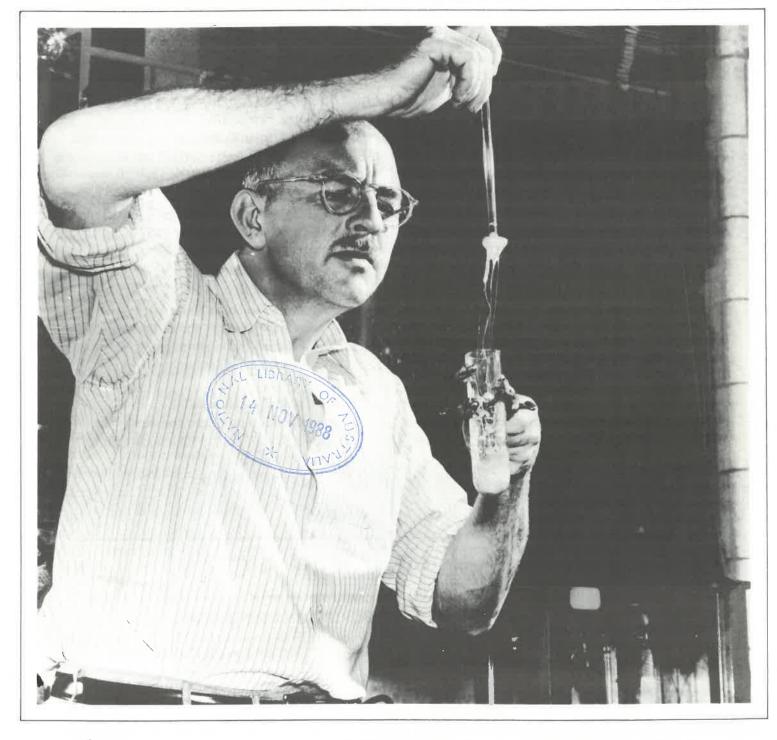
# Du Pont Celebrates the 50th Anniversary of Nylon





The discovery of nylon led to man-made materials that have dramatically enriched the quality of life in many areas including clothing, the home, recreation, electronics, communications, transportation, construction and health care.



The Journal of the Australian College of Road Safety







Vol. 1. No. 3, August, 1988

# 'DRIVE TO SURVIVE'

In addition to teaching the theory of

defensive driving at public meetings

and in the local media, the ultimate aim

of the campaign is to encourage the

attendance of drivers at one of the many

defensive driving courses currently

being conducted in the Sydney area.

Details of these courses is contained in a

National Roads and Motorists Associa-

tion (NRMA) publication titled 'Defen-

sive Driving Booklet' printed Septem-

ber 1987. The booklet is free of charge

and can be obtained from the NRMA

Traffic and Safety Department, 151

Clarence Street, Sydney 2000. Copies

of this booklet are also on hand at all

'Drive to Survive' meetings in the

When Inspector Ron Blackman arrived in his new position as Commander Traffic Enforcement for the Blacktown Police District on 4 October, 1987 he was confronted with startling statistics just released by the NSW Traffic Authority which showed that two of the three Police Divisions in his District ie Blacktown and Fairfield Divisions, came first and second in the State for fatal and serious road accidents in 1986.

It therefore became clearly evident to him that a more pro-active approach was required to initiate new policies and effective strategic plans to combat his District's serious road toll.

Accordingly, in addition to the normal enforcement measures currently being used by Police to control the accident rate, Inspector Blackman conceived the idea of initiating a defensive driving campaign called the 'Drive to Survive' campaign.

The aim of the campaign is to teach all age groups, particularly young drivers in the 17 to 25 age group, the theory of defensive driving.

The main reason for targeting young drivers for special attention is because:

.Young drivers between the ages of 17 and 25 account for approximately one third of the New South Wales annual road deaths and serious injuries.

·Young drivers lack the ability to anticipate and look ahead, and the judgement that comes with experience; both of which are essential to safe driv-

•They are over-confident about vehicle-handling skills and reflexes which play little part in safe driving.

· Young drivers are more susceptible to the effects of alcohol.

•Peer group pressure plays a major role in influencing the behaviour of young drivers.

Campaign Launch

The 'Drive to Survive' campaign was launched by the Blacktown District Highway Patrol on February 10, 1988 at Blacktown Police Citizens Youth Club.

