required number of operators is to be detailed by OC No 212 MU, BAF. An electrician and an NCO of supply assistant trade (if the vehicle is to be kept under storage condition in No 212 MU) are also to be detailed with the party. Prior to acceptance, each vehicle is to be checked for complete serviceability. Any minor defects revealed during inspection are to be informed to the concerned officer of No 201MU, BAF and, if possible, necessary rectification is to be carried out. If these are serious or the general condition of a vehicle is poor, it is not to be accepted. In such cases the OC No 212 MU, BAF will raise a report and send it to OC NO 201 MU, BAF for his necessary action. On receipt of this report No 201 MU, BAF will make necessary arrangements to get such a vehicle serviced/replaced by the local agent/manufacturer of the vehicle. If, however, such a vehicle is not serviced /replaced by the concerned supplier, a detail report is to be forwarded to Air Headquarters. At the time of collection of vehicles from No 201 MU, BAF, the vehicles are to be checked for completion against from E-03 from 748 is to be raised for each vehicle, and all tools etc listed on the "Kit List" are to be entered on form 748 and the last column signed by an officer of No201 MU, BAF.

The following documents are to be collected for each vehicle:

- 3. a. Vehicle log book.
 - b. Kit schedule list.
 - c. Kit short list.
 - d. Form E-03.
 - e. Publications Vis maintenance manual, driver's hand book and spare parts catalogue. The vehicles are to be driven from No 201 MU, BAF to 212, BAF to No 212 MU, BAF by experienced operator. On arrival these are to be given an initial inspection, road tested and painted to BAF specifications prior to being put in storage or allotted to other user units. Details of make, type, model, BA numbers, chassis numbers and contract number are to be intimated to Air Headquarters by signal.

Allotments of Vehicles to User Unit

4. When a vehicle is allotted out, the No 201/212 MU BAF upon receipt of allotment instructions is to prepare the vehicle for issue. This will normally require de-inhibiting, preallotment inspection and road test. When the vehicle is ready, the consignee unit is to be informed to detail operator/escort and arrange collection. All documents are to be completed and it is to be ensured that the vehicle is fully serviceable condition. The common user vehicles are to be issued complete to the last column of form 748, kit short list and form E-03. All queries in respect of discrepancies, if are to be settled at the time of issue. Specialist vehicles are to be issued complete to the last column of F-748/1670 and vehicle log book. In case of minor deficiencies which do not affect the road worthiness of the vehicle, a certificate listing such minor items is to be prepared, signed by the officer in-charge storage and attached with the vehicle log book and F-748. In case of vehicles dispatched by rail, the consignor unit is to ensure that these are properly lashed to avoid damage in transit. Suitable wagons are to be arranged and prior railway clearance is to be obtained for over dimensioned vehicles before asking the consignee unit to send representatives for collection.

Repair and Disposal of User Vehicles

5. When a MT vehicle becomes unserviceable and beyond unit capacity to repair or is surplus to the requirements, the person holding the vehicle on charge is to raiser from 523 in quadruplicate, retain one copy and forward three copies under a covering letter to Air Headquarters endorsed for action by Directorate of Engineering. Directorate of Engineering at Air Headquarters will confirm/amend classification of the vehicles and recommend disposal to Directorate of Supply, who will then issue necessary allotment orders direct to Base/Unit. One copy of from 523 is to be enclosed with the allotment orders to both consignors as well as consignee units. On receipt of the allotment orders, the unit is asking No 201 MU, BAF for a calling-in date. The vehicle is to be checked for completeness and on the date fixed, it is to be handed over as per original F-748, form E-03, kit short list and log book. Base/Units are to detail an experienced MTO NCO to hand over vehicles to No 212MU, BAF. In case of serviceable surplus vehicles, these are to be allotted out to other Base/Unit or MT storage unit. The consignor unit is to ensure that the vehicle allotted out is completely serviceable at the time of transfer.

Classification of Vehicles

6. a. <u>Common User</u> Vehicles in accordance with special Bangladesh Army Order No 51/61, dated 15th December, 1961 the common user vehicles are to be classified as follows:

Class I : A vehicle fit for active service.

Class II : A vehicle requiring field repairs.

Class III : A vehicle requiring field repairs.

Class IV : A vehicle requiring a Base repair but not a complete

Overhaul.

Class V : A vehicle that requires a Base overhaul.

Class VI : A vehicle which is beyond economical repair.

b. **Specialist Vehicles**. Specialist MT vehicles are to be classified as

below:

Class I : A new vehicle with mileage under 10,000 miles.

Class II : A new vehicle with mileage over 10,000 miles or a

reconditioned serviceable vehicle.

Class III : An accident vehicle, which requires depot repairs.

Class IV : A vehicle requiring necessary repairs at dept.

Class V : A vehicle which requires complete overhaul or

recondition.

Class VI : Beyond economical repair vehicles.

