CORRECTED TRANSCRIPT

RURAL AND REGIONAL SERVICES AND DEVELOPMENT COMMITTEE

Inquiry into cause of fatality and injury on Victorian farms

Bendigo – 20 May 2004

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Witness

Mr F. A. Ford (sworn).
The CHAIR — Would you please give us your full name and address for the purpose of the transcript.

Mr FORD — My name is Frank Ford. My address is 53 Cameron Street, Cranbourne.

The CHAIR — If you could provide us with your presentation, we will ask some questions of you afterwards.

Mr FORD — Yes, I believe you have a submission from me, and I will address that fairly quickly, but I think there might be a few questions you want to ask. I am here as a private individual. I do not represent any organisation. I elected to address the committee as a result of my experience in the design, testing and manufacture of roll bars for both tractors and earthmoving equipment. The issue of roll bars on farm machinery I believe falls within the terms of reference of this committee. A roll bar does not prevent accidents. It offers protection should a rollover occur. If anything a roll bar can make a piece of farm machinery slightly less safe. It is something else to watch around trees and buildings. The information I can offer is not so much how to prevent the accidents but how to reduce injuries should a rollover occur. As I indicated in my submission, I have been in the business for 30 years and I am still designing, testing and manufacturing roll bars, although I know longer own the production company.

I do have some photographs of some of the products that I have designed over the years, which I will leave for the committee. In one particular that offers operating protection from falling bales could be of special interest. A lot of injuries can be prevented using this product, particularly on very large bales. Over the years I have driven many types of tractors, and I have even rolled one over. I am here today to demonstrate that a roll bar can save you. As far as ATVs are concerned, I have not ridden one and the information I have gathered is from others. If I ever decided to ride an ATV I would certainly take one of the excellent training courses that are offered and fit a roll bar as well.

I raised the fact that I was saved by a roll bar of my design to demonstrate that accidents can happen. I was not doing anything dangerous. Another manufacturer had installed equipment that fouled the tractor steering and without the roll bar I would be another statistic. I am happy to answer any questions and aspects of roll bar machinery.

Now for ATVs. An ATV is a wonderful and versatile piece of engineering, and I would hate to change that. If there is any overall problem with ATVs, it is that they are just too good. The engineers have developed a product which, as the name suggests, will go almost anywhere. Riders without the necessary skills can get into some very hazardous situations. The question is, can a roll bar be fitted? Is it technically possible to fit an effective roll bar to an ATV? I was asked to investigate this matter by Mark Norman, of WorkCover. He is a senior farm safety adviser. I believe it is possible to fit a roll bar to an ATV to perfect the rider in a side and rear rollover only. Overseas statistics indicate that these account for about 50 per cent of accidents. There are many other types of accidents that can occur, and to design a roll bar for these is far more difficult. Just a side and roll bar has not been all that easy. The actual product now, after much refinement, is surprisingly simple. Once I decided to concentrate on the side and rear roll question a standard arose. Chair, I do have a copy of a suggested standard for ATVs. It has been with Standards Australia since late last year and is an extension to 1636, which covers roll bars for farm tractors.

Because ATVs are so light and fast compared with a normal tractor, a number of factors had to be considered and they addressed in the standard. Standards Australia is non-committal. The document has been read, it has not been considered by the committee responsible for AS16. The most favourable comment I have received is there could be the basis for an interim standard that maybe available within a year. As of yesterday, I spoke to them and their statement was, ‘It is a reasonably mature document’, which is apparently quite favourable. Over this period of a year I intend to develop a range of makes and models, assuming in the interim standards will become available. As soon as it is available and my designs comply I can approach the individuals and organisations that have expressed an interest in a roll bar for their ATV. I am confident in this time that I will have one, probably two, different designs available. Because ATVs are used for such a wide range of purposes I do not foresee roll bars becoming compulsory even if they were generally available. It should be the owner or rider’s decision, based on the use of the machine.

I cannot give more detailed information but as Kirsten Murray will confirm I really wanted to appear before the committee much later this year but this is the last opportunity. It would be premature to release any real details until the standards committee has really passed this document. However, I did mention and name a type B roll bar in my submission. The type B roll bar mentioned in my submission I can confirm recently, that is a couple of days ago.
met that standard for an ATV mass of 330 kilograms, for sides and rear only. Even if a roll bar were available for an ATV how many farmers would purchase one? With all the publicity and subsidies still only about half of the tractors in Victoria are fitted with a roll bar. I do not know how you convince so many farmers that they should install a roll bar, if not of my design, then the design of someone else.

Thank you Mr Chairman and members of committee. Maybe you would like to ask me some questions, I think there are probably a few floating around.