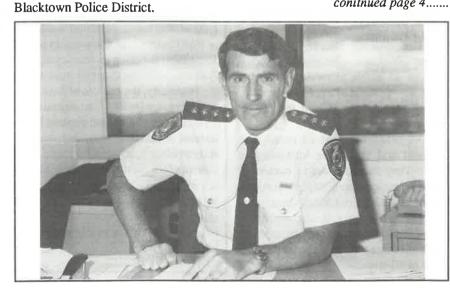
The launch initially concentrated on motor cycle safety awareness and featured a panel of motor cycling experts, including Warwick Schuberg - Director of Stay Upright Motor Cycle Techniques, Jeff Sayle - current Australian 250 cc motor cycling champion, and a number of experienced Blacktown District Highway Patrol motor cyclists.

About 100 interested persons attended the launch.

#### Phase Two of Campaign

A second meeting of the campaign was again held at Blacktown Police Citizens Youth Club on April 27, 1988. This meeting concentrated on defensive driving theory for car drivers. The panel

conitnued page 4.....



#### **ROADWISE**

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> The Australian College of Road Safety P.O. Box 999 Armidale NSW 2350

#### **EDITORIAL CONTRIBUTIONS**

Articles for publication in ROAD-WISE are invited from interested persons and organisations.

The publisher reserves the right to reject submissions, modify or reduce the size of an article at its discretion, but with the approval of the author.

No payment is offered for articles submitted.

All articles should be clearly expressed and should be interesting to read. They should relate to matters of road safety, operation of mobile equipment or vehicles or traffic education.

The publisher requires indemnity from contributors against damages or liabilities that may result from publication of all material.

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## The Growth of ACRS and Roadwise

The Australian College of Road Safety and "Roadwise" have made promising progress since February this year. Private and corporate membership links have been made from all Australian states and territories.

Practitioners in road safety training, public servants, community groups, motorists' organisations and businesses are joining forces through the ACRS. This should lead to the achievement of the goals of those who moved to establish the organisation, viz: provide a network for communication, co-operation, promotion and support in a national effort to solve some road safety problems.

The national executive of ACRS has embarked on a programme aimed at obtaining feedback on its objectives, building membership and providing an information service for its members. These issues will be discussed at its next meeting in Sydney on October 17.

Of major significance to this new movement was the recent announcement by Mr Mac Thomson, General Manager, Advertising and Public Affairs, Du Pont (Australia) Ltd., that his organisation would provide sponsorship for the Australian College of Road Safety. The sponsorship provides \$10,000 during the years 1988/1989 and 1989/1990 for costs in developing the activities of ACRS. The conscience of Du Pont management to safety matters is to be commended.

Hopefully, the readers of Roadwise are finding this a useful publication. Your comments are invited. The objective has been set to make various improvements in format, presentation and content by the second year of publication. To do this, a number of factors are required. Apart from the importance of growing membership and circulation, advertising space will be available to defray costs. As the official journal of the Australian College of Road Safety, the content is of prime importance. All interested parties can benefit by pooling suggestions and details of achievements. Please provide the editor with details of new publications, reports on road safety programmes, letters to the editor, comments on material included in previous issues and reference to any aspect of road safety, traffic education or driver/rider training.

# **Cost-effectiveness** and **Priority Ranking** of Road Safety Measures

This is the synopsis of a paper which discusses some aspects of using cost Mectiveness analysis for evaluating and giving priority to road safety programs. It was presented at the Second National Traffic Education Conference held in Armidale in February 1988.

Resources available for road safety programs are limited, so it is necessary to order alternative programs in priority so that resources will be used most effectively. Cost-effectiveness analysis is one useful tool for making rational choices among alternative programs.

A cost-effectiveness analysis that considers both benefits and costs in financial terms is called a benefit-cost analysis. The results of a benefit-cost analysis are presented as a benefit-cost ratio, a ratio greater than 1 indicating that a program's benefits exceed its costs. Some of the Authority's programs, such as Random Breath Testing, 'Black spot' treatment, and promoting restraint use, have been demonstrated to have high benefit-cost ratios.

Choosing between alternative new programs or programs from which longterm benefits are anticipated can be challenging. They need to be considered in terms of their likely benefits, allowing for their probability of success. Benefits from a new program are more likely to be realised if the program is based on sound principles in the first instance; but ultimately a program's effectiveness must be determined by an objective evaluation of its appropriateness, efficiency and effectiveness in achieving prescribed objectives.