Course: MTOF TTA (MTO) Topic No-04

COLLECTION AND ALLOTMENT OF MT VEHICLES

<u>Aim</u>

1. To learn the collection and allotment procedure of BAF MT vehicles.

General

2. BAF Base/Units when established for any type of vehicles Air Headquarters allots the vehicles to the Base/Units establishment either from the MU s or from the Base/Units where vehicles are held surplus.

Action by Air Headquarters

3. Air Headquarters allots the vehicles on F-440 which is raised in four copies. One copy is retained by the Air Headquarters, dispatched two copies to the consignor and one copy to the consignee unit.

Action by the Consignor Unit

4. On receipt of F-440 the consignor unit prepares the vehicle for dispatch. When the vehicle is ready, they inform the consignee unit to collect it.

Action by the Consignee Unit

- 5. Having received the information for the collection of the allotted vehicle, the consignee unit will take the following actions:
 - a. Will detail a qualified MTO (NCO) to collect the vehicle.
 - b. Will give an approved F-658E to the MTO collecting the vehicle if coming by road.
 - c. Will give the authority letter bearing the specimen signature of the person collecting the vehicle.

Action by the Person Collecting the Vehicle

- 6. The person collecting the vehicle is to check the followings:
 - a. That the vehicle is 100% serviceable.
 - b. That all fitted items are correct against F-E03 (out inspection).
 - c. That all tools and loose kit are complete as per last column of F-748.
 - d. That all concerning documents i.e. F-813, F-E03, F-464, F-748 and F-600 are duly completed and signed.

Action by the Consignor and Consignee

7. After completion of the allotment, the bottom slip of F-440 duly signed by the MT Officer or OC Unit and is forwarded to Air Headquarters to complete their record.

Loan of MT Vehicles

8. This procedure of loan allotment is just the same except that the vehicle is to be returned to the consignor unit after the loan period is over.

Course: MTOF TTA (MTO) Topic No-05

FLIGHT OR SECTION INVENTORY

Aim

1. To learn the procedure of running and checking of the flight or section inventory.

General

- 2. Every flight or section commander keeps a record of all class 'A' items in use in his flight or section and for which he is responsible by means of flight inventory F-37 (flight or section inventory F-37 sheets 1-4). The F-37 is a duplicate to record (the relevant sheet of the A-IN-U articles) of ledger. Each flight inventory is given a serial number which is noted on the A-IN-U ledger sheet. Class 'C' items being of a consumable nature are not accounted for in the inventory. When a flight or section is first formed, the flight commander demands the equipment for the Base Supply Squadron, after the items have been issued and the vouchers passed to EAS to record the items so issued. From the A—IN-U ledger sheet E AS prepares F-37 in single copy. The F- 37 is then handed over to the flight commander who checks the F-37 and if agrees with the quantities of items physically held in flight, signs sheet No 1 as accepting the responsibility. The flight commander retains the F-37 and there after must continue to keep it up to-date. An additional copy of F-37 sheet No 1 is also signed by flight commander which is retained in EAS and is known as accounts copy.
 - a. <u>Independent Check</u>: Once in a year before the annual stock taking is conducted at Base Supply Sqn, F-37 is checked against physical holding of the equipment as detailed on the F- 37 by an independent checker who is appointed by the officer commanding for this purpose. Before the actual quantities are checked, F- 37 is sent to the EAS for comparing it with the A-IN-U ledger sheets. The balance then existing in A-IN-U ledger is entered in the next vacant column of the F-37. The independent checker and the flight commander will sign on both copies of F-37 sheet No 1.
 - b. <u>Periodical Check:</u> This check is usually carried out by the inventory holder himself within six months of the independent check. All inventory checks are recorded on both the copies of F-37 sheet No 1 of the F-37 which are signed by the flight commander.

c. <u>Handing and Taking Over Check</u>: this check falls when one of the inventory holders is relieved from the duties of the flight commander. The check of the inventory is done in the same manner as stated above. The incoming and out going flight commanders check the stock in their person. When a unit leaves the Base the unit equipment inventories and both copies of F-464 for each machine are to be forwarded to equipment officer of the new Base. The machine inventory is carried out to a new base by the flight commander concerned. The A- IN-U ledger transferred from the Base is also to be used at the new Base as the A-IN-U ledger appertaining the unit equipment inventories.

Course: MTOF TTA (MTO Topic No-06

RUNNING IN NEW / RECONDITIONED VEHICLES

Aim

1. To learn the precautions and speed limits or running-in new/reconditioned vehicles.

Purpose

2. All new vehicles or vehicles fitted with new or reconditioned engine will be run-in carefully during the first 700 miles of the engine life. This ensures the reliability and longer life of engine.