Mr WALSH — Frank, with the roll bar that you have designed for the ATV, you have got a seatbelt harness to wear?

Mr FORD — No.

Mr WALSH — So you would just put it on and sit on the seat as per normal?

Mr FORD — Yes that is right. It is more akin to a tractor. There is a problem with fitting a restraint. It is all right if the ATV just tipped over backwards or sideways, but if there is a multiple roll you really do not want to be strapped to an ATV rolling down the hill.

Mr WALSH — So if it tips over or rolls once if you are not strapped in, isn’t it likely to be more dangerous with a cage around you that it is going to land on top of you.

Mr FORD — That can happen, it is fairly unlikely because it is the same principle as the tractor. Most tractor roll bars have the same thing and there is a zone of clearance which is set out for the operator if it does go sideways or over to the rear.

Mr WALSH — But for a full tractor roll over to work properly you are supposed to have your seat belt on as well, aren’t you?

Mr FORD — True, but most accidents that occur that they do not have seat belts on and most of them do not wear them. I think it really is up to the individual operator. I think if you are in steep country then you do not have the restraint, but if you are in flat country you have a restraint.

Mr INGRAM — Following on from that, there has been a fair bit of discussion with us that the design for roll bars probably poses more risk because you reduce the amount of manoeuvrability of the rider. How do you get around that with what you are designing?

Mr FORD — It is a simple roll bar: it just protects you but does not limit movement or anything like that. It does not restrain the operator in any way at all.

Mr INGRAM — What does it do to the centre of gravity of the vehicle?

Mr FORD — It will raise it ever so slightly, as set out in this suggested standard and you would take that into consideration when you take the operating weight of the machine. We are not talking a very heavy roll bar. It is in two parts. There is the mount system and the roll bar itself and each weigh about 6 kilograms so we are not talking about a huge amount of weight and you can adjust that in the overall operating weight of the machine.

Mr McQUILTEN — When can we see it?

Mr FORD — We should put the pressure on these people to do it because if I release it now and it is not suitable then we have got nowhere but I believe, and they have indicated, that it is a reasonable document. I have got two of each design built, one the type A did not work very well at all, and did not meet the requirements, but the type B have.

Mr INGRAM — So Frank it is really only designed for those low-speed, side roll overs or when one flips over backwards. It is not designed for a high speed when the machine rolls?

Mr FORD — No it is not designed for that, although I do think it may assist. It is hard to tell with a high speed because you can get multiple rolls and the machine can pick you up. But if the machine itself was away from
you then it would assist, certainly assist in rear and slow roll overs, which is apparently a little over half on American statistics.

Mr INGRAM — Did you indicate a cost?

Mr FORD — Yes, $500 approximately which I think is all right. I did build some very complicated ones to start with and they were worth between $1500 and $2500. I do not think you would sell them.

Mr INGRAM — You indicated that you have informed several ATV manufacturers. What has been their response?

Mr FORD — From one the response was not very good at all and the other has not responded. So that would be no response and a hostile, well not hostile — —

Mr INGRAM — A negative response?

Mr FORD — Yes, a negative response.

The CHAIR — Your particular roll bar would not have any harness restraints or anything along those lines would it?

Mr FORD — No. I believe that when it comes to multiple rolls, which is the same with farm tractors. Unfortunately he died last year, but Eric Young from WorkCover had many long discussions about whether we should supply seat belts with farm tractors, but in that multiple roll once you are tied to the machine and it is rolling down a hill — —

Mr INGRAM — With this type of equipment obviously you would recommend that, like the manufacturers do, riders wear a helmet?

Mr FORD — Absolutely, yes that is right, you would wear a helmet.

The CHAIR — So with your type B you tested personally some of the things like manoeuvrability and stability?

Mr FORD — No, only the roll bar as we would test in accordance with that issued to test a tractor roll bar. It has got to meet a certain number of requirements, and it does set out in that any adjustment in weight so that it does not affect the manoeuvrability of the machine.

Mr INGRAM — Have you looked at different models mounting practicality and so forth?

Mr FORD — At the moment I have only looked at two. I have got photographs of a great range of them, and I believe it can be adapted. I started out on — can I mention a brand? — a Polaris only because there was one very close to Cameron Street and I used that as the model, but more recently I have been able to purchase a Suzuki chassis, one used between I think 1992 and 1999 or something like that and I am building it on that. I have a chassis so that I can actually test it on the chassis.

The CHAIR — Thank you very much, Frank. You will get a copy of your evidence and if you are happy with it, sign it and you make correct any matters of grammar but not of fact.

Witness withdrew.