Programs from which long-term benefits are anticipated are usually difficult to evaluate. In such cases, it may be necessary to evaluate the program using proxy measures of program effectiveness. For such an evaluation to be meaningful, these proxy measures should clearly indicate that the ultimate desired outcome will be achieved. The Authority's school education program is being evaluated in this way.

Cost-effectiveness is an important one of many considerations when choosing among alternative road safety programs. Some other considerations are feasibility and public acceptability of programs being considered, and the opportunity cost of choosing one program over another (or a number of others). Another major consideration is that programs should fit within a broader road safety strategy, in addition to being successful in relative isolation.

#### About the Author Mr H.L. Camkin, B.E. (Civil), Dip. T. & C.P., Cert. Traffic

Planning and Control

Mr Harry Camkin has been Traffic Planning and Control Director of the Traffic Authority of New South Wales since 1976. He had previously held the positions of Chief Traffic Planner and Chief Traffic Engineer, NSW, Department of Motor Transport. He has travelled overseas many times to study traffic engineering/transport management practices and to attend international conferences in Europe and North America. He has also been consultant to Governments in Malaysia, Singapore and the Philippines.

# Briefly...

**Annual Report of DECA** 

The annual report of the Driver Education Centre of Australia, based at Shepparton, Victoria showed unappropriated profits carried forward of \$169,824 following the earning of \$2,572,997 total income.

The directors reported that "We have seen during the past year even greater acknowledgement of DECA as a national leader in the field of driver education with increasing requests for DECA's services being received from organisations Australia wide." Programmes were also carried out in Papua New Guinea.

During 1987 usage of DECA's facilities by government departments and private industry increased by 34%. "This figure indicates these organisations' continuing awareness of the benefits to be derived from quality driver training," the Directors said.

#### **Accidents in NSW**

The NSW Minister for Transport, Mr Bruce Baird, has released a detailed analysis of the state's road toll. The analysis is contained in a report, "Road Traffic Accidents in NSW 1987", prepared by the Traffic Authority of NSW.

"The number of fatalities in 1987 totalled 959 which was below the 1986 figure of 1,029," Mr Baird said.

"However, the number of injuries dropped by only 11 from 38,230 in 1986 to 38,219 last year."

There were 69,214 recorded traffic accidents in NSW during 1987 and these cost the community an estimated \$1,620 million. The number of persons killed was the lowest since 1963. The number of motorcyclists killed was the lowest since 1972 and the number of pedestrians killed was the lowest recorded since

Mr Baird said that "While random breath testing has been a huge success in NSW, alcohol is still a major factor. contributing to at least 18% of all the serious injury crashes and 23% of fatal crashes. Staying under 0.05, driving at a speed suitable to road and weather conditions and wearing a restraint, regardless of where you are seated in the vehicle, are measures each individual can take to help stay in control of their own safety on the road."

continued from page 1

included Peter Finlay - Director of Nationwide Defensive Driving School, Kevin Bartlett - well known motor racing driver, Kevin Brady - Chief Information Officer of NSW Traffic Authority, and a number of experienced Blacktown District Highway Patrol Officers.

A special feature of this meeting was the presentation of 'Safe Driving Award' certificates to drivers selected for safe driving during the December '87 Christmas Holiday period.

Approximately 160 persons attended this meeting - the majority in the 17 to 25 target age group.

Feedback from the people in attendance was most encouraging and reinforced Inspector Blackman's belief that the community will respond to preventative policing methods if properly marketed.

Extensive media coverage was provided from the commencement of the campaign by utilising local as well as Sydney media. Arrangements were made with local newspapers and Blacktown Radio Station 2WS for an ongoing publicity campaign using 25 defensive driving techniques supplied by Inspector Blackman. It is expected that this publicity will continue throughout 1988 and will peak during the Christmas/New Year Holiday period.

#### **Phase Three of Campaign**

This phase was held at the Fairfield/ Cabramatta Police Citizens Youth Club on July 7, 1988.

The panel included Ian Luff - Director of Australian Dynamic Safety Driving, Colin Bond - well known motor racing driver, Kevin Brady - NSW Traffic Authority, and a number of experienced Blacktown District Highway Patrol Officers.

Although extensive publicity was given using coloured posters and media promotion - especially local ethnic media because of the Fairfield/ Cabramatta area's high ethnic population - only 70 persons attended. The small numbers may have resulted from the meeting being held during the first week of school holidays. However, the quality of interaction between the audience and panel was excellent considering the small attendance.