Precautions

- 3. The following precautions are to be taken during the running-in period of the engine:
 - a. Only experienced operator is detailed to drive such vehicles.
 - b. Vehicle is driven on flat and not on hilly roads or cross country, except in emergency.
 - c. Vehicles be loaded up to 2/3 of the maximum carrying capacity.
 - d. When auxiliary low gear or power takes off in use it is very easy to "OVERREV" the engine even at vary low road speed. It is important to brief the operators to avoid this happening.
 - e. Speed in appendix 'A' to this lesson is not to be exceeded. Maximum authorized speeds for various types of vehicles will not be reached unit the vehicle has completed its running-in mileage of 700 miles. During the next 300 miles until a total of 1000 miles has been reached, the operators are to be very careful not to rev the engine to maximum RPM in any gear, or to drive at maximum permissible speeds. After completion of the running-in period the speed should be progressively increased until at 1000 miles, the maximum authorized speeds may be attained. It is only by carefully handing the vehicle in the first 1000 miles of its life that it can be expected to give satisfactory service without failure.
 - f. Upper cylinder lubricant be used by Base/Unit holding vehicles on charge until the running-in period is completed. This is to be done by adding engine oil to the patrol tank in the proportion, of one ounce of oil for every gallon of petrol. The oil, however, is to be diluted with an equal amount of petrol and the mixture thoroughly stirred before it is poured into the tank. This will ensure a homogeneous oil and petrol mixture. NCOIC MT Ops Flt is to ensure that this is done under his supervision whenever the vehicle is refilled.

- g. During the running-in period, tenders load carrying are not to be used for towing other vehicles.
 - h. In case of any unserviceability the vehicle is to be personally inspected by NCOIC MT R&I Flt.
 - j. At the end of running-in period the engine oil is to be changed completely, drained off and the sump refilled with fresh oil. Therefore the engine oil is to be changed in accordance with servicing schedule.

Cautions

- 4. Cautionary labels as appendix 'B' to this lesson are to be affixed to the windscreen of the vehicle and pasted in its log book. These labels are not to be removed till the running-in period has been completed. The following units are responsible for affixing these labels.
 - a. <u>MU (Vehicles Flight)</u>. For all new vehicles received from abroad and for new or reconditioned vehicle from the Army. Also for vehicles reconditioned by the unit.
 - b. MTR & SU. For vehicles repaired or overhauled by them and new for reconditioned vehicles received from Army.

Certificate

5. At the end of running in period the MT Officer will endorse a certificate (in red ink) in the repair column of vehicle log book as per appendix 'C' to this lesson.

Course: MTOF TTA (MTO) Topic No-07

DAILY SERVICING TASKS (POSTER NO-33)

<u>Aim</u>

1. To get familiarized with the poster No-33 and learn the sequence of tasks to be accomplished on MT vehicles.

Object

2. A sequence of daily tasks is to be none by MT operators so that they get themselves familiarized with the construction of their vehicles and are able stimulated period in appearance and efficiency of the vehicles. To ensure adequate supervision of the daily task, a monthly check is to be one by an experience NCO. These tasks should be completed within one month, but where an interval of approximately days, is considered to be more suitable.

Sequence of Tasks

- 3. The following 17 tasks are to be completed in a month:
 - a. Examine the engine and radiator for fuel, oil an coolant leaks.
 - b. Ensure that the vehicle tool kit is completed and all tools are clean an serviceable.
 - c. Examine all road lamps for security of attachment, damage and corrosion.
 - d. Check the level of the electrolyte in the batteries, and if necessary add distil water to drink level to ¹/₄ inch above the plates. Remove any corrosion from the terminals and smear with "greases terminal". Ensure that the batteries are secured. Examine battery stowage (to be packed) for signs of corrosion due to acid leakage.
 - e. Examine the tyres for damage or cuts, and signs of excessive wear due to uneven braking or incorrect alignment of front wheels. Ensure that all schader valves are fitted with valve caps. Remove stones from outer covers.
 - f. Check the tightness of all road wheel securing nuts.
 - g. Examine the exhaust system for security of attachment and sign of leaks.
 - h. Examine the body and cab externally for damage, corrosion, loose nuts, bolts and fittings, and damage to fabric tilt and /or paint word. Ensure that all doors close easily and can be secured without force.
 - j. Examine the body and can internally for damage, corrosion, loose nuts, bolts and fitting. Check the operation of adjustable seats, wind screens and side windows.

- k. Examine the chassis towing member, towing hook and attachment for damage.
- I. Examine:
 - (1) Fan belt for tension and wear.
 - (2) Fan belt and blades for damage and check security.
- m. Examine all interior lights and panel lights for correct functioning. Ensure that all spare tyres are serviceable and secured.
- n. Repeat task No-4.
- p. Repeat task No-5.
- q. Repeat task No-6.
- r. Examine the mudguards and stays for security of attachment, cracks and signs of damage.
- s. Examine the spear wheel stowage for security, and ensure that the fuel tank filler caps, oil filler caps and radiator filler cap are correctly fitted and secured.

Note:- Details of defect noted are to be entered in form 656 and reported to the NCOIC MT Ops Flt.

