

NATIONAL TRANSPORT RESEARCH CENTRE

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EFFECTIVENESS
OF
TRAFFIC POLICE TRAINING

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EFFECTIVENESS OF TRAFFIC POLICE TRAINING

INTRODUCTION

The traffic safety problem in our cities and on our rural roads has registered a very sharp increase during recent years. There are a number of administrative, legal, technical, socio-economic and cultural reasons for it, each having responsibility for a proportion of the problem. There is urgent need for carrying out research in fundamental aspects of the problem to make sure the problem is being tackled properly.

The standard methods of solving the problem are :-

- i) Engineering - making roads safe and fast by incorporating engineering improvements such as separation of grades and carriage-ways, installation of signs, signals and road markings to guide the road users along their travel paths with speed and safety.
- ii) Education - educating the road users in the rules of the road to inform them of their rights and limitations as road users, to prevent them from creating a situation hazardous to themselves and to other road users.
- iii) Enforcement - to prevent violation of the rules of the road by the road users by organizing a very effective enforcement agency.

Although all the three aspects are important and every one of them contributes to some extent to accident prevention, this study however pertains to the last item only and is aimed at determining the role of Traffic Police in Traffic safety in the developing countries such as Pakistan.

The need for this study has risen due to the fact that in this country there are two distinct schools of thought. One school of thought mainly comprising the police officials and a large section of the society believes that our traffic safety problem is part of a much bigger problem namely socio-economic

and cultural factors and it is not possible to overcome this problem unless these conditions are improved. They believe that traffic police has a very limited role in overcoming our highway safety problem and as such cannot be expected to help much. At the top of it, they believe that since the job of the traffic police is limited, it is also very simple and just about any individual can perform it. Therefore, there is no need for setting a minimum standard of education or giving extensive training to the traffic police officials in the art of traffic operation and control.

The second school of thought believes that since in 95% of the accidents driver action namely violation of traffic rules is a factor and control of driver is directly proportional to the enforcement level, enforcement, therefore, has a pivotal role in traffic safety and the problem can be overcome by an effective enforcement of traffic rules. They also believe that traffic operation and control is a very complex art and requires very extensive training before an individual can be in a position to do the job effectively. They maintain that even within the prevailing socio-economic and cultural condition it is possible to alleviate the problem of highway safety provided those entrusted with the task are fully trained and well conversant with the requirement of their duties. The problem of highway safety in the developing countries does have social or cultural background as well but the problem is primarily due to the fact that the enforcement is very poor. The traffic police officials are themselves ignorant of traffic rules; are unaware of the art of traffic operation and control; are ill-equipped to do the job and because of these reasons generally resort to negative enforcement.

HYPOTHESIS

The present study is designed to investigate the role of training in traffic enforcement to determine which of the two view points are valid.

SCOPE

The scope of the study is restricted to Rawalpindi-Islamabad area and would cover only the lower ranks of the traffic police.

METHODOLOGY

In consultation with the local police administration a party of 30 traffic policemen including 10 Sub Inspectors, 10 Head Constables and 10 Constables were picked up at random. Details of education, service, experience and training were obtained.

These officials were subjected to a very close and unobtrusive surveillance during the hours of their duty and observations were recorded in a prepared proforma regarding the effectiveness of their work. The measure of effectiveness comprised of the degree of control they exerted on preventing violations of traffic rules by road users, including the motor vehicle, the bicycle, the pedestrian and the manually and animal drawn vehicle.

At the end of the observation period these officials were subjected to a very extensive test of their knowledge of rules, regulations and the art of traffic operation and control, to determine the deficiencies in their training which handicapped them in the discharge of their duties efficiently and effectively.

After obtaining an estimate of their deficiencies and noting the type of their failings, a programme of training was devised to help them to overcome their deficiencies. At the end of the training they were again tested to determine the effectiveness of the training imparted.

They were then put back on the road and again watched un-obtrusively to measure their performance.

DETAILS OF TRAINING

The training started with a talk on the necessity and the object of traffic control, the background of the traffic law and rules, Science of traffic control and the role of traffic police in overcoming traffic problems. Stress was, however, given to practical training. They were taught how to spot defaulters, whom to prosecute and how to tackle various types of offenders, namely motor vehicles, cyclists, pedestrians, animal and manually drawn vehicles violating various rules and regulations, how to remove obstructions to keep the roads clear for the smooth flow of traffic. They were trained in manual speed checks. Relative importance of various violations as factors leading to accidents, relating violations to types of accidents, relative importance of documents checks vs checking of moving violations and the most effective deployment techniques of available manpower were fully explained.

DURATION OF STUDY

Duration of study was to be completed in six months but actually took much longer due to a number of unavoidable reasons.

COMMENCEMENT OF THE STUDY

The study commenced in February 1979 with the preparation of a proforma, containing the more common types of violations by different units of traffic, showing total traffic of all kinds, various violations by different units, percentage of violations and the percentage of prosecutions to judge the quality and out-put of work of individuals. The proforma is on the following page.

PRE-TRAINING OBSERVATION

The observation of every individual policeman was made unobtrusively for one hour during day and one hour during night. Results were noted in the proforma enclosed.

VIOLATIONS

Prominent features were that percentage of violations was very high and the percentage of prosecutions was nil in every case. Obstructions infested the roads and little effort was made to remove them. Hand carts and even motor vehicles would be parked within 30 feet of busy road junctions and intersections, badly choking the traffic streams. Ordinary parking would be done at more than a foot of distance from the kerb. To top it double parking was also resorted to where parking space was not available leaving a very narrow strip of the road for circulation of traffic reducing its flow. No policeman were detailed to take care of the traffic on the stretches of roads lying between intersections. Changing lanes abruptly without indication, cutting in sharply, weaving through traffic and reckless driving were prevalent. Jay walking was rampant. There was no discipline.

In the course of the initial observation the main deficiencies noted were that the men took no notice of the violations of the rules of the road whether committed by cyclists, motorists, animal-drawn vehicles or any other category of road users.

POSITIONING

They would simply be standing at a corner or in the middle of the intersection watching the traffic passing by. They would not take a position wherefrom they could spot violaters approaching them from a distance to enable them to signal them to stop.

Violations would occur under their noses and they would watch helplessly. Even if they had any intention to stop them they could not do so, as the violaters after committing the violation, would move away from them and not towards them.

They would occasionally haul up public service vehicles, not for the breach of any rule of the road, but for checking their documents or for overloading.

Violations of the rules of the road like taking a turn from the wrong lane, improper queueing, wrong parking, taking a turn without caring for other traffic, cutting sharply, reckless driving, obstructing traffic, jay walking and even cycling without lights at night were no offences in their view.

PROSECUTIONS

Their ignorance of the rules of the road was appalling. Even where they felt an offence was committed they would keep their hands off the violater. They seemed to have not been trained in tackling traffic offenders. They did not dare to haul up an offending car driver for fear of reprisals as they felt that the car owner would be a high government official or an influential person who would feel it an insult and make a complaint of rude behaviour against them. They did not seem to understand that "Law is no respecter of personality".

Where two persons or more were posted at an intersection, they spent most of the time in chatting.

Their presence on the road had little effect on driver behaviour. Their proficiency in traffic control was limited to hand signalling. In the twin city where most of the important road junctions and intersections were fitted with traffic lights mere hand signalling was of little avail.

They had no basic knowledge of traffic control. Although some of them were reported to have been trained in traffic control, they learnt little about it.

PRE-TRAINING KNOWLEDGE OF RULES

After the pre-training observation a test about the knowledge of the men in traffic rules was held. Answers to one hundred simple questions were asked. Details of the questions and the correct answers may be seen below :-

TRAFFIC SAFETY RULES - TEST

- | | | |
|---|------|-------|
| 1. Pedestrian can cross a road at any point | True | False |
| 2. Where there are no footpaths pedestrian should walk along left edge of the road. | True | False |
| 3. At a zebra crossing right-of-way belongs to pedestrians. | True | False |
| 4. A pedestrian should cross at an intersection when light is red. | True | False |
| 5. While following behind another vehicle, the minimum distance between the two vehicles should be equal to one car length. | True | False |
| 6. It is alright to overtake another vehicle by crossing single continuous line marked on the road provided no vehicle is coming from opposite direction. | True | False |
| 7. It is alright to overtake going through an intersection. | True | False |
| 8. While turning left at an intersection on red signal, you have the right of way. | True | False |
| 9. You must use your horn while going through an intersection. | True | False |
| 10. It is not essential to dip your lights at night time for on-coming vehicle. | True | False |
| 11. Turn your lights on half hour before sunset. | True | False |

- | | | | |
|-----|--|------|-------|
| 12. | It is legal to overtake on the left provided driver ahead is making a right turn. | True | False |
| 13. | It is alright to overtake provided you flash your head lights at the vehicle coming from opposite direction. | True | False |
| 14. | It is alright to drive at night without tail lights if you have the proper head lights. | True | False |
| 15. | It is not necessary to stop at a stop sign if there is no traffic on the other road. | True | False |
| 16. | At a round-about, the right-of-way belongs to traffic on main road. | True | False |
| 17. | It is alright to overtake a vehicle which is overtaking another vehicle provided no traffic is coming from opposite direction. | True | False |
| 18. | Yellow flashing signal light means caution. | True | False |
| 19. | Before crossing a major road come to complete stop only if there is traffic on the major road. | True | False |
| 20. | While parking, the distance from an intersection should not be less than 30 feet. | True | False |
| 21. | While parking the distance from fire-hydrant should not be less than 10 feet. | True | False |
| 22. | While parking behind or in front of another parallel parked vehicle the distance should not be less than one foot. | True | False |
| 23. | It is alright to park on a bus stop provided no bus is approaching. | True | False |
| 24. | On a red light, it is legal to turn right. | True | False |

- | | | | |
|-----|--|------|-------|
| 25. | It is alright to make a U-turn at any place provided it is not specifically prohibited. | True | False |
| 26. | While turning right on green light it is not necessary to yield to the traffic coming from opposite direction. | True | False |
| 27. | In case of four lane highway, it is legal to turn right from left lane. | True | False |
| 28. | In case of rear-end accident due to sudden stoppage of vehicle in front. the responsibility lies on driver in front. | True | False |
| 29. | Safe following distance rule does not apply in case of overtaking. | True | False |
| 30. | It is not essential to always keep rear screen clear. | True | False |
| 31. | In case of doubt about the right-of-way at an intersection, always yield to the traffic approaching from right. | True | False |
| 32. | Bad roads cause more accidents than bad driving. | True | False |
| 33. | It is not illegal to park the vehicle on the right hand side of the road. | True | False |
| 34. | On a single lane road you must stop to let the other vehicle pass if you are going downhill. | True | False |
| 35. | It is not essential to drive within the marked lanes if there is no other traffic on the road. | True | False |
| 36. | It is not necessary for a cyclist to have a reflector in the rear if he has a light in the front for night time driving. | True | False |
| 37. | You must use your indicator to help the following driver to overtake if he cannot see the road ahead. | True | False |

- | | | | |
|-----|--|------|-------|
| 38. | A traffic police officer on duty can over-rule any indication given by a sign, signal or lane marking. | True | False |
| 39. | On hearing the siren or seeing the flashing signal of an approaching emergency vehicle such as ambulance, fire engine, police vehicle etc., you must pull to the kerb and remain stationary till the emergency vehicle has passed. | True | False |
| 40. | Pedestrian can cross a road only at designated point if there is one in the vicinity. | True | False |
| 41. | Where there are no footpaths pedestrian should walk along right edge of the road. | True | False |
| 42. | At a zebra crossing right-of-way belongs to motorists. | True | False |
| 43. | A pedestrian should cross at an intersection when light is green. | True | False |
| 44. | While following behind another vehicle, the minimum distance between the two vehicles should be equal to two feet for every mile per hour of speed. | True | False |
| 45. | It is alright to overtake another vehicle by crossing double continuous lines marked on the road if no vehicle is approaching from opposite direction. | True | False |
| 46. | While turning left or right at an intersection you must stop for the pedestrian crossing the street you are turning on. | True | False |
| 47. | It is alright to overtake going over a level rail crossing. | True | False |
| 48. | You must use your horn while going through a blind curve. | True | False |
| 49. | It is not necessary to dip your lights at night time while following behind another vehicle. | True | False |

- | | | | |
|-----|--|------|-------|
| 50. | Turn your lights on half hour after sunset. | True | False |
| 51. | It is legal to overtake on the left provided the facility is a four lane highway. | True | False |
| 52. | It is not necessary to stop at a stop sign if you are taking a left turn. | True | False |
| 53. | It is alright to reverse in a one way street if you have gone slightly beyond your destination. | True | False |
| 54. | At a round-about, the right-of-way belongs to traffic approaching from the right. | True | False |
| 55. | Yellow flashing signal always means road is closed. | True | False |
| 56. | Before crossing a major road come to a complete stop even if there is no traffic on the major road. | True | False |
| 57. | While parking the distance from and intersection should not be less than one car length. | True | False |
| 58. | While parking behind or in front of another parallel parked vehicle the distance should not be less than one car length. | True | False |
| 59. | While parking, the distance from a fire-hydrant should be at less one foot. | True | False |
| 60. | It is alright to park in front of an entrance to a building provided the gate is closed. | True | False |
| 61. | On a red light, it is legal to turn left only after yielding to the traffic approaching from the right. | True | False |
| 62. | In case of four lane highway, it is not essential to turn right from right lane. | True | False |

- | | | | |
|-----|---|------|-------|
| 63. | In case of rear-end accident due to sudden stoppage of vehicle in front, the responsibility lies on driver following behind. | True | False |
| 64. | It is alright to pass a stationary school bus stopped for letting off or picking up school children provided the road is a four lane highway. | True | False |
| 65. | In case of doubt about right-of-way at an intersection always yield to the traffic approaching from left. | True | False |
| 66. | Red flashing sign means road closed. | True | False |
| 67. | Ordinary traffic safety rules do not apply to animal drawn vehicles. | True | False |
| 68. | On hearing the siren or seeing the flashing signal of an approaching emergency vehicle such as ambulance, fire engine, police vehicle etc., you are only required to slow down. | True | False |
| 69. | While following behind another vehicle, the minimum distance between the two vehicles should always be equal to ten feet. | True | False |
| 70. | It is alright to overtake another vehicle by crossing a single continuous line with a broken line on your side, even if a vehicle is approaching from opposite direction. | True | False |
| 71. | You must use your horn while going through a crowded street. | True | False |
| 72. | Turn your lights on till half hour before sunrise. | True | False |
| 73. | It is legal to turn left by overtaking a vehicle stopped in front for red light by using the left shoulder. | True | False |