#### The Future of Drive to Survive

Blacktown District Highway Patrol plan to hold two further 'Drive to Survive' meetings during 1988 - on September 7 at Greystanes High School, and November 29 at Blacktown Police Citizens Youth Club. What then of the

The Federation of New South Wales Police Citizens Youth Clubs is presently seeking a "new direction" to target the youth population of the community so far as all forms of anti-social behaviour, including road safety!

The Commander Federation of New South Wales Police Citizens Youth Clubs, Superintendent Perc Carter, when appraised of the campaign to date, enthusiastically expressed his support for extending the 'Drive to Survive' campaign to all of the 52 Clubs throughout the State. Organisation and control of the campaign would then pass onto Police Citizens Youth Club personnel using local resources, for example, a panel comprising local Highway Patrol or Traffic Police, Department of Motor Transport Licence Testing Officer, Learner Driver Instructor, and well known local road safety expert.

In conclusion, Inspector Blackman has expressed the view that apart from salaries of Police there are no other costs to be met by the Police Department, therefore the campaign is simple to run and is cost effective from a community based policing point of view. It provides a means for the Police and Community to come together in order to reduce the road toll!

Finally, Inspector Blackman would ultimately wish to see this campaign spread to every State in Australia because of the need to teach young drivers defensive driving techniques.

#### **Footnote**

During the period from February 1 to June 30 1988 (the period since the start of the 'Drive to Survive' campaign) the Blacktown Police District road toll has decreased by almost 20 per cent fatals compared to the corresponding period the previous year.

Inspector Blackman can be contacted on phone No. (02) 6719172 for further information.

## International **Traffic Safety Project**

The publication, "Reducing Traffic Injury - A Global Challenge", ISBN 0 909844 20 8, G.W. Trunca et al, Royal Australasian College of Surgeons, 1988, has been launched. This is a report arising from an international traffic safety project of the Royal Australasian College of Surgeons.

The book highlights the startling statistics of fifteen (15) million injured and half million deaths annually throughout the world because of traffic crashes. The estimate is made that the problem will get worse before it gets better. The authors predict that by 1995 this number will be doubled, as populous developing nations motorise; the report concludes that the importance of the statistics is under-rated when considering the level of funding for research and counterac-

Apart from the problem of the majority of the world's population becoming increasingly exposed to the risk of death and injury on the road as more and more nations motorise, the authors say that there is still need for improvement in the existing motorised nations.

"The motorised nations now have in place for the most part, what might be termed the first generation of traffic safety countermeasures although few have been able to implement the full range of measures in the manner needed to realise the maximum potential."

The opinion is expressed that incremental reductions in accidents and road trauma from each individual programme are relatively small in these nations.

"An examination of the strategies needed both to implement known measures more effectively and to formulate a second generation of countermeasures is urgently required," states the report.



## Letters To The Editor

Dear Sir

The issue of tyre safety seems to cause confusion and concern amongst car owners. Could you advise me please regarding simple instructions which need to be given to avoid tyre failure?

There are two questions over which there seems to be discussion:

1. What gauge should be used for measuring tyre pressures? Garage gauges are notoriously inaccurate and measuring pressures at a garage means that the tyre is usually hot. Therefore, if measuring pressures at home, what sort of gauge should be used?

2. What pressure should be aimed at? Some authorities recommend, for safety's sake, levels above the top recommended pressure (on the car door) and others state the top pressure as noted on the car door.

Yours sincerely **Brian Connor** 

### Reply to Dr Brian Connor's letter

#### Tyre Safety

Since 1973, vehicles manufactured in Australia have a plate or sticker, with advice on tyre selection and maintenance, affixed to the vehicle eg on the edge of the driver's door, glove box. These recommendations are in accordance with the Australian Design Rule and must be applied for performance, economy and safety.

The two aspects of tyres which affect safety are selection of the correct tyres and maintenance of tyres during the life of the vehicle.

#### Selection

Rims of wheels are designed to operate effectively and safely with the steering and suspension of a particular vehicle. Wider wheels should not be fitted to a vehicle without considering this technicality.