Ref: Poster No 33 and AP 3025

Course: MTOF TTA (MTO) Topic No-08

OFFENCES, PENALTIES AND PUNISHMENT BRTA(BANGLADESH ROAD TRANSPORT AUTHORITY

- 1. **General provision for punishment of offence-** if any body commit offence under section -137 for the first time it may fined two hundred taka but if having been previously convicted of any offence under this ordinance he is also convicted of such offence under this ordinance it may fined four hundred taka.
- 2. **Driving without licence-** If anybody drives a motor vehicle or any service vehicle without licence. He may punished with imprisonment four months or fined five hundred taka or both
- 3. **Using of banded horns or other sound producing device-**If any person or owners of the vehicle or responsible person of the vehicle uses banded horns or other sound producing device it may fined hundred taka.
- 4. **Driving with intoxicated by drinks or drug (Section-144):** If anybody commit offence under section-144 for the first time it may fine one thousand taka or may punished three months imprisonment or both. But it happened in the second time it may punished two years imprisonment or fined one thousand taka or both.
- 5. Using of Vehicle without Registration, Rule permission or Fitness Certificate: If any body drive motor vehicle or service vehicle without registration, rule permission or fitness certificate or will be given authority to drive motor vehicle he may punished with imprisonment three months or fined two thousand taka or both.
- 6. **Driving without insurance:** If anybody drives motor vehicle or service vehicle violation of the section-155. He may punish one year imprisonment or fined two hundred taka or both.
- 7. **Using of deep smoke produce vehicle (Section-150):** If the vehicle produces deep smoke which harmful for health. It is restricted to drive. It done he may fined five hundred taka.

Course: MTOF TTA (MTO) Topic No-09

OFFENCES, PENALTIES AND PROCEDURE

General provision for punishment of offence

1. Whoever contravenes any provision of this ordinance or of any rules or regulations made there under shall, if no other penalty is provided for the offence, be punishable with fine which may extend to two hundred taka or if having been previously convicted of any offence under this ordinance he is again convicted of an offence under this ordinance with fine which may extend to four hundred taka.

Driving without licence

2. Whoever drives a motor vehicle or public service vehicle or whoever causes or allows a motor vehicle or public service vehicle to be driven in contravention of the provision of sub-section (1) of section 3 shall be punishable with imprisonment which may extend to four months, or with fine which may extend to five hundred taka or with both.

Fitting and using of prohibited horns or other sound producing device

3. Whoever uses or being the owner or person in charge of motor vehicle fits causes or allows fitting of any horns or any sound producing devices prohibited by any competent authority having jurisdiction over the area or prohibited under the provision of this ordinance or any rules or regulations made there under or uses horn or any sound producing device where its use is prohibited shall be punishable with fine which may extend to one hundred taka.

Disobedience of orders obstruction and refusal of information

- 4. (1) Whoever willfully disobeys and direction lawfully given by any person or authority empowered under this ordinance to given such direction or obstructs any person or authority in the discharge of any functions which such person or authority is required or empowered under this ordinance to discharge or being required by or under this ordinance to supply any information, withholds such information or gives information which he knows to be false or which he does not believe to be true, shall, if no other penalty is provided for the offence, be punishable with imprisonment for a term which may extend to one month or with fine which may extend to five hundred taka or with both.
 - (2) Whoever, otherwise than with lawful authority or reasonable excuse, drives or causes to be driven a motor vehicle in opposite direction on one way road or contrary to any notice shall be punishable with fine which may extend to two hundred taka.

Offences relating to licence

- (1) Whoever, being disqualified under this ordinance for holding or obtaining a driving licence, drives a motor vehicle in a public place or applies for or obtains a driving licence or not being entitled to have a driving licence issued to him free of endorsement, applies for or obtains a driving licence without disclosing the endorsements made on a driving licence previously held by him or being disqualified under this ordinance for holding or obtaining a driving licence uses in Bangladesh a driving licence such as is referred to in sub- section (2) of section 10, shall be punishable with imprisonment for a term which may extend to three months or with fine which may extend to five hundred taka or with both and any driving so obtained by him shall be of no effect.
 - (2) Whoever, being disqualified under this ordinance for holding or obtaining a conductor's licence, acts as a conductor of a stage carriage in a public place or applies for or obtains a conductor's licence without disclosing the endorsement made on a conductor's licence previously held by him, shall be punishable with imprisonment for a term which may extend to one month or with fine which may extend to two hundred taka or with both and any conductor's licence so obtained by him shall be of no effect.
 - (3) Whoever, while driving a motor vehicle in a public place fails to produce his valid driving licence whenever required to do so by any authority acting under this ordinance or any rules or regulations made their under shall be punished with fine fifty taka.

Driving at excessive speed

- 6. (1) Whoever drives any motor vehicle or a tractor or a locomotive in contravention of section 85 shall be punishable for a first offence with imprisonment for a term which may extend to one month or with fine which may extend to five hundred taka or with both and his driving licence shall be suspended for a period not exceeding one month.
 - (2) Whoever causes any person who is employed by him or is subject to his control in driving to drive a motor vehicle in contravention of section 85 shall be punishable for a first offence with imprisonment which may extend to one month or with fine which may extend to three hundred taka, or with both and for any subsequent offence with imprisonment which may extend to three month or with fine which may extend to five hundred taka or with both.
 - (3) No person shall be convicted of an offence punishable under sub-section.