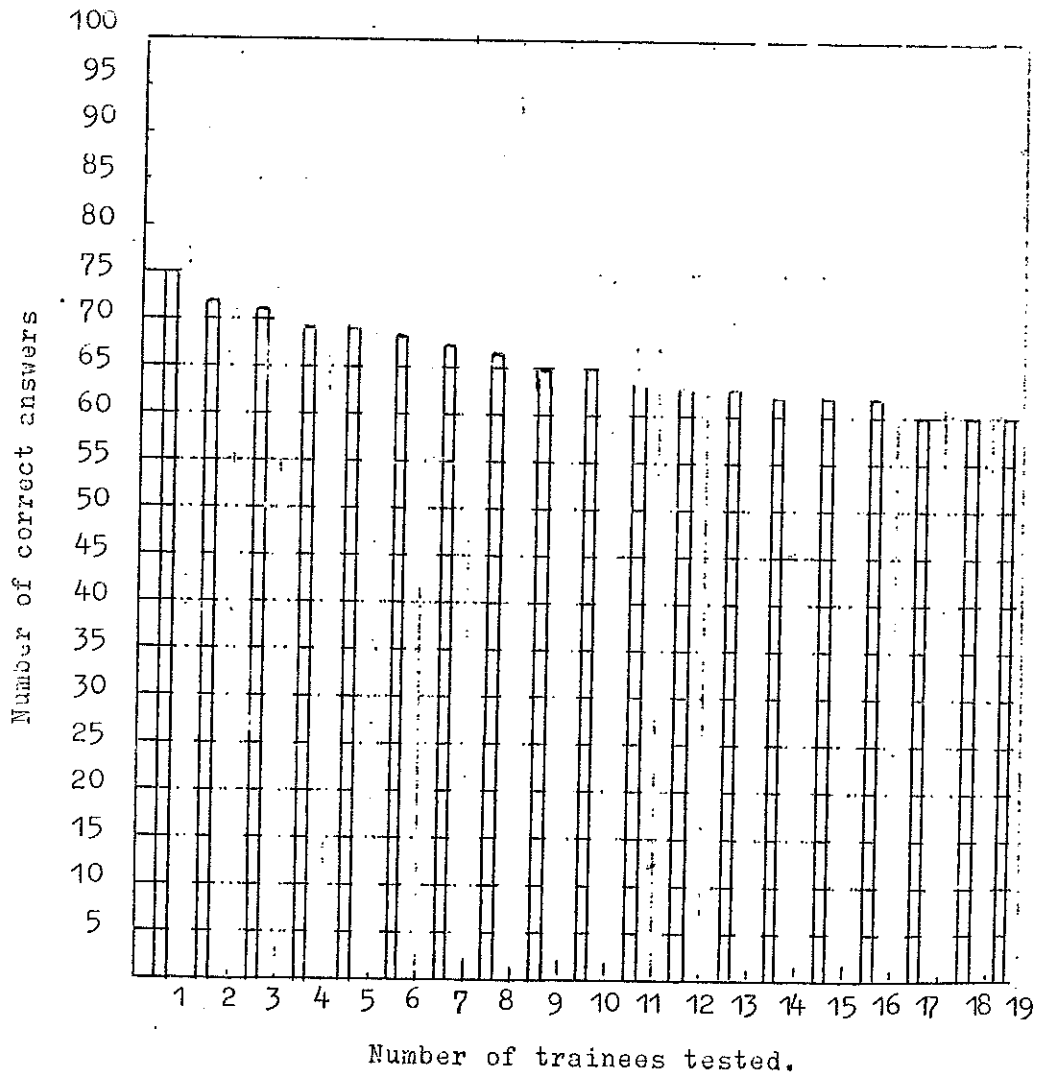
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|-----|---|------|-------|
| 74. | It is not necessary to stop for stationary school bus picking up and letting off children if you are proceeding in the opposite direction. | True | False |
| 75. | At a round-about, the right-of way belongs to traffic approaching from the left. | True | False |
| 76. | It is illegal for all heavy vehicles to overtake any vehicle while going up a steep slope turn on a four lane highway. | True | False |
| 77. | Before crossing a major road, you are only required to slow down. | True | False |
| 78. | Night time speed should always be 10 mph less than the day time speed limit. | True | False |
| 79. | A right turn green arrow appearing alone on a signal, does not mean one can not go straight. | True | False |
| 80. | It is alright to take a left turn by overtaking a vehicle on the right provided the vehicle ahead is stopped at a red light for going straight. | True | False |
| 81. | It is alright to park on the right side of the road provided it is a one way street and parking is not specifically prohibited. | True | False |
| 82. | In case of four lane highway, it is not essential to turn left from left lane only. | True | False |
| 83. | You must use your horn while overtaking any vehicle. | True | False |
| 84. | Red flashing sign has the same meaning as a stop sign. | True | False |
| 85. | The safety helmet for motor cycles etc. is desirable but it is not a legal requirement. | True | False |

- | | | | |
|-----|--|------|-------|
| 86. | It is alright to overtake another vehicle by crossing single continuous line with a broken line on the other side, provided no vehicle is approaching from the opposite direction. | True | False |
| 87. | You must use your horn while going over a rail crossing. | True | False |
| 88. | Turn your light on till half hour after sunrise. | True | False |
| 89. | It is not necessary to keep within the lanes if there is no other traffic on the road. | True | False |
| 90. | It is alright to park on the road proper where there is a shoulder, provided the road is not too busy. | True | False |
| 91. | In case of four lane highway it is legal to turn left from right lane. | True | False |
| 92. | You must use your horn while going past a school. | True | False |
| 93. | A single continuous line has the same meaning as a double continuous line. | True | False |
| 94. | It is alright to park on a footpath provided nobody is walking on the footpath. | True | False |
| 95. | You must use your horn while reversing. | True | False |
| 96. | At a yield sign, give right of way only if there is traffic on the other road. | True | False |
| 97. | It is not illegal to park on pedestrian cross walks. | True | False |
| 98. | You must use your horn only when a violation is being committed and at no other time. | True | False |

99. Light decoration (especially blinking ones) in addition to those required under law are desirable for additional visibility at night time. True False
100. It is absolutely essential for public transport vehicle while crossing a rail track to stop and listen before crossing the rail tracks. True False

Only 19 persons took the test. The highest number of correct answers was 75 and the lowest 60.

PRE TRAINING RULES TEST



One person has answered 75 questions correctly.

1	"	"	"	72	"	"
1	"	"	"	71	"	"
2	"	"	"	69	"	"
1	"	"	"	68	"	"
1	"	"	"	67	"	"
1	"	"	"	66	"	"
2	"	"	"	65	"	"
1	"	"	"	64	"	"
2	"	"	"	63	"	"
3	"	"	"	62	"	"
3	"	"	"	60	"	"

For policemen, who are charged with the duty of enforcing rules of the road, to be so badly lacking in their knowledge was deplorable. It was one of the causes of their failure in controlling traffic.

TRAINING DETAILS

To remove the above noted deficiencies and to equip them for their job the following programme of training comprising of lectures, discussions and practical work on the road was prepared under the direction of Adviser Highway Safety, which is as follows :-

TRAINING PROGRAMME

THEORY

1ST DAY

Address by Adviser Highway Safety on the necessity and principles of Traffic Control.

2ND DAY

Method of controlling traffic, application of the principles of segregation and restraint.

3RD DAY

Traffic lights - phasing of Hand signal vs traffic lights. The principle of restraint.

4TH DAY - HIGHWAY CODE INSTRUCTIONS

1. All road users
2. Pedestrians
3. Drivers

5TH DAY

DRIVERS - Continued.

6TH DAY

DRIVERS - Continued.

7TH DAY

CYCLISTS

8TH DAY

DRIVERS OF ANIMAL DRAWN VEHICLES
PERSONS INCHARGE OF ANIMALS

9TH DAY - ACCIDENT INVESTIGATION

- Single
- Cluster
- Blackspot
- Traffic Control

10TH DAY

- Warning Signs
- Regulatory Signs
- Mandatory Signs

11TH DAY

- Road Markings
- Signals

12TH DAY

HANDLING ACCIDENTS

13TH DAY

FIRST AID LECTURE BY A SPECIALIST ON :-

- Moving Casualty
- Bleeding
- Burn
- Medical Help
- Care of Casualty
- Feeding
- First Aid Kit

FIELD

14TH DAY

Taking students out on the road and training them in selecting suitable position wherefrom they can observe traffic conveniently and be able to see violations clearly and haul up defaulters. Practice to be carried out at four different places.

15TH DAY

Taking students out on the road and training them in detecting violations of Speed limit, Main Roads.

16TH DAY

Taking students out on the road for observation of obedience of drivers to Traffic Signs, Signals and signalling devices.

17TH DAY

Taking students out on the road and training them in checking violations of sections 96 & 99 of the Motor Vehicles Ordinance vizi Excessive speeding, driving recklessly or dangerously and prosecuting defaulters.

18TH DAY

Taking students out on the road and training them in detecting violations of traffic signs and prosecuting defaulters.

19TH DAY

Taking students out on the road and training them in detecting violations of the Tenth and Eleventh Schedules of the Motor Vehicles Ordinance - Turning and overtaking and indicating violations and prosecuting defaulters.

20TH DAY

Taking students out on the road and training them in detecting violations of instructions of the Highway Code for (i) All Road Users.

21ST DAY

Taking students out on the road and training them in handling pedestrians breaking rules of the road, particularly jay walkers.

22ND DAY

Taking students out on the road and training them in detecting violation of instructions of the Highway Code for Drivers and prosecuting defaulters.

23RD DAY

Taking students out on the road and training them in detecting violations of instructions of the Highway Code regarding Road Signs and prosecuting defaulters.

24TH DAY

Taking students out on the road and training them in detecting violations of instructions of the Highway Code for Cyclists and prosecuting defaulters.

25TH DAY

Taking students out on the road and training them in detecting violations of instructions of the Highway Code for drivers of animal drawn vehicles and persons incharge of animals and prosecuting defaulters.

26TH DAY

Taking students out on the road and training them in detecting violations of West Pakistan Motor Vehicle Rules, 1969 regarding traffic segregation, projection of roads, prohibition of flying of ribbons and handkerchiefs etc., flying of odd flags, use of sound signals, restriction on travelling backwards and prosecuting defaulters.

27TH DAY

Taking students out on the road and training them in beat patrol, watching on coming traffic and spotting violaters from a distance, stopping them and prosecuting them.

28TH DAY

Taking students out on the road and training them in removing obstructions from the carriage way and prosecuting defiant violaters.

29TH DAY

Taking students out on the road and training them in removing obstructions from the foot-paths and prosecuting defiant violaters.

30TH DAY

SPEED CHECKS.

Before embarking on the training programme, it is necessary to give an idea of the importance of training in the field of traffic control.

Enforcement is the most important ingredient of all the elements needed for road safety and smooth flow of traffic. However civilized a people may be and however good the laws, yet laws cannot be implemented without effective enforcement. Similarly enforcement cannot be effective unless the persons responsible for enforcing the laws are fully trained in this profession.

To shirk the responsibility of effective enforcement, some agencies take cover under lack of equipment and paucity of numbers. They do not realize that whatever equipment and numbers they have are not being put to full use, merely for want of training.

A survey conducted in Islamabad in January 1979, under the guidance of the Adviser Highway Safety, indicated that the presence or absence of untrained or half trained traffic policemen, at intersections controlled by traffic lights, made no difference in the number of traffic violations committed at those intersections. The following observation charts indicate the result :

Date of observation	Place of observation	Time of observation	V I O L A T I O N S										Rank and number of Policemen on duty	Position taken by Policemen	Number of violations checked by Police	Involvement of Police on duty			
			Turning right from left lane	Turning left from right lane	Turning left on red light without stopping	Violating stop line	Breaking queue	Proceeding against red light	Day walking	Total number of units passing the point	Total number of violations	Percentage of units violating regulations							
13 - 2 - 1979	FAIZABAD POINT	1325 TO 1425 HOURS	PEDESTRIANS								2	19	2	1.52%	Removed to show result	Nil	Nil	Nil	
			PEDAL CYCLES					4				47	4	8.15%					
			ANIMAL DRAWN VEHICLES									8							
			MOTORCYCLE SCOOTER RICKSHAW	14		3	12	4				271	33	12.17%					
			CAR JEEP MINI BUS	58						3		698	61	8.73%					
			STATION WAGON PICK UP	59						4		290	63	21.72%					
			BUSES	11						1		127	12	9.44%					
			TRUCK TRAILER TANKER	5						3		70	8	11.42%					
			PEDESTRIANS									2	2	2	100.00%	Removed to show result	Nil	Nil	Nil
			PEDAL CYCLES			2							23	2	8.69%				
12 - 2 - 1979	ZERO POINT	1130 TO 1425 HOURS	ANIMAL DRAWN VEHICLES																
			MOTORCYCLE SCOOTER RICKSHAW	7				2			123	12	9.75%						
			CAR JEEP MINIBUS	21	2	9	5	11	5			483	53	10.96%					
			STATION WAGON PICK UP	31	1	5	9	2				175	48	27.42%					
			BUSES	5				5				23	10	43.47%					
TRUCK TRAILER TANKER	1								26	5	19.23%								

