

ST. CATHARINES PUBLIC LIBRARY
3 3043 01428 6448

THE LAW SPEEDING AND SPEED DETECTION DEVICES

Third Edition



A. Shakoor Manraj, Q.C. & Paul D. Haines

THE LAW ON SPEEDING AND SPEED DETECTION DEVICES

Third Edition

A. Shakoor Manraj, Q.C.

and

Paul D. Haines, Ph.D.



LexisNexis®

The Law on Speeding and Speed Detection Devices

© LexisNexis Canada Inc. 2007

October 2007

All rights reserved. No part of this publication may be reproduced, stored in any material form (including photocopying or storing it in any medium by electronic means and whether or not transiently or incidentally to some other use of this publication) without the written permission of the copyright holder except in accordance with the provisions of the Copyright Act. Applications for the copyright holder's written permission to reproduce any part of this publication should be addressed to the publisher.

Warning: The doing of an unauthorized act in relation to a copyrighted work may result in both a civil claim for damages and criminal prosecution.

Members of the LexisNexis Group worldwide

Canada	LexisNexis Canada Inc, 123 Commerce Valley Dr. E. Suite 700, MARKHAM, Ontario
Argentina	Abeledo Perrot, Jurisprudencia Argentina and Depalma, BUENOS AIRES
Australia	Butterworths, a Division of Reed International Books Australia Pty Ltd, CHATSWOOD, New South Wales
Austria	ARD Betriebsdienst and Verlag Orac, VIENNA
Chile	Publitecsa and Conosur Ltda, SANTIAGO DE CHILE
Czech Republic	Orac, sro, PRAGUE
France	Éditions du Juris-Classeur SA, PARIS
Hong Kong	Butterworths Asia (Hong Kong), HONG KONG
Hungary	Hvg Orac, BUDAPEST
India	Butterworths India, NEW DELHI
Ireland	Butterworths (Ireland) Ltd, DUBLIN
Italy	Giuffré, MILAN
Malaysia	Malayan Law Journal Sdn Bhd, KUALA LUMPUR
New Zealand	Butterworths of New Zealand, WELLINGTON
Poland	Wydawnictwa Prawnicze PWN, WARSAW
Singapore	Butterworths Asia, SINGAPORE
South Africa	Butterworth Publishers (Pty) Ltd, DURBAN
Switzerland	Stämpfli Verlag AG, BERNE
United Kingdom	Butterworths Tolley, a Division of Reed Elsevier (UK), LONDON, WC2A
USA	LexisNexis, DAYTON, Ohio

Library and Archives Canada Cataloguing in Publication

Manraj, A. Shakoor

The law on speeding and speed detection devices / A. Shakoor
Manraj, Paul D. Haines. — 3rd ed.

Includes index.

Previous eds. published under title: The law on speeding and radar.
ISBN 978-0-433-45462-5

1. Speed limits—Ontario. 2. Radar in speed limit enforcement—
Ontario. 3. Traffic regulations—Ontario. I. Haines, Paul Douglas
II. Manraj, A. Shakoor. Law on speeding and radar. III. Title.

KEO535.M35 2007

345'.7130247

C2007-904192-2

KF2231.M35 2007

Printed and bound in Canada.

SHAKOOR dedicates this Book
in honour of his departed parents

JANE MAKBULAN MANRAJ

and

AZEEZ RAHAMAT MANRAJ

who, by their principles, knowledge, wisdom, devotion and
kindness, have enriched their son's life.

PAUL dedicates this Book to his wife, Patricia Haines, his
Daughter and Son-in-Law, Sheila and Mark Gordon and
their three children, Lucas, Nicholas and Kyle. He also
wishes to dedicate this Book to all those who
so valiantly administer Justice.

PREFACE TO THE THIRD EDITION

Many years have passed by since the Second Edition of this Book and, as can be expected, there have been tremendous development, drastic changes and advancements in speed detection. Today, we have to deal with the impact made by the current *Highway Traffic Act* and the *Provincial Offences Act* and the changes made necessary by the development of new speed detection devices.

When one hears the word "speeding", immediately radar comes to mind. The two are inseparable. However, laser has now appeared on the scene and has stolen some of the limelight from radar. These two speed detection devices are most frequently used by the police officers who have to enforce the law on speeding. For this Third Edition, we have (of necessity) added more pages to deal with the developing law and the many important decisions handed down by courts of first instance and appellate courts, regarding new speed detection devices and procedural problems arising from speeding cases.

It is very interesting to observe the frequency with which defendants have invoked the provisions in the *Canadian Charter of Rights and Freedoms* to support their claims that systemic delays have been a violation of their rights to a speedy trial and their protection under the Charter which preserved for them the right that the prosecution must prove its case against them, unless there is a shifting onus on the defendant, who must prove what he is establishing as his defence. This could be a difficult task to a person who is unaware of what is expected in the procedure of reverse onus. The development and approach to speed detection and the new types of speed monitoring systems have opened new vistas of defences in speeding cases.

We have been forced to make radical changes in the chapters dealing with the various new speed detection devices in the arrangement of the Book. Whereas the Second Edition was able to convey our concepts, views and the legal arguments, in ten chapters and four appendices, we have now had to increase the number of chapters to eighteen with nine appendices. The text has been thoroughly revised by rewriting what needed to be brought up-to-date by the many recent decisions in respect of the new speed detection devices.

Because human error, negligence, lack of knowledge and sloppy performance are the main causes of poor ticketing performance in the seven types of speed detection devices currently in use, this Third Edition is now more informative of the speed detection devices used. Every speed

monitoring device in use, regardless of type, can lead to successful submissions in court that the equipment was not tested in accordance with the manufacturers' specifications or that the instrument itself was not properly calibrated by the police officer or operator.

It is hoped that this new edition will benefit the operators by giving them a complete understanding of how speed monitoring devices operate and the errors that are often made in the course of their operation. Our aim is to make this Third Edition of the Book the most definitive source on speed detection by any of the seven types of speed monitoring systems presently used by police officers. One of the fundamental purposes of this Third Edition of the Book is to explain the physical laws affecting the operation of the various devices used. The speed detection device, like any other sensitive scientific instrument, needs to be handled with care and skill to ensure that it functions properly and with maximum efficiency.

There have been many instances of useful advice and suggestions coming from many quarters, including police officers and members of the Bar. But, perhaps, the most welcome help and support came from our respective wives, Bonita Manraj and Patricia Haines. The dedication and patience of Bonita Manraj who transformed the legal author's manuscript into a tidy transcript for submission to our publishers is greatly appreciated.

ACKNOWLEDGMENTS

1. The authors would like to thank the Michigan Office of Highway Safety Planning, which directed the Michigan Speed Measurement Task Force to develop a comprehensive set of recommendations that would be useful throughout the Michigan criminal justice system regarding speed measuring radar devices and their application to speed law enforcement. (Thanks for the useful guidelines and recommendations.)

2. We would like to acknowledge our use of *The Law of Traffic Offences*, 1st Edition (Scarborough, Ont.: Carswell, 1989) by Scott C. Hutchison and John G. Marko, Chapter 4, "Speeding" pp. 68-69, 70-73, 84-85. Reprinted by permission of Thomson Carswell, a division of Thomson Canada Limited.

3. Amending defective indictments, counts or informations as set out in s. 601.(1), (2) and (3) for publication were reproduced from *Martin's Annual Criminal Code* (Aurora, Ont.: Canada Law Book, 1992) with the permission of Canada Law Book, a Division of the Cartwright Group Ltd.

4. We wish to thank our publishers, LexisNexis Canada, for making available to the legal author all the recent relevant authorities and material that were so necessary and vital to the completion of this Third Edition of the Book. The availability of the authorities facilitated by LexisNexis Canada has resulted in the saving of many long hours that would have had to be expended in the law libraries while researching the said authorities.

5. The authors here wish to record their thanks to the countless law enforcement officials, both in the U.S. and Canada, for all the help and assistance rendered in order to get this Edition ready for publication. We have great respect for all those who so valiantly administer justice in the courts that adjudicate on speeding cases.

6. The co-author of the Book responsible for Chapters 6 – 17 wishes to thank Sudeep Paul and Jaber Sheikh, Professional Engineers with the Microsoft Corporation, for their help in diagram preparation and for facilitating him with the use of the mathematical instruments of their company's WORD system.

7. We also wish in particular to thank Mr. Les Langford of Law Enforcement Services for his gracious permission to allow us to quote freely from his book *Understanding Police Traffic RADAR & LIDAR* (Lehi, UT: Swift Publishing, 2006), especially where we cited in Chapter 16 of our Book.

8. We would also like to thank Canada Law Book, a Division of the Cartwright Group Ltd. and the Incorporated Council of Law Reporting, as we referred to cases from their series of reports.

9. Our efforts and labours on this Third Edition have been made lighter by the unfailing assistance of our respective wives, Bonita Manraj and Patricia Haines.

10. We would be remiss if we did not mention the patience and understanding of Ms Fran Cudlipp, Product Acquisitions Editor of LexisNexis Canada. Ms Cudlipp never hesitated to give advice whenever we asked for her guidance in matters concerning the preparation, scope and publication of this Edition. Ms Cudlipp evinced outstanding competence and succeeded in getting the best out of her authors.

11. We would also like to thank Ms Stephanie Wood, a dedicated, knowledgeable and keen Editor, who in her search for consistency and perfection was able to find in the second part of the Book, grammatical errors, as well as mistakes in an advanced theoretical physics paper. Without the help of both Ms Cudlipp and Ms Wood, this Book would not have reached the Printers in such a short period of time.

12. Finally, we wish to express our sincere thanks to our publishers, LexisNexis Canada, for their help, advice and co-operation in getting the Book ready for circulation.

A.S.M.

P.D.H.

TABLE OF CONTENTS

<i>About the Authors</i>	v
<i>Preface to the Third Edition</i>	vii
<i>Acknowledgments</i>	ix
<i>Table of Cases</i>	xvii
<i>Table of Statutes</i>	xxi
Comments by the Authors Concerning International Metric and Imperial/U.S. Customary Standards of Measurement	1
Chapter 1: The Statutory Provisions in Ontario Relating to Speeding	3
Introduction	3
What is Speeding?	4
<i>Highway Traffic Act</i> , R.S.O. 1990, c. H.8	5
128. Rate of speed	5
128.1 Status quo maintained	12
129. Conversion of rate of speed set out in by-laws	12
130. Careless driving	13
131. Territory without municipal organization	13
132. Unnecessary slow driving prohibited	13
Chapter 2: Nature of Speeding Offences	15
<i>Mens Rea</i> Not an Ingredient of Offence	15
Classes of Statutory Offences	15
Speeding an Absolute Liability Offence	16
Due Diligence and Necessity as Defences to Speeding Charges	18
Amount of Speed Over the Limit Immaterial	21
Vehicles Exempt from Speeding	22
Sufficiency of Details of the Charge	22
Chapter 3: How is Speeding Detected?	29
Demerit Point System	29
Visual Observation	32
Chain and Marker Measurement	32
Pacing	33
Speed Monitoring Systems	34
Radar	36
Failure to Show Radar Reading Not Fatal	38
Speed Recorded on Radar Device is <i>Prima Facie</i> Evidence of That Speed	41
Speeding Not an Included Offence of Careless Driving	47

Guidelines for the Adjudication of Radar Speeding Cases	55
Chapter 4: Signs and Posted Speed Limits and the Application of the Doctrine of Judicial Notice	59
Proof of Signs and By-laws	59
Conspicuously Posted Speed Limit Signs	64
Judicial Notice	65
Chapter 5: A Miscellany of Recent Interesting Speeding Cases – Analyses of and Commentaries on the Applications and Other Proceedings Brought Under the <i>Canadian Charter of Rights and Freedoms</i>	71
Chapter 6: Speed Violations and Speed Detection Devices	83
Overview of Current Speed Detection Devices	83
Three Common Faults of All Speed Detection Devices	84
The Problems of Effectively Dealing with These Faults	84
Chapter 7: The Operational Aspects of Speed Radar	87
Speed Violation and Radar	89
Speed Radar: How It Works and How It Is Used	89
Qualifications for Radar Use	91
Malfunctions and Inaccuracies	92
Chapter 8: Types of Police Radar Devices and Their Faults	95
Vehicle-Mounted Stationary Radar	95
Hand-Held Radar	96
Mounted Moving Radar	97
Chapter 9: Situations That Cause Faulty Readings from a Moving Radar	99
Reverse Cosine Error (Also Called Moving Cosine Error) Effects	99
Batching Error Effects	99
Shadowing Effects	100
Weather Effects	101
Ghost Effects	101
Misalignment of Radar Antenna	101
Effects of Concentrated Areas of Interference	102
Multiple Targeting Effects	103
Panning Effects	104
Refraction Effects	104
Pulsating Signal Amplitude Effects	104
Patrol Speed Effects	104
Summary	104

Chapter 10: Major Factors That Create Faulty Radar Use	107
Improper Calibration	107
Faulty Tuning Forks and Improper Usage	108
Effects of Terrain	110
Operational Range Control Effects	110
Target Envelope Effects	111
Electronic Wave Propagation	111
Police Tampering	113
Poor Location	113
Improper Set-up Procedure	113
Ineptitude of Radar Enforcement Police Officers	114
Chapter 11: The Do's and Don'ts of Effective Speed Radar Targeting	115
Operational Do's	116
Operational Don'ts	120
Critical Factors That Police Radar Operators Must Observe	121
Chapter 12: Concerning Police Laser Systems	125
History	125
The Nature of Police Laser	125
How LIDAR Pulses Are Generated	126
What LIDAR Pulses Are	127
How a Police Officer Assesses Speed	127
What the Police Officer's Functions Should Be During Targeting	130
Wavelength Specifics of Most Police LIDAR	130
What the Basic Layout of Laser Gun Components Look Like	131
Chapter 13: Operational Aspects of Lidar	133
Speed Control	133
Proper LIDAR Testing	134
Distance Test	134
Known Speed Testing	134
Sight Alignment	136
Chapter 14: Major Faults with Police Laser Guns Today	137
Cosine Error	137
Sweep Error	137
Reflection Error	138
Target Speed Error	138
Error by Interference	139
Motionless Moving Error	139
Error by Sliding Effects	140
Optical Alignment Error	140

Control Button Testing Errors	141
Creeping Error	141
Pre-Targeting Error	141
Last-Minute Targeting Error.....	141
Error from Duality Testing	142
Physical Impedance Error.....	142
Weather Error	142
Error of Not Maintaining Composure.....	143
Error in Perceived Judgment	143
Variance Error	143
Error of Lacking a Credible Time History.....	144
Errors of the Police Officer and "So-called" Prosecution Judge.....	145
Offset Error.....	145
Refraction Error.....	146
Possible Multiple Bounce and Shadowing Errors.....	146
A Good Possibility of No Laser Gun Faults by Police Officers in the Future	147
Chapter 15: The Do's and Don'ts of Effective Speed Laser Targeting	149
Operational Do's	149
Operational Don'ts	151
Chapter 16: Top Radar and Laser Court Questions	153
Common Types of Radar Bands.....	154
Questions Attorneys May Ask While Cross-Examining a Police Officer.....	159
Chapter 17: VASCAR and AUTOVELOX	163
VASCAR.....	163
Distance/Time (Clocking) Speed Measuring Systems	166
Operational Do's	166
Operational Don'ts	167
AUTOVELOX	167
Chapter 18: Conclusions	171
Motion for Non-Suit – "No Case Submission".....	171
Section 9 of Part I of the <i>Provincial Offences Act</i>	173
Section 11(d) of the <i>Canadian Charter of Rights and Freedoms</i>	174
Non-Compliance.....	175
Sufficiency of Information	176
Costs	179

Appendix A: The Physical Nature of Police Radar.....	183
Appendix B: Cosine Error Construction and Analysis	197
Appendix C: Antenna Deflection Angle.....	199
Appendix D: Beam Width Construction and Analysis	207
Appendix E: The Battle Against Destructive Interference of Police Laser Guns	209
Appendix F: The Future of Police Speed Laser	211
Index.....	227

