

TECHNICAL INVESTIGATIONS
AND ANALYSIS OF MOTOR VEHICLE ACCIDENT

PRESENTED TO

THE DEPARTMENT OF MECHANICAL ENGINEERING

SCHOOL OF ENGINEERING

MARA INSTITUTE OF TECHNOLOGY

IN FULFILLMENT OF THE REQUIREMENT FOR THE
ADVANCED DIPLOMA IN MECHANICAL ENGINEERING

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MAY 1993

ACKNOWLEDGEMENT

All praises be to Allah, the Most Merciful, the Most Gracious to whom we extend our greatest thanks.

The students who undertake this work wishes to express their sincere thanks to En. Abdullah Suhaimi who had supervised the project and also to the expertise and facilities provided by SIRIM, under the guidance of En. Talib Ria Jaafar and automotive expert from TUV, Mr Eugen Haberkorn for the successful completion of this project.

Both the students are also very grateful to the Royal Malaysian Police Forces, especially to all the Traffic Departments including the Shah Alam Police Station (Section 11), Klang Police Station, Melaka Tengah Police Station, Ipoh Police Station, Kuantan Police Station, Kota Bahru Police Station, Melor Police Station and the Road Transport Department (RTD) for the assistance and information given to benefit this project work.

Finally, we like to extend our sincere thanks to all lecturers and colleagues for the continuous assistance in every aspect either directly or indirectly throughout the project work.

MAY ALLAH BLESS ALL OF US

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ITM : MAY '93

PREFACE

The students had the opportunity to undertake the engineering application project on " Technical Investigations And Analysis of Motor Vehicle Accident " It is an advantage and a desirous opportunity to be given a chance to do this project.

The project scope is rather wide and it covers almost the entire aspects of accident analysis which is related to engineering fundamental.

From this project, we have learned a lot more that improved and widened our knowledge in practical engineering applications. The project report is divide into six chapters

- 1] Statistical data on accidents
- 2] Information to be gathered and tasks at site of accidents including the assessment of faults
- 3] Technical investigations on accident vehicles
- 4] Accident reconstruction
- 5] Case studies
- 6] Conclusion

We sincerely hoped that the project report is valuable and useful for the knowledge of similar nature of research undertakings in the future. Any constructive comments are welcome.

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INTRODUCTION

It is undoubtedly that not even one-quarter of all accidents occurred are due to certain aspects of highway design, junctions layout, road surface characteristics or traffic control but human beings as vehicle drivers are the major contributory factors. The increasing number of vehicles and road users can be the main causes of the accidents. But, road users are human operators that are directly responsible for the majority of the accidents that occurred. In most cases human errors or lack of anticipation of adverse situation is the direct cause of the accidents, irrespective of the physical conditions under which the accidents took place. Although road accidents are usually the result of mistakes made by road users, it is also evident that poor road designs and planning contributed to or compounded these errors. There are 3 main factors that cause accidents to happen:

- i) Attitude and behaviour of road users.
- ii) The traffic mix, and condition and use of vehicles, and
- iii) The design and the conditions of the roads.

Malaysia has some 40,000 km of reasonably good quality roads of which about 600 km are the modern 2-lane dual-carriage way toll expressway. Construction is still underway for the completion of the North-South toll expressway, a total distance of some 900 km which form nearly 2 % of the entire highway network of about 60,000 km. The highway network ranks one of the best in the developing countries. More than 50 %