Date of observation	Place of observation	Time of observation	TRAFFIC UNITS	VIOLATIONS										Rank and number of Policemen on duty		
				Turning right from left lane	Turning left from right lane	Turning left on red light without stopping	Violating stop line	Breaking queue	Proceeding against red light	Day Walking	Total number of units passing the point	Total number of violations	Percentage of units violating regulations			
14 - 2 - 1979	ZERO POINT	1100 TO 1200 HOURS	PEDESTRIANS							4	33	4	12.12%			
			PEDAL CYCLES				2		2		46	4	8.69%			
			ANIMAL DRAWN VEHICLES													
			MOTORCYCLE SCOOTER RICKSHAW	3			2	13	3			217	21	9.67%		
			CAR JEEP MINIBUS	25		5	4	10	4			737	48	6.51%		
			STATION WAGON PICK UP	23		2	1	8	1			270	35	12.96%		
			BUSES	3			1					47	4	8.51%		
			TRUCK TRAILER TANKER	3								20	3	15.00%		
			PEDESTRIAN									11	55	11	20.00%	
			PEDAL CYCLES	4		4			5	1			32	14	43.75%	
			ANIMAL DRAWN VEHICLES													
			MOTORCYCLE SCOOTER RICKSHAW	3		5	2						34	10	29.58%	
CAR JEEP MINIBUS	7		6	3	1	3	2			152	22	14.47%				
STATION WAGON PICKUP	5		5	3	1	1	1			51	11	21.56%				
BUSES	2		2	1						10	3	30.00%				
TRUCK TRAILER TANKER																
14 - 2 - 1979	SUPER MARKET POINT	1335 TO 1350 HOURS	PEDESTRIAN													
			PEDAL CYCLES													
			ANIMAL DRAWN VEHICLES													
			MOTORCYCLE SCOOTER RICKSHAW	3		5	2									
			CAR JEEP MINIBUS	7		6	3	1	3	2						
			STATION WAGON PICKUP	5		5	3	1	1							
			BUSES	2		2	1									
			TRUCK TRAILER TANKER													
			PEDESTRIAN													
			PEDAL CYCLES													
			ANIMAL DRAWN VEHICLES													
			MOTORCYCLE SCOOTER RICKSHAW	3		5	2									
CAR JEEP MINIBUS	7		6	3	1	3	2									
STATION WAGON PICKUP	5		5	3	1	1										
BUSES	2		2	1												
TRUCK TRAILER TANKER																

TRAFFIC UNITS	VIOLATIONS										Rank and number of Police men on duty	
	Turning right from left lane	Turning left from right lane	Turning left on red light without stopping	Violating stopline	Breaking Queue	Proceeding against red light	Jay Walking	Total number of units passing the point	Total number of Violations	Percentage of units violating regulations		
							6	65	6	9.23%		
	PEDESTRIANS			4	6	4		40	14	35.00%		
	PEDAL CYCLES											
	ANIMAL DRAWN VEHICLES											
	MOTORCYCLE SCOOTER RICKSHAW	5		2		3		50	12	24.00%		
	CAR JEEP MINIBUS	6	4	19	2	1		170	35	20.58%		
	STATION WAGON PICK UP	6	4	6	2	1		67	21	31.34%		
	BUSES	2	1	1				9	4	44.44%		
TRUCK TRAILER TANKER			1				4	1	25.00%			
											REMOVED TO OBSERVE EFFECT	
Date of observation	14-2-1979											
Place of observation	ABBARA POINT											
Time of observation	1410 TO 1425 HOURS											

LOCATION	TRAFFIC UNIT	VOLUME		VIOLATION		PERCENTAGE	
		MANNED	UNMANNED	MANNED	UNMANNED	MANNED	UNMANNED
S C I P E R	PEDESTRIAN	48	55	8	11	16.66%	20.00%
	PEDAL CYCLE	23	32	12	14	52.17%	43.75%
	ANIMAL DRAWN VEHICLES						
	MOTORCYCLE SCOOTER RICKSHAW	29	34	9	10	31.03%	29.58%
	CAR JEEP MINIBUS	141	152	27	22	19.14%	14.47%
	STATION WAGON PICK UP	56	51	20	11	35.71%	21.56%
	BUSES	11	10	4	3	36.36%	30.00%
	TRUCK TRAILER TANKER	1					
	PEDESTRIAN	59	65	12	13	20.33%	20.00%
	PEDAL CYCLE	45	40	5	4	11.11%	10.00%
A B A B A B A	ANIMAL DRAWN VEHICLES						
	MOTORCYCLE SCOOTER RICKSHAW	32	50	12	12	37.5 %	24.00%
	CAR JEEP MINIBUS	120	170	30	35	25.00%	20.58%
	STATION WAGON PICK UP	57	67	28	21	49.12%	31.19%
	BUSES	8	9	4	4	30.00%	44.44%
	TRUCK TRAILER TANKER	4	4	1	1	25.00%	25.00%

LOCATION	TRAFFIC UNIT	VOLUME		VIOLATION		PERCENTAGE	
		MANNED	UNMANNED	MANNED	UNMANNED	MANNED	UNMANNED
FAIZABAD POINT	PEDESTRIAN	38	38	4	4	15.26%	15.26%
	PEDAL CYCLE	46	134	6	8	13.04%	8.51%
	ANIMAL DRAWN VEHICLES	14	16				
	MOTORCYCLE, SCOOTER RICKSHAW	166	542	28	66	15.66%	12.17%
	CAR, JEEP, MINIBUS	788	1396	106	122	10.34%	8.73%
	STATION WAGON, PICK UP	260	580	70	126	26.61%	21.72%
	BUSES	134	254	22	24	16.41%	9.44%
	TRUCK, TRAILER, TANKER	58	140	12	16	20.68%	11.42%
	PEDESTRIAN	27	33	3	4	11.11%	12.12%
	PEDAL CYCLE	39	46	4	5	10.25%	10.86%
ZERO POINT	ANIMAL DRAWN VEHICLES						
	MOTORCYCLE, SCOOTER RICKSHAW	133	217	14	21	10.52%	9.67%
	CAR, JEEP, MINIBUS	706	737	39	48	5.53%	6.51%
	STATION WAGON, PICKUP	263	270	50	51	19.01%	18.88%
	BUSES	36	47	3	4	8.33%	8.51%
	TRUCK, TRAILER, TANKER	25	20	2	1	8.00%	5.00%

It is also necessary to explain the various aspects of training which were taken care of. The knowledge of rules was so low that many of the trainees did not know "the right of way". They would naturally not understand its violations, and would not be able to pick up persons violating others' right of way.

The morale of persons lacking professional knowledge cannot but be low. It not only required sermons to boost it, but also numerous practical demonstrations of tackling difficult offenders.

Training comprised of imparting knowledge of the rules and their practical application. Knowledge was easy to impart; but training them in its application was terribly hard work.

Besides showing the way to haul up violaters the training required the cultivation of the following qualities amongst the trainees :-

1. keen observation - to enable them to detect all violations occurring in their presence.
2. alertness - to haul up maximum number of violaters.
3. agility - to act quickly to prevent violaters running away.
4. courage - so that they do not hesitate in hauling up violaters of high social standing.
5. fairness - so that they do not show favour to one and be harsh on another.
6. balance - so that they do not overact.
7. tact - a quality that should enable them to disarm hostile offenders.
8. politeness with firmness.
9. confidence in their position - that they are the custodians of the rules of the road.
10. pride in their profession - that they are rendering a valuable service to the community by saving its members from death and injury on the road and keeping the traffic stream flowing smoothly.

To have a full comprehension of the enforcement prevalent in the twin city of Rawalpindi-Islamabad it is necessary to describe its nature.

It was directed against overloading in public vehicles - buses, wagons, taxi-cars and mini-buses, the violations of route permit and faulty taxi-car meters.

Important intersections which were already controlled with traffic lights were manned by two or three policemen who would be seen tackling public service vehicles and checking their documents! Little notice was taken of moving violations. Cars were never checked for any violation.

Enquiries made in this fact revealed that car owners were considered personages of position above the law and were not interfered with. Public service vehicles were the only road users on which the traffic police could lay their hands. The practice was popular as it provided financial benefit to the unscrupulous.

In the beginning when the men were put on the road after their training, for full scale operations, they realized that too many violations were being committed, which they did not previously notice. Hedged in between violaters all round they were puzzled and frustrated and felt that it was impossible for a single policeman to check the wave of violations.

They were told that the condition should not discourage them. They had just to spot one violater in the on-coming traffic, give him the signal to stop when he was still at a distance, with a view to give him time to slow down.

In the beginning many violaters would run away. To prevent this the policemen were re-trained individually, under close supervision, to choose a position of vantage wherefrom they could spot a violater at a distance, well in advance of his approach to the point of vantage, signal him distinctly and confidently to stop, remain in front of the vehicle and with the left arm signal the vehicle to move to the left

edge of the road and bring it to a halt on the shoulder of the road or adjacent to the kerb, where there was no shoulder, all the time remaining in front of the vehicle.

The drivers were inclined to stop the vehicles in the lane of traffic and would obstruct the flow of other traffic.

To avoid obstruction to the flow of traffic and hazard to road safety, policemen were instructed to take their position in front of the vehicle while prosecuting the driver. Also to keep the driver and any passenger, who would come out of the vehicle in support of the driver, off the road, to prevent them from reducing road space for passage of other vehicles as well as to prevent them from being knocked down by passing vehicles.

In order to brow-beat the policeman many drivers would enter into lengthy arguments and refused to produce the driving licence and registration papers.

To avoid arguments and consequent loss of time and temper, the trainees were instructed to clearly define the violation committed by the driver at the very outset and if the driver did not agree, to tell him to argue it out in the court and that the policeman could not let him go without prosecuting him, as otherwise he would not be doing his duty and not earning his pay.

If the policeman found the defaulting driver still hesitating to produce his papers, he should start writing down the challan (prosecution), beginning with the registration number on the number plate.

Although many violations would go unchecked while the policeman remained busy with the prosecution in hand, yet that one prosecution would have a deterrant effect on the drivers of passing vehicles.

Violations naturally came down and the same policemen who used to be puzzled by the immensity of the problem, found

time in less congested areas, particularly in Islamabad, where violations became few and far between, to relax and wait for long periods for the next offender.

The prosecution of car drivers produced a healthy effect on the drivers of public service vehicles. They were suffering from the feeling that it was only them that the Police was after. Seeing car drivers being prosecuted they realized that the police was not hauling up drivers merely for harassing them but really did mean business. When pulled up they cooperated with the police and committed less violations of stopping in the middle of the road, away from the kerb and also double parking.

Persuasive efforts were used more than prosecution in the case of pedestrians. Since the pedestrian does not carry a number plate and when challenged conveniently disappears in a side street or merges with the crowd on the pavements of busy streets, he is less amenable to road discipline.

The policemen were trained to hold the violating pedestrians by the arm, take them to the pedestrian crossing, at the same time explaining to them the hazards to which they would otherwise expose themselves. There was little opposition to this practice. On the contrary public support was coming forth. When a defaulting pedestrian would enter into an argument with the policeman, by-standers would support the policeman and tell the defaulting pedestrian that that was in the pedestrian's own interest.

Since the cyclist also does not carry a number plate he also has scant respect for the rules of the road. When hauled up he is inclined to give a fake name and wrong address to the police. The policeman has few alternatives but to take him to the Police Station for identification and execution of a personal bond for appearance in the court. The policeman can ill afford to spend that much time on the prosecution of a lone cyclist.

To avoid loss of time policemen were trained to give the defaulting cyclist the option to voluntarily take out the air from one of the wheels, this worked well in cases of cycling without light at night, at the same time explain to the defaulter the hazards of cycling without light.

In this operation the policemen used to be surrounded with by-standers, to watch the tamasha, but their attitude was seldom hostile. They would, on the contrary, advise the defaulter to take out the air and go.

The tonga posed the problem of obstructing other traffic and driving without light at night. Here also the policemen were trained to use persuasion to direct the tongas to go back and return to the road only after fixing the lights. Since the policeman could not allow them to ply their vehicles without lights at night. Prosecutions were not often done for want of time which was more needed for motorized traffic.

A small section of the population lives on hawking merchandise on hand carts. They are expected to take the produce to the customer at his residence and save him the trouble of visiting the market and thus indirectly lessen the congestion in the commercial areas. But they infest the roads in the markets and cause lot of obstruction to traffic.

During the course of training the policemen were instructed to keep them on the move under threats of prosecution and not allow them to park on the roadside, particularly near road junctions and intersections. It has met with some degree to success, but needs constant attention of the policeman. Prosecutions have been found to be very time-consuming.

Some changes were made in the deployment of the traffic police. In place of posting men only at intersection they were also spread to stretches of roads between intersections.

Because of the importance of intersections, the duty to control traffic was assigned to head constables.

Stretches of roads and streets were put in the charge of constables. Two-man foot patrols were assigned convenient stretches of roads. They were instructed to patrol their beats and keep the roads clear of obstructions and free of all kinds of traffic violations. To achieve this they were trained to walk on the right side of the road so that they face the on-coming traffic and are able to spot violaters from a distance and can conveniently stop them for prosecution.

Sub-Inspectors and ASIs, who are mobile, were used for mechanized patrols. Long stretches of roads were given in their charge. They were trained not only to chase and prosecute drivers, committing traffic violations, but also to supervise the work of foot patrols.

The training was carried out during all hours of the day from 0600 hours to 2200 hours - which are the usual hours of duty of the traffic police.

Head Constables were also trained for speed checks. A two-men team with a stop watch, two light walkie-talkie wireless sets, a motorcycle and two nylon ropes and four pegs would, by surprise, take up position under cover on a road.

Two spots across the road at a distance of 352 feet would be marked with white paint or a thin chord. One head constable with the stop watch and a walkie-talkie set would take up a position of vantage off the road from where he could see both the lines or chords clearly and remain out of the observation of motorists. The other head constable with the motorcycle and a walkie-talkie set would take up position at a distance of a mile down the road concealed from motorists' view.

The H.C. with the stop watch would click it to start as soon as a speeding vehicle would be on the first line and click it to a stop on the vehicle passing over the second line. he has committed to memory the calculation table, which is :

If a vehicle crosses the distance between the lines in 3 seconds, its speed is 80 m. p. h.

"	"	"	4	"	"	"	60	"	"	"
"	"	"	5	"	"	"	48	"	"	"
"	"	"	6	"	"	"	40	"	"	"
"	"	"	7	"	"	"	34.28	"	"	"
"	"	"	8	"	"	"	30	"	"	"

Fractions of seconds are also given in the table but it is not necessary to repeat them here.