TABLE OF CASES

F

Florida v. Aquilera, 48 Fla. Supp. 207 (Dade County Court, 1979)	55
--	----

G

Gibbins v. Skinner, [1951] 2 K.B. 379, (sub. nom. Boyd-Gibbins v. Skinner) [1951] 1 All E.R. 1049	60
Greenspan v. The Queen (1982), 17 M.V.R. 57 (Ont. Prov. Off. Ct.)	175

L

London (City) v. Polewsky, (2005), 202 C.C.C. (3d) 257 (Ont. C.A.)	17, 18
Lupo v. The Queen (29 November 1984), unreported (Prov. Off. App. Ct.)	175

N

Nicholas v. Penny, [1950] 2 K.B. 466, [1950] 2 All E.R. 89 (C.A.)	33, 34
---	--------

P

People v. Ferency, 133 Mich. App. 526 (1984)	55
--	----

R

R. v. Abbey, [2006] O.J. No. 4689 (Ont. S.C.J.)	76
R. v. Aldor, [2005] M.J. No. 47, 2005 MBQB 35 (Man. Q.B.)	80
R. v. Amyot, [1968] 2 O.R. 626, [1968] 4 C.C.C. 58 (Ont. Co. Ct.)	21, 34
R. v. Angelantoni (1975), 28 C.C.C. (2d) 179, 31 C.R.N.S. 342 (Ont. C.A.)	172
R. v. Askov, [1990] S.C.J. No. 106, [1990] 2 S.C.R. 1199, 59 C.C.C. (3d) 449 (S.C.C.)	73
R. v. Axler (20 August 1981), unreported (Prov. Off. App. Ct.)	36
R. v. Bednarz, [1961] O.J. No. 163, 130 C.C.C. 398, 35 C.R. 177 (Ont. C.A.)	66
R. v. Bigioni, [1986] O.J. No. 2753 (Ont. Prov. Off. Ct.)	51
R. v. Bigioni, [1987] O.J. No. 2481 (Ont. Prov. Ct. (Crim. Div.))	52
R. v. Bigioni, [1988] O.J. No. 2220 (Ont. C.A.)	52
R. v. Bland, [1974] O.J. No. 2139, 6 O.R. (2d) 54, 20 C.C.C. (2d) 332, 17 Crim. L.Q. 193 (Ont. C.A.)	40
R. v. Bourque (1985), 38 M.V.R. 110 (Alta. Q.B.)	43
R. v. Brewer, [1988] O.J. No. 2531 (Ont. Prov. Ct. (Crim. Div.))	53
R. v. Cahill (1962), 132 C.C.C. 252, 40 C.R. 166 (P.E.I.S.C.)	172
R. v. Carson, [1983] O.J. No. 2996, 41 O.R. (2d) 420, 147 D.L.R. (3d) 754, 4 C.C.C. (3d) 476, 4 C.R.R. 289, 34 C.R. (3d) 86, 20 M.V.R. 54 (Ont. C.A.)	173
R. v. Clark, [1973] O.J. No. 2154, 1 O.R. (2d) 210, 14 C.C.C. (2d) 73 (H.C.J.)	59
R. v. Clark, [1974] O.J. No. 1904, 3 O.R. (2d) 716, 18 C.C.C. (2d) 716 (Ont. C.A.)	60
R. v. Comeau, [1980] N.S.J. No. 40, 43 N.S.R. (2d) 530, 9 M.V.R. 308, 81 A.P.R. 530 (N.S.C.A.)	65
R. v. Côté, [1977] S.C.J. No. 37, [1978] 1 S.C.R. 8, [1977] 2 W.W.R. 174, 73 D.L.R. (3d) 752, 13 N.R. 271, 33 C.C.C. (2d) 353, 40 C.R.N.S. 308 (S.C.C.)	25
R. v. Cunningham, [1979] O.J. No. 679, 45 C.C.C. (2d) 544 (Ont. Div. Ct.)	64

R. v. Dantzer, [1985] O.J. No. 1036, 33 M.V.R. 7 (Ont. C.A.)	63
R. v. Eagles, [1976] O.J. No. 1019, 31 C.C.C. (2d) 417 (Ont. H.C.J.)	66
R. v. Fry (1977), 36 C.C.C. (2d) 396 (Sask. Prov. Ct.)	19
R. v. Fudell, [1956] O.W.N. 609, 116 C.C.C. 67, 24 C.R. 207 (Ont. H.C.J.)	66
R. v. Grainger, [1958] O.W.N. 311, 120 C.C.C. 321, 28 C.R. 84 (Ont. C.A.)	39
R. v. Harper, [1985] B.C.J. No. 2742, 35 M.V.R. 135, 45 C.R. (3d) 186, 17 C.R.R. 113 (B.C. Co. Ct.), aff'd [1986], B.C.J. No. 706, 44 M.V.R. 313, 53 C.R. (3d) 185 (B.C.C.A.)	63
R. v. Hauca (1966), 56 W.W.R. 683 (Alta. Dist. Ct.)	61
R. v. Haynen, [2002] O.J. No. 4943 (Ont. C.J.)	18
R. v. Hickey, [1976] O.J. No. 2149, 12 O.R. (2d) 578, 68 D.L.R. (3d) 88, 29 C.C.C. (2d) 23 (Ont. Div. Ct.)	16, 171
R. v. Hickey, [1976] O.J. No. 2193, 13 O.R. (2d) 228, 70 D.L.R. (3d) 689, 30 C.C.C. (2d) 416 (Ont. C.A.)	16
R. v. Higgins, [1981] N.S.J. No. 404, 46 N.S.R. (2d) 80, 10 M.V.R. 157, 60 C.C.C. (2d) 246 (N.S.C.A.)	16, 26
R. v. Hotchkiss, [1985] O.J. No. 2446 (Ont. Prov. Off. Ct.)	62
R. v. Jacobs, unreported (Alta. Prov. Ct.)	48
R. v. Jamieson, [1981] O.J. No. 1937, 64 C.C.C. (2d) 550 (Ont. C.A.), reasons of court adopted (1982), 66 C.C.C. (2d) 576n (Ont. C.A.)	24
R. v. Johnson (30 September 1983), unreported (Ont. C.A.)	177
R. v. Karpetz (18 March 1982), unreported (Prov. Off. App. Ct.)	38
R. v. Kartna, [1979] O.J. No. 143, 2 M.V.R. 259 (Ont. H.C.)	23
R. v. Kennedy (1972), 7 C.C.C. (2d) 42 (N.S. Co. Ct.)	19
R. v. Kennedy, [1973] O.J. No. 108, 11 C.C.C. (2d) 263, 21 C.R.N.S. 251 (Ont. C.A.)	172
R. v. King, [1977] O.J. No. 428, 35 C.C.C. (2d) 424 (Ont. Div. Ct.)	32
R. v. Kuiack, [2000] B.C.J. No. 2574 (B.C. Prov. Ct.)	73
R. v. Kytwayhat, [2004] S.J. No. 119, 2004 SKPC 33 (Sask. Prov. Ct.)	28
R. v. LaFrentz, [1970] 2 C.C.C. 381 (Sask. Q.B.)	41
R. v. Latimer, [2001] S.C.J. No. 1, [2001] 1 S.C.R. 3 (S.C.C.)	19
R. v. Lawless (1981), 11 M.V.R. 296 (P.E.I.S.C.)	54
R. v. Lehan (1982), 15 M.V.R. 160 (Alta. Q.B.)	46
R. v. Lende, [1999] O.J. No. 4880 (Ont. C.J.)	26
R. v. Martin, [2004] S.J. No. 332, 2004 SKQB 199 (Sask. Q.B.)	78
R. v. McKay (11 January 1985), unreported (Ont. Prov. Off. App. Ct.)	69
R. v. McLaren (1981), 10 M.V.R. 42 (Ont. C.A.)	60
R. v. Moniz, [1999] O.J. No. 312 (Ont. Prov. Off. Ct.)	71
R. v. Moodie, [1984] O.J. No. 1266, 13 C.C.C. (3d) 264 (Ont. H.C.J.)	179
R. v. Moodie, [1985] O.J. No. 128, 32 M.V.R. 208, 20 C.C.C. (3d) 189, 9 O.A.C. 281 (Ont. C.A.)	180
R. v. Morabito, [1949] S.C.J. No. 2, [1949] S.C.R. 172, [1949] 1 D.L.R. 609, 93 C.C.C. 251 (S.C.C.)	172
R. v. Morash (1972), 10 C.C.C. (2d) 39 (N.S. Co. Ct.)	40
R. v. Morris, [1994] B.C.J. No. 1253, 5 M.V.R. (3d) 110 (B.C.S.C.)	19
R. v. O'Reilly, [1979] A.J. No. 554, 10 Alta. L.R. (2d) 199, 3 M.V.R. 228 (Alta. Dist. Ct.)	43, 48, 117
R. v. Ontario 430023 Ltd., [1992] O.J. No. 1895 (Ont. C.J. (Prov. Div.))	73
R. v. Paul (1973), 12 C.C.C. (2d) 497 (N.S. Co. Ct.)	19
R. v. Perka, [1984] S.C.J. No. 40, [1984] 2 S.C.R. 232 (S.C.C.)	19
R. v. Phillips (1956), 1 Crim. L.Q. 246 (B.C. Co. Ct.)	44
R. v. Phillips (1972), 10 C.C.C. (2d) 39 (N.S. Co. Ct.)	174
R. v. Polla (21 February 1985), unreported (Prov. Off. App. Ct.)	178
R. v. Poos (13 August 1986), unreported (Prov. Off. App. Ct. Brantford, Ont.)	176

R. v. Potts, [1982] O.J. No. 3207, 36 O.R. (2d) 195, 134 D.L.R. (3d) 227, 66 C.C.C. (2d) 219, 26 C.R. (3d) 252, 14 M.V.R. 72 (Ont. C.A.), leave to appeal to S.C.C. denied (1982), 43 N.R. 270n (S.C.C.)	67, 68
R. v. Prasad, [2002] O.J. No. 267 (Ont. Prov. Off. Ct.)	74
R. v. Pronovost, [1994] B.C.J. No. 3123 (B.C. Prov. Ct.)	4
R. v. Purcell, [1975] N.S.J. No. 332, 11 N.S.R. (2d) 309, 24 C.C.C. (2d) 139 (N.S.C.A.)	67
R. v. Purchase (3 April 1981), unreported (Prov. Off. App. Ct.)	179
R. v. Redden, [1978] N.S.J. No. 55, 29 N.S.R. (2d) 266 (N.S.C.A.)	64
R. v. Redlick, [1978] O.J. No. 778, 41 C.C.C. (2d) 358, 2 C.R. (3d) 380 (Ont. H.C.J.)	68
R. v. Sault Ste. Marie (City), [1978] S.C.J. No. 59, [1978] 2 S.C.R. 1299, 85 D.L.R. (3d) 161, 21 N.R. 295, 40 C.C.C. (2d) 353, 7 C.E.L.R. 53, 3 C.R. (3d) 30 (S.C.C.)	15, 18, 25
R. v. Schweyer (25 June 1981), unreported (Prov. Off. App. Ct.)	175
R. v. Seymour (16 June 1982), unreported (Prov. Off. App. Ct., Huron County, Ont.)	49
R. v. Shniffer (19 October 1982), unreported (Prov. Off. Ct., Judicial District of Waterloo, Ont.)	50
R. v. Sim, [1987] O.J. No. 2482 (Ont. Prov. Off. Ct.)	52
R. v. Sim, [1987] O.J. No. 2483 (Ont. Prov. Off. Ct.)	53
R. v. Sim, [1988] O.J. No. 2250 (Ont. C.A.)	53
R. v. Snodgrass, [1980] N.B.J. No. 286, 32 N.B.R. (2d) 583, 78 A.P.R. 583 (N.B.Q.B.)	69
R. v. Snyder, [1974] S.J. No. 50, [1974] 3 W.W.R. 372, 16 C.C.C. (2d) 331 (Sask. Q.B.)	172
R. v. SRC Law Corp., [2003] B.C.J. No. 151, 2003 BCSC 64 (B.C.S.C.)	72
R. v. Stoyanov, [2000] B.C.J. No. 2575 (B.C. Prov. Ct.)	73
R. v. Sweeney, [1985] B.C.J. No. 2099, 33 M.V.R. 1 (B.C.C.A.)	63
R. v. Tait, [1965] 1 C.C.C. 16 (N.B. Co. Ct.)	34
R. v. Thompson, [1981] O.J. No. 257, 61 C.C.C. (2d) 214, 12 M.V.R. 196 (Ont. H.C.J.)	177
R. v. Tilden Car Rental Inc., [1991] A.J. 1151, 85 Alta. L.R. (2d) 345, 126 A.R. 201 (Alta. Prov. Ct.)	26
R. v. Tkachuk, [2006] A.J. No. 941, 2006 ABQB 570 (Alta. Q.B.)	27
R. v. Tollefson, [1998] B.C.J. No. 1437 (B.C. Prov. Ct.)	73
R. v. Tri-M Systems Inc., [2001] B.C.J. No. 712, 153 C.C.C. (3d) 551 (B.C.C.A.)	74, 75
R. v. Tsang, [1998] B.C.J. No. 1216 (B.C. Prov. Ct.)	79
R. v. Uvery, [1968] S.J. No. 115, 66 W.W.R. 27, 1 D.L.R. (3d) 29, [1969] 2 C.C.C. 305, 5 C.R.N.S. 43 (Sask. Q.B.)	66
R. v. Vining (1977), 1 W.C.B. 241 (N.S. Co. Ct.), per McLellan Co. Ct. J., aff'd [1977] N.S.J. No. 705, 43 A.P.R. 629, 28 N.S.R. (2d) 629 (N.S.C.A.)	62
R. v. Waschuk, [1970] S.J. No. 166, 1 C.C.C. (2d) 463 (Sask. Q.B.)	42
R. v. Weber, [2003] O.J. No. 1491, 64 O.R. (3d) 126 (Ont. C.J.)	77, 78
R. v. Werenka (1981), 11 M.V.R. 280 (Alta. Q.B.)	43
R. v. West, [1981] O.J. No. 3208, 35 O.R. (2d) 179, 64 C.C.C. (2d) 417, 13 M.V.R. 70 (Ont. H.C.J.)	177
R. v. Wilkinson, [2001] S.J. No. 241, 2001 SKQB 205 (Sask. Q.B.)	79
R. v. Windrem (May 1986), unreported (Prov. Off. Ct., Brampton, Ont.)	50
R. v. Wolfe (1979), 3 M.V.R. 143 (B.C. Co. Ct.)	44
R. v. Woodhouse, [1982] O.J. No. 3427, 38 O.R. (2d) 351 (Ont. Co. Ct.)	19

S

Smith v. The Queen, [1982] N.S.J. No. 48, 51 N.S.R. (2d) 539, 15 M.V.R. 161 (N.S.C.A.)	47
---	----

W

W.H. Valley Auto Wreckers Ltd. v. Township of Roxborough (20 September 1984), unreported (Prov. Ct. Crim. Div.)	175
--	-----

TABLE OF STATUTES

Canada

<i>Canadian Charter of Rights and Freedoms</i> , Part I of the <i>Constitution Act, 1982</i> , being Sched. B to the <i>Canada Act 1982</i> (U.K.), 1982, c. 11	
s. 7	17, 63, 75
s. 11(b)	71, 72, 74
s. 11(d)	63, 74, 75, 174
s. 24(1)	71, 72
<i>Criminal Code</i> , R.S.C. 1985, c. C-46	
General	19, 25
s. 19	69
<i>National Capital Act</i> , R.S.C. 1970, c. N-3	
s. 2	67
National Capital Commission Traffic and Property Regulations, C.R.C. 1978, c. 1044	
s. 5(1)	67
<i>Weights and Measures Act</i> , R.S.C. 1985, c. W-6	
General	178