- (1) Solely on the evidence of one witness to the effect that in the opinion of the witness such person was driving at a speed which was unlawful, unless that opinion is shown to be based on an estimate obtained by the use of some mechanical device.
- (4) The publication of time table under which or the giving of any direction that any journey or part of a journey is to be completed within a specified time shall, if in the opinion of the court it is not practicable in the circumstances of the case for that journey or part of a journey to be completed in the specified time without infringing the provisions of section 85, be prima facie evidence that the person who published the time table or gave the direction has committed an offence punishable under subsection (2).

Driving recklessly or dangerously

7. Whoever drives a motor vehicle at a speed or in a manner which is dangerous to the public, having regard to all the circumstances of the case including the nature, condition and use of the place where the vehicle is driven and the amount of traffic which actually is at the time or which might reasonably be expected to be in the place shall be punishable on a first conviction for the offence with imprisonment for a term which may extend to six months or with fine which may extend to five hundred taka and his driving licence shall be suspended for a specified period and for a subsequent offence if committed within three years of the commission of a previous similar offence with imprisonment for a term which may extend to six months or with fine which may extend to one thousand taka or with both and his driving licence shall be suspended for a period not exceeding one month.

Driving while under the influence or drink or drug

8. Whoever while driving or attempting to drive a motor vehicle is under the influence of drink or drug to such extend as to be incapable of exercising proper control over the vehicle shall be punishable for a first offence with imprisonment which may extend to three months or with fine which may extend to one thousand taka or with both and for a subsequent offence with imprisonment which may extend to two years or with fine which may extend to one thousand taka or with both and his driving licence shall be suspended for a specified period.

Driving when mentally or physically unfit to drive

9. Whoever drives a motor vehicle in any public place when he is to his knowledge suffering from any disease or disability calculated to cause his driving of the vehicle to be a source of danger to the public shall be punishable for a first offence with fine which may extend to five hundred taka and his driving licence shall be suspended for a specified period and for a subsequent offence with imprisonment for a term which may extend to three months or with fine which may extend to five hundred taka or with both.

Punishment for offence relating to accidents

10. Whoever fails to comply with the provision of clause (c) of sub-section (1) of section 102 or of section 104 shall be punishable with imprisonment for a term which may extend to three months or with fine which may extend to five hundred taka or with both or if having been previously convicted of an offence under this section with imprisonment for a term which may extend to six months or with fine which may extend to one thousand taka or with both.

Punishment for abetment of certain offences

11. Whoever abets the commission of an offence under section 143 or 145 shall be punishable with the punishment provided for the offence.

Racing or a trial of speed

12. Whoever without the written consent of the government permits or take part in a race or trial of speed between motor vehicles in any place shall be punishable with imprisonment for a term which may extend to one month or with fine which may extend to five hundred taka or with both and his driving licence shall be suspended for a period which may extend to one month.

Using vehicle in unsafe condition

13. Any person who drives or causes or allows to be driven in any public place a motor vehicle or trailer while the vehicle or trailer has any defect which such person knows of or could have discovered by the exercise of ordinary care and which is calculated to render the driving of the vehicle a source of danger to person and vehicle using such place shall be punishable with imprisonment for a term which may extend to one month or with the fine which may extend to two hundred and fifty taka or with both or if as a result of such defect an accident is caused causing bodily injury or damage to property with imprisonment which may extend to three months or with fine which may extend to one hundred taka or with both.

Using of motor vehicles emitting smokes

- 14. (1) Whoever drives or causes or allows or lets out a motor vehicle for use in any public place, the smoke of which would constitute a health hazard, shall be punishable with fine which may extend to two hundred taka.
 - (2). Any police officer not below the rank of sub-Inspector of Police in uniform authorized in this behalf by the authority or any Inspector of Motor Vehicles or other persons authorized in this behalf by the authority may seize and detain such vehicle for such time as may be necessary to ascertain if the smokes constitute a health hazard.
 - (3). No person shall be convicted of an offence punishable under sub-section (1) solely on the evidence of a witness unless that opinion is based on a test by the competent person.

Sale of vehicle in or alteration of vehicle to a condition contravening this ordinance

15. Whoever being an importer of or dealer in motor vehicles, sells or delivers or offers to sell or deliver a motor vehicle or trailer in such condition that the use thereof in a public place would be in contravention of chapter 6 or any rule made there under or alters the motor vehicle or trailer so as to render its condition such its use in a public place would be in contravention of chapter 6 or any rule made there under shall be punishable with imprisonment which may extend to two years or with fine which may extend to five thousand taka or with both:

Provided that no person shall be convicted under this section if he proves that he had reasonable cause to believe that the vehicle would not be used in a public place until it had been put into a condition in which it may lawfully be so used.