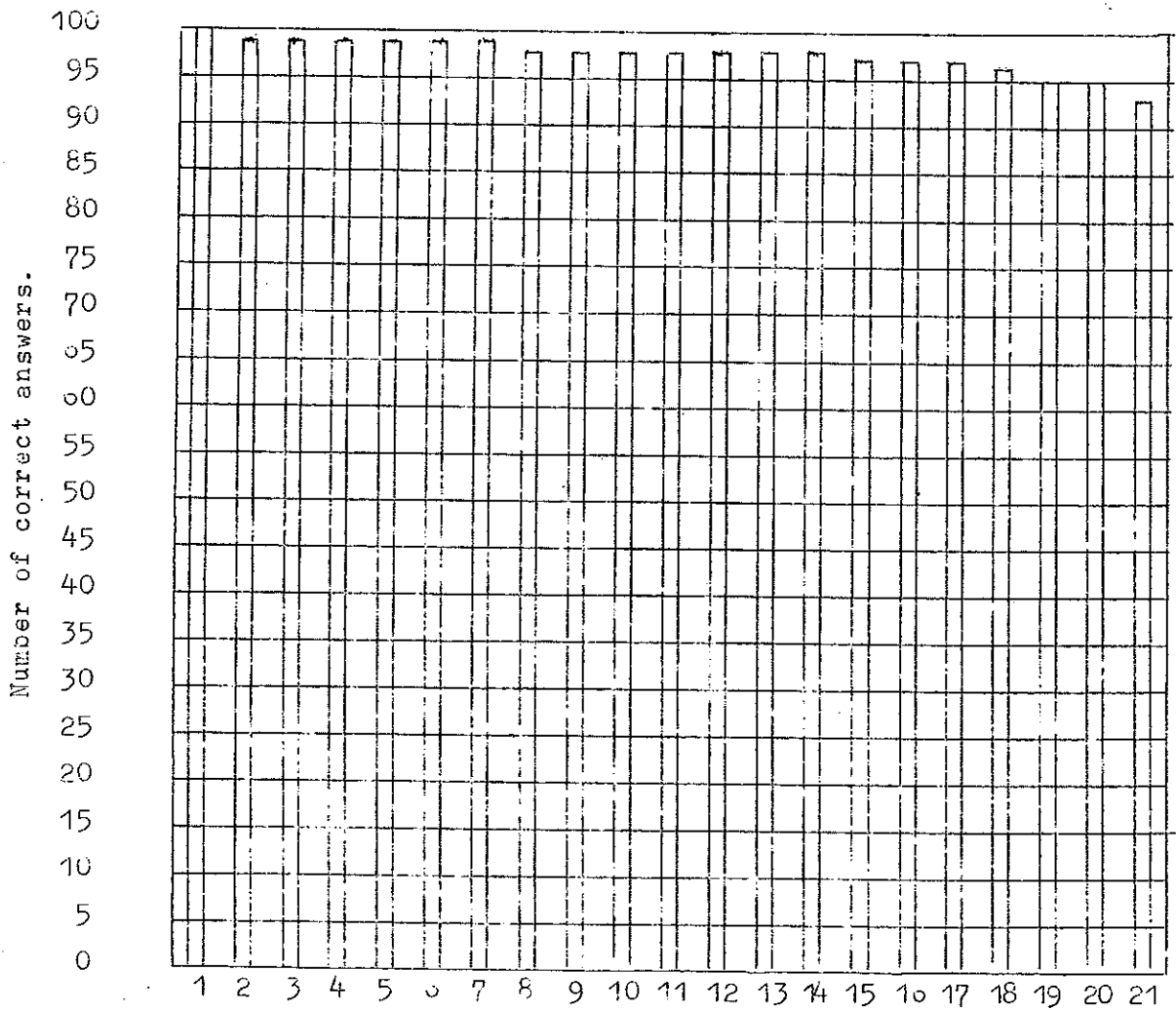
If the H.C. with the stop watch would find that a vehicle has exceeded the speed limit, he would signal the number and description of the vehicle to the H.C. with the motorcycle, who would stop and prosecute it. In case the vehicle failed to stop, he would chase it on the motorcycle, and prosecute the driver on two counts: (i) exceeding speed limit & (ii) failing to stop at a Policeman's signal.

Training policemen in speed checking was easy as they found it interesting and exciting.

Record of speed of all type of motor vehicles taken before the speed checks and after the speed checks is given in the following chart. It indicates the sobering effect of speed checks on driver behaviour :

POST TRAINING RULES TEST

At the conclusion of the training men were again tested in the knowledge of rules. This time the correct answers to 100 questions ranged from 93 to 100, whereas in the pre-training test the correct answers ranged from 60 to 75. Training made terrific improvement in trainees' knowledge of rules over their knowledge before training. Only 21 trainees took the test. Result is as follows :-



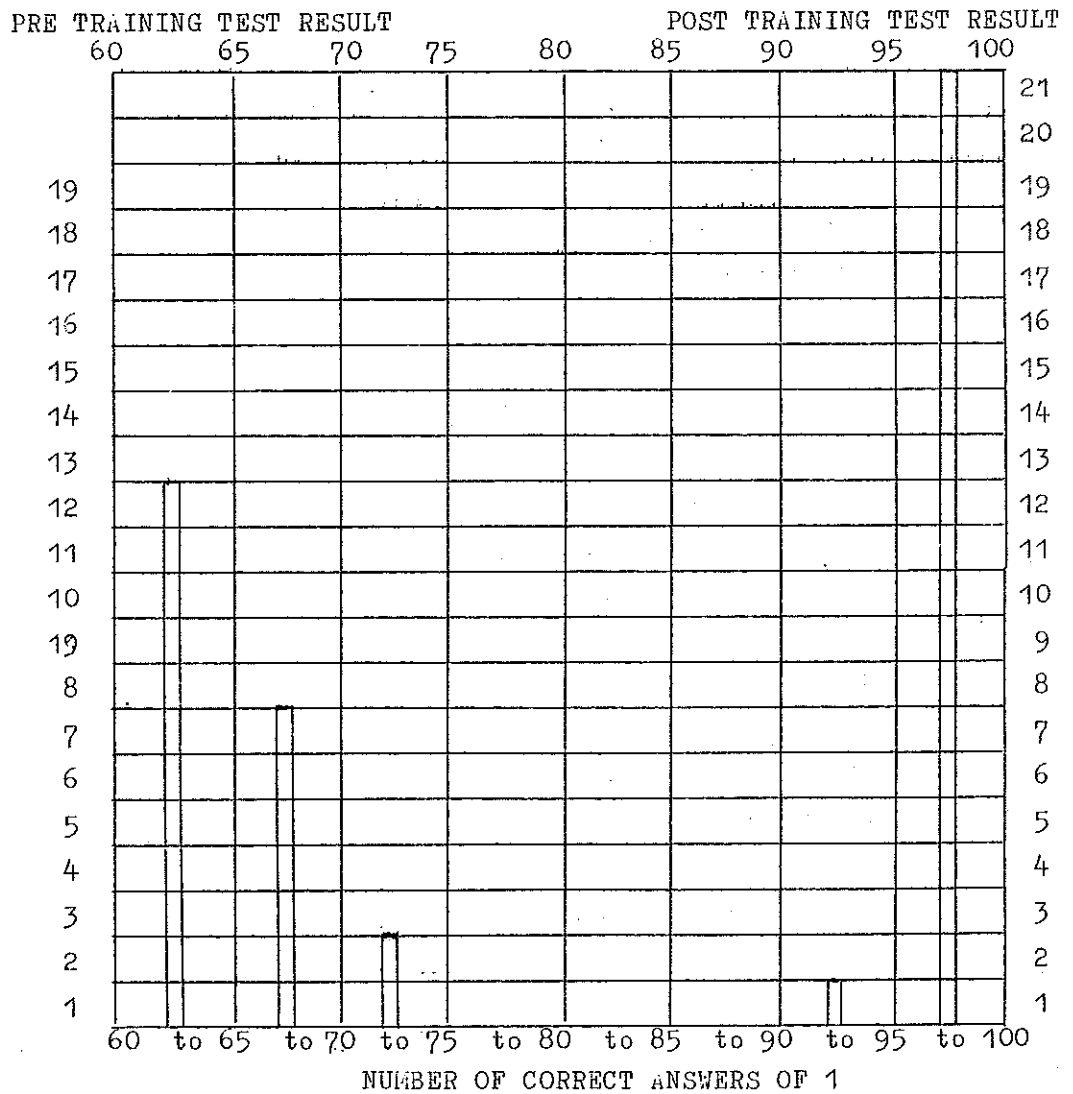
Number of trainees tested.

One person has answered 100 questions correctly

6	"	have	"	99	"	"
7	"	"	"	98	"	"
3	"	"	"	97	"	"
1	"	has	"	96	"	"
2	"	have	"	95	"	"
1	"	has	"	93	"	"

The number of policemen, giving correct answers to one hundred of traffic safety rules, before their training and after their training, is shown in the graph below.

Number of policemen giving correct answers before training and of those after training, is shown below.



POST TRAINING PERFORMANCE

To estimate the improvement in practical work, the trainees were observed during the performance of their duty from points from where their work could be clearly seen without their seeing the observer and when they were acting on their own without supervision or direction.

They were observed for one hour during the day and one hour during night. The same forms which were used for the pre-training observation were used for the post-training observation also.

Although most of the men observed before the training were transferred and fresh persons were taken in for training, yet since the standard of knowledge and performance of all the persons was practically the same, it made no difference for the study. Even if it did, it could not be helped.

Comparative statement of violations noticed, in the course of observations, made before and after the training is as follows :

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STATEMENT OF TRAFFIC PASSING THE POINTS CONTROLLED BY 30 POLICE-MEN INDIVIDUALLY BEFORE THEY WERE TRAINED AND AFTER THEIR TRAINING WITH VIOLATIONS PERCENTAGE OF VIOLATIONS AND PROSECUTION PERCENTAGE

TRAFFIC UNITS	TOTAL TRAFFIC		VIOLATIONS		PERCENTAGE OF VIOLATIONS		TOTAL PROSECUTIONS		PERCENTAGE OF PROSECUTIONS		POSITION OF POLICE - MAN ON DUTY		ATTITUDE OF POLICEMAN ON DUTY	
	Before Training	After Training	Before Trg.	After Trg.	Before Trg.	After Trg.	Before Trg.	After Trg.	Before Trg.	After Trg.	Before Trg.	After Trg.	Before Trg.	After Trg.
PEDESTRIANS	22428	19555	15161	5386	57%	29%	NIL	596	NIL	11%	On the left side of the road leading away from the intersection; somewhere he could spot violators from a distance & signal them to stop well in advance.	INDIFFERENT	Before Trg.	After Trg.
PEDAL CYCLES	15538	12900	10955	7287	78%	55%	NIL	596	NIL	8%	Sometime in the middle of the intersection wherefrom he could observe but could not be able to stop violators. Sometime loitering in side streets.	INDIFFERENT	Before Trg.	After Trg.
ANIMAL DRAWN VEHICLES	3134	3356	4197	2362	133%	70%	NIL	94	NIL	3%			Before Trg.	After Trg.
HARD GIGS	674	2025	984	846	147%	41%	NIL	63	NIL	7%			Before Trg.	After Trg.
MOTORCYCLES/SCOOTERS	18963	13615	5366	4822	28%	13%	NIL	463	NIL	9%			Before Trg.	After Trg.
RICKSHAW	2363	2892	1151	530	48%	14%	NIL	37	NIL	11%			Before Trg.	After Trg.
CAR, JEEP/ MINI WAGON	53704	38551	10828	4994	28%	5%	NIL	164	NIL	8%			Before Trg.	After Trg.
STATION WAGON/ PICK UP	15711	1037	7659	817	50%	7%	NIL	101	NIL	12%			Before Trg.	After Trg.
BUSES	2528	6141	1392	481	55%	7%	NIL	46	NIL	9%			Before Trg.	After Trg.
TRUCK, TRAILER TANKER	1124	1650	470	146	41%	8%	NIL	7	NIL	1%			Before Trg.	After Trg.

The effect of enforcement.

It clearly indicates the improvement made in road traffic discipline by the training of the traffic police. The training of only 10% of the personnel employed on the enforcement of the traffic rules has brought down the violations in the areas and at the points where the policemen trained under the present study were posted. The percentage of violations has very considerably gone down as shown below :-

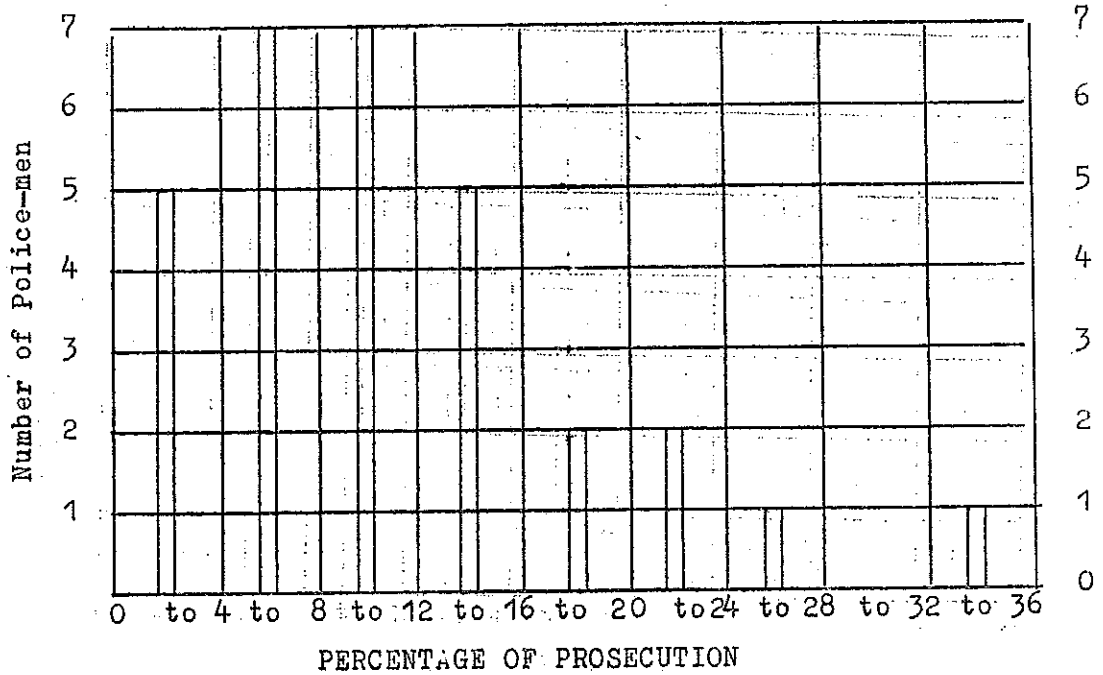
	<u>From</u>	<u>To</u>
Pedestrians	57%	29%
Pedal Cycles	78%	55%
Animal drawn vehicles	133%	70%
Hand carts	145%	41%
Motorcycles	28%	13%
Rickshaws	48%	11%
Cars, Jeeps and Miniwagons	28%	5%
Wagons and Pick Ups	50%	7%
Buses	55%	7%
Trucks, Trailers and Tankers	41%	8%

The training did not have the same effect on every trainee. Every one did improve, but on some the effect was more pronounced as is shown in the following statement :