Alberta

<i>Highway Traffic Act</i> , 1975, (Alta.) (2d Sess.), c. 56	
s. 152(1)(c)	43

British Columbia

<i>Constitutional Question Act</i> , R.S.B.C. 1996, c. 68	
General	73
<i>Interpretation Act</i> , R.S.B.C. 1996, c. 238	
s. 24	75
<i>Motor Vehicle Act</i> , R.S.B.C. 1979, c. 288	
s. 122(1)	63
s. 151	62
s. 151(1)	63
s. 151(3)	63, 65
s. 151(7)	62, 63
<i>Motor Vehicle Act</i> , R.S.B.C. 1996, c. 318	
s. 82	75
s. 83.1(2)	74
s. 83.2	75

Nova Scotia

<i>Motor Vehicle Act</i> , R.S.N.S. 1967, c. 191	
s. 90(2)	47
s. 96(1)	47, 65
s. 96(2)	40

<i>Motor Vehicle Act</i> , R.S.N.S. 1989, c. 293	
s. 106(1)	62

Ontario

<i>Highway Traffic Act</i> , R.S.O. 1970, c. 202	
s. 306	177
<i>Highway Traffic Act</i> , R.S.O. 1990, c. H.8	
General	29, 77
s. 31	29
s. 32	29
s. 56	29
s. 61	22
s. 79.1	36, 37
s. 128	17
s. 128(1)	4, 5, 22, 64
s. 128(2)	64
s. 128(6)	64
s. 128(14)	21, 22, 77
s. 128(15)	31
s. 128.1	12
s. 129	12
s. 130	13
s. 131	13
s. 132	13
s. 205.1(1)	35
s. 205.1(3)	35
s. 205.1(4)	35
s. 205.1(4)(a)	79
s. 205.1(4)(b)	79
s. 205.3 – 205.13	79
s. 205.3(1)	79
Demerit Point System, O. Reg. 339/94	
General	30
s. 1(5)	30
Signs, R.R.O. 1990, Reg. 615	
General	59
<i>Municipal Act</i> , R.S.O. 1980, c. 302	
s. 210	64
<i>Provincial Offences Act</i> , R.S.O. 1980, c. 400	
General	171
s. 3	177
s. 3(1)	175
ss. 3(1) – (4)	175
s. 3(4)	175
s. 9	176
s. 9(1)	173
s. 26	177
s. 61(2)	179
s. 112	179

<i>Provincial Offences Act</i> , R.S.O. 1990, c. P.33	
General	26, 77
s. 1(1)	77
s. 2(9)	79
s. 5.1	77
s. 5.2(1)	77
s. 6	77
s. 7(1)	77
s. 8(1)	77
s. 9	77
s. 9.1	77
s. 12(1)	77
s. 25(1)	23
s. 25(2)	23
s. 25(7)	23
s. 34	23, 28
s. 34(1) – (6)	23
s. 35	23
s. 36	23
s. 36(2)	23
s. 45	77
s. 46	77
s. 60	77
s. 60.1	77
s. 61	77
s. 81	69
s. 90(1)(a)	23
s. 90(1)(b)	23
s. 124(1)	23
s. 124(2)	24
Costs, R.R.O. 1990, Reg. 945	
s. 1	77
Proceedings Commenced by Certificate of Offence, R.R.O. 1990, Reg. 950	
General	77
Victim Fine Surcharges, O. Reg. 161/00	
s. 1	77
<i>Time Act</i> , R.S.O. 1980, c. 501	
s. 1	64

Saskatchewan

<i>Highway Traffic Act</i> , S.S. 1986, c. H-3.1	
General	26
<i>Vehicles Act</i> , R.S.S. 1965, c. 377	
s. 133(3)	42
s. 133(10)	41

United Kingdom

<i>Road Traffic Act</i> , 1934, 24 & 25 Geo. 5, c. 50	
s. 1(7)	60

Chapter 2

NATURE OF SPEEDING OFFENCES

MENS REA NOT AN INGREDIENT OF OFFENCE

One does not have to have an intention to speed. The Crown does not have to prove *mens rea*. In other words a "guilty mind" is not an ingredient of the offence of exceeding the speed limit. Speeding, put simply, is speeding. Either one is speeding or one is not. If the speed limit is 60 k.p.h. and one is travelling at 65 k.p.h., then that is speeding. Although there is no legal authority on the point, nevertheless, it is a matter of practice that police officers do not charge motorists for the offence of speeding unless they are doing about 10 k.p.h. in excess of the limit. There is no hard and fast rule. Speeding charges for 7 k.p.h. in excess have appeared before the courts. One is led to conclude that much of it is in the hands of the police officer concerned. He may exercise his discretion. The first thing that must be done is to determine into which of the three classes of statutory offences speeding falls.

CLASSES OF STATUTORY OFFENCES

Three classes of statutory offences have been recognized. Mr. Justice Dickson (later Chief Justice of Canada) in the celebrated case of *R. v. Sault Ste. Marie (City)* said:

I conclude, for the reasons which I have sought to express, that there are compelling grounds for the recognition of three categories of offences rather than the traditional two:

1. Offences in which *mens rea*, consisting of some positive state of mind such as intent, knowledge, or recklessness, must be proved by the prosecution either as an inference from the nature of the act committed, or by additional evidence.
2. Offences in which there is no necessity for the prosecution to prove the existence of *mens rea*; the doing of the prohibited act *prima facie* imports the offence leaving it open to the accused to avoid liability by proving that he took all reasonable care. This involves consideration of what a reasonable man would have done in the circumstances. The defence will be available if the accused reasonably believed in a mistaken set of facts

which, if true, would render the act or omission innocent, or if he took all reasonable steps to avoid the particular event. These offences may properly be called offences of strict liability. Mr. Justice Estey so referred to them in *Hickey's* case.

3. Offences of absolute liability where it is not open to the accused to exculpate himself by showing that he was free of fault.¹

The Nova Scotia Court of Appeal examined the nature and characteristics of the three categories of statutory offences and discussed the tests that are applicable in determining into which category each offence falls.²

SPEEDING AN ABSOLUTE LIABILITY OFFENCE

Into which of these three categories does the offence of speeding fall? Speeding falls into the third category. It is the category where the Legislature has made it clear that guilt will follow proof merely of the proscribed act. Reference must be made to the case of *R. v. Hickey*.³ In this case, the defendant testified that he honestly believed, because of the speedometer reading, that he was not exceeding the speed limit. A test conducted by a police officer at the scene showed the speedometer was not working properly. The justice of the peace convicted. The defendant appealed and the majority of the Ontario Divisional Court set aside the conviction.⁴ The Crown appealed this ruling and the Ontario Court of Appeal restored the conviction and, in doing so, identified the offence of speeding as one of *absolute liability*, stating specifically that it is *not* a strict liability offence.⁵ Mr. Justice Estey's identification of speeding in the Divisional Court decision as a strict liability offence was rejected.

The Ontario Court of Appeal was a strong court comprised of Jessup, Martin and Wilson J.J.A. The judgment of the court was delivered orally by Jessup J.A. This is what His Lordship stated:

¹ [1978] S.C.J. No. 59, [1978] 2 S.C.R. 1299 at 1325-26, 85 D.L.R. (3d) 161, 21 N.R. 295, 40 C.C.C. (2d) 353, 7 C.E.L.R. 53, 3 C.R. (3d) 30 (S.C.C.).
² *R. v. Higgins*, [1981] N.S.J. No. 404, 46 N.S.R. (2d) 80, 10 M.V.R. 157, 60 C.C.C. (2d) 246 (N.S.C.A.).
³ [1976] O.J. No. 2149, 12 O.R. (2d) 578, 68 D.L.R. (3d) 88, 29 C.C.C. (2d) 23 (Ont. Div. Ct.).
⁴ *Id.*
⁵ *R. v. Hickey*, [1976] O.J. No. 2193, 13 O.R. (2d) 228, 70 D.L.R. (3d) 689, 30 C.C.C. (2d) 416 (Ont. C.A.) (subsequent references are to D.L.R.).

Assuming, without deciding, that statutory offences can be classified into one of three groups as mentioned by Estey, C.J.H.C., in his judgment given in the Divisional Court, we are of the opinion that the offence here in question, of speeding, under the *Highway Traffic Act*, R.S.O. 1970, c. 202, is a statutory offence within the third group mentioned by Estey, C.J.H.C.; that is one of absolute liability in the sense that reasonable mistake of fact is not a defence.

Accordingly, on any view of the law, we think that the conviction was properly entered by the learned Judge of the first instance. In the result the appeal is allowed, the judgment of the Divisional Court is set aside and the conviction registered is restored.⁶

It is respectfully submitted that the Ontario Court of Appeal had a unique opportunity of examining fully the reasons for assigning speeding to the category of absolute liability offences. All that we have is the undressed reasoning that since reasonable mistake of fact is not a defence for speeding, then that infraction must be consigned to the category of absolute liability offences. We have to live with that decision. There are many problems that arise from that decision and the debate continues whether speeding should have been more appropriately identified as a strict liability offence rather than as an absolute liability offence.

In the case of *London (City) v. Polewsky*,⁷ the Ontario Court of Appeal had before it the appeal by Victor Polewsky, with leave, from a decision of Pockele J. of the Ontario Court of Justice dismissing his appeal from convictions on three charges of speeding contrary to s. 128 of the *Highway Traffic Act*,⁸ (the "HTA"). The main issue in this appeal was whether speeding is an offence of absolute or strict liability in Ontario. The appellant argued that speeding ought to be classified as a strict liability offence because of: (1) the guidelines for categorizing offences as set out by the Supreme Court of Canada in *R. v. Sault Ste. Marie (City)*; and (2) the application of s. 7 of the *Canadian Charter of Rights and Freedoms*⁹ which engages the appellant's liberty interest. The Court of Appeal referred to the Supreme Court of Canada's decision in *R. v. Sault Ste. Marie* — that the offence in issue is one of absolute liability — and stated: "We have not been given any good policy reason to revisit *Hickey* on the grounds articulated in *Sault Ste. Marie*. Speed is a factor in many collisions. The overall regulatory pattern adopted by the legislature, the subject matter of the legislation, and the language used suggested that

⁶ *Id.*, at 689-90.

⁷ (2005), 202 C.C.C. (3d) 257 (Ont. C.A.).

⁸ R.S.O. 1990, c. H.8.

⁹ Part I of the *Constitution Act*, 1982, being Sched. B to the *Canada Act* 1982 (U.K.), 1982, c. 11.

speeding should continue to be interpreted as an offence of absolute liability."¹⁰ The appeal was dismissed.

See also *R. v. Haynen*.¹¹ Haynen was charged with speeding. A police officer clocked his vehicle exceeding the speed limit and followed him for several miles. The accused set up the defence of necessity. He was convicted. Under the HTA, speeding is an absolute liability offence. The defence of necessity failed.

It is to be noted that under the second class of offences, referred to as offences of strict liability, the accused could avoid liability by proving that he took all reasonable care.

In *R. v. Sault Ste. Marie (City)*, Dickson J. (as he then was) went on to clarify and explain his findings regarding the three classes of statutory offences:

Offences which are criminal in the true sense fall in the first category. Public welfare offences would, *prima facie*, be in the second category. They are not subject to the presumption of full *mens rea*. An offence of this type would fall in the first category only if such words as "willfully", "with intent", "knowingly", or "intentionally" are contained in the statutory provision creating the offence. On the other hand, the principle that punishment should in general not be inflicted on those without fault applies. Offences of absolute liability would be those in respect of which the Legislature has made it clear that guilt would follow proof merely of the proscribed act. The over-all regulatory pattern adopted by the Legislature, the subject-matter of the legislation, the importance of the penalty, and the precision of the language used will be primary considerations in determining whether the offence falls into the third category.¹²

DUE DILIGENCE AND NECESSITY AS DEFENCES TO SPEEDING CHARGES

This second category of offences is usually referred to as the "due diligence" category, carrying with it the burden of "reverse onus". To avoid liability the accused must prove that he took all reasonable care, exercised due diligence and did what a reasonable man would have done in the circumstances. After my years of experience in the Provincial Offences Court of Appeal presided over by Judge R.B. Dnieper, it is

respectfully submitted that the reverse onus is a heavy onus cast upon the accused person. Firstly, the defence of necessity is well established in Canadian law: see *R. v. Latimer*¹³ and *R. v. Perka*.¹⁴ Secondly, the defence of necessity is available in cases involving driving offences under the *Criminal Code*:¹⁵ see *R. v. Woodhouse*¹⁶ and *R. v. Fry*.¹⁷ Thirdly, the defence of necessity is also available in cases involving offences under provincial highway traffic legislation, including the offence of speeding: see *R. v. Morris*¹⁸ and *R. v. Kennedy*.¹⁹

Where the defence of necessity is open to the defendant, the burden of proof would lay upon him to satisfy the court that he drove his car in excess of the speed limit as it was the only means open to him. The evidence adduced at the trial suggests otherwise and clearly does not support such finding.

These principles are clearly reviewed by O'Hearn Co. Ct. J. in *R. v. Kennedy*. Here, the Crown appealed against the respondent's acquittal on a charge of speeding (going 64 m.p.h. in a 40 m.p.h. zone). The appeal was dismissed because there was a reasonable doubt as to whether the speed limit sign was "erected and displayed" at the relevant time. However, the court went on to consider the defence of necessity that had been raised. The respondent had testified that he knew that the speed limit was 40 m.p.h., but that he could not safely slow down because he was being followed too closely by another motor vehicle.

O'Hearn Co. Ct. J. held that on a speeding offence the accused might be justified in having exceeded the speed limit if that course were necessary to the preservation of persons or property. The burden of proof on an accused person raising this common law excuse rests on that accused person. This defence was not available to the accused who had sufficient time to slow down or change lanes but had not done so.

The defence of necessity — which is a difficult defence to raise — was considered again and Anderson Co. Ct. J. dealt with an unusual fact situation in the case of *R. v. Paul*.²⁰ To understand the exceptional circumstances that the defence of necessity might be available, it is

¹⁰ *London (City) v. Polewsky* (2005), 202 C.C.C. (3d) 257 at para. 3 (Ont. C.A.).

¹¹ [2002] O.J. No. 4943 (Ont. C.J.).

¹² [1978] S.C.J. No. 59, [1978] 2 S.C.R. 1299 at 1326, 85 D.L.R. (3d) 161, 21 N.R. 295, 40 C.C.C. (2d) 353, 7 C.E.L.R. 53, 3 C.R. (3d) 30 (S.C.C.).

¹³ [2001] S.C.J. No. 1, [2001] 1 S.C.R. 3 (S.C.C.).

¹⁴ [1984] S.C.J. No. 40, [1984] 2 S.C.R. 232 (S.C.C.).

¹⁵ R.S.C. 1985, c. C-46.

¹⁶ [1982] O.J. No. 3427, 38 O.R. (2d) 351 (Ont. Co. Ct.).

¹⁷ (1977), 36 C.C.C. (2d) 396 (Sask. Prov. Ct.).

¹⁸ [1994] B.C.J. No. 1253, 5 M.V.R. (3d) 110 (B.C.S.C.).

¹⁹ (1972), 7 C.C.C. (2d) 42 (N.S. Co. Ct.).

²⁰ (1973), 12 C.C.C. (2d) 497 (N.S. Co. Ct.).

necessary to state the facts of this unusual case upon which Anderson Co. Ct. J. had to adjudicate:

The respondent (defendant) in this matter, Lawrence Frederick Paul, stated his occupation to be Director of Programmes for Alcoholism and Drug Abuse for all Indian people in Nova Scotia, employed by the union of Nova Scotia Indians.

