

# **OBA - Anatomy of a Trial: Fundamentals Revisited - June 15 &16, 2023**

## **EXAMINATION OF THE DEFENCE'S ACCIDENT RECONSTRUCTION ENGINEER**

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### **Introduction**

This document is designed to provide a basic outline to assist counsel in preparing for the direct examination of an accident reconstruction expert.

A list of more substantive papers and presentations on this topic is set out at the end of this document, some of which were relied upon herein.

### **General Principles Relating to Expert Witnesses**

Expert evidence is admissible where the subject matter requires specialized knowledge that is likely outside of an ordinary person's knowledge or experience and is necessary for the court to reach a correct judgment on an issue. As stated by the Ontario Court of Appeal in *Webb v. Waterloo (Region) Police Services Board* "expert opinion evidence is admissible only when the trier of fact is unable to form his or her own conclusions on the issues in the case without help".

In the field of accident reconstruction, experts are frequently necessary, and their evidence is regularly accepted by the courts to assist in determining such issues as the likely speed of a vehicle prior to a collision with another object and whether that same vehicle travelling at different speeds may have avoided the collision. Typically, these conclusions require scientific analysis relying heavily upon the laws of physics and computer software and is not something normally within the court's knowledge.

The basic rules dealing with experts are set out in Rule 4.1 (Duty of Expert) and Rule 53.03 (Expert Witnesses) in the *Rules of Civil Procedure*.

### **Duty Of Expert**

**4.1.01 (1) It is the duty of every expert engaged by or on behalf of a party to provide evidence in relation to a proceeding under these rules,**

- (a) to provide opinion evidence that is fair, objective and non-partisan;**
- (b) to provide opinion evidence that is related only to the matters that are within the expert's area of expertise; and**

**(c) to provide such additional assistance as the court may reasonably require to determine a matter and issue.**

### ***Duty Prevails***

**(2) The duty in subrule (1) prevails over any obligation owed by the expert to the party by whom or on whose behalf he or she is engaged.**

### **Expert Witnesses**

**53.03 (1) A party who intends to call an expert witness at trial shall, not less than 90 days before the pre-trial conference scheduled under subrule 50.02 (1) or (2), serve on every other party to the action and report, signed by the expert, containing the information listed in subrule (2.1).**

...

**(2.1) A report provided for the purposes of subrule (1) or (2) shall contain the following information:**

- 1. The expert's name, address and area of expertise.**
- 2. The expert's qualifications and employment and educational experiences in his or her area of expertise.**
- 3. The instructions provided to the expert in relation to the proceeding.**
- 4. The nature of the opinion being sought and each issue in the proceeding to which the opinion relates.**
- 5. The expert's opinion respecting each issue and, where there is a range of opinions given, a summary of the range and the reasons for the expert's own opinion within the range.**
- 6. The expert's reasons for his or her opinion, including,
  - i. a description of the factual assumptions on which the opinion is based,**
  - ii. a description of any research conducted by the expert that led him or her to form the opinion, and**
  - iii. a list of every document, if any, relied on by the expert in forming the opinion.****
- 7. An acknowledgement of the expert's duty (Form 53) signed by the expert.**

### **WHAT IS ACCIDENT RECONSTRUCTION?**

Accident reconstruction is the process of investigating, analysing and drawing conclusions based on the evidence surrounding a collision or accident.

Typically, experts in the field of accident reconstruction are forensic engineers with specialized education, training and experience. These experts commonly rely upon computer software specifically designed to assist in accident reconstruction that produces computer animations showing how collisions occurred and, when different variables are inputted, how those same collisions may have been avoided. The software utilized by forensic engineers has typically been previously admitted by the courts as reliable.

When retaining a forensic engineer, it is important to confirm that this expert will have the necessary credentials and experience to properly perform crash data analysis and to produce conclusions, diagrams and computer animations that can be used as demonstrative evidence at trial. While not necessary, it is helpful if your expert has previously been qualified by the Ontario courts to give opinion evidence on the topic for which you are adducing his or her opinions.

## **THE EXPERT REPORT**

In addition to complying with Rule 53.03 set out above, it is also important to provide your expert witness with all available and relevant information and documentation. Such evidence and documentation generally includes the following:

- Witness statements
- Examination for Discovery transcripts
- Police measurements and reports
- Physical damage relating to vehicles or other objects including photographs
- Weather information
- Lighting information
- Scene photographs
- Opposing expert reports

## **QUALIFYING YOUR EXPERT AT TRIAL**

Before an expert can testify, counsel must persuade the trial judge (and opposing counsel) that their expert witness possesses the unique knowledge and experience that permits them to give opinions on specific issues that will assist the court. This is known as qualifying the expert.