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<u>Trainee No.</u>	<u>Rank of Trainee</u>	<u>Total Violations</u>	<u>Total Prosecutions</u>	<u>Prosecution Percentage</u>
1.	S.I.	581	23	4%
2.	S.I.	231	48	20%
3.	S.I.	1323	47	3%
4.	S.I.	192	33	17%
5.	S.I.	607	70	11%
6.	S.I.	608	52	8%
7.	S.I.	195	17	8%
8.	A.S.I.	281	42	14%
9.	A.S.I.	5907	75	1%
10.	A.S.I.	2832	88	3%
11.	H.C.	119	26	21%
12.	H.C.	129	43	33%
13.	H.C.	495	52	15%
14.	H.C.	1549	25	1%
15.	H.C.	725	66	9%
16.	H.C.	751	47	6%
17.	H.C.	560	52	9%
18.	H.C.	321	20	6%
19.	H.C.	175	17	9%
20.	H.C.	335	40	12%
21.	C	672	30	4%
22.	C	279	69	25%
23.	C	533	85	16%
24.	C	1325	40	3%
25.	C	1326	95	7%
26.	C	800	61	7%
27.	C	182	26	14%
28.	C	182	26	14%
29.	C	723	73	10%
30.	C	1265	89	7%

Expressed in a graph the prosecution percentage is as follows :-



5	Police-men have prosecuted	1% to 4%
7	" " "	4% " 8%
7	" " "	8% " 12%
5	" " "	12% " 16%
2	" " "	16% " 20%
2	" " "	20% " 24%
1	" " "	24% " 28%
None	" " "	28% " 32%
1	" " "	32% " 36%

Following table indicates unit-wise reduction in the percentage of violations :-

TRAFFIC UNITS	VIOLATIONS		REDUCTION IN VIOLATIONS	PERCENTAGE OF REDUCTION
	Before Training	After Training		
Pedestrians	15161	5383	9778	64%
Pedal Cycles	10955	7278	3677	33%
Animal Drawn Vehicles	4197	2362	1835	43%
Hand Carts	984	846	138	14%
Motorcycle/ Scooter	5396	1822	3574	65%
Rickshaw	1151	330	821	71%
Car, Jeep, Miniwagon	10828	1994	8834	81%
Station Wagon/ Pick-up	7859	817	4042	89%
Buses	1392	481	911	65%
Truck, Trailer, Tanker	470	146	324	68%

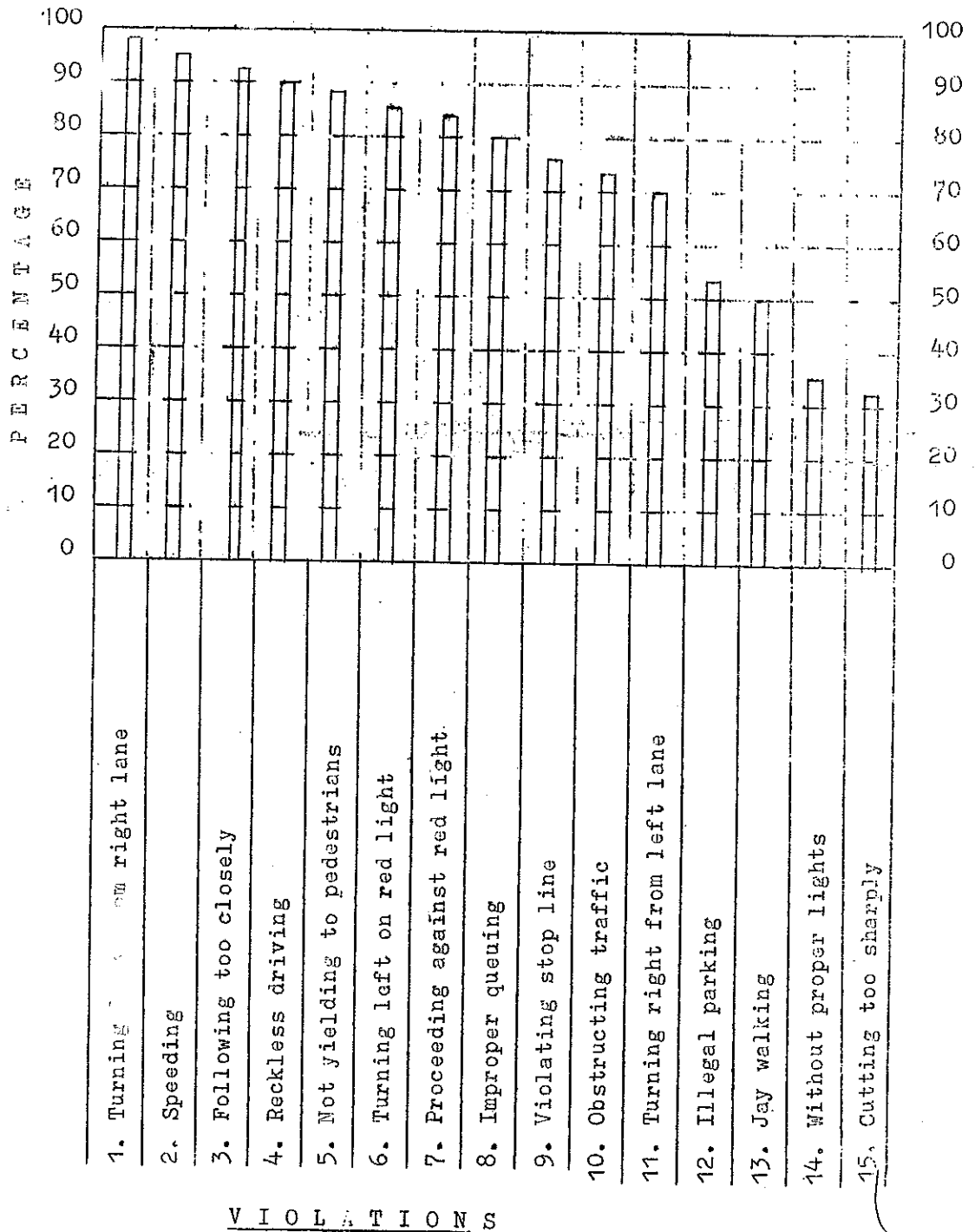
Following table indicates violation wise reduction in percentage :

VIOLETIONS	Before Training	After Training	Reduction	Percentage
1. Turning right from left lane	5039	1542	3496	69%
2. Turning left from right lane	1697	30	1667	98%
3. Turning left on red light without stopping	3832	565	3267	85%
4. Violating stop line	5272	1123	4149	78%
5. Proceeding against red light	6568	958	5610	85%
6. Illegal parking	3415	1586	1829	53%
7. Improper queueing	3948	776	3172	80%
8. Not yielding to pedestrians	2711	327	2384	87%
9. Speeding	644	29	615	95%
10. Reckless driving	1125	102	1023	90%
11. Following too closely	2272	149	2123	93%
12. Cutting too sharply	335	257	78	23%
13. Without proper lights	1073	8039	2694	25%
14. Obstructing traffic	4583	1187	3396	74%
15. Jay Walking	10177	5278	5278	51%

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REDUCTION PERCENTAGE - VIOLATION WISE

The effect is more pronounced on some violations of traffic and less on others. It is illustrated in the following graph :

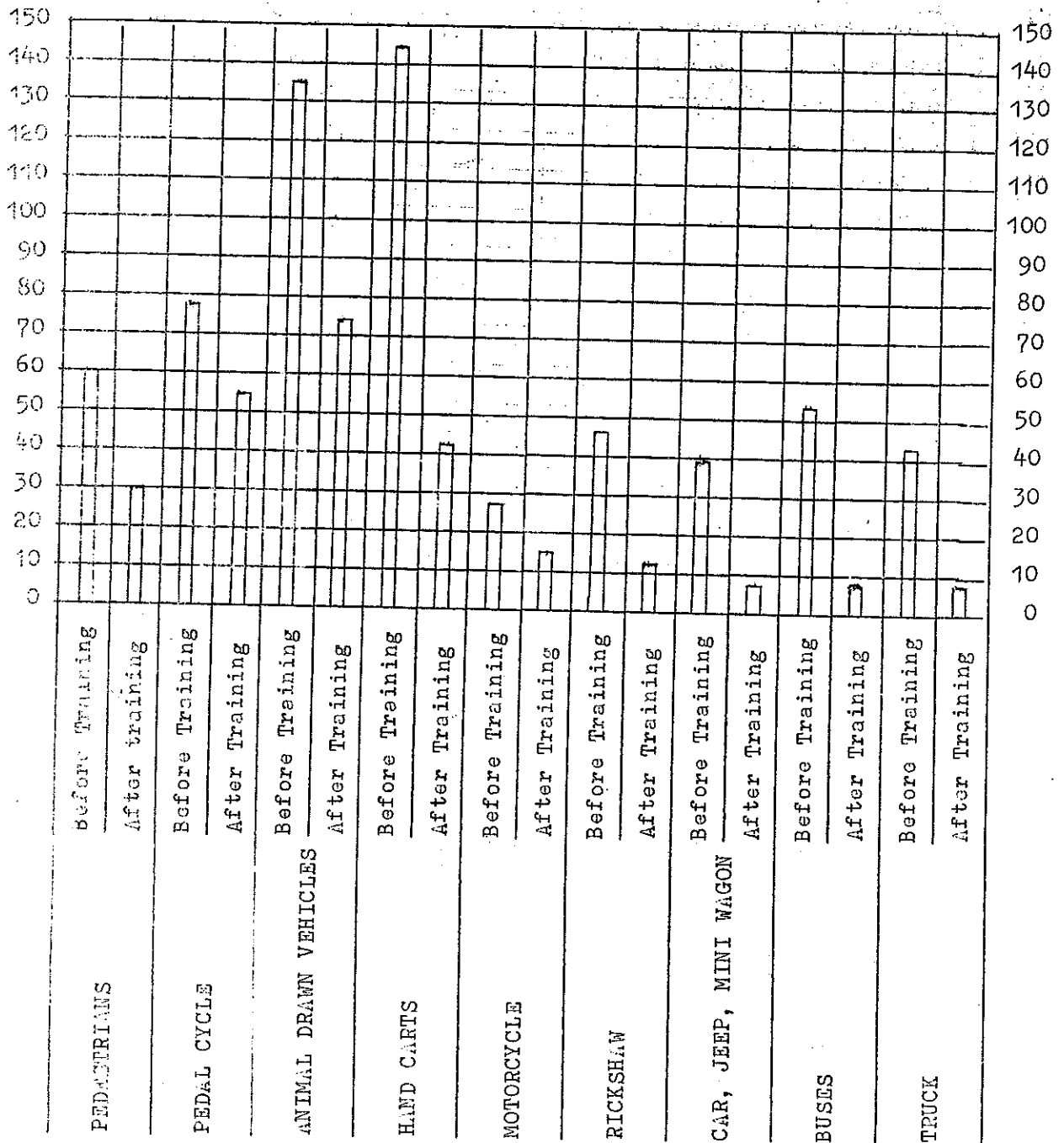


The sharp decline in violations registering a fall of 98% to 68% was due partly to the stress laid on curbing those violations and partly to the favourable reaction of the drivers.

Violations on which the effect of enforcement has not been so pronounced require a longer period to reduce. In the "without proper lights" violations the pedal cyclist is the most numerous offender. The sharp cutting driver is not so numerous, but he has not been frequently hauled up. If the training is extended to the whole of the Traffic Police, it is hoped all the violations would come down steeply.

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The following graph illustrates the difference between violations, before and after training of the Policemen, in respect of different types of traffic units :



Note:- Violation percentage of hand carts and animal drawn vehicles is above hundred as most of them are guilty of more violations than one. Violations multiply at night, as besides obstructing traffic, illegal parking, violating stop line and improper queuing, these vehicles also violate the lighting restrictions. Pedal cycles also come in this category.

INVOLVEMENT LEVEL IS EXPRESSED IN THE CHART BELOW

	VIOLATIONS		PROSECUTIONS	
	<u>Before Training</u>	<u>After Training</u>	<u>Before Training</u>	<u>After Training</u>
1. Turning right from left lane	5039	1542	NIL	54
2. Turning left from right lane	1697	30	NIL	NIL
3. Turning left on red light without stopping	3832	565	NIL	51
4. Violating stop line	5272	1123	NIL	50
5. Proceeding against red light	6568	958	NIL	47
6. Illegal parking	3415	1586	NIL	130
7. Improper queueing	3948	776	NIL	56
8. Not yielding to pedestrians	2711	327	NIL	7
9. Speeding	644	29	NIL	2
10. Reckless driving	1125	102	NIL	17
11. Following too closely	2272	149	NIL	18
12. Cutting too sharply	335	257	NIL	15
13. Without proper lights	10733	8039	NIL	297
14. Obstructing traffic	4583	1187	NIL	30
15. Jay Walking	10177	5278	NIL	538

...../51..