On the morning of August 9, 1972, Mr. Paul took three patients in to the Nova Scotia Hospital Alcoholism Clinic. While there, he attended a group therapy session to speak to the Indian people in MicMac. Mr. Paul related that while there he received a telephone call from Truro which made it necessary for him to return immediately to Truro to meet with two young people with whom he had made an arrangement. This arrangement, according to Mr. Paul, was that these two young people, boys, were to buy marijuana from a person who was selling it on the reserves, hand the marijuana over to Mr. Paul, who, in turn, was to hand it over to a member of the R.C.M.P. Drug Squad in Sydney. Mr. Paul indicated that this was the only way that he could get the Band Council of the reserves to exclude persons he knew as traffickers from the reservations. He was of the opinion that the R.C.M.P. could not, or would not, take any action against the drug offenders on the different reserves. Mr. Paul did not leave the hospital immediately, but had to make arrangements for someone to take over the group therapy session, and then left Dartmouth via MicMac Rotary, Nova Scotia Highway 118, to the No. 102, towards Truro. The accused said that he was exceeding the posted speed limit, however, felt that the boys were afraid and would not stay in the motel. Earlier, Mr. Paul had made reservations with the manager of the motel in Truro to give the boys a room when and if they needed it. The boys were in this motel waiting for Mr. Paul.²¹

It was at this point, en route, that Mr. Paul was found to be speeding. Anderson Co. Ct. J. allowed the Crown appeal, holding that it is under the most exceptional circumstances that the defence of necessity might be available and the circumstances in this case were not of that type.

The Crown need only prove the *actus reus* (the speeding) since it is an absolute liability offence. But there are some difficult situations which give rise to grave concern. What is the position of a person whose aged parent was suddenly seized with a heart attack, and who was speeding in order to get the seriously sick patient to the nearest hospital? Can the driver of the speeding vehicle raise the defence of necessity? In such circumstances is the driver guilty of speeding? If the purpose of speeding and its necessity have been established by reliable evidence, then it is submitted that that is sufficient grounds for designating speeding as a

²¹ *Id.*, at 497-98.

strict liability offence. There are defences to the charge of speeding based on improper or faulty radar detection and other means of detection. These defences are discussed in a later chapter.

AMOUNT OF SPEED OVER THE LIMIT IMMATERIAL

It is perhaps convenient to deal with another aspect of speeding before moving on. Section 128(14) of the HTA is the penalty section. Here we see that a graduated scale of fines is to be imposed depending upon the speed in excess of the limit. This raises a problem. As mentioned earlier, the act of speeding itself is the offence and this being so, the amount of speed over the limit is immaterial. In the case of *R. v. Amyot*, this was made very clear and Clare Co. Ct. J., in a commendable display of judicial clarity, concluded:

We come now to the point as to whether the accused can be convicted of driving at a specific rate of speed. The only offence, as set out in the *Highway Traffic Act*, R.S.O. 1960, c. 172, is operating a motor vehicle at a greater speed than the existing speed limit. There is no offence of operating a motor vehicle at a speed greater than 10 miles above the speed limit, or 20 miles above the speed limit, and this apparently has come by implication from the point system for traffic offences set up in the Province of Ontario. In my opinion, I can acquit or convict of the offence of exceeding the speed limit. I accept the evidence of the police officer, but would not convict on an offence of driving a motor vehicle at 78 m.p.h. on the evidence that was before me. I am of the opinion that I am not required to make any such decision. I am satisfied on the evidence presented before me that the accused respondent was driving at a rate of speed in excess of the speed limit, and if I had jurisdiction would have so found.²²

The clear jurisprudential reasoning reveals that the rate of speed over the limit is not material to the offence of speeding but becomes very relevant in as far as the penalty concerned. How can these two concepts be reconciled? It is respectfully submitted that the only way that this rather apparent anomaly can be explained is by examining the functions performed by the judicial officer (a judge or justice of the Peace) who enters a conviction for speeding or the evidence of the police officer. In the first place, the judicial officer makes a finding of law. He finds that the evidence, accepted by him, discloses that the driver was going above the speed limit. He therefore enters a conviction for the offence of speeding. The court then moves on to make a finding of fact. The court again looks

²² [1968] 2 O.R. 626, [1968] 4 C.C.C. 58 at 66-67 (Ont. Co. Ct.).

at the evidence and, if accepted, makes a finding of fact based on the credibility of the police officer or other witness or witnesses, that the driver was going, for example, 30 k.p.h. in excess.

This is how the mechanism works in practice. The presiding judge or justice of the peace now moves on to the penalty. He uses his finding of fact to assess the fine that the defendant must pay. If this were not the mechanism that was used to arrive at his decision, then the presiding judge or justice of the peace would never be able to fine a speeding motorist. All that he would be able to do is enter a conviction for speeding *simpliciter*, then apply the law as set out in *R. v. Amyot* and conclude that the amount of the excess does not concern him and therefore cannot proceed to penalty. It is because of the finding of fact made by the court with respect to the amount of the excess that he is able to say (as in the example given, doing 90 k.p.h. in a 60 k.p.h. zone) that the fine in accordance with s. 128(14) of the HTA (as amended) would now amount to 30 m.p.h. $\times$ \$7.00 = \$210.00. This is the procedure that is necessary to follow when arriving at a decision in a speeding charge that involves the marriage of s. 128(14) and the rationale stated in *R. v. Amyot*.

VEHICLES EXEMPT FROM SPEEDING

The speed limits prescribed by a regulation or by-law passed under s. 128(14) or set under s. 128(1) of the HTA do not apply to:

- (a) a fire department vehicle as defined in s. 61 of the HTA while proceeding to a fire or responding to, but not returning from, a fire alarm or other emergency call;
- (b) a motor vehicle while used by a person in the lawful performance of his or her duties as a police officer; or
- (c) an ambulance as defined in s. 61 of the HTA while responding to an emergency call or being used to transport a patient or injured person in an emergency situation.

SUFFICIENCY OF DETAILS OF THE CHARGE

Insofar as the charge is concerned, it is sufficient if it states that the defendant on a given date, time and place did commit the offence of speeding contrary to the relevant section of the HTA. Even if the relevant section is omitted in the information, summons or offence notice but reads: "Speeding contrary to the HTA", then there is sufficient information to entitle the defendant to plead and for the trial to proceed. See *R. v.*

Kartna,²³ where the appellant Aarne Kartna appealed his conviction for speeding. The traffic ticket (this was before the new procedure as set out in the *Provincial Offences Act*²⁴) stated that he committed the offence of "speeding contrary to HTA" and that no reference was made in either the information or the summons to the *Highway Traffic Act*.²⁵ On appeal by way of stated case, he argued that the summons was insufficient. The appeal was dismissed. The summons and the information were held to be valid.

In the course of delivering the judgment of the court, Hughes J. pointed out:

In this case, the summons was not left blank but has the initials H.T.A. This use of initials makes the form of summons meaningless and unexplainable apart from common usage. Indeed, the argument made is that it could refer to a statute completely different from The *Highway Traffic Act*. In my view, the use of the initials H.T.A. is *surplusage* because the word speeding is sufficient to refer a person who receives the ticket to the section and the statute. Additionally, the summons was read to him in Court by the Justice of the Peace and the full name of the statute was read rather than the initials.²⁶

All these matters regarding sufficiency of detail in an information are now covered by the *Provincial Offences Act*: see s. 25(1), where each offence charged in an information shall be set out in a separate count; s. 25(2) (allegation of offence); s. 25(7) (sufficiency); s. 34(1) – (6) (amendment of information or certificate); s. 35 (particulars); s. 36(2) (grounds for quashing an information or certificate unless an amendment or particulars under s. 34, 35 or 36 would fail to satisfy the ends of justice); s. 90(1)(a) and (b) (irregularities in form); and s. 90(2) (adjournment to meet irregularities). Further, s. 124(1) of the *Provincial Offences Act* states:

Judgment shall not be given in favour of an appellant based on any alleged defect in the substance or form of an information, certificate or process or any variance between the information, certificate or process and the evidence adduced at trial unless it is shown that objection was taken at the trial and that, in the case of a variance, an adjournment of the trial was refused notwithstanding that the variance had misled the appellant.

²³ [1979] O.J. No. 143, 2 M.V.R. 259 at 265 (Ont. H.C.).

²⁴ R.S.O. 1990, c. P.33.

²⁵ *R. v. Kartna*, [1979] O.J. No. 143, 2 M.V.R. 259 at 260 (Ont. H.C.) (subsequent references are to M.V.R.).

²⁶ *Id.*, at 265 (emphasis added).

Then, s. 124(2) of the *Provincial Offences Act* states:

Where an appeal is based on a defect in a conviction or an order, judgment shall not be given in favour of the appellant, but the court shall make an order curing the defect.

Enough has been said to show that the court will not entertain spurious objections. The tests are:

1. Does the defendant know the offence with which he is charged?
2. Is there sufficient information or detail to enable him to plead?
3. If there is lack of any detail, can such be applied at trial or before plea is taken?

No longer can submissions be made successfully to the court to have the information, summons or certificate declared invalid merely on the grounds that it states incorrectly: the name of the defendant; the time (or if such is omitted); the date of birth; the motor vehicle registration number; the name, make or model of the vehicle; or, the name of the street or, for example, if "southbound" appears when in fact it should be "northbound". These are just a few of the objections that have been raised from time to time in the Provincial Offences Appeal Court. The list is far from complete and the examples given above only serve to indicate how the law has developed in recent years and the practical approach the courts have adopted in order to dispense justice in a fair and equitable manner. The application for this new approach to dispense justice in a less punctilious manner can be seen in the Ontario Court of Appeal decision in *R. v. Jamieson*.²⁷ In this case, the applicant, Constance Jamieson, was convicted of speeding — 82 k.p.h. in a 50 k.p.h. zone. She mailed her request for a rehearing on March 7, 1981, but it had not been received by the court office by March 19 when she was convicted *in absentia*. She applied for a rehearing, which was granted for June 25 at 1:30 p.m. She contended in the Court of Appeal that she arrived at 2:10 p.m. on the trial date because her car had a flat tire en route. When she arrived, the courtroom was closed and her conviction registered. The *Provincial Offences Act* has preserved the principles of natural justice, the right to be heard, the right to an impartial hearing and the *audi alteram partem* rule ("Let the other side be heard" or, put another way, "Every man has a right to be heard"). It was on these facts that Constance Jamieson applied for leave to appeal to the Ontario Court of Appeal. Leave was granted. In the course of the judgment, MacKinnon A.C.J.O. stated:

²⁷ [1981] O.J. No. 1937, 64 C.C.C. (2d) 550 at 552 (Ont. C.A.), reasons of court adopted (1982), 66 C.C.C. (2d) 576n (Ont. C.A.).

In my view, the proceedings before the Provincial Court Judge may have been unsatisfactory. The *Provincial Offences Act* is not intended as a trap for the unskilled or unwary but rather, as already stated, as an inexpensive and efficient way of dealing with, for the most part, minor offences. The way in which the proceedings were conducted by the Provincial Court Judge may have resulted in a denial of natural justice.²⁸

It is pertinent that this portion of this discussion should conclude with the very pointed and penetrating remarks made by two learned judges in two leading cases.

The first important decision giving a clear indication of this new approach was handed down by the Supreme Court of Canada in *R. v. Côté*.²⁹ There, de Grandpré J., in discussing the sufficiency in an information, said that "... the golden rule is for the accused to be reasonably informed of the transaction alleged against him, thus giving him the possibility of a full defence and a fair trial".³⁰

The second important decision to highlight this movement towards a less formal and technical approach to particulars and details contained in an information, is the subsequent decision from the Supreme Court of Canada in *R. v. Sault Ste. Marie (City)*.³¹ There, Dickson J. (as he then was) stated:

The slightest defect made an indictment a nullity. That age has passed. Parliament has made it abundantly clear in those sections of the *Criminal Code* having to do with the form of indictments and informations that the punctilio of an earlier age is no longer to bind us. We must look for substance and not petty formalities. . . . In my opinion, the primary test should be a practical one, based on the only valid justification for the rule against duplicity: does the accused know the case he has to meet, or is he prejudiced in the preparation of his defence by ambiguity in the charge?³²

One must compare and contrast the provisions regarding amendments to defective indictments as set out in *Martin's Annual Criminal Code*³³ and the provisions vested in the court under s. 34 of the Ontario *Provincial Offences Act*. The provisions of s. 34 which relate to amendments in summary proceedings are much more extensive than those under the *Criminal Code* and vest in the court a broader discretion and power to

²⁸ *Id.*, at 552.

²⁹ [1977] S.C.J. No. 37, [1978] 1 S.C.R. 8, [1977] 2 W.W.R. 174, 73 D.L.R. (3d) 752, 13 N.R. 271, 33 C.C.C. (2d) 353, 40 C.R.N.S. 308 (S.C.C.) (subsequent references are to D.L.R.).

³⁰ *Id.*, at 757.

³¹ [1978] S.C.J. No. 59, [1978] 2 S.C.R. 1299, 85 D.L.R. (3d) 161, 21 N.R. 295, 40 C.C.C. (2d) 353, 7 C.E.L.R. 53, 3 C.R. (3d) 30 (S.C.C.) (subsequent references are to D.L.R.).

³² *Id.*, at 168.

³³ (Aurora, Ont.: Canada Law Book, 1992).

grant amendments. Virtually any defect, substantial or procedural, can be amended under the *Provincial Offences Act*.

As stated in this chapter, speeding is an absolute liability offence in the Province of Ontario (see *R. v. Sault Ste. Marie (City)*, ante). It is interesting to see how the "due diligence" test applies. In *R. v. Higgins*,³⁴ the Nova Scotia Court of Appeal considered the nature of certain violations and applied the test laid down in *R. v. Sault Ste. Marie (City)* to determine whether they were strict or absolute liability offences. The court concluded that the defendant had been charged with failing to obey the sign in question, that it was a strict liability offence and that the defendant had done everything a reasonable person could be expected to do to observe and obey the sign in question. A driver who can satisfy the court that he took reasonable steps to obey the sign, or that through no fault of his own the sign was not visible, should be acquitted.

See also *R. v. Tilden Car Rental Inc.*³⁵ The offence of speeding is a strict liability offence in Alberta and the attempt to raise due diligence failed. The defendant company admitted that the vehicles were speeding but raised the defence of due diligence. The company could take measures to ensure that renters were liable for the fines.

Another interesting case is *R. v. Lende*.³⁶ Michael Lende was convicted of speeding. The Crown made out a *prima facie* case. The defendant Lende failed to rebut it and did not give any evidence. He chose not to cross-examine the police officer. He was present at his trial. If he seriously wished to assert that the officer should have tested the laser device against conventional radar, he should have cross-examined the officer on that issue so that evidence would have been available to the court to help in the adjudication of the matter.

Another case in which the defence of "necessity" was successfully raised is *R. v. Kytwayhat*.³⁷ In this case, the defendant was doing 151 k.p.h., which was detected on an R.C.M.P. radar reading. The officer charged the defendant with the offence of speeding contrary to the Saskatchewan *Highway Traffic Act*.³⁸ In Saskatchewan, speeding is a strict liability offence and this makes the defence of "necessity" available to the defendant. The defendant was taking his stepdaughter, who "was great with child" and who he believed was going into labour, to the Health

Centre. He admitted that he exceeded the speed limit. The court held that the defence of necessity arose and was available to the defendant.

A very interesting case that deals with the evidentiary burden in various types of speeding cases is *R. v. Tkachuk*.³⁹ The accused Tkachuk was acquitted on a speeding charge because the police officer trained in the use and operation of the LTI 20-20 laser device was not specifically trained in the "Ultra-light" model he was using. The Crown appealed and submitted that the decision to acquit the respondent was probably unreasonable, and further that the Commissioner committed an error of law in failing to consider relevant evidence, that is to say, the officer's visual estimation of speed. The Crown asked that a conviction be entered and that the respondent be sentenced accordingly.

The accused responded that the trial judge considered the evidence adduced by the Crown and found that it fell short of proof beyond a reasonable doubt. He submitted that the trial judge made findings of credibility and that the Appeal Court ought not to interfere with those findings. He further submitted that the trial judge made no error, the decision was not unreasonable and consequently there were no grounds of appeal.