In selecting replacement tyres or

when purchasing a second-hand vehicle, the information on the recommendation plate should be compared with size codes moulded in to the tyre side-

Never mix tyres of different sizes or construction on the same axle. It is always preferable to fit identical tyres on all four wheels. (It is possible to fit a different pair of tyres on front and back axles eg diagonal ply on the front and radial ply on the rear; fabric belted radials on the front and steel belted radials on the rear; high profile tyres on the front and low/squatter tyres on the rear. The positioning mentioned here is important.)

#### Maintenance

Uneven wear or tyre squeal can indicate problems with tyre inflation or other mechanical faults. (Tyre squeal might also occur with excessive speed on curves.)

Check the tyres regularly for correct inflation pressure, wear and damage. Tyres showing wear on both sides of the tread indicate that air pressure is too low. If the wear is in the centre of the tread, the air pressure is too high. Always check the air pressure when the tyres are cold as heat causes expansion and higher pressure.

Uneven wear can also indicate a problem with wheel alignment, worn shock absorbers, worn suspension or worn wheel bearings.

Wheel balancing should be a normal routine maintenance matter to prevent "wheel wobble". Correct balance can be achieved by fitting weights to wheel

Tyre valves should be sealed with a valve cap to keep out dust and to prevent loss of air pressure. Use valve caps which have rubber seals inside.

If punctured tyres are to be reused, all punctures should be repaired to ensure safety. It is not good practice to fit a tube without proper repair to the hole (tubes can eventually be rubbed by the rough edges of the hole or moisture may penetrate and rust steel belted radial tyres). The tyre should be removed from the rim to repair it and not merely sealed

with a plug from the outside or by injecting liquid sealant through the tyre valve.

#### Gauges

The matter of service station gauge inaccuracy has been raised.

The Australian Consumers' Association in an article 'Getting Petrol and Air', Choice Magazine, June 1984, reported on a survey of tyre pressure gauges. In New South Wales, 16 service stations were visited and an average error (described as modest) was +6%. In South Australia, 11 service stations were included in the survey. Only one gauge gave an error greater than 5%.

Despite the issue of service station gauge accuracy, it is true that tyres checked at service stations will have higher than ambient temperatures. It would be preferable for motorists to have a portable gauge. The survey carried out by ACA showed that pistontype gauges are more durable and accurate than flexible membrane gauges. The recommendations were:

Gauges: Brilaw 10902 K-Mart 751 KPA K-Mart 750 **PCL** 

Easy Air The 'bottom line' for gauge accuracy is that there is a specification set by the Australian Standards Association. The current publication is 'Tyre Pres-

Foot/hand pumps (with gauge):

sure Gauges for Road Vehicles' No 1268 (1973), price \$10. The standard includes portable bar and portable spring gauges. Currently, a committee is redrafting this standard and community groups and individuals are able to comment on interim draft standards (contact Mr Jim Elsden, PO Box 458 North Sydney 2059 (02) 9634182).

#### NRMA Survey

The NRMA conducted a survey into how Sydney motorists maintain their car tyres, including a survey of service station air pumps (see PUBLICA-TIONS for details of the report).

The concern of Dr Connor about this matter is well founded when results of the NRMA survey are studied. For example, only 41.7% of the 103 service stations surveyed had accurate gauges. Of private cars parked in car parks, 77% had at least one serious tyre fault, 7% of tyres were so under-inflated that a blowout was a real possibility and 13% of tyres did not meet the legal tread depth.

## Profiling People

## Eric Braden is "Up Top"

"Roadwise" brings you information on Mr Eric Braden of Darwin, Northern Territory.

Eric Braden has had 45 years of driving experience in various parts of the world. He is an ex-police driver with the force in Britain. He has also worked in heavy industry, as both a "truckie" and a training officer.

For twelve years, he has been the proprietor of the Northern Territory Defensive Driving School. His organisation has conducted training courses in Darwin, Katherine, Tennant Creek and Alice Springs.

The school caters for learner driving. In addition, defensive driving courses are conducted for the public, Government Departments and the Northern Territory Taxi Council. This

Abroad

The late William Haddon Jnr.

a physician who was the first

director of the National Highway

Traffic Safety Administration

and well known for his matrix of

cause-effect relationships in traf-

fic crashes, is to be honoured as one of the first inductees to the Safety and Health Hall of Fame defensive driving course is approved by both the Road Safety Council and the Automobile Association of Northern Territory.