P O S I T I O N I N G

POSITION OF TRAFFIC POLICE-MAN ON DUTY	
Before Training	After Training
<p>Standing lazily in the middle of the intersection paying no attention to violations. Even if he did he would not be able to stop as after committing violations vehicles would move away from him and not towards him.</p> <p>Would some times wonder away into adjoining streets, would sometimes be seen chatting with others and smoking.</p>	<p>Would take up his position on the left side of the roads leading away from the intersection at a distance of 10 to 15 yards from it, from where he could spot violaters from a distance approaching towards him. He could signal them to stop, well in advance of their approach and be able to stop them conveniently and remaining all the time in front of the vehicle to prevent the driver from running away.</p>

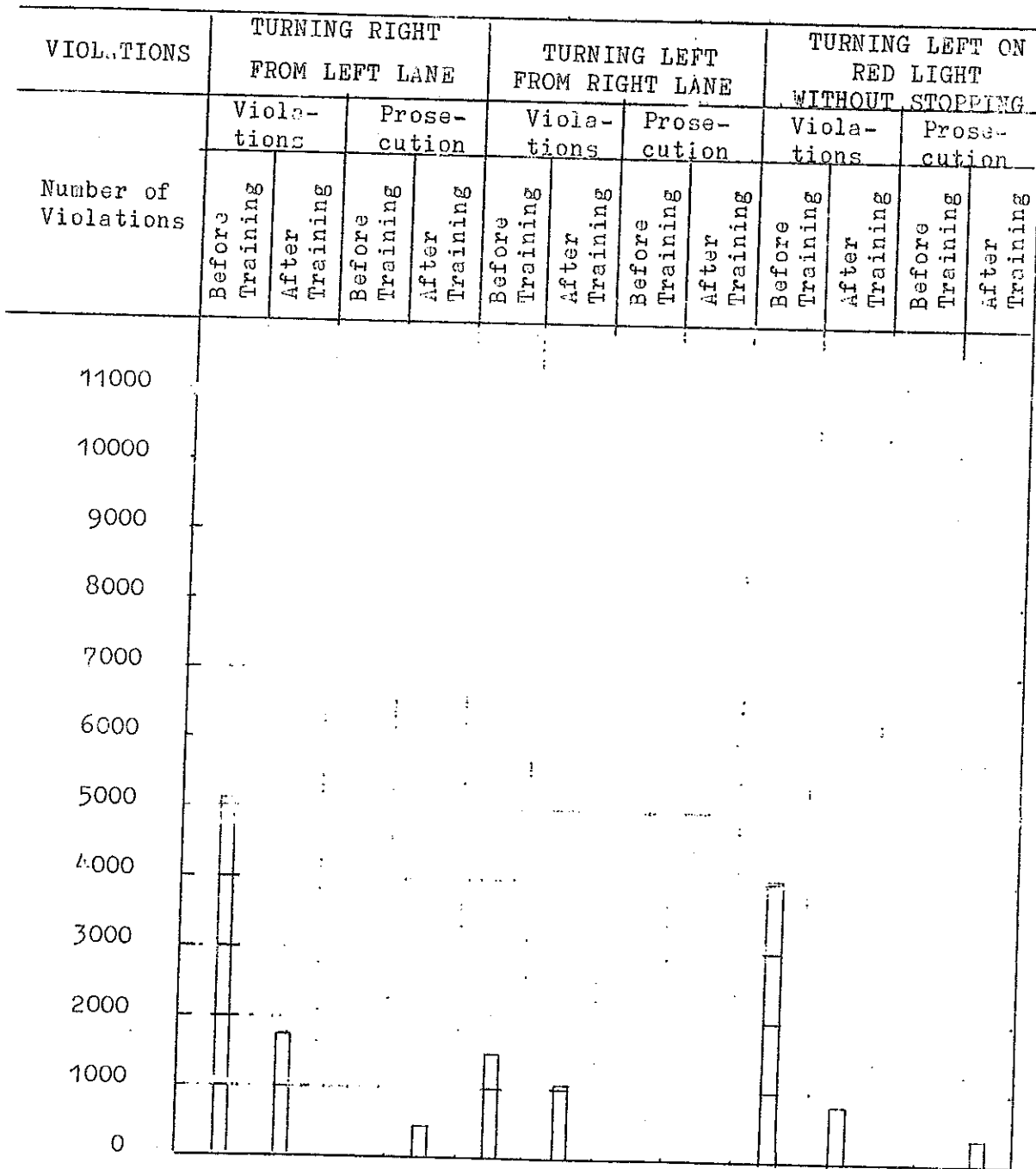
TRAFFIC UNITS	SUPER MARKET						AABPARA					
	Total Traffic		Violation		Prosecution		Total Traffic		Violation		Prosecution	
	Before Training	After Training	Before Training	After Training	Before Training	After Training	Before Training	After Training	Before Training	After Training	Before Training	After Training
Pedestrians	773	388	411	181	0	0	351	254	244	90	0	0
Pedal Cycle	249	159	149	109	0	7	178	52	167	21	0	6
Animal Drawn Vehicles	0	0	0	0	0	0	0	0	0	0	0	0
Hand Carts	0	0	0	0	0	0	0	0	0	0	0	0
Motorcycle	316	213	47	29	0	5	431	256	132	118	0	6
Rickshaw	0	0	0	0	0	0	0	0	0	0	0	0
Car, Jeep, Mini Wagon	1079	888	101	25	0	3	1272	1063	228	18	0	3
Station Wagon Pick up	381	396	162	35	0	5	454	305	238	11	0	5
Buses	55	75	20	3	0	0	87	91	23	3	0	1
Truck, Tanker Trailer	6	4	7	0	0	0	26	11	8	0	0	0
TOTAL:	2859	7410	2497	382	0	20	2799	2036	1040	261	0	17

TRAFFIC UNITS	ZERO POINT						F Y Z A B A D					
	Total Traffic		Violation		Prose-cution		Total Traffic		Violation		Prose-cution	
	Before Training	After Training	Before Training	After Training	Before Training	After Training	Before Training	After Training	Before Training	After Training	Before Training	After Training
Pedestrians	281	83	92	40	0	0	83	60	48	13	0	0
Pedal Cycle	89	35	63	21	0	3	125	85	64	48	0	14
Animal drawn vehicles	0	0	0	0	0	0	4	0	3	0	0	0
Hand Carts	0	0	0	0	0	0	0	0	0	0	0	0
Motorcycle	400	173	63	34	0	8	439	188	104	15	0	6
Rickshaw	0	0	0	0	0	0	0	0	0	0	0	0
Car, Jeep, Mini Wagon	990	694	134	29	0	8	1402	885	328	38	0	19
Station Wagon Pick-up	279	337	89	7	0	3	485	345	299	10	0	4
Buses	60	85	21	5	0	2	201	141	34	3	0	0
Truck, Tanker Trailer	24	24	5	2	0	2	60	72	25	2	0	0
TOTAL:	2113	1431	467	138	0	26	2799	1776	905	129	0	43

TRAFFIC UNITS	COMMITTEE CHOWK						MARIR CHOWK					
	Total Traffic		Violation		Prosecution		Total Traffic		Violation		Prosecution	
	Before Training	After Training	Before Training	After Training	Before Training	After Training	Before Training	After Training	Before Training	After Training	Before Training	After Training
Pedestrians	1570	583	1022	170	0	26	624	388	450	171	0	28
Pedal Cycle	1142	423	1001	285	0	10	835	308	801	323	0	20
Animal drawn vehicles	304	216	449	185	0	0	44	160	30	94	0	1
Hand Carts	37	70	68	17	0	0	7	121	0	18	0	1
Motorcycle	1072	485	319	49	0	6	904	533	180	91	0	4
Rickshaw	248	145	80	18	0	4	105	218	55	53	0	2
Car, Jeep, Mini Bus	3312	1241	695	98	0	4	3202	1563	503	157	0	6
Station Wagon Pick-up	1168	444	197	32	0	2	919	995	413	81	0	3
Buses	106	181	38	4	0	0	110	311	103	22	0	1
Truck, Tanker Trailer	45	35	28	3	0	0	88	199	35	15	0	0
TOTAL:	9004	2823	3897	861	0	52	6918	4796	2570	1025	0	66

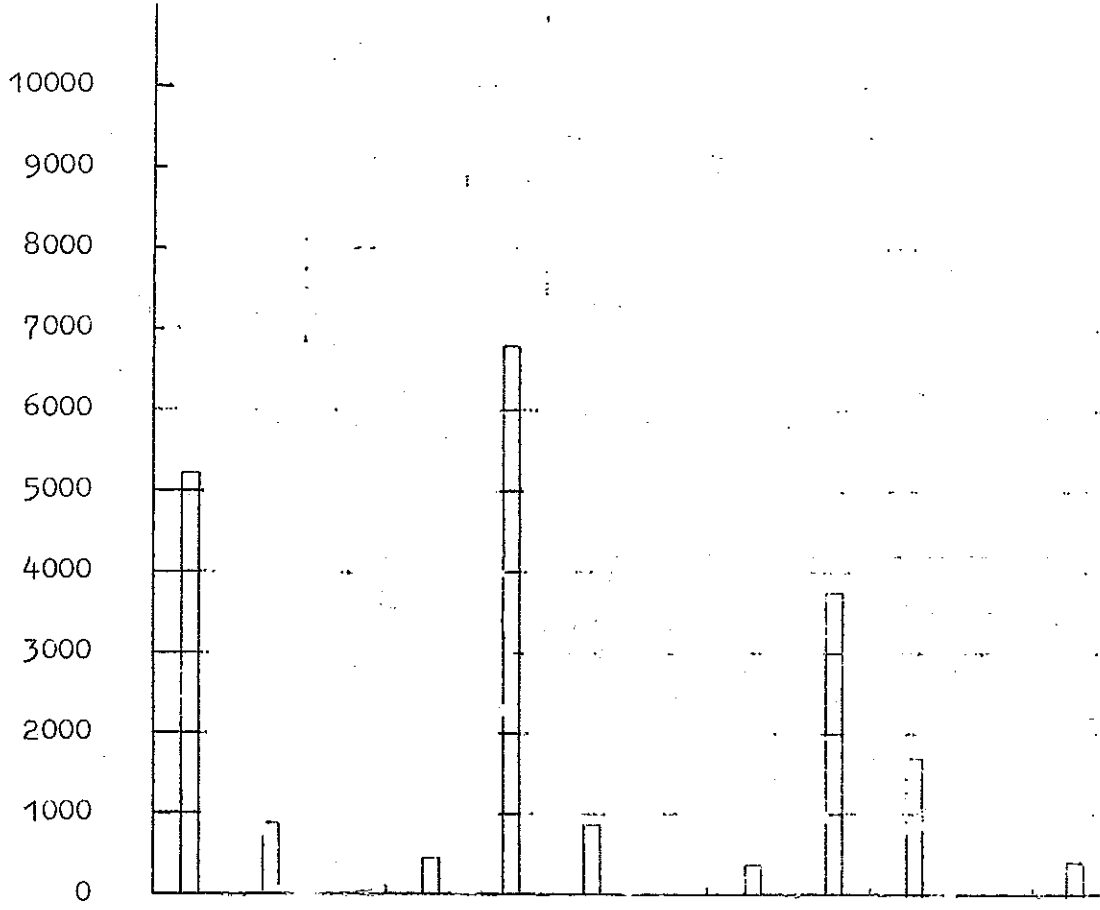
TRAFFIC UNITS	G.T.S. CHOWK						FAWARA CHOWK					
	Total Traffic		Violation		Prosecution		Total Traffic		Violation		Prosecution	
	Before Training	After Training	Before Training	After Training	Before Training	After Training	Before Training	After Training	Before Training	After Training	Before Training	After Training
Pedestrians	1188	493	948	204	0	14	1475	1806	1379	505	0	44
Pedal Cycle	683	381	295	228	0	11	803	1320	658	625	0	6
Animal drawn vehicles	45	174	63	79	0	5	484	494	639	427	0	6
Hand Carts	23	96	27	13	0	2	132	273	279	118	0	2
Motorcycle	707	379	156	70	0	4	434	1650	197	6	0	2
Rickshaw	68	187	52	30	0	2	148	332	239	57	0	2
Car, Jeep, Mini Bus	1675	1321	243	89	0	7	1124	5047	346	270	0	6
Station Wagon Pick-up	129	91	116	9	0	1	17	156	5	12	0	3
Buses	83	272	18	21	0	1	21	349	0	10	0	2
Truck, Tanker Trailer	15	35	0	3	0	0	10	97	0	7%	0	2
TOTAL:	4616	3428	1918	752	0	47	4647	12020	3782	2082	0	75

INVOLVEMENT LEVEL



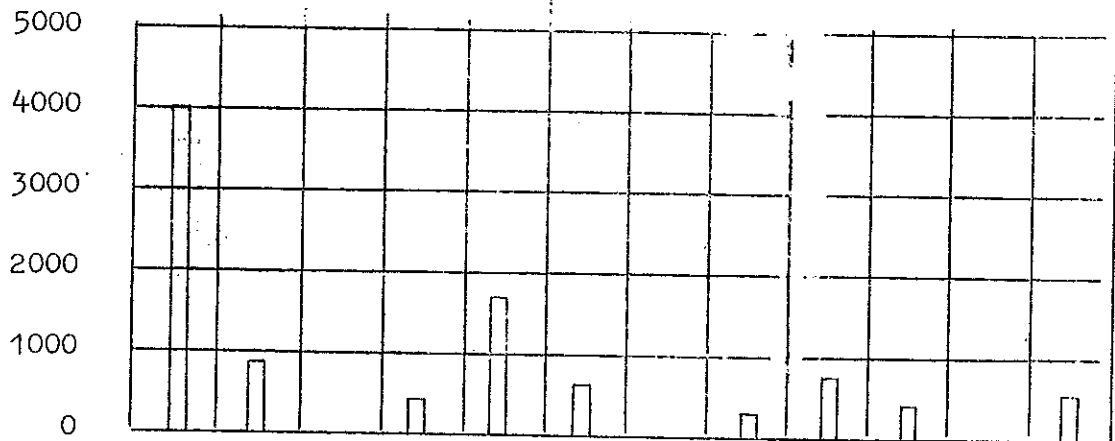
INVOLVEMENT LEVEL

VIOLATIONS	VIOLATING STOP-LINE				PROCEEDING AGAINST RED LIGHT				ILLEGAL PARKING			
	Viola-tions		Prose-cution		Viola-tions		Prose-cution		Viola-tion		Prose-cution	
	Before Training	After Training	Before Training	After Training	Before Training	After Training	Before Training	After Training	Before Training	After Training	Before Training	After Training
Number Violations												



INVOLVEMENT LEVEL

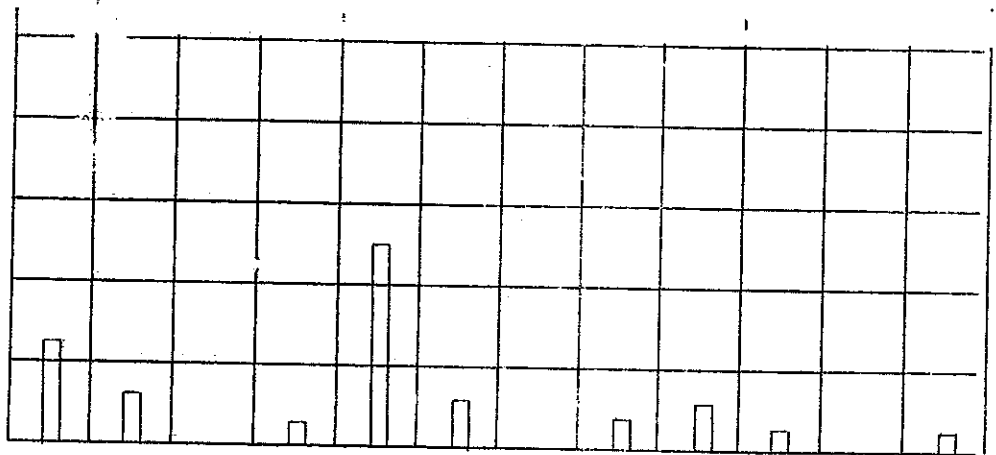
VIOLATIONS	IMPROPER QUEUING				NOT YIELDING TO PEDESTRIANS				SPEEDING			
	Viola-tions		Prose-cution		Viola-tions		Prose-cution		Viola-tions		Prose-cution	
	Before Training	After Training	Before Training	After Training	Before Training	After Training	Before Training	After Training	Before Training	After Training	Before Training	After Training
Number of Violations												