Using of motor vehicle without registration or certificate of fitness or permit

16. (1) Whoever drives a motor vehicle for use in contravention of the provisions of section 32 or without the certificate of fitness under section 47 or the permit required by sub-section (1) of section 51 or in contravention of any condition of such permit relating to the route on which or the area in which or the purpose for which the vehicle may be used or to the maximum of passengers and maximum weight of luggage that may be carried on the vehicle, shall be punishable for a first offence with imprisonment for a term which may extend to three months or with fine which may extend to two thousand taka or with both and for any subsequent offence with imprisonment for a term which may extend to six months or with fine which may extend to five thousand taka or with both.

(2). Nothing in this section shall apply to the use of a motor vehicle in an emergency for the conveyance of persons suffering from sickness or injury or for the transport of materials for repair or of food or materials to relieve distress or of medical supplies for a like purpose:

Provided that the person using the vehicle reports such to the transport committee within seven days.

Agents and canvassers without proper authority

17. Whoever engages himself as an agent or canvasser in contravention of the provisions of section 79 or any regulations made there under, shall be punishable for first offence with fine which may extend to one thousand taka and for any second or subsequent offence with imprisonment which may extend to six months or with fine which may extend to two thousand taka or with both.

Driving vehicle exceeding permissible weight

18. Whoever drives a motor vehicle or causes or allows a motor vehicle to be driven in contravention of the provision of section 86 or of the conditions prescribed under that section or in contravention of any prohibition or restriction imposed under section 86 or section 88 shall be punishable for a first offence with fine which may extend to one thousand taka and for any subsequent offence with imprisonment for a term which may extend to six months or with fine may extend to two thousand taka or with both.

Driving uninsured vehicle

19. Whoever drives a motor vehicle or causes or allows a motor vehicle to be driven in contravention of the provisions of section 109 shall be punishable with fine which may extend to two thousand taka.

Taking vehicle without authority

20. Whoever takes and drives away any motor vehicle without having either the consent of the owner thereof or other lawful authority shall be punishable with imprisonment which may extend to two thousand taka or with both.

Obstruction in public street or public place

21. Whoever causes obstruction in a public street or public place by keeping a motor vehicle for repair or keeping or storing spare parts of motor vehicles or any articles for sale or keeps any article for any other purposes causing obstruction to flow of traffic shall be punishable with a fine which may extend to five hundred taka and such vehicles or spare parts or articles shall be liable to confiscation.

Unauthorized interference with vehicle

22. Whoever otherwise than with lawful authority or reasonable excuse enters or mounts any stationary motor vehicle or tampers with the brake or any part of the mechanism of any part of the body or the speed governor or the speed governor seal or the taxi meter (fare meter) or the taxi meter seal of a motor vehicle shall be punishable with imprisonment which may extend to three months or with fine which may extend to one thousand taka or with both.

Special procedure for trial of offences

- (1) Notwithstanding anything contained in the code of criminal procedure, 1898 (Act V of 1898), a police officer not below the rank of Sub-inspector or sergeant or any Inspector of motor vehicles authorized in this behalf or other person authorized in this behalf by the authority shall frame a charges of the offences punishable under sections 137, 139, 140, 142, 146, 149, 150, 151, 152, 153, 154, 155, 156, 157 and 158 one copy of which shall be delivered to the accused person who shall acknowledge receipt thereof under his signature or thumb-impression and other copy to be forwarded to the Superintendent of Police or the Deputy Commissioner of Police (Traffic) in the Metropolitan Area or such authority as is notified by the Authority in this behalf having jurisdiction in the area in which the offence is committed.
 - (2) The authorized police officer or other authority shall impose a fine as provided for in the section, in the charge and if the fine so specified is paid at the specified place on or before the specified date either in cash or by money order, no further proceedings shall be taken against the offender in respect of that offence.
 - (3)If the fine is not paid in the manner specified in the charge, the Superintendent of Police or the Deputy Commissioner of Police (Traffic) in the Metropolitan Area having jurisdiction in the area in which the offence was committed or any officer authorized by him in this behalf, on receipt of a report from the authorized police officer or other authority may lay a complaint against the offender before a court of competent jurisdiction.
 - (4) Where a person, on his failure to pay the fine has been prosecuted under sub-section (3) the provision of clause (b) of sub-section (1) of section 165 shall not apply to him.
 - (5) Any person who refuses or avoids to accept a copy of the charge made over to him under this section or to acknowledge receipt thereof, may be arrested without warrant by the officer acting under this section and shall, on conviction before a Magistrate, be punished in addition to any penalty that may be incurred by him in respect of the offence specified therein with fine which may extend to two hundred and fifty taka.

Power of arrest without warrant

- 24. (1) A police officer in uniform may arrest without warrant any person who commits in his view an offence punishable under section 146 or section 147 or section 148 or section 149 or section 154 or section 156.
 - (2) A police officer in uniform may arrest without warrant-
 - (a) Any person who being required under the provisions of this ordinance to give his name and address refuses to do so or gives a name or address which the police officer has reason to believe to be false or
 - (b) Any person concerned in an offence under this ordinance or reasonably suspected to have been so concerned, if the police officer has reason to believe that he will abscond or otherwise avoid the service of a summons.
 - (3) A police officer arresting without warrant the driver of a motor vehicle shall, if the circumstances so require, taka or cause to be taken any steps he may consider proper for the safe custody of the vehicle or to take it to the nearest police-station.
 - (4) A police officer acting under this section shall, as soon as possible, intimate to the owner the place where the vehicle has been removed or where the driver has been taken and in any case within twenty-four hour of the occurrence.