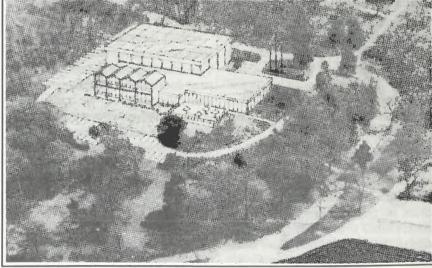
The Territory Government Departments now using these courses include Department of Transport and Works. Department of Primary Production and Department of Prisons for their officers. The Taxi Council of the Northern Territory make the course compulsory for all new drivers entering the industry. Traince tourist bus drivers have also used the training programme.

Mr Braden's driving school is the only one in the Territory properly qualified to handle the driving education of handicapped people.

In this work, Mr Braden is assisted by Mary Ehn, an ex-nursing sister. She spent time at Banstead House in England, gaining a diploma which qualifies her to teach handicapped people in a specially equipped automatic vehicle.

Eric Braden has served on the Council of the Automobile Association of the Northern Territory for the past five years. He is playing a very important role in reducing the vehicle accident rate in the territory. Figures published in the past have shown that the Territory had the highest accident rate and accident death rate per 10,000 vehicles of any State or Territory in Australia.

Eric Braden is one of many specialist trainers across Australia who have joined the Australian College of Road



The architect's drawing of the Safety and Health Hall of Fame International, established March 15, 1986 by Veterans of Safety, in co-operation with Central Missouri State University and the CMSU Foundation. The structure will provide office space, a conference centre, auditorium and meeting rooms, with dining facilities and lodging for overnight guests.

The Hall of Fame provides recognition of individuals who have contributed significantly to the field of safety and/or health.

International.

The programme of the Safety and Health Hall of Fame International will ultimately include recognition of individuals, safety library, ceremonial centre, resource centre and displays of safety exhibits. The organisation was established on March 15, 1986 and construction of the facilities will commence in 1991 for completion in the following year. The organisation is based on campus, Central Missouri State University in Warrensburg, USA.

The Hall of Fame will provide a per-

manent facility to conduct programmes and activities of safety and health professions. The plan is for qualified organisations from the USA and from other nations to conduct activities within the basic mission of the Hall of Fame.

Organisations, agencies industries and individuals are being sought to participate in this project. From Australia, the Queensland Road Safety Council is a co-operating organisation.

#### A Welcome

The Australian College of Road Safety welcomes the membership of the City of Bellevue, Washington, USA. Contact: Mrs Karen Lee Gonzales Neighbourhood Traffic Control Coordinator,

PO Box 90012 Bellevue, Washington, USA





#### **Publications**



In each edition, we have listed some important books, pamphlets and teaching aids. The publishers would be pleased to receive information about any other publications for inclusion in future issues.

"Cost of Road Accidents in Australia",

L.A. Steadman and R.J. Bryan,

Bureau of Transport and Communications Economics, Occasional Paper 91, AGPS, 1988

#### "Passenger Coach Safety",

House of Representatives Committee on Transport Safety, Parliamentary Paper No. 114/1986, AGPS, June 1986

#### "Bicycle Helmet Safety - Final Report on Motorcycle and Bicycle Helmet Safety Inquiry",

House of Representatives Committee on Transport Safety, AGPS, Nov 1985

#### "On the Road - Traffic Safety Education, Schools' Survey Report",

Road Traffic Authority of Victoria, ISBN 0 7306 0263, Report No. GR/87/15, July 1987.

"An Overview of the Road Traffic Authority's Traffic Safety Education Programmes - The First Decade: 1978-1987",

Road Traffic Authority of Victoria, ISBN 0 7306 0191 9, Report No. GR/87/10

"Reducing Traffic Injury - A Global Challenge".

Gordon Trinca, Ian Johnston, Bob Campbell, Frank Haight, Peter Knight, Murray Mackay, Jack McLean, Elaine Petrucelli,

Royal Australasian College of Surgeons, 1988, ISBN 0 909844 20 8 (price \$30)

#### "Tyres - The Bald Facts".

National Roads and Motorists' Association, NRMA Survey Report, October, 1987

Video, "Right Attitude",

Federal Office of Road Safety, GPO Box 594 Canberra 2601.

This is the fifth video in the motorcyle safety series "Right Rider" and is aimed at inexperienced riders in our community.

#### "Road Safety For Infants"

is a training video produced for the New South Wales Traffic Education Centre, PO Box 999 Armidale 2350 by John Davis Productions

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