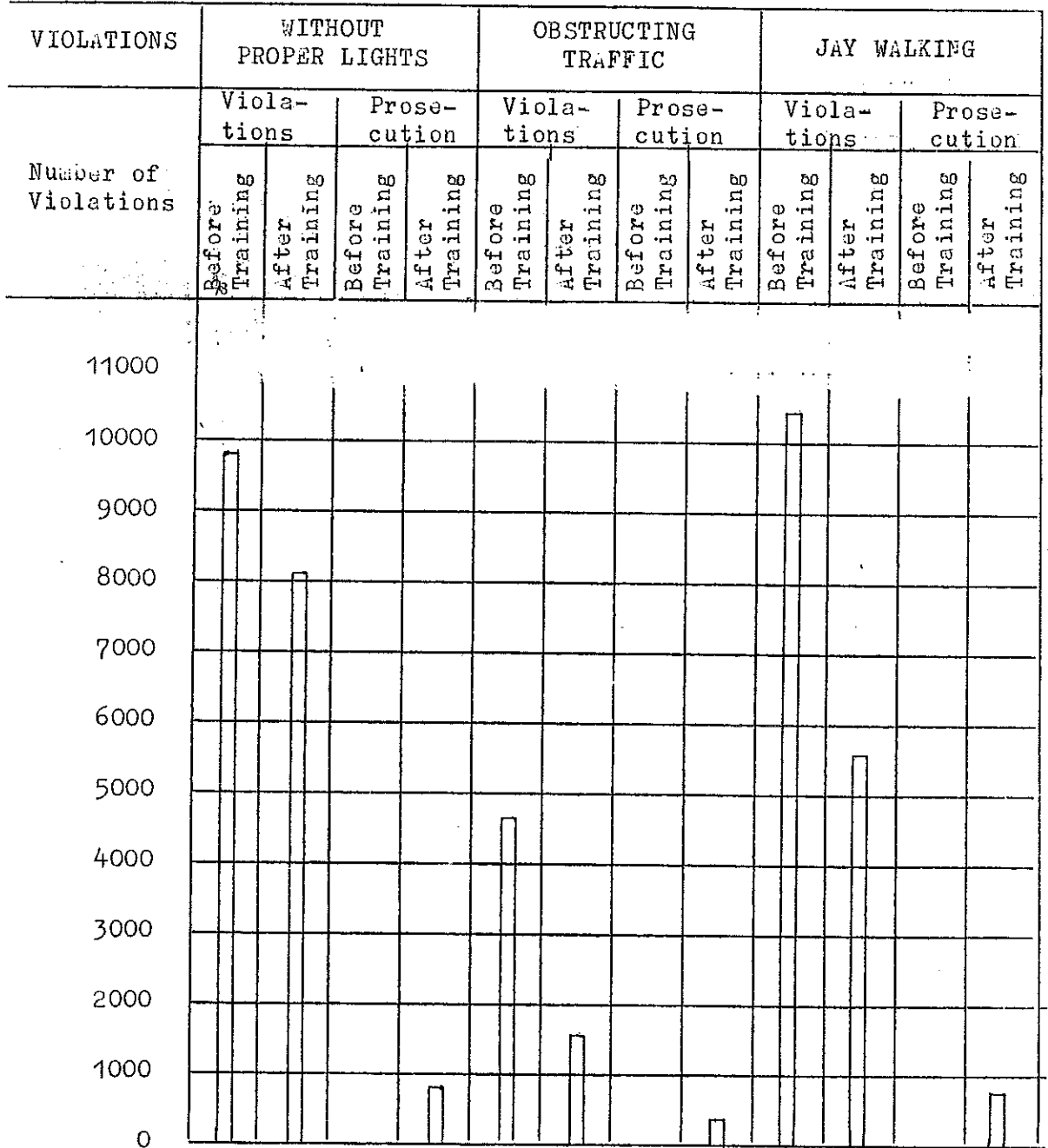
INVOLVEMENT LEVEL

VIOLATIONS	RECKLESS DRIVING				FOLLOWING TOO CLOSELY				CUTTING TOO SHARPLY			
	Viola-tions		Prose-cution		Viola-tions		Prose-cution		Viola-tions		Prose-cution	
	Before Training	After Training	Before Training	after Training	Before Training	After Training	Before Training	After Training	Before Training	After Training	Before Training	After Training

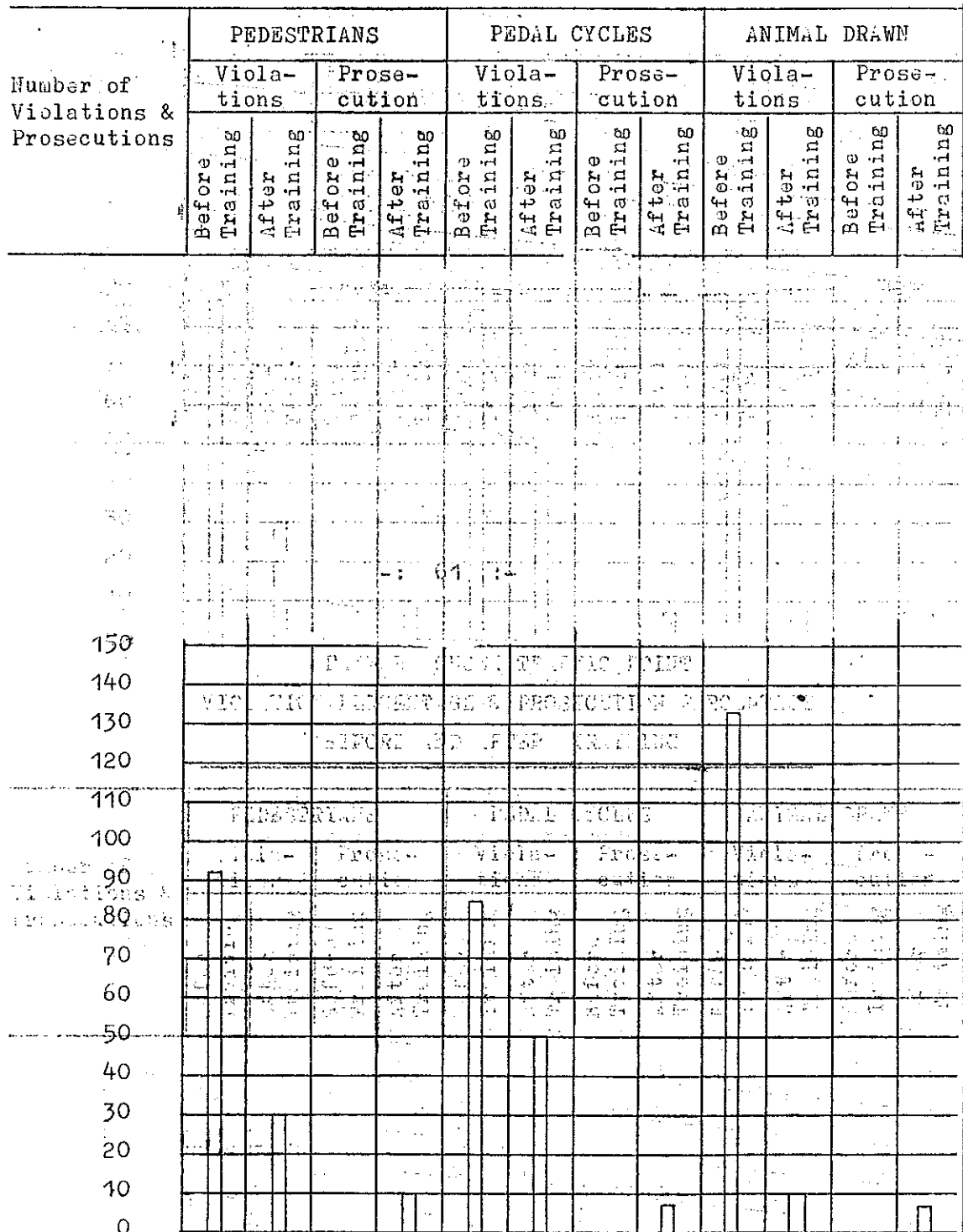
11000
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0



INVOLVEMENT LEVEL



FAWWARA CHOWK TRAFFIC POINT
VIOLATION PERCENTAGE & PROSECUTION PERCENTAGE
BEFORE AND AFTER TRAINING

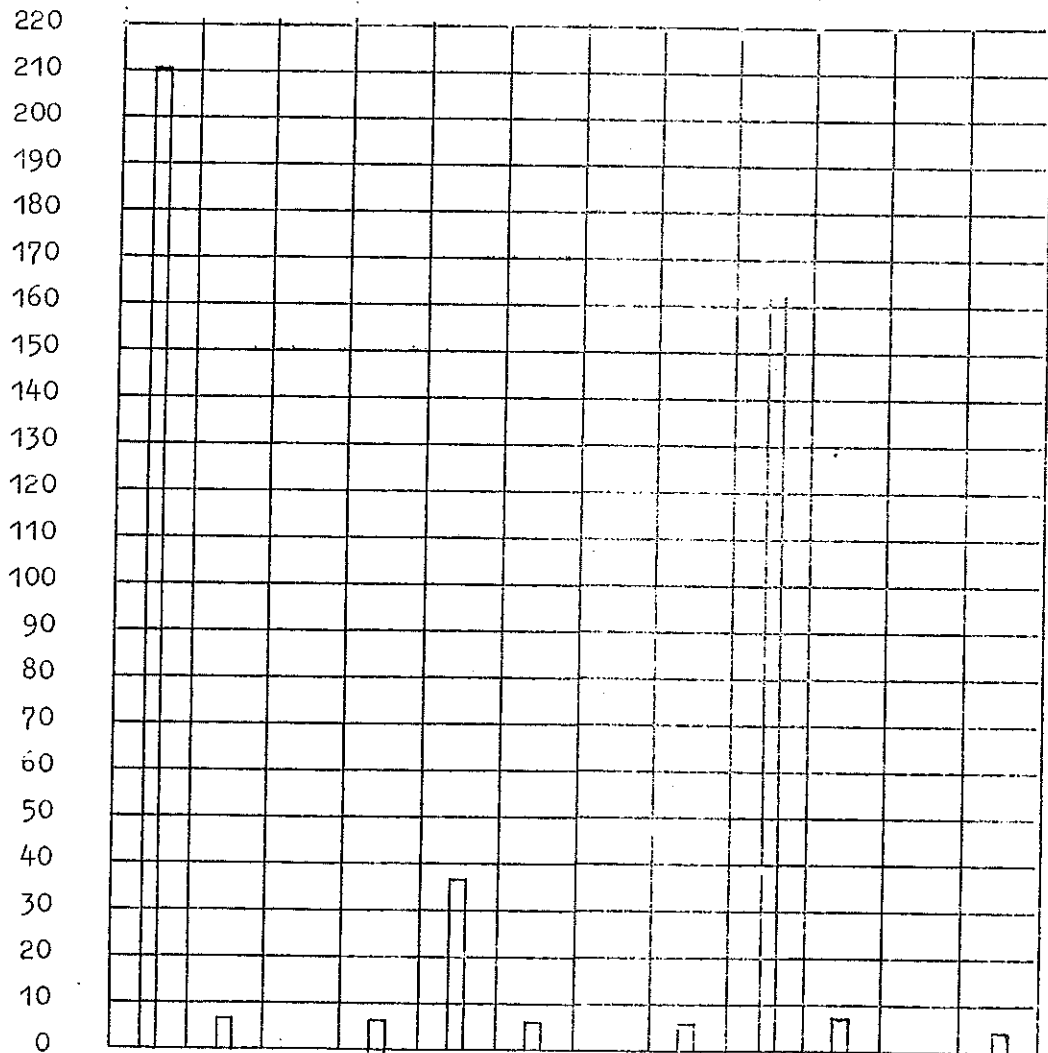


Note:- Prosecution percentage refers to violations and not to total traffic.

Where percentage of violations has exceeded 100, the traffic units have been guilty of more violations than one.

FAWWARA CHOWK TRAFFIC POINT
VIOLATION PERCENTAGE & PROSECUTION PERCENTAGE
BEFORE AND AFTER TRAINING

Number of Violations & Prosecutions	HAND CART				MOTORCYCLE				RICKSHAW			
	Viola-tions		Prose-cution		Viola-tions		Prose-cution		Viola-tions		Prose-cution	
	Before Training	after Training	Before Training	After Training	Before Training	After Training	Before Training	After Training	Before Training	After Training	Before Training	After Training



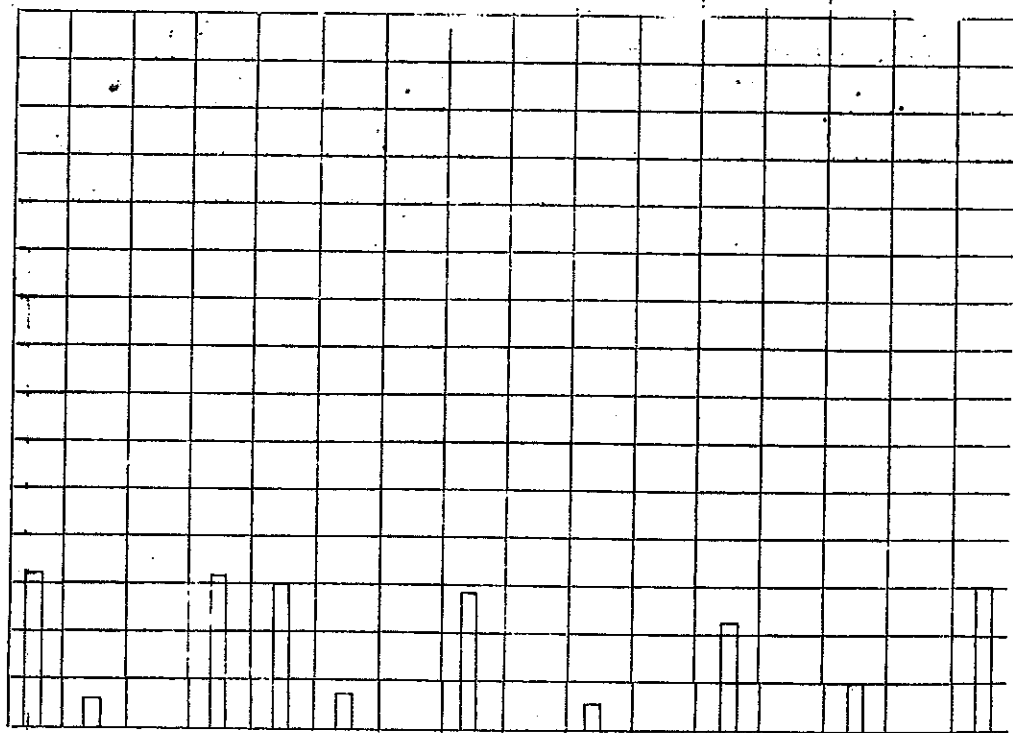
Note:- Prosecution percentage refers to violations and not to total traffic.