The Appeal Court rejected the accused arguments, allowed the Crown's appeal and ordered a new trial. The Appeal Court saw it differently and held that the trial judge dismissed the charge without addressing the ultimate question of whether the respondent was actually speeding. Laser readings and radar evidence were not the only method of proof capable of meeting the Crown's burden. The trial judge failed to consider the officer's corroborating visual estimate of the respondent's speed, which was unchallenged. The failure of the trial judge to consider relevant evidence justified appellate intervention. Further, another important aspect arises. In addition, there was no evidence before the trial judge as to why specific training on the Ultra-light model was necessary or why, without specific training, the laser could be unreliable. The finding that the officer required training in the absence of evidence that such training was required was an erroneous conclusion of law.

It is submitted that this case demonstrates fully the operation of the "reverse onus" rule established in strict liability offences of speeding and "necessity" in absolute liability offences of speeding in some jurisdictions. The defendant in such categories of speeding must adduce expert evidence to support his submissions that the offence of speeding has not been properly proven by the Crown.

³⁴ [1981] N.S.J. No. 404, 46 N.S.R. (2d) 80, 10 M.V.R. 157, 60 C.C.C. (2d) 246 (N.S.C.A.).

³⁵ [1991] A.J. 1151, 85 Alta. L.R. (2d) 345, 126 A.R. 201 (Alta. Prov. Ct.).

³⁶ [1999] O.J. No. 4880 (Ont. C.J.).

³⁷ [2004] S.J. No. 119, 2004 SKPC 33 (Sask. Prov. Ct.).

³⁸ S.S. 1986, c. H-3.1.

³⁹ [2006] A.J. No. 941, 2006 ABQB 570 (Alta. Q.B.).

This is not a case of *no* evidence, but is a case in which *the only question was the weight of evidence*. I would dismiss the appeal with costs.¹¹

However, where an expert is called and the testimony of the expert is to the effect that the maximum error at reading of 73 m.p.h. is 1 m.p.h., the court will enter a conviction. In *R. v. Morash*,¹² the defendant appealed by way of trial *de novo* from his conviction for speeding contrary to s. 96(2) of Nova Scotia's *Motor Vehicle Act*.¹³ The appeal was dismissed and His Honour, County Court Judge O'Hearn, in delivering the decision of the court, stated:

A car going 73 m.p.h. goes 107.06 ft. per second and will traverse 490 ft. in roughly 4.58 seconds. An anticipated reaction time error of .05 seconds is, therefore, slightly larger than 1 per cent. If the operator error is combined with the maximum machine tolerance, either by addition or, as is preferable in this case, multiplication, the maximum possible combined error could be 1.3 per cent which, at 73 m.p.h., is less than 1 m.p.h. This means that given a competent operator and a machine working as it ought (and the evidence is that if it does not work properly, it does not work at all) the possible inaccuracy of a reading of 73 m.p.h. is ± 1 m.p.h. . . . With the speed limit of 65 m.p.h. a reading of 66 m.p.h. would, I think, be suspect, but a reading of 73 m.p.h. is beyond suspicion.¹⁴

Some two years after the *Morash* case, the Ontario Court of Appeal, presided over by Jessup, Arnup and Dubin J.J.A., handed down the decision in *R. v. Bland*.¹⁵ In this case, the Ontario Court of Appeal reviewed all the relevant authorities dealing with speeding. Here, the defendant was charged with driving 90 m.p.h. in a 60 m.p.h. zone and was convicted. At the trial before the justice of the peace, evidence adduced showed that the defendant's speed was ascertained from the police vehicle's speedometer. The police constable was not asked what the speed limit was on the part of Highway 7 where the defendant was alleged to have been speeding. The defendant appealed by way of stated case and that appeal was dismissed. He then further appealed to the Ontario Court of Appeal. The appeal was again dismissed and the finding of the court can be summarized as follows:

1. The police constable's evidence of the speed based upon the police vehicle's speedometer is *prima facie* evidence that the defendant was driving at that speed, in the absence of some evidence, elicited

¹¹ *Id.*, at 312 (emphasis added).

¹² (1972), 10 C.C.C. (2d) 39 (N.S. Co. Ct.).

¹³ R.S.N.S. 1967, c. 191 [now R.S.N.S. 1989, c. 293, s. 100(2)].

¹⁴ *R. v. Morash* (1972), 10 C.C.C. (2d) 39 at 43-44 (N.S. Co. Ct.).

¹⁵ [1974] O.J. No. 2139, 6 O.R. (2d) 54, 20 C.C.C. (2d) 332, 17 Crim. L.Q. 193 (Ont. C.A.).

either on cross-examination or by defence witnesses to the effect that the speedometer was inaccurate; and

2. Although there was no oral evidence as to the speed limit of the section of Highway 7 with relation to which the charge was laid, this was not fatal, as the court is obliged to take judicial notice of the speed limit at the location in question, that having been set out in the relevant regulation passed by the Lieutenant Governor in Council.

Speed Recorded on Radar Device Is *Prima Facie* Evidence of That Speed

So far, we have been able to show that the law holds that, in the absence of evidence to the contrary, the radar reading is *prima facie* evidence of the speed at which the vehicle was travelling. This cannot really be criticized for, before the *prima facie* rule applies, it must be established *in evidence* that:

1. The radar machine was in proper operational order; and
2. The radar operator was qualified to operate the machine in question.

Since the appearance of the First Edition of this text, the courts have been called upon to decide a large number of cases where both ingredients to establish a *prima facie* case have been challenged. Even without leading any evidence, or in the case of a trial *in absentia* (*ex parte* trial), the Crown is required to go much further than was hitherto the accepted practice in order to establish a *prima facie* case. These cases and their ramifications on the essential ingredients that must be proved by the Crown will be considered a little further on in this chapter. A judge or justice of the peace cannot take judicial notice of the qualifications or ability of any person to operate a radar device properly, or that a particular device was functioning properly at the time of the alleged offence without there being the relevant and appropriate evidence on the record. At all times, the onus is on the Crown to prove its case beyond a reasonable doubt. The onus does not shift to the defendant.

An interesting situation arose in the case of *R. v. LaFrenz*,¹⁶ where there was no evidence as to the accuracy of the speedometer in the police vehicle. By statutory enactment, s. 133(10) of the *Vehicles Act*¹⁷ of Saskatchewan, the onus of proof was on the accused. He had to prove the

¹⁶ [1970] 2 C.C.C. 381 (Sask. Q.B.).

¹⁷ R.S.S. 1965, c. 377.

inaccuracy of the radar if he was to succeed. Here, the accused was convicted of operating a motor vehicle on a public highway in excess of 65 m.p.h. contrary to s. 133(3) of the *Vehicles Act*. The sole evidence against the accused was a radar speedometer reading, which showed that his vehicle was driven at 90 m.p.h. In proof of the accuracy of the radar machine, evidence was led that, when the radar speedometer was set up, a police vehicle went through the laser beam at 70 m.p.h. and this showed at 68 m.p.h. on the radar speedometer. There was no evidence as to the accuracy of the speedometer in the police vehicle. It was held in the Saskatchewan Queen's Bench by Sirois J., in Chambers, that the appeal should be dismissed. The speed recorded on the radar machine was *prima facie* evidence of that speed. The accused had not adduced any evidence to show that the police vehicle speedometer had been inaccurate or raised a reasonable doubt with respect to its correctness. It was inconceivable that either the radar or the police vehicle speedometer was in error to the extent of 25 m.p.h. In the result, the accused had failed to discharge the burden of proof cast upon him by the Act and was rightly convicted.

So far, it might appear that all the decided cases supported the *prima facie* rule regarding the accuracy of the radar machine. Let us now turn our attention to some cases where the conviction for speeding was set aside on appeal. An examination of these cases will reveal what defence is available and how cross-examination can establish doubt. It appears as though the Appeal Division of the Saskatchewan Queen's Bench took a somewhat different view regarding tests of accuracy of the radar machine. On September 28, 1970, MacDonald J., sitting in the same court that handed down the ruling in *R. v. LaFrentz*,¹⁸ delivered an important decision in *R. v. Waschuk*.¹⁹ The accused was convicted at trial of speeding according to a police officer's radar device. At trial, the police officer gave evidence as to the tests he performed on the radar, but gave no evidence as to the meaningfulness of these tests. The beam control was set quite low. The range was set quite low. No patrol car was run through to test the machine. There were no vehicles between the accused's vehicle and the radar machine. In addition, the police officer gave no evidence as to his qualifications to operate a radar device. The accused appealed his conviction. The appeal was allowed. Mr. Justice MacDonald overturned the conviction on the basis that the trial judge erred in law by taking judicial notice of the meaningfulness of the tests conducted on the radar without some evidence whether the machine was in good working order and capable of recording the speed of the vehicle being tested. Mr. Justice MacDonald stated:

It is our duty as Judges to take judicial notice of facts which are known to intelligent persons generally In my view, intelligent persons generally have no idea as to what makes a radar machine work and the evidence herein would be a complete mystery to most people.¹⁹

An important decision was handed down by the Alberta Court of Queen's Bench with respect to what the Crown must establish to prove a *prima facie* case where speed is proven by radar. In *R. v. Werenka*,²⁰ the appellant was convicted of speeding when he drove at 112 k.p.h. in a 90 k.p.h. zone. The only evidence was given by a police officer on the basis of radar results. It is important to note that in this case no defence was called. The police officer gave evidence that he had successfully taken a radar course given by the police, which lasted three days. He said he had performed tuning fork tests in accordance with his training. He testified that the radar device was working properly and was capable of accurately measuring speed. He rendered a certificate pursuant to s. 152(1)(c) of the *Alberta Highway Traffic Act, 1975*²¹ indicating that the tuning fork was accurate at 64 k.p.h. The appellant was convicted and appealed his conviction. The appeal was dismissed. Cawsey J. handed down a written decision which, *inter alia*, pointed out that the Crown only had to prove a *prima facie* case. The Crown was not obliged to demonstrate that the instrument was capable of accurately registering speeds over the entire range of the instrument where there was no evidence, either primary or via cross-examination, to throw doubt on the officer's evidence. Here, the conviction had to be upheld because: (1) the constable was a qualified operator for the device; (2) the radar machine was tested and accurately measured the speed of the appellant's vehicle; and (3) the uncontradicted evidence of the officer was *prima facie* evidence of the speed given by the officer, notwithstanding that he did not have a detailed knowledge of the technical working of the radar set. This is much the same reasoning as that of McFadyen Dist. Ct. J., as she then was, in *R. v. O'Reilly*.²²

While on the question of tuning fork accuracy, reference must be made to the case of *R. v. Bourque*.²³ Here, the accused appealed his conviction for speeding. At trial, he had given evidence that he had been travelling within the speed limit. The officer, who clocked the accused with radar, testified that he had tested the radar set with a tuning fork and that the set was working properly. No certificate as to the accuracy of the tuning fork was entered into evidence, nor was there any evidence that the

¹⁸ [1970] S.J. No. 166, 1 C.C.C. (2d) 463 (Sask. Q.B.) (subsequent references are to C.C.C.).

¹⁹ *Id.*, at 465.

²⁰ (1981), 11 M.V.R. 280 at 281 (Alta. Q.B.).

²¹ (Alta.) (2d Sess.), c. 56.

²² [1979] A.J. No. 554, 10 Alta. L.R. (2d) 199, 3 M.V.R. 228 (Alta. Dist. Ct.).

²³ (1985), 38 M.V.R. 110 (Alta. Q.B.).

radar set was capable of properly registering the speed of the accused's vehicle. The appeal was allowed.

Moshansky J., in allowing the appeal, held that when the Crown seeks to rely on electronic devices for convictions, it must be prepared to establish beyond a reasonable doubt that such devices are operating properly and are capable of performing the functions for which they are intended. If a tuning fork is used to test the performance of the radar set and is not itself proven to be performing accurately, then there has to be a reasonable doubt on the evidence as to the reliability of the readings given by the radar set. The benefit of any such reasonable doubt must be given to the accused person.

In *R. v. Phillips*,²⁴ the conviction for speeding was quashed on appeal by Mr. Justice Sullivan as it was held that the evidence adduced by the Crown at trial was not of the quality to prove the case "beyond a reasonable doubt",²⁵ especially in view of the evidence that perfect radar equipment *can* become most unreliable when unqualified and untrained people undertake its operation.

Perhaps a comment here would be appropriate. In cross-examination much can come out in evidence, and a defendant contesting a speeding charge based on radar detection may be able to cross-examine the police officer successfully and bring out the point that the officer is not sufficiently experienced to undertake the operation of a highly sensitive piece of equipment such as a radar device.

In *R. v. O'Reilly*, the appellant was convicted of speeding. His appeal, which was heard in the Alberta District Court before McFadyen Dist. Ct. J., was allowed and the conviction was set aside in view of the Crown's failure: (1) to adduce evidence that the radar set was capable of accurately measuring speeds; and that (2) the tests were approved tests. The result might have been different if the police officer in his evidence had testified that the two conditions were met.

Reference must be made to another case where the appeal was allowed. In *R. v. Wolfe*,²⁶ the appellant was convicted of speeding and appealed to the British Columbia County Court. Arkell Co. Ct. J. allowed the appeal for, although the police officer, Constable Duncan, gave evidence that he was trained and in his opinion the radar machine was working properly, the evidence fell short of establishing that the training

was adequate and this inadequate training was enough to cast doubt on the accuracy of the device and its results.

In this case we have a classic example of how the cross-examination of the police constable created serious doubt on the training and experience of the constable. This is how the cross-examination went:

Q Is it a procedure that is prescribed by this machine or do you know that?

A No, I don't know that.

Q You don't know if it's a procedure prescribed for this machine?

A No.

Q Do you know, if in regard to this machine specifically, if you have had any training that has told you that the tuning fork method is a suitable method for testing this machine?

A If I had any instructions?

Q Yes.

A Only from my colleagues to use it as a check.

Q That's all?

A That is all.

Q Did you have the occasion on this particular — at this particular time, using this particular machine, to test the accuracy of the machine against the actual speed of cars?

A I'm sorry, how do you mean?

Q Well, did you run a car through this particular machine, at this time, and determine that it was accurate in that matter?

A No, I didn't.²⁷

Here we have an honest officer answering questions truthfully. No attempt was made on his part to "gild the lily". In delivering his judgment, Arkell Co. Ct. J. stated:

It is clear from the evidence of Constable Duncan that he has had some training and experience operating the radar gun but his training obviously fell short. It is insufficient or inadequate with regard to the proper method of checking this particular gun and obviously he was not sure that the proper method of checking the gun was that of using the tuning fork.²⁸

²⁴ (1956), 1 Crim. L.Q. 246 (B.C. Co. Ct.).

²⁵ *Id.*

²⁶ (1979), 3 M.V.R. 143 (B.C. Co. Ct.).

²⁷ *Id.*, at 145.

²⁸ *Id.*, at 146.

His Honour concluded:

Here the police officer in question did give evidence that he was trained and that in his opinion the machine was working properly but it is clear from his further evidence that there is certainly some doubt raised as to whether or not the machine was, in fact, accurate. There is some doubt as to his ability to properly operate that particular model of radar gun in light of the fact that he was obviously unsure of the procedure for testing this particular machine. Although there was perhaps some evidence before the justice of the peace on which he concluded that the radar set, was working correctly; I am however, of the opinion that the evidence was insufficient and therefore the justice of the peace did err, considering the evidence which was before him at that particular time. The appeal will be allowed.²⁹

If there is no evidence that the radar device was operating properly and was capable of accurately registering speeds, then a conviction in such circumstances would be bad. The Crown must establish by evidence that the device was checked and found to be working properly. After this evidence is proffered by the Crown, then the defendant, his agent or the lawyer representing him can cross-examine at length, if the necessity arises, to throw doubt on the police officer's experience, his ability to use the radar mechanism, his ability to conduct the tests and to explain the implications of the tests conducted and whether or not the particular mechanism can be used to register speeds accurately.

Cross-examination is an art. Not many people understand the rules of cross-examination. It certainly does not mean examining crossly. One must know one's case, what is the defence and what it is intended to prove. A "roving commission" or a "fishing expedition" as a basis for cross-examination can be very dangerous. Sometimes simple, straightforward questions will elicit the answers needed. Experience has shown that cross-examination in the hands of an untrained, unskilled and unthinking individual can be very adverse and dangerous to the defendant's case. This is enough to indicate the importance of the cross-examination of the police officer or other prosecution witness. Let us turn to the instances where convictions were overturned on appeal. In the case of *R. v. Lehane*,³⁰ the officer testified that he was working a "moving-mode" radar when he received a reading of 132 k.p.h. in a 110 k.p.h. zone on the appellant's vehicle, which was the only vehicle in the radar beam at the time. There was no evidence that the device had been recently tested to determine whether or not the device was operating properly and was capable of accurately registering speeds. The defendant appealed his

²⁹ *Id.*, at 148.

³⁰ (1982), 15 M.V.R. 160 (Alta. Q.B.).

conviction for speeding and the appeal was allowed. Mr. Justice Quigley sitting in the Alberta Court of Queen's Bench, in setting aside the conviction, stated:

I adopt the reasons of McFadyen J. [as she now is] in the case of *R. v. O'Reilly* (1979), 16 A.R. 369 (Dist. Ct.), including her approval of Patterson, Provincial Court Judge's statements in the unreported decision of *R. v. Jacobs*.

In my opinion it would be an easy matter for police officers to test the accuracy of radar devices by means of a calibrated tuning fork or by some other means before and after a duty shift during which the device is used.

The appeal is allowed, the conviction quashed and it is ordered that the fine and costs be remitted to the appellant.³¹

Before moving on to some other matters that are to be discussed, it would be pertinent to bring to the reader's attention the fact that speeding itself is not an "included offence" of careless driving. Speeding can be an element in the careless driving but it is not in itself careless driving. It has been correctly stated that one can drive carelessly at 5 k.p.h. and carefully at 100 k.p.h., depending, of course, on the facts and circumstances.

Speeding Not An Included Offence of Careless Driving

In *Smith v. The Queen*,³² the appellant was charged with careless and imprudent driving contrary to s. 90(2) of the *Motor Vehicle Act*³³ of Nova Scotia. The trial judge dismissed the charge but entered a conviction for speeding under s. 96(1) of the Act, which was in his view an included offence. The appellant appealed his conviction for speeding by way of stated case. It was held by the Nova Scotia Supreme Court (Appeal Division), MacKeigan C.J.N.S., Hart and Macdonald J.J.A. comprising the court, that the appeal must be allowed because speeding is not an included offence of careless and imprudent driving.

Before concluding this chapter, it would be useful to make reference once more to the *O'Reilly* decision. Her Honour, District Court Judge McFadyen (as she then was), in delivering the decision of the court, considered, approved and applied the very illuminating conclusions

³¹ *Id.*, at 161.

³² [1982] N.S.J. No. 48, 51 N.S.R. (2d) 539, 15 M.V.R. 161 (N.S.C.A.).

³³ R.S.N.S. 1967, c. 191 [now R.S.N.S. 1989, c. 293, s. 100(2)].

arrived at by His Honour, Alberta Provincial Court Judge D.E. Patterson in the case of *R. v. Jacobs*.³⁴ In the *O'Reilly* case, Her Honour concluded:

His Honour Judge D.E. Patterson, a Judge of the Provincial Court of Alberta, in an unreported decision in *R. v. Jacobs*, reviewed the authorities and concluded as follows:

"Summarizing the foregoing cases, it would appear to me that the following conclusions can be reached:

- (1) That the testimony of readings of less sophisticated devices, such as stop watches and speedometers, can be accepted by the Court on *prima facie* evidence, without proof of the accuracy of such devices. This rule would only apply in the absence of legislative intervention with which I will deal shortly.
- (2) That readings taken from radar instruments can be accepted as *prima facie* evidence in the following circumstances:
 - (a) The instrument must be operated by someone trained in its operation. He need not have knowledge of the electronics or mechanism of the device but must be thoroughly familiar with its use.
 - (b) The operator must give evidence that at the time in question he conducted an approved test of the instrument, and that test satisfied him that the instrument was operating properly and was capable of accurately registering speeds. It would be preferable, in my view, for the operator to state that, based on his knowledge of the instrument, such a test satisfied him that the instrument was capable of accurately registering speeds over the entire range of the instrument and what that range was; but the cases do not indicate that this is essential.
- (3) The readings from the stop watch, a speedometer or a radar instrument is [sic] *prima facie* evidence only. Like any evidence, it is susceptible to rebuttal or raising a reasonable doubt — either by matters elicited on examination or cross-examination or defence evidence."

I have reviewed the authorities and am satisfied that the law has been accurately stated by Patterson Prov. J.³⁵

The third conclusion mentioned above makes it clear that the readings from a stop watch, a speedometer or a radar instrument are *prima*

³⁴ Unreported (Alta. Prov. Ct.).

³⁵ *R. v. O'Reilly*, [1979] A.J. No. 554, 10 Alta. L.R. (2d) 199, 3 M.V.R. 228 at 231-32 (Alta. Dist. Ct.).

facie evidence only. It is not always necessary to lead a defence in speeding cases, since it could be a definite disadvantage to put the defendant in the witness box and expose him to cross-examination by a well-trained and skilful cross-examiner. It is far better to cross-examine the police officer and establish through cross-examination that the requirements to prove the offence have not been established. The authors of this text have found that in 99% of the cases in which they were involved, cross-examination of the police officer with respect to the tests he carried out to prove the accuracy of the radar was successful and resulted in a dismissal of the defendant.

In Ontario, we have built into our jurisprudence the doctrine of *stare decisis*, i.e., the legal doctrine that binds the court to decisions previously made in similar cases by higher courts in the same jurisdiction. Despite this fact, it is regrettable that many of the justices of the peace who preside over the courts that hear speeding cases just "do their own thing", quite unmindful of decisions that have been handed down by the Provincial Offences Appeal Court. There have been instances where justices of the peace have stated that they are not "concerned" about decisions handed down by the Provincial Offences Appeal Court. This militates against an enlightened, uniform and progressive judicial system.

Since the publication of the First Edition of this text, very many cases have come before the Provincial Offences Appeal Court and the Ontario Court of Appeal in which the tests conducted by the police officer to prove the accuracy of his radar device and his training as a radar operator were the subject-matter of the appeals. The conclusions reached by His Honour, Judge D.E. Patterson in *R. v. Jacobs*, as approved by McFadyen Dist. Ct. J. of the Alberta Provincial Court and summarized under clauses 2(a) and (b) of her decision in *R. v. O'Reilly* have been the main grounds of many appeals. Some of these cases call for an in-depth analysis.

In *R. v. Seymour*,³⁶ the appellant Seymour was convicted of the offence of speeding at 108 k.p.h. in an 80 k.p.h. zone. The first ground of appeal was that there was insufficient evidence before the justice of the peace as to the nature of the radar recording to allow him to infer that there was an accurate measurement of the speed of the appellant's vehicle. It was argued that it must be positively established in evidence that the police officer is a person who has been properly trained in the use of the device, and further, that at the time in question the radar device was operating accurately. In order to prove this, it was argued that the Crown

³⁶ (16 June 1982), unreported (Prov. Off. App. Ct., Huron County, Ont.).

must adduce evidence to the effect that approved tests in accordance with the manufacturer's specifications were carried out. His Honour, Provincial Court Judge W.G. Cochrane, addressed his mind to the evidence of the police officer and applied Judge D.E. Patterson's tests, as they were approved by McFadyen Dist. Ct. J. in *R. v. O'Reilly*. He found that tests were carried out by the police officer, but that there was no evidence of: (1) the results of those tests; and (2) that the tests carried out were approved tests. The appeal was allowed and the conviction was set aside.

In yet another case, *R. v. Shniffer*,³⁷ the court had to consider two vital aspects of the evidence in a speeding case, viz: (1) whether there was sufficient and cogent evidence before the court that the police officer was a properly qualified radar operator; and (2) whether the particular radar machine was properly tested by the police officer. His Honour, Provincial Court Judge R.D. Reilly stated in this well-considered decision:

It is clear from the line of cases, and it is a matter of logic, common sense, that there must be some evidence that the radar operator, be he police officer or someone else, has been trained and has experience presumably based on proper training, so that the evidence may be relied upon . . . Radar is not the most complicated thing in the world, however, it does require some knowledge of the operation of the device, an awareness of what is necessary to test it, both by internal tests, and one presumes, by independent tests, and even the mechanical procedure of pointing the machine is of some significance as Constable Bruyn pointed out in his own testimony . . . There must be some evidence, upon which the Court can rely, that the machine was in proper working condition, and that, I emphasize again, is dependent upon the training and experience of the officer.³⁸

The appeal was allowed and the conviction was set aside.

In 1986, His Honour, Judge W.D. August, sitting in Brampton, Ontario, heard the appeal in *R. v. Windrem*.³⁹ In that case, the appellant appealed his conviction for speeding at 94 k.p.h. in a 60 k.p.h. zone. The appellant argued that the evidence adduced at the trial by the prosecution was not sufficient to establish beyond a reasonable doubt the charge against him. The main thrust of the argument was that the prosecution did not lead any evidence to show that the radar set was tested in accordance with the manufacturer's specifications. There was no evidence that the tests carried out by the police officer were approved tests, and further, there was no evidence regarding the results obtained by the tests carried

³⁷ (19 October 1982), unreported (Prov. Off. Ct., Judicial District of Waterloo, Ont.).

³⁸ *Id.*

³⁹ (May 1986), unreported (Prov. Off. Ct., Brampton, Ont.).

out. It was submitted that the prosecution cannot simply prove that the radar set was tested and found to be working properly. The burden is cast upon the prosecution to establish evidence that: (1) the specific tests were carried out to check the accuracy of the radar device; and (2) such tests were in accordance with the approved methods as prescribed by the manufacturer of the device. Each device requires its own testing method.

In *R. v. Windrem*, the police officer had stated in his evidence before the justice of the peace that he had checked the radar before and after use and found it to be "working accurately". He went on to state that he was a qualified radar operator. The Crown argued that the justice of the peace implied from that statement that the police officer had checked the radar in accordance with the tests set out in the manufacturer's manual.

His Honour, Judge W.D. August, rejected that argument and stated:

Well, that is enough evidence. I think that there was . . . A very serious error made by the Justice. I think he assumed that the officer gave that evidence, because they probably do give that evidence, and here he did not give that evidence . . . No, I don't think the officer went far enough by merely stating that the radar was checked before and after this violation.⁴⁰

The appeal was allowed and the conviction and sentence were set aside.

At this stage, two further cases should be mentioned. The first is *R. v. Bigioni*.⁴¹ In this case, the defendant was charged with speeding. The police officer testified before the justice of the peace that he used a hand-held Muniquip radar speed device, which recorded that the defendant was doing 94 k.p.h. in a posted 60 k.p.h. zone. The officer stated that he tested the hand-held radar set at the start of the shift, at the set-up location and after he finished the shift at 3:00 a.m., and that it was found to be working accurately. He also stated that he was qualified in the use of radar. Counsel for the defence looked at the officer's notes and declined to cross-examine the officer. When the court asked counsel whether he wished to lead a defence, he declined and proceeded to make submissions. Counsel submitted that the Crown had failed to prove the speed of the defendant's vehicle beyond a reasonable doubt and relied on the *O'Reilly*, *Seymour* and *Shniffer* decisions. Basically, the submissions were focused on three aspects of the law, viz:

⁴⁰ *Id.*

⁴¹ [1986] O.J. No. 2753 (Ont. Prov. Off. Ct.).

1. There was insufficient evidence with respect to the training of the police officer and the bare statement that he was a qualified radar operator.
2. There was no evidence that the tests carried out by the officer were approved tests for that device.
3. There was no evidence of the results of the approved tests that ought to have been carried out on that device.

The learned justice of the peace stated that he felt a *prima facie* case was made out, and since there was no cross-examination to destroy the officer's evidence and no defence was led, he had no alternative but to enter a conviction.

The defendant appealed, and the appeal was heard by His Honour, Judge A.W. Davidson on February 9, 1987 at Scarborough Provincial Court.⁴² The learned judge found that there was a sufficient *prima facie* case that remained unchallenged, and the appeal was dismissed. The matter was heard by Brooke, Krever and Griffiths J.J.A. of the Ontario Court of Appeal, and their Lordships dismissed the appeal.⁴³ It was held that the police officer's evidence established a sufficient *prima facie* case that remained unanswered, and the conviction was proper in the circumstances.

It is to be noted that in this case, no defence was called. What the court really did was to apply the principles set out in the *Grainger* and *O'Reilly* decisions. Perhaps the police officer should have been cross-examined fully as to his training as a radar operator, the tests he carried out to prove the accuracy of the particular radar device he used, and more particularly, whether the tests he carried out were in accordance with the manufacturer's specifications as set out in the manufacturer's manual. It is likely that the decision in this case might have gone the other way, had all these important aspects of the officer's evidence been before the justice of the peace who heard the case.

Another decision that followed an almost identical route to the *Bigioni* case was that in *R. v. Sim*.⁴⁴ Here, no defence was called before the justice of the peace and a conviction was entered. The matter was taken to the Provincial Offences Court and His Honour, Provincial Court Judge R. Walneck, after hearing full arguments regarding the qualifications of the police officer, the tests he carried out and the lack of evidence that the

radar device was capable of accurately measuring the speed of a motor vehicle, dismissed the appeal.⁴⁵ A further appeal was lodged before the Ontario Court of Appeal and on October 11, 1988 their Lordships Robins, Tarnopolsky and Finlayson J.J.A. dismissed the appeal on very much the same grounds as in the *Bigioni* case.⁴⁶ In the *Sim* appeal, the disposition sheet is endorsed as follows:

There was evidence of the police officer that he tested the radar unit both before and after it measured the respondent's speed and there was evidence from which it can be concluded that the police officer was familiar with the unit and the manner in which it was intended to be used. We accordingly cannot find any error in law on the part of the justice of the peace. The appeal will be dismissed.⁴⁷

Here again, no defence was called before the justice of the peace. The cross-examination was very limited. One would have expected the cross-examination of the police officer to be more extensive, covering such important aspects as his experience, his training, the tests he carried out to prove the accuracy of the radar equipment and whether those tests were in accordance with the manufacturer's specifications. In the vast majority of cases, the police officer never saw the manufacturer's manual, never heard of it and knew nothing of its contents. The only training he received was usually from a sergeant or a fellow officer. These are all matters of vital importance. They directly affect the credibility of the officer involved, the establishment of reasonable doubt and the important question of the discharge by the Crown of the onus cast upon it. It is to be hoped that in a proper case, with all the relevant evidence on the record, either directly or by cross-examination, the Ontario Court of Appeal will then have an opportunity to express its approval of the nature of the essential ingredients that must be provided by the Crown to establish a *prima facie* case.

The Provincial Offences Appeal Court came to grips with the issue of the qualification of the radar operator in *R. v. Brewer*.⁴⁸ In this case, the police officer stated that he was a "qualified radar operator". That would have been sufficient standing alone to establish his qualification but, in cross-examination, the officer admitted that he had not in fact received any information from the manufacturer as to the operation of the radar device and could not confirm that the tuning fork used to test the machine was activated by use of an appropriate surface.

⁴² *R. v. Bigioni*, [1987] O.J. No. 2481 (Ont. Prov. Ct. (Crim. Div.)).

⁴³ *R. v. Bigioni*, [1988] O.J. No. 2220 (Ont. C.A.).

⁴⁴ [1987] O.J. No. 2482 (Ont. Prov. Off. Ct.).

⁴⁵ *R. v. Sim*, [1987] O.J. No. 2483 (Ont. Prov. Off. Ct.).

⁴⁶ *R. v. Sim*, [1988] O.J. No. 2250 (Ont. C.A.).

⁴⁷ *Id.*

⁴⁸ [1988] O.J. No. 2531 (Ont. Prov. Ct. (Crim. Div.)).

His Honour, Provincial Court Judge Vibert A. Lampkin, in his reasons for judgment, carefully examined the police officer's evidence under cross-examination. The learned judge then went on to consider the training and qualifications of the police officer to use the radar unit in a manner prescribed by the manufacturer. He cited at length from the First Edition of this text and concluded:

I agree that if the evidence had stayed simply as it had been given in chief that "I am a qualified radar operator", that he had some basic training by an experienced officer, that would have been sufficient. But his qualification was seriously questioned and attacked under cross-examination. He had read absolutely nothing at all from the manufacturer. He couldn't even say whether the person who trained him had read anything from the manufacturer. He couldn't really confirm that the tuning fork was activated by use of an appropriate surface. He said he used the steering wheel, but he couldn't confirm that that was an appropriate method in which to activate it. He really could not confirm that what he did to use that radar unit was according to the manufacturer's specifications.

I agree with the defence, indeed, that when attacked in that fashion, the police officer could not have been regarded as a "qualified radar operator" and therefore that a *prima facie* case was not made out. The appeal will be allowed, the conviction will be set aside and any fine paid will be ordered to be remitted.⁴⁹

It is respectfully submitted that His Honour, Judge Lampkin, has, in this decision, correctly stated the relevant essential ingredients that must be established by the Crown insofar as the radar operator is concerned.

Perhaps this is a convenient time to mention the case of *R. v. Lawless*.⁵⁰ Here, the appellant submitted that the learned trial judge was in error in "not giving weight to the fact that the radar operated by the police officer may have locked on the heater fan which runs continuously in the appellant's motor vehicle".⁵¹ It was established in evidence that the police officer involved did not have any scientific knowledge regarding how the radar gun he used worked. The officer was, however, trained how to operate it. The officer also admitted that he had heard of instances where radar machines had given speed readings on stationary objects but in the instant case, he had calibrated the instrument after obtaining the reading and found it was working properly.

⁴⁹ *Id.*

⁵⁰ (1981), 11 M.V.R. 296 (P.E.I.S.C.).

⁵¹ *Id.*, at 299.

MacDonald J. held that the weight of the evidence indicated that the radar instrument was in proper working order and would show an accurate reading. It was not sufficient for the appellant Lawless to merely cite instances of radar machines recording inaccurate readings without showing that the machine actually in use was subject to a particular weakness or actually took a wrong reading.

In the famous U.S. case of *Florida v. Aquilera*,⁵² the radar gun was considered and then 80 speeding tickets were dismissed when Judge Nesbitt observed that the radar gun clocked a palm tree travelling at 86 m.p.h. The courts in the United States of America have been consistently helpful in clarifying and establishing the proper use of radar as a speed monitoring device and the responsibility of the police officer regarding the quality of the evidence he must give in cases in which he is involved.

GUIDELINES FOR THE ADJUDICATION OF RADAR SPEEDING CASES

Michigan Speed Measurement Task Force

Revision October 13, 2000

The goal of these guidelines is to provide recommendations to members of the Michigan judicial system regarding the adjudication of radar speeding cases.

The Michigan Court of Appeals ruled that in order to avoid any violation of the due process rights of a defendant, seven guidelines must be met in order to allow into evidence speed readings from a "moving radar speedometer" [PEOPLE v. FERENCY, 133 MICH APP 526 (1984)]. Moreover, in its ruling, the Court of Appeals encouraged the Michigan Office of Highway Safety Planning (O.H.S.P.) to establish a set of recommendations that would be useful in the adjudication of radar speeding cases. As a consequence of this ruling, O.H.S.P. directed the Michigan Speed Measurement Task Force to develop a comprehensive set of recommendations that would be useful throughout the Michigan criminal justice system regarding speed-measuring radar devices and their application to speed law enforcement. As a result of this directive, the following set of Michigan Speed Measurement Task Force recommendations were developed for the judicial system:

⁵² 48 Fla. Supp. 207 (Dade County Court, 1979).

Chapter 6

SPEED VIOLATIONS AND SPEED DETECTION DEVICES

OVERVIEW OF CURRENT SPEED DETECTION DEVICES

There are seven specific types of speed monitoring systems in present use by police officers. They are:

1. Speedometer clocks;
 2. Photographic imaging;
 3. Aircraft tracking;
 4. Radar;
 5. Laser;
 6. VASCAR; and
 7. AUTOVELOX.
1. Speedometer clocks are placed in patrol vehicles and are used to pace other vehicles. Their only requirement is that they be factory certified and used by a police officer certified in their use. They are the least expensive method of clocking speeders. They are calibrated in one of three ways and can be exceptionally accurate:
 - a. by using a fifth wheel attached to the rear of the patrol vehicle;
 - b. by using a stopwatch that has been certified to clock the patrol vehicle over a measured course; and
 - c. by using a dynamometer which allows the patrol vehicle wheels to rotate in place while the speedometer is checked against the device for any discrepancies.
 2. Photographic imaging devices are used to capture vehicles and licence plate numbers when a speed threshold is broken, regardless of the speed monitoring device used.
 3. Aircraft tracking uses a combination of ground-based units and a fixed-wing aeroplane. The pilot uses a stopwatch to time a vehicle

moving over a measured course and employs the simple formula of Speed = Distance divided by Time to determine the existence of speeders, then radios this information to speed patrol police officers on the ground.

4. Radar (an acronym for RADIO DETECTION AND RANGING) involves the transmission of electromagnetic waves that are reflected off a moving object with continuous change of frequency, known as the Doppler effect, and computes the speed of a vehicle.
5. Laser systems are "directed" electromagnetic pulse emitters that continuously record the added "send and receive" time lapse of pulse bursts (which is then divided by two) to determine speed by constant differencing. They are not "passive" receivers like radar devices but require a police officer to take an "active" role in directing their aim.
6. VASCAR devices are ground-based visual average speed computers and recorders. They have a future for being the most accurate of all devices when employed strictly in a remotely travelled area.
7. AUTOVELOX is a comprehensive speed monitoring device which is stationary, stand-alone (meaning no police officer needs to be in attendance), uses a laser system, camera, and has its own computing system. It can be set up on a particular roadway permanently or can be transported to a new location.

Three Common Faults of All Speed Detection Devices

All the above systems have numerous faults where there is always *at least one* type of mechanical, electronic or human error happening continuously, whether in use or in an idle state. This is because there is no such thing as a perfectly operating speed monitoring device in a perfect operational state at any and all times. Thus, every single speed monitoring device ever made, regardless of type, can be beaten in a Court of Law if the imperfections of the device being used are too grave.

The Problems of Effectively Dealing with These Faults

One of the fundamental purposes of this Book is to explain the *physical laws* operating upon or impacting these speed monitoring devices. In this way, serious steps can be made by police officers to reduce, to a large extent, the many possible types of errors in speed monitoring that they can make inadvertently. As well, precautionary steps

can be taken to keep mechanical, electronic and human errors to a minimum in the use of such devices, in order to avoid "grave" malfunctions.

It is also hoped that many other law enforcement personnel, including, in particular, police officer trainees, defendants, prosecutors, judges and legislation law makers, will benefit from a stronger understanding of how speed monitoring devices should operate, as well as being very mindful of the foibles often caused by poor calibration, component-part malfunction or deterioration and the human use of such devices.

Also, depending upon which provincial or state statistics you wish to believe, however they were manufactured, it appears, by some writers that upwards of 30 per cent of all speeding ticket revenues were not justified. This appears to the authors as being quite exaggerated (some of which is seemingly predicated on court reversals or personnel who have the authority to vacate such charges). We believe that *no responsible statistics exist* to support this figure. In fact, we go further: we believe it is an utter impossibility to actually construct such a statistic, given the highly abstruse protocol (even imagined) that would be required to construct a responsible *sample space* (collection of incidents) upon which to base a reliable statistical *inference* on such a matter. While undoubtedly some tickets are issued in error, it is our hope to make this "some" just as slight as possible.

Chapter 10

MAJOR FACTORS THAT CREATE FAULTY RADAR USE

IMPROPER CALIBRATION

Any scientific piece of equipment used for measuring a physical quantity, with the exception of perhaps a scaled ruler or mechanical micrometre, is required to be periodically calibrated by the user. There is no scientist or technician working in any legitimate testing or fabricating environment who is not keenly aware of this necessity, for without constant checking for reliable output from their measuring devices, they can never be sure of the accuracy of their results. Good quality control procedures demand it and a police radar unit is no exception.

Unfortunately, there are some manufacturers of police radar equipment who convey the notion that because their units, like quartz watches, are crystal-controlled units, external calibration by a tuning fork is not necessary. This is absolutely false. Every police radar unit has a frequency and a counting circuit, both of which function independently but are required to operate synchronously. They can and do fall out of synchronization, however, and it is only through close and independent monitoring that such malfunctioning can be identified.

There are many police officers who feel that just flicking on the calibrate switch or test switch built into their radar unit, examining the reading that comes up to see if it matches the programmed speed reading and then switching it back to regular operation, constitutes a proper calibration. It is not. All the police officer has done is to cause the internal frequency setting device, the crystal, to generate a signal. The crystal's pulses are counted according to a preset ratio of pulses counted to pulses generated. Such counts correlate to a specified speed. All the police officer has done is to test the counting circuit, which may be functioning perfectly. The crystal mixer diode or klystron transmitter, however, may be malfunctioning. In short, an internal calibration without reference to an external source is no calibration at all.

Ideally, the radar unit should be calibrated by testing its speed registration mechanism against moving vehicles of known speed. This, however, is impractical and is why tuning forks are substituted. When a

tuning fork, corresponding to a specific velocity, is set in vibration in the midst of the pulsed wave train being emitted by the radar's transmitter, that portion of the wave train being reflected back to the receiver by the tuning fork is compressed to the same extent as a portion of the reflected wave train would be if it were bouncing back from a moving vehicle travelling at the same specified velocity. In effect, the vibrating tuning fork is a simulation of the velocity of a moving vehicle. How good a tuning fork simulation is has been well documented with exhaustive tests that show a closer than one-fifth of a kilometre per hour difference on the average between tuning forks and vehicles used to calibrate the same radar devices.

A police radar unit should always be calibrated with its antenna directed to the sky. If it produces the same response with the same tuning forks with its antenna realigned in the direction of the target area that the police officer has chosen to monitor for speeding vehicles, then the radar unit can be deemed to have passed its calibration test.

This, however, cannot be said of hand-held units. Theoretically, operators are required to activate their unit in all directions. A police officer who states that he or she did a 360-degree sweep of the target area before engaging in any traffic monitoring may be believed by the court, because the statement implies that the police officer swept all areas. This, in fact, is impossible to do. Imagine being in the centre of a big bubble. Mathematically speaking, there are an infinite number of points on the inner surface of the bubble. It would, therefore, take an infinite period of time to hit every such point, notwithstanding beam overlap. However, if a police officer takes the time to do a reasonable number (five or six) 360-degree sweeps, so as to be fairly satisfied that there is no source of interference within the target area, then his or her evidence will be quite satisfactory.

FAULTY TUNING FORKS AND IMPROPER USAGE

Tuning forks are precision instruments and are extremely delicate. If dropped by accident, micro-sized fractures can occur in its interior, leading to slow crack propagation that is most difficult to determine. This is metal fatigue and is a condition that every tuning fork, however handled, eventually develops over prolonged usage. Dropping them only accelerates the process.

Consequently, all tuning forks should be routinely checked by a certified technician with the proper gauging instruments. A surface scratch of

only 1/20,000 of a centimetre was enough to cause an inaccurate reading by eight kilometres in a test incident.¹ Another reason for the importance of keeping tuning forks well protected is that such small fracturing and scratching sets up *secondary harmonic frequencies*. In a vibrating tuning fork this, in time, slowly overrides and alters the stroking behaviour of the fork's tines as they compress the reflected wave train returning to the transmitter.

During the past several years, numerous comments and publications from inter-office memoranda, from both speed radar manufacturing companies and police departments, have been issued alleging the infallibility of tuning forks. The latter have been abused not only to the point of having their tines gouged and bent, but also even to having portions of them sawed off. Immediately after some of these torture tests have taken place, these mistreated tuning forks have been shown to be still capable of emitting the same frequency of vibration as before. The conclusion that the observers of such demonstrations (or readers of their results) have been earnestly requested to reach is that tuning forks have such unique qualities inherent in their composition and construction that they can be expected to maintain their perfect performance indefinitely.

Of course, this is nonsense. Perhaps some tuning forks, suffering such abuse, may operate with a previously designed frequency for some time, but what length of time this might actually be is another matter. All metal objects possess a specific "granular alignment" that constantly changes over time. A freshly abused tuning fork might very well exhibit the same frequency of vibration as it did before being abused. However, tests have also shown that tuning forks are very delicate instruments and that their longevity for accuracy is dependent upon their ongoing consistency to produce accurate readings.

Consequently, tuning forks that are to be used for calibration testing must be periodically checked for reliability and certified for use during a specified time interval with available documentation, so that the operator of the radar system may inspect them for time lapse and, if need be, request replacements.

Striking a tuning fork against a surface of non-uniform density such as a police officer's boot that has nails in it will also produce secondary harmonic frequencies. However, this method of setting the tuning fork in vibration by police officers is most common. Ideally, a surface of uniform density that is slightly less hard than the material the tuning fork is made

¹ Peter Gilchrist, *Fight That Ticket In Ontario* (Vancouver: International Self-Counsel Press, 1980), at 69.

of should be used. There is probably no police officer who can find such a surface object around for this purpose only, and there are very few surfaces on their person or inside or on their cruiser that are reliable enough.

EFFECTS OF TERRAIN

Because all speed radar systems are designed to function on a blind trust basis regardless of having a large target-capturing envelope, hilly terrain creates the worst possible difficulties not only in identifying the target vehicle but also in determining its true speed. Even in hilly terrain, the valleys and peaks in the roadway may be quite gradual and not apparent to cursory observation by a police radar operator. However, if a valley covers a large portion of the radar's emitted and received signals in such a way that a stronger wave of reflected microwave signals is registered from a vehicle that either precedes or follows the target vehicle, then the latter may be misidentified. In this situation, the radar beams may either "undershoot or overshoot" as a result of the antenna system. In effect, short lengths of roadways that have the capacity of receiving most of the return signals reflected back from a surface to register a speed reading, or roadways that are not perfectly straight, irrespective of how heavy or light the traffic may be, are prime sources of error in targeting any vehicles.

OPERATIONAL RANGE CONTROL EFFECTS

Because speed radar systems have both a high and low range of sensitivity, the actual range (target envelope) is always the operator's choice. This range always affects the radar's sensitivity to returning signals.

With a low-sensitivity setting, the radar device detects only strong signals — that is, from vehicles that are relatively close (500 metres or less). The problem here is that a vehicle that is further away but has a larger cross-sectional area (for example, a 20-metre-long commercial transport trailer) can receive and reflect a far greater concentration of radar signals that "override" the reflected signals of a closer vehicle being targeted by the radar operator.

Conversely, with a high-sensitivity setting, the radar device will detect relatively weak signals from vehicles that are further away. However, again the closer vehicle may be wrongly identified as the speeding vehicle in a group of vehicles within the capture radius of the radar unit.

The only way out of this "dual trap" is the vigilance of the radar operator in taking extreme care in well-defining the correct length and width of their target envelope before entering into speed enforcement activity. The only way of doing this is to select a roadway populated with many vehicles moving at different speeds to determine the sensitivity setting they wish, prior to going to their selected patrol area. Also, such prior vehicle monitoring in order to set a sensitivity setting must be provable by documented evidence, when asked, and "timedated" before actual enforcement activity took place.

Whatever range setting the operator chooses, it is only approximate, not precise. Most range control units are designed so that at any one setting only some targeted vehicles will be displayed.

From the above discussion, one can draw the false conclusion that speed radar systems *per se* are not too reliable in targeting most vehicles. Nothing could be further from the truth. Speed radar systems in the hands of inept or inadequately trained police officers can provide erroneous readings in a variety of different target situations. However, in the hands of well-trained police officers who properly tune and measure off the centre line length of their "capture envelope" before venturing out to enforce the law, speed radar systems will detect virtually any speeder who enters their envelope.

TARGET ENVELOPE EFFECTS

Many police officers are too impatient to take the time to construct the target envelope that they wish to use. The consequences of this impatience can be fatal during cross-examination. If, for example, a police officer says that the capture envelope was approximately 30 metres and that the radar recorded a speed of 130 k.p.h., then it could be concluded either that the police officer's radar device was defective in recording speeds accurately or that the police officer's testimony was false. A speed of 130 k.p.h. translates into a capture envelope of 36 metres per second; therefore, the targeted vehicle would have been in the radar beam for less than one second. This is hardly sufficient time for an operator to develop a meaningful tracking history.

ELECTRONIC WAVE PROPAGATION

We touched upon electronic interference briefly in the previous chapter, but with only minor observation. To really understand the impact of this phenomenon, it is necessary to digress a little. We mentioned

earlier about the occurrence of secondary harmonic frequencies. To explain, a "harmonic" is a numerical multiple of a basic frequency being transmitted. It is immaterial what this frequency is or what its source is. For example, if a Citizen's Band (CB) radio emits a signal of 27 million cycles per second (c.p.s.), the second harmonic being emitted would be twice this (54 million c.p.s.), the third harmonic emitted would be three times the first (81 million c.p.s.) and so on. In fact, harmonics can be recorded today from an ordinary CB transmitter that can range up to the 1000th harmonic quite easily, although they become progressively weaker as they are being generated. Although more sophisticated radio transmitters can be built that shield the air waves from such wave propagation, they do not yet abound. Consequently, such high harmonics, which surpass the five bands of radar receiving units in current use, are a real problem to police radar systems if they occur in sufficient signal strength. In fact, the radar's susceptibility to processing a harmonic from a foreign source can result in a spurious reading, because foreign radio signals can enter the radar set through its antenna, as well as through its associated intercabling or even through the radar's housing assembly. While manufacturers of speed radar systems employ a variety of shielding techniques to eliminate unwanted signals and make the system as responsive as possible to genuine signals reflected from vehicles within specific target envelopes, their systems are not perfect. It is impossible to make a speed radar system that is totally impervious to all unwanted signals under all operating conditions.

Leaky insulators on high tension power lines, high output microwave transmission towers and hydro power substations are examples of unseen sources that can cause significant wave propagation interference to any radar system.

Up to a six per cent error reading² can occur in a mounted radar unit if its battery source is the same as that of the cruiser's engine if the engine is idling. Furthermore, if the battery posts are dirty or loose, or if the power cable's battery clips are not tightly clamped to the battery posts, readings can flicker with considerable variance.

The presence of neon, fluorescent or mercury vapour lighting, in addition to underground communication and power lines,³ can create erratic electrical charges that have the same propagating wave interference effect as the harmonic frequencies described above.

² *Id.*, at 67.

³ Just because a power line is underground is by no means any kind of a guarantee that it is grounded or properly shielded from interfering with microwave transmission.

Most erroneous readings, however, are generated inside the police officer's vehicle. Vehicle-to-station and station-to-vehicle voice transmission or maintaining an open line between the two can seriously affect radar readings, as can alternators, air conditioners, electrical motors for fans and windshield wipers, ignition systems (as mentioned above) and sirens. Thus, relocating the radar unit within the vehicle by only a few centimetres to a more receptive location to achieve more accurate speed measurements should be done with great care. The "whistling" is the guide.

POLICE TAMPERING

While most police officers are honest, decent people who work very hard at what often seems to be an increasingly thankless job, the potential exists among some police officers (as it does in many groups of people) for tampering with the rules. This is especially true if the system does not adequately discourage such practice.

Police officers are aware that the evidence they give in court will be given a high credibility rating by the court because of the objectivity of their evidence. The responsibility of disproving the accuracy of the radar device rests on the defendant, and this is in line with the legal authorities dealing with this aspect of use of radar devices.

POOR LOCATION

This is the most critical factor contributing to the greatest amount of false radar readings that exist. What is absolutely surprising is that the court, police and Crown prosecutors appear to be utterly oblivious to its importance (as are so many "expert" police radar operators). The calibre of location never seems to enter into examination, it being too nebulous a factor to consider.

IMPROPER SET-UP PROCEDURE

Set-up procedures that a police officer is required to go through with his radar equipment before using it are almost never questioned in court. If they are, they are all too glibly considered, if at all, in the rendering of any judgment by a judge.

INEPTITUDE OF RADAR ENFORCEMENT POLICE OFFICERS

Because of the exceedingly simplistic appearance of current radar systems, which have very few controlling devices (all of which make them seem to be very user friendly), some police officers believe that only a five-minute course is required to learn how to operate them outside. This attitude, not intended by any manufacturers, is the most prevalent reason why some police officers perform very badly in cross-examination by competent lawyers and justices of the peace. This situation should not develop. Individuals cannot get into a reputable police college today without exceptional talent in a variety of areas. However, the situation still develops because of the inadequacy of radar system training in many such institutions.

We shall say much more in the next chapter about these last two factors.

Chapter 11

THE DO'S AND DON'TS OF EFFECTIVE SPEED RADAR TARGETING

As we have seen from our somewhat cursory evaluations, there are a considerable number of factors that affect or influence the response of speed radar systems. While we may appear to have confirmed what many have secretly believed — that speed radar is just not all it's cracked up to be — it is still one of the most effective means to accurately target speeding vehicles. The real problem lies in its deceptively simple appearance and the very few controls that are required just to make it operate in any fashion. As a result, speed radar is, perhaps, the most misunderstood, and therefore, the most misused of all modern devices employed today for tracking speed. However, a great deal can be done to eliminate the majority of the factors that interfere with its operational accuracy if its users simply exercise a little more responsibility.

For police officers, the court and prosecutors must recognize that there are very serious limitations with every type of speed radar device that are just not going to disappear regardless of the continuing advances being made by the manufacturing industry. Consequently, effective use of radar, like any other precision instrument, can only be achieved by not going outside these limitations. The truth is that there are enough speeding vehicles abounding on roadway areas which can be easily and accurately targeted within the limitations of most radar units, and police officers need never fear there will ever be an insufficient supply.

We, of course, cannot even begin to identify every limitation involved in using particular speed radar devices since there are so many different manufacturers, all of whom make devices whose limitations vary considerably with those of their competitors.¹ We can, however, suggest some do's and don'ts in operating speed radar devices that are, we feel, generally applicable to most models available in today's market.

¹ It is respectfully submitted by the authors, in view of their studies, that this is an excellent reason why police departments and the courts should derive a "standard of acceptability" if the law is to continue to regard the evidence of speed radar readings as *prima facie* evidence. In fact, it appears to be almost a necessity since the law now regards speeding as an absolute offence, as opposed to a strict liability offence.

Chapter 16

TOP RADAR AND LASER COURT QUESTIONS

The first 10 of the following questions come with permission from Les Langford, President of Speed Measurement Laboratories Inc. (SML),¹ and are valuable for our consideration. SML is known for its excellence throughout North America and abroad. He has given us permission to quote SML fully.

1. Has your radar gun ever made a mistake? Please explain the error.

Common mistakes of radar guns include shadowing error, cosine error, batching error, low Doppler cosine error, pulsating signal amplitude, harmonic signal interference, RFI (Radio Frequency Interference) error. All radar guns make mistakes, even the newer digital models. Police officers must be truthful if they know. There has never been a speed monitoring device invented and/or in use that does not have some history of faults. Police officers who claim their radar guns have never made a mistake are either true novices or are just lying. They need to be acquainted with the fault history of their device. Have them explain these mistakes and suggest these mistakes were made in your case. We can think of the famous court case of *Florida v. Aquilera*, 48 Fla. Supp. Supp. 207 (Dade County Ct.), 1979, where 80 speeding tickets were dismissed when Judge Nesbitt observed a radar gun clock a palm tree traveling 86 mph.

2. Do you use tuning forks to check the radar gun's accuracy before each patrol shift? How do you use them?

Connecticut v. Tomanelli, 216 A.2d 625, 1966 affirmed judicial notice of the acceptability of using tuning forks to check the accuracy of radar guns. If the speed displayed on the radar is not within +/- 1 mph of the speed stamped on the tuning fork, that tuning fork must not be used. If the radar is used in the moving mode, two tuning forks must be used. One checks for the accuracy of the radar's high Doppler and one checks the accuracy of the radar's low Doppler. The low Doppler accuracy is important as it displays the patrol vehicle's or motorcycle's speed and is

¹ 2300 Harvest Glen, Fort Worth, Texas, 76108.

necessary in speed compilation of the offending speeders. If the radar gun is stationary only, one tuning fork is used. This is not radar gun calibration. Police agencies should have tuning fork certifications for accuracy and records of tuning forks being used on all radar guns each day before each shift. Tuning forks must have notarized statements of accuracy and must be tested every three years by an independent facility. *(We do not adopt this three year wait and see policy. There are such conditions as hydrogen embrittlement in alloys, and by tuning forks made by extrusion; grain breakage can occur during short time intervals that make them inaccurate. A simple dropping can produce grain breakage, setting up discordant harmonics, and ruin the fork forever.)*

3. What radar band is used by your radar gun?

There are, at the moment, five radar bands approved by the Federal Communications Commission for use in speed enforcement. They are: X, K, Ka, Super Ka, and Ku that cover various gigahertz (GHz) (billions of microwave cycles per second) that range from 10.475 to 36.0 GHz. This is important as they all have different beam divergence patterns. A radar gun's microwave beam diverges much like a flashlight. Police officers should be able to identify which radar band is used by their radar as *Ohio v. Wilcox*, 1974 and *Honeycutt v. Kentucky*, 408 S.W.2d 421, 1966 both affirm operators must be qualified through proper training. The police officer must understand different beam divergence patterns of the different radar bands if they are to properly identify a suspected speeder with a radar or laser speed gun.

To assist police officers and other law enforcement personnel, we give the following information:

COMMON TYPES OF RADAR BANDS

X-Band Radar: 10.5 to 10.55 GHz. Started in the 1950s, X-band radar is the easiest to detect because of its lower frequency and higher power output. Depending on terrain, temperature and humidity, X-band radar can be detected from a distance of 2 to 4 miles, yet it can only take accurate readings of speed from a distance of 1/2 mile or less.

Unfortunately, police radar is not the only source of X-band signals. Garage door openers, microwave intrusion alarms, microwave towers, and other high-tech equipment can fool a radar detector into giving off an X-band alert. Filters and redundant sampling (back-up systems) are used to combat this "falsing".

K-Band Radar: 25.05 to 24.25 GHz. Such devices have a relatively small wavelength so they are more easily absorbed by water molecules in

the air. At the power level found in police radar guns, K-band has an effective clocking range of about 1/4 mile. Depending upon terrain (around a corner, over a hill, etc.), K-band waves can be detected from a range of 1/4 mile to 2 miles.

K-band guns also have what's known as "Instant-On" radar. This keeps the transmitter in "hot stand by" mode, ready to be activated by a police officer when the target is within 200-300 yards. If it's been aimed at you, your speed has been measured by the time the detector alerts you. If it is being used to target vehicles ahead of you, your detector may provide a warning in time for you to slow down and avoid a ticket. We mention this only because of the many "fuzz busters" that are tuned to K-band.

Ka Photo Cop and Ka Wide-Band: 34.2 to 35.2 GHz. In 1987 the FCC (Federal Communications Commission) allocated a frequency on yet another band, Ka, for police radar use. With that came the introduction of photo radar (also known as "photo-cop"). The photo-cop system works at 34.3 GHz and combines a Ka-band radar gun with an automated camera.

A vehicle approaching at or above a predetermined speed will trigger the camera. The photo shows the front of the vehicle, license plate, driver's face, the date, location, and time. The unit can clock and photograph up to 200 vehicles per hour. Alleged speeders are not stopped. The film is processed and a ticket is mailed to the registered owner of the vehicle, ordering him or her to pay the fine or appear in court.

Ka Super Wide-Band: 33.4 to 36.0 GHz. The introduction of the "stalker" radar gun raised the stakes in the detection game. Unlike all previous guns, the Stalker has been FCC licensed for any frequency in the Ka-band between 33.4 GHz to 36.0 so cannot be picked up by detectors designed only for X, K, and photo radar. Stalker guns are being used in more than half the country. In response, manufacturers have developed detectors with "Super wide-band" technology that sweeps all of the Ka-band allocated to radar, as well as providing continuous feedback.

Photo-cop's effective range is 120-300 feet and it transmits a continuous signal which is a plus for radar detectors. The distance at which it can be detected varies, depending upon a detector's Ka-band sensitivity. Better detectors can typically sniff out a photo-cop system 1/4 to 1/2 mile away. Only a handful of cities use photo radar. Industry sources predicted widespread interest and expanded use, but that has not been the case. Legal controversies along with prohibitive expense have caused officials to stick with more traditional methods of speed detection. The FCC later expanded Ka-band radar use to a range of 34.2 to 35.2 GHz. This became known as Ka Wide-Band.

Ku Band Radar: The Federal Communications Commission (FCC) has allocated **13.45 GHz** in the Ku band for traffic radar use in the United States; however Ku radars are not sold or used in the U.S. Some European countries are reported to use Ku band (13.45 GHz) traffic radars.

4. Were there other vehicles in the beam width of your radar gun when you allege I was speeding?

The correct answer is there very well might have been but it was yours that I identified.

Michigan v. Ferency, 133 Mich. App. 526, 351 N.W.2d 225, 1984 held the police officer must be able to establish the target vehicle (speeder) was within the beam width of the radar gun. The beam widths of radar bands are different at 500 feet: X band 157 feet, K band 104 feet, and Ka band at 79 feet. On the interstate 157 feet covers all four lanes of the highway. *Ferency* also held the police officer must understand the operation of their equipment as the radar interacts with the environment. Recently Pennsylvania police were embarrassed when their new radar constantly clocked rocks at 70 mph when in fact the radar was reporting the speed of the unit's heater fan according to the *Philadelphia Inquirer*. If the police officer targeted your vehicle at 1000 feet how many other vehicles were in the beam's width? By its nature, radar can't single out one vehicle in a group. Which vehicle produced the speed reading?

5. Has the police officer been properly certified to operate radar and laser guns?

NHTSA (National Highway Traffic Safety Administration) calls for police officer re-certification to operate radar and laser guns every three years. It also calls for radar and laser gun re-certification every three years to be conducted by an independent testing company. The police department should produce these documents of compliance. NHTSA also calls for police officer certification to consist of 24 hours of classroom instruction and 16 hours of supervised field experience prior to use of speed enforcement radar and laser guns. Equipment re-certification must not be conducted by the manufacturer of the radar or laser guns. Police officers should carry on them at all duty times proof of their certification to properly operate radar and laser speed guns. Some states have specific training requirements for certification.

6. Did the police officer establish a valid visual tracking history of the vehicle prior to issuing a ticket?

Wisconsin v. Hansen, 85 Wis.2d 233, 270 N.W.2d 212, 1978 and *Michigan v. Ferency*, see previous, both held the police officer must establish and complete a valid "visual tracking history" which includes vehicle identification by make and model, establishing the vehicle is

within the beam of the radar used, using the radar gun's Doppler audio, checking the police vehicle's speedometer twice, comparing the speedometer speed to that of the radar's patrol speed. Was this done in this case? If so, explain how the police officer determined this vehicle was within the main power beam of the radar.

7. Is the speed gun on the IACP approved list of radar and laser speed guns?

This question must be answered by the police officer. After Judge Nesbit observed a palm tree traveling at 86 mph, model minimum performance