Power of police officer to impound document

- 25. (1) Any police officer not below the rank of sub-inspector or sergeant or any inspector of motor vehicles authorized in this behalf or other person authorized in this behalf by the authority may, if he has reason to believe that any identification mark carried on a motor vehicle or any licence, permit, certificate of registration, certificate of fitness, certificate of insurance or other document produced to him by the driver or person in charge of a motor vehicle is a false document within the meaning of section 464 of the penal code seize the mark or document and call upon the driver or owner of the vehicle to account for his possession of or the presence in the vehicle of such mark or document.
 - (2) Any police officer not below the rank of sub-inspector or sergeant or any inspector of motor vehicles authorized in this behalf or other person authorized in this behalf by the authority may, if he has reason to believe that the driver or the conductor, if any, of a motor vehicle who is charged with any offence under this ordinance may abscond or otherwise avoid the service of a summons, seize any licence held by such driver or conductor and forward it to the court taking cognizance of the offence and the said court shall, on the first appearance of such driver or conductor before it, return the licence to him in exchange for the temporary acknowledgement given under sub-section(3)

(3) A police officer or any inspector of motor vehicles or other person seizing a licence under sub-section (2) shall give to the person surrendering the licence a temporary acknowledgement therefore and such acknowledgement shall authorize the holder to drive or to act as conductor until the licence has been returned to him or until such date as may be specified by the police officer or by the inspector officer or by the inspector of motor vehicles or by other person in the acknowledgement, whichever is earlier or the court has otherwise ordered.

<u>Power to detain vehicles used without certificate of registration or certificate of fitness or permit</u>

26. Any police officer or any Inspector of Motor Vehicles authorized in this behalf or other person authorized in this behalf by the authority may, if he has reason to believe that a motor vehicle has been or is being used in contravention of the provisions of sub-section (1) of section 32 or without the certificate of fitness required by sub-section (1) of section 47 or without the permit required by sub-section (1) of section 51 or in contravention of any condition of such permit relating to the route on which or the area in which or the purpose for which the vehicle may be used, seize and detain the vehicle and for this purpose take or cause to be taken any steps he may consider proper for the temporary safe custody of the vehicle: Provided that where any such officer or person has reason to believe that a vehicle has been or is being used without the certificate of fitness required by sub-section(1) of section 47 or without the permit required by sub-section (1) of section 51, he may instead of seizing the vehicle, seize the certificate of registration of the vehicle and shall issue an acknowledgement in respect thereof.

Power to charge certain offenders on the spot

27. (1) Notwithstanding anything to the contrary contained in this ordinance or any other law for the time being in force, a police officer in uniform, not below the rank of a sub-inspector or sergeant, specially empowered in this behalf by the competent authority or any inspector of motor vehicles or other persons authorized in this behalf by the authority may in any area to be notified by the authority in this behalf, charge on the spot any person who in his presence or view commits any of the offences set forth in the twelfth schedule with the commission of that offence.

Explanation: For the purpose of the sub-section, "competent authority" shall be such authority as may be notified by the authority.

(2) An officer acting under sub-section (1) shall draw up the charge in the form prescribed, specifying the nature of the offence, the fine as mentioned against such offence in the Twelfth schedule payable in respect thereof and the accused person shall pay the fine on the spot by means of stamps to the officer who made the charge and shall receive an acknowledgement therefore.

- (3) If the accused person has refused to receive the copy of the charge or if the fine is not paid in the manner specified in sub-section (2), the officer used in the commission of the offence to the officer-in-charge of the nearest police-station who shall keep the vehicle in his custody and shall release it as soon as the fine is paid and shall also send an intimation to the officer who forwarded the vehicle.
- (4) The accused person may prefer an appeal to the court which is competent to hear appeals against the orders of sentences of magistrates of third class and the decision of the appellate authority in this respect shall be final.

Deprivation of driving licence

- 28. (1) Notwithstanding anything to the contrary contained in this ordinance or any other law for the time being in force any police officer of or above the rank of superintendent of police or Deputy Commissioner or an officer of the Authority not below the rank of assistant Director having jurisdiction over the area specially empowered in this behalf by the Authority or any other person empowered ing this behalf by period which may extend to three months, who, in his presence or view, commits any or the misdemeanors in traffic as mentioned hereunder:
 - (a) Driving against red light; or
 - (b) Overtaking just before or on the pedestrian crossing or where overtaking is prohibited: or
 - (c) Driving on to a main road without stopping and exceeding the speed limit indicated on the road; or
 - (d) Not giving way to other vehicle intentionally; or
 - (e) Driving in opposite direction on one way road; or
 - (f) Any other matter as may be prescribed.
 - (2) Any officer acting under sub-section (1) shall seize any driving licence held by such driver and shall give to the person surrendering the driving licence an acknowledgement therefore, specifying the period of deprivation and the nature of offence thereof and the name of the licensing authority to whom report shall be use on the expiry of the said period for getting back the driving licence.
 - (3) The authority making the order under sub-section (1) shall endorse the period of deprivation and reasons thereof in the driving licence and shall forward it to the licensing authority having jurisdiction over the area or the licensing authority who issued it or last renewed it.