Where percentage of violations has exceeded 100, the traffic units have been guilty of more violations than one.

FAWWARA CHOWK TRAFFIC POINT
 VIOLATION PERCENTAGE & PROSECUTION PERCENTAGE
 BEFORE AND AFTER TRAINING

Number of Violations & Prosecutions	CAR, JEEP, MINI				WAGON, PICKUP				BUSES				TRUCK			
	Viola-tions		Prose-cution		Viola-tions		Prose-cution		Viola-tions		Prose-cution		Viola-tions		Prose-cution	
	Before Training	After Training	Before Training	After Training	Before Training	After Training	Before Training	After Training	Before Training	After Training	Before Training	After Training	Before Training	After Training	Before Training	After Training

200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0



Note:- Prosecution percentage refers to violations and not to total traffic.

Bus and truck traffic at the time pre-training counts were taken was NIL at the point.

DIFFICULTIES

The difficulties encountered in carrying out the study could not have been anticipated. The time allotted for each part of the study became a mere fraction of the time spent.

No sooner were the men selected and unobtrusive observation was started, the men would be transferred one after the other from the Traffic Branch to other Branches of the Police for administrative reasons, inspite of the assurance to retain them till the conclusion of the study. Others had to be picked up for observation and fresh data was collected.

Another difficulty experienced was that men detailed for duty at specific places would quite often not turn up. Enquiries would reveal they were either detailed on special duty or had proceeded on leave. A few were suspended and a few arrested taking bribes.

The training programme which should have taken a month lasted for five months. It could not be started immediately after the observation concluded as the administration found it difficult to relieve thirty men at a time every day for a period of one month.

After repeated requests the administration agreed to relieve men in batches. The course started on 18th September, 1979, which according to revised arrangements should have concluded in two months, but the attendance was irregular and rarely upto 50%. Lessons had to be repeated. Here again, beside the time consumed, transport expenses multiplied.

The transfers of the men continued till all the persons observed and trained, except a few, were gone. Fresh men were introduced in the course, necessitating further extension. The training was concluded on 20th February, 1980.

The post-training observation was likewise delayed because of absence of men from duty and their posting on special duties and transfers.

Replacement of the personnel observed before and after training has made no material difference for the study as those who replaced the transferred personnel had more or less the same standard of training and efficiency and the study markedly indicates the difference in the out-put of work of men observed before and after training.

To judge the quality and out-put of work of individuals a proforma was drawn up under the guidance of Adviser Highway Safety, containing the more common types of violations by different units of traffic, showing total traffic of all kinds, various violations by different units, percentage of violations and the percentage of prosecutions, that would give a correct picture of the effectiveness of each individual.

The observation of every individual policeman was made unobtrusively for one hour during day and one hour during night. Results were noted in the proforma noted above.

Prominent features were that percentage of violations was very high and the percentage of prosecutions was NIL in every case. Obstructions infested the roads and little effort was made to remove them. Hand carts and even motor vehicles would be parked within 30 feet of busy road junctions and intersections, badly choking the traffic streams. Ordinary parking would be done at more than a foot of distance from the kerb. To top it double parking was also resorted to where parking space was not available leaving a very narrow strip of the road for circulation of traffic reducing its flow. No policemen were detailed to take care of the traffic on the stretches of roads lying between intersections. Changing lanes abruptly without indication, cutting in sharply, weaving through traffic and reckless driving were prevalent. Jay walking was rampant. There was no discipline in traffic.

In the course of the initial observation the main deficiencies noted were that the men took no notice of the violations of the rules of the road whether committed by motorists, cyclists, animal drawn vehicles or any other category of road users.

They would simply be standing at a corner or in the middle of the intersection watching the traffic passing by. They would not take a position wherefrom they could spot violaters approaching them from a distance to enable them to signal them to stop.

Violations would occur under their noses and they would watch helplessly. Even if they had any intention to stop them they could not do so, as the violaters after committing the violation, would move away from them and not towards them.

They would occasionally haul up public service vehicles, not for the breach of any rule of the road, but for checking their documents or for overloading.

Violations of the rules of the road like taking a turn from the wrong lane, improper queueing, wrong parking, taking a turn without caring for other traffic, cutting sharply, jay walking and even cycling without light at night were no offences in their view.

Their ignorance of the rules of the road was appalling. Even where they felt an offence was committed they would keep their hands off the violater. They seemed to have not been trained in tackling traffic offenders. They did not dare to haul up an offending car driver for fear of reprisals as they felt that the car owner would be a high government official or an influential person who would feel it an insult and make a complaint of rude behaviour against them. They did not seem to understand that, "Law is no respecter of personality".

Where two persons or more were posted at an intersection, they spent most of the time in chatting.

Their presence on the road had little effect on driver behaviour. Their proficiency in traffic control was limited to hand signalling. In the twin city where most of the important road junctions and intersections were fitted with traffic lights mere hand signalling was of little avail.

CONCLUSION

ENHANCEMENT OF KNOWLEDGE LEVEL

It is evident from the rules knowledge test taken before the training, shown on the charts on page 16 that the men lacked knowledge of rules very badly.

Out of 30 persons who took the test only two gave 70 to 75% of correct answers, six gave 65 to 70% correct answers and the remaining scored only 60 to 65% whereas for a driver to pass a test for the licence the minimum requirement is 95% correct answers.

At the test taken after the training the men showed a very marked improvement. Out of the 21 persons who appeared in the test, one scored hundred percent marks, six scored 99%, two scored 98%, three scored 97%, one scored 96%, two scored 95%. Only one fell below the required 95%. He scored 93%.

Without sound knowledge of rules, the enforcement personnel cannot be expected to implement the rules. The training has evidently placed the men in a better position to detect violations.

ENHANCEMENT OF INVOLVEMENT

From the secret observations made when the men were placed on duty after the training it was noticed that they were fully involved in detecting violations and prosecuting offenders. Post training observation charts amply prove this. Before the training they acted as mere dummies, took no notice of violations occurring in their presence. They spent their time in chatting or merely standing in the centre of the intersection or blowing their whistle at the change of the traffic light signal.

After the training they took tactically correct positions from where they could spot violaters from a distance and be able to stop them conveniently and prosecute them quickly. Involvement level is expressed in the chart on pages 56 to 60.

ENHANCEMENT OF PROSECUTIONS

The pre-training observation charts clearly show that there were no prosecutions of moving violations. None of the S.Is., A.S.Is., H.Cs. or Constables ever prosecuted any moving violation. The post-training observation charts clearly indicate that the men were fully occupied in prosecuting offenders. Prosecutions do consume time, but in one hour the trained men have done the maximum number of prosecutions possible. The moment they finished with one they caught hold of another defaulter. They did not let the offender lengthen the process of prosecution. With violaters who would argue and hesitate to show the documents, they would start writing down the registration number from the number plate in the challan book which would disarm the arguing violater and speed up the process of prosecution. Before training and after training counts of traffic, violations and prosecutions at important intersections are on pages 61 to 63.

DECREASE IN VIOLATIONS

Comparison of the observation charts of the pre-training and post training periods clearly indicate the

decline in the percentage of violations to an average to 50%. In case of a very few traffic units the decline has been a little less than 50%, but for most of the units it has been above 50%. For motorcycles, cars, jeeps, miniwagons, rickshaws, buses, trucks and wagons the fall in violations is from 65 to 89 percent. This has been indicated in the charts on pages 45 and 46 and graph on page 49.

Violation-wise the reduction has come down between 23 and 98%. Only two violations i.e. cutting in sharply and moving without proper lights have registered a fall of 23 and 25%, respectively, the rest have shown a decline above 50%. Turning left from right lane has shown a fall of 98%, speeding 95%, following too closely 93%, reckless driving 90% and so on. The chart showing the violation-wise figures is at page 46. The graph is at page 47. The explanation of lesser reduction in some violations is given on page 48.

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SUGGESTIONS FOR IMPROVEMENT OF TRAFFIC POLICE

From the scrutiny of the comparative statement of the counts of traffic flow, percentage of violations and prosecutions, taken before and after the training it is manifest that the training of only 10% the traffic personnel made considerable effect on the traffic discipline. The flow of traffic improved and violations were reduced. The accident rate also declined.

The results are very encouraging. It is evident that if the whole lot of the traffic police personnel are properly trained and if the training is extended to other cities it would bring about a country-wide reform in the use of the road.

The study has shattered the dogma that mere numerical strength of men in traffic uniform can curb violations and improve road safety and traffic circulation. Increase in numerical strength will make no difference if the enforcement personnel are not properly trained. Merely putting men in traffic uniform does not achieve anything. This has been amply proved by the survey of traffic behaviour, made in Islamabad at intersections while manned and when un-manned.

The men trained for traffic duty should be retained in the traffic branch and not transferred out and replaced by un-trained men. Regulation and control of traffic is a specialised job. Policemen are generally trained in the control of crime and maintenance of Law & Order. They are not trained in traffic control. Some courses are, however, run for training policemen for traffic duty but they are sketchy and have not been able to train men in either the science or art of traffic control. Stress is solely on hand-signalling. If a policeman can regulate traffic at a road junction or intersection, he is considered proficient. To be effective he has to know, the emergence of the science of traffic control and the necessity and background of the traffic rules. These are required to interest him in his profession.

To give him pride in his profession, the noble aspect of the service he would be rendering to the community should be ingrained in his mind. To give him confidence, he should be made to understand that he is the sole custodian of the traffic laws which apply equally to all road users - high or low, as law is no respecter of personality. The qualities of impartiality, tact and balance should be inculcated in him.

Practical training can best impart these qualities. Efficient instructors should supervise the work of the men closely, guide them in difficult situations and discuss their failings with them when their tour of duty is over. What haunts regulation and control of traffic are the deficiencies of organizational, operational and career planning of the Traffic Police.

ORGANIZATIONAL DEFICIENCIES

Although the scope of the study was limited to Rawalpindi and Islamabad area yet the points brought forth apply safely to the whole country. It would not be out of place to mention a few factors that bedevil traffic control. Although there is a D.I.G. Traffic in every province yet he has no administrative or operational control over the traffic police in the districts which rests with the D.I.G.'s of the Ranges and the Superintendents of Police of the district who are no specialists and are basically interested in the control of crime and the maintenance of Law and Order and believe that the traffic can be controlled simply by putting policemen in traffic uniform.

OPERATIONAL DIFFICULTIES

The deployment of manpower is defective. Men are posted to places where they are not required viz at intersections provided with traffic lights. No men are posted where they are badly needed, viz long stretches of roads between intersections where speeding, reckless driving and dangerous overtaking occur. Foot patrols, which have in the absence of mechanized patrols, been found to be very effective during the study, are seldom detailed.

CAREER PLANNING

There is no systematic career planning arrangement for the traffic police. Policemen are posted for traffic duty for short periods and then transferred back to general police duties. The same applies to supervising police officers. Specialisation does not get a chance and professionalism required for the job does not develop. If the policemen posted to the Traffic Branch are not thoroughly trained in the art of traffic control and if transfers of trained traffic policemen continue, the time will soon come when, movement of vehicle in dense traffic lanes would come to a crawl. Where density of traffic is low the accident rate would steeply rise.

Observations of the performance of traffic policemen before training has proved that the untrained or the half trained traffic police cannot cope with the traffic problem.

Control of traffic is a specialized job. In the police training institutions in the country, training is imparted for crime control and maintenance of Law and Order. Even the Traffic Training Institute of Lahore, the only institution of that name does not impart the training required of the personnel to whom the control of traffic is entrusted. That is more or less a driving school.

To indicate how important specialized traffic training is, I would quote a paragraph from the report of the Seminar on Traffic Law Enforcement held in Paris in 1974 under the auspices of the "Organization for Economic Cooperation and Development".

"Despite the many differences between countries the tendency appears to be towards an increase in specialist traffic police as the rate of motorisation increases. The question whether or not specialist traffic police divisions should be created is dependent on community size,

traffic density and police resources. The advantages of specialist traffic police are those usually associated with specialization in any area. Traffic police involved almost whole time in traffic matters, with extra and special traffic training, selected because of a special aptitude for traffic work have many advantages to offer".

This calls for the establishment of institutions for training policemen exclusively in the science and art of traffic control.

I was asked for advice on the establishment of a Traffic Training Section in the Police Academy. I have given my recommendations to the Commandant. The Academy can train officers and instructors for provincial Training Centres which impart training to traffic personnel of the districts.

Training must necessarily be of a high quality; which should bring out the best in the men - Work-wise as well as Character-wise. The best part is the close supervision of the work in the field. This is mostly neglected.

Traffic training as has so far been imparted is of so poor a quality that the presence or absence of a traffic policeman makes no difference in the number of violations. To prove it copies of the counts taken in Islamabad, on the orders of the Adviser Highway Safety, at Aabpara, Super Market, Zero Point and Fyzabad are placed at pages 23 to 29.

The object of traffic control is road safety and smooth circulation of traffic. To achieve the object the traffic police should be capable of checking violations of traffic rules. It requires thorough training to make them fit for their duty.

Training imparted once should not be considered enough. Training is a continuous process. There should be refresher courses where not only the professional knowledge should be refreshed, but new tactics should also be taught.

In the end, to stress the importance of training, I would quote from the book "UPGRADING THE AMERICAN POLICE" :-

"Apparently, an untrained police force is a scandal which most local governments are willing to tolerate, and most citizens are willing to ignore. Why this is so is far from obvious. 'Where untrained persons are permitted to function as policemen, no person's life or liberty is safe' - August Vollmer Warned. For more than three decades the need for training has been dramatized on a national scale by the Federal Bureau of Investigation and its director, J. Edgar Hoover, who has repeatedly stressed that the efficiency of law enforcement today is commensurate with the degree of training of its officers. Only through modern police training can we keep abreast of the times in the unceasing fight against lawlessness... Police work by untrained men.....is as obsolete as the practice of medicine by sorcery".