The process of qualifying an expert witness is performed by first leading testimony from the witness regarding the specific area where their opinions will be sought and then setting out their qualifications to give such opinions. This typically requires counsel to take the witness through their curriculum vitae, including their education, training, employment, academic papers published, presentations given and whether they have previously been accepted by the Ontario courts to give opinion evidence.

The internet has several precedents for asking the correct questions during this process, but it is more useful to obtain a transcript from a previous trial involving your witness or a similar witness if possible. Common questions during the qualifying of an expert include the following:

1. Please state your name.
2. Where are you employed?
3. What is your title there?
4. How long have you been so employed?

5. What are some of your duties at our place of employment?
6. Where did you attend university?
7. What degrees do you possess?
8. Have you given any lectures?
9. Are you a member of any professional associations?
10. Have you received any honors or awards?
11. Did you specialize in any particular field?
12. Do you have a c.v.? (admit c.v. into evidence)
13. What specific training do you have in the area of your specialty?
14. Do you have any publications or research?
15. What licenses or certifications do you possess?
16. How long have you had those licenses or certifications?
17. What type of scientific or technical studies have you conducted?
18. Has your work been peer-reviewed?
19. Did you prepare a report in this case?
20. Can you please explain the materials that you reviewed in creating your report?
21. After you completed your report did you arrive at a conclusion?
22. When coming to your conclusion, did you rely on specific scientific or technical principles or methods that are widely used in your field?
23. Your honor, at this time I tender this witness as an expert in the field of (state-specific field of expertise).

The final step of the process is to ask for leave from the court to have the expert qualified to provide opinion evidence on the relevant subject areas. It is important to remember that your expert will not be permitted to give opinion evidence outside the scope of the area of expertise for which they have been qualified.

## **PREPARING THE EXPERT FOR TRIAL**

Many experts who have been previously qualified to give evidence in court are familiar with the trial process and do not need extensive preparation. It is also often difficult to find time during or immediately before a trial to conduct extensive preparation.

However, it is important to meet with your expert beforehand and to review the following:

- Ensure the expert is familiar with his or her report and its conclusions.
- Ensure the expert is familiar with the content of the documents that he or she relied upon to form their opinion.
- Ensure that your expert can explain in plain language how computer software works and how your expert used it to develop conclusions and computer animations.
- Ensure that your expert has reviewed any opposing expert report.
- Have your expert present his or her testimony as if they are telling a story or teaching a class. In this regard, it is important to keep the evidence interesting and easily understandable.
- Review potential weaknesses and likely areas for cross-examination.

- Practise using demonstrative aids in advance.

## THE DIRECT EXAMINATION

In their article "*Ten Tips for Direct Examination and Cross-Examination*", American Journal of Trial Advocacy, Volume 39:339 authors Bates, Huntley and Starnes Jr. set out the following tips for a proper direct examination.

1. Prepare
2. Keep it simple
3. Use topic sentences or headers when beginning a new area
4. Personalize the witness and ensure they are likable and engaging
5. Direct the focus of the witness and do not let them wonder off topic
6. Help the witness show, not tell, the jury
7. Start strong, end strong and address your weaknesses
8. Highlight strong answers
9. Avoid attracting objections
10. Listen carefully to your expert's answers to ensure you have adduced the information and opinions necessary for your case

## CONCLUSION

Direct examination is a unique opportunity to present a story to the jury that proves an important aspect of your case. A good expert witness should immediately grab the attention of the judge or jury and provide evidence that is interesting, persuasive and easy to understand. The use of demonstrative aids and computer animations goes a long way to achieving these goals. Accordingly, it is important to retain an expert who can deliver his or her evidence in this fashion. Once the expert has been retained and has delivered their report, all that remains is proper preparation by counsel.

## BIBLIOGRAPHY

1. *Admission of Accident Reconstruction at Trial – Winning Strategies and Topics*. Osgoode Hall Law School Professional Development CLE, April 2009. David F. MacDonald and Michael L. Bennett.
2. *Ten Tips for Direct Examination and Cross Examination*, American Journal of Trial Advocacy, Volume 39:339, Walter W. Bates, R. Todd Huntley and William S. Starnes, Jr.
3. *Five Evidentiary Challenges in Motor Vehicle Accident Trials*, Law Society of Ontario, March 27, 2018 – Tab 16, Lara Fitzgerald-Husek and Charles Jung

4. *Preparing for Examination in Chief of the Expert Witness*, PIA Law Practical Strategies for Experts: Testifying Without Fear, L. Craig Brown, October 20, 2016
5. *Effective Use of Experts*, Litigating the Medical Malpractice Claim, Ontario Bar Association, Kryworuk, Peter & Kaczmarczyk, Tyler, April 29, 2013.