- (4) The licensing authority on receipt of the driving licence, shall enter the endorsement in the record and keep the licence until the period of deprivation expires and thereafter shall return the licence to the holder in exchange of the acknowledgement given under sub-section(2)
- (5) If , at the time of committing the offence, the driving licence is not in the possession of the person committing the offence, the authority acting under subsection (1) may take or cause to be taken any steps he may consider proper for the disposal of the case.

Summary disposal of cases

- 29. (1) A court taking cognizance of an offence under this ordinance shall, unless the offence is an offence specified in part A of the Fifth Schedule, state upon the summons to be served on the accused person that that he-
 - (a) May appear by pleader and not in person, or
 - (b) May by a specified date prior to the hearing of the charge plead guilty to the charge by registered letter and remit to the Court such sum not exceeding two hundred and fifty taka as the Court may specify.
 - (2) Where the offence dealt with in accordance with sub-section (1) is an offence specified in Part B of the Fifth Schedule, the accused person shall, if he pleads guilty to the charge, forward his licence to the Court with the letter containing his plca in order that the conviction may be endorsed on the licence.
- (3) Where an accused person pleads guilty and remits the sum specified and has complied with the provisions of sub-section(2), no further proceedings in respect of the offence shall be taken against him, nor shall he be liable to be disqualified for holding or obtaining a licence by reason of his having pleaded guilty.

Cognizance of offences

30. Every Court of competent jurisdiction or any other competent authority unless otherwise provided shall take cognizance of any offence committed under this ordinance or the rules made there under when reported by any member of the Authority or the Transport Committee or any Inspector of Motor Vehicles or any officer of the Transport Department authorized in this behalf by the Chairman of the Authority or the Transport Committee or by the Government.

Restriction on conviction

- 31. (1) No person prosecuted for an offence punishable under section 142 or section 143 shall be convicted unless-
 - (a) Within twenty-one days from the commission of the offence, a nation specifying the nature of the offence and the time and place where it is alleged to have been committed was served on or send registered Post to him or the person registered as the owner of the vehile at the time of the commission of the offence, or
 - (b) Within thirty days of the commission of the offence, a summon for the offence was served on him:

Provided that nothing in this section shall apply where the court is satisfied that-

- (i) The failure to serve the notice or summons referred to in this sub-section was due to the fact that neither the name and address of the accused nor the name and the address of the registered owner of the vehicle could with reasonable diligence have been ascertained in time or
- (ii) Such failure was brought about by the conduct of the accused.
- (2) No court shall, unless otherwise provided, make any award of lose than twenty-five per cent of the maximum fine provided for the offence punishable under this ordinance.

Courts to send intimations about conviction

- 32. (1) Every Court by which any person holding a driving licence or a permit is convicted of an offence under this ordinance or an offence in the commission of which a motor vehicle was used shall send intimation to-
 - (a) The licensing authority which issued the driving licence or the conductors licence:
 - (b) The licensing authority which last renewed the driving licence or the conductor's licence:
 - (c) The Transport Authority which issued the permit and the authority which countersigned it;
 - (2) And every such intimation shall state the name and address of the holder of the licence, the licence number, the date of issue and renewal of the same, the permit number, the date of issue and renewal of the permit the nature of the offence, the punishment awarded for the offence and such other particulars as may be presonibed

Jurisdiction of Courts

33. No court inferior to that of a magistrate of the second class shall try any offence punishable under this ordinance or any rules or regulations made there under.

Commanding of offences

34. Notwithstanding anything contained in the code of criminal procedure 1898 (Act V of 1898)

An offence punishable under sections 137,139,140,142,146,149,151,152,153,154,155,156 and 158, may be compounded by any Magistrate of the first or second class or any police officer or above the rank of deputy superintendent of police specially authorized in this behalf by the Government and the cases may be disposed of in the manner as may be prescribed.

Power to levy fee

35. Any regulations which the Authority is empowered to make under this ordinance may notwithstanding the absence of any express provision to that effect, provide for the levy of the such fees in respect of applications, amendment of documents, test, endorsements, badges, plates, countersignature, authorizations, supply of statistics or copies of the documents or orders and for any other purpose or matter involving the rendering of any service by the officers of authorities under this ordinance or any regulation made there under as may be considered necessary:

Provided that the Government may if it considers so to do in the public interest, by general or special order, exempt any class of persons from the payment of any such fee either in part or in full.

Power to make regulations

36. The Authority may make regulations for carrying out the purposes of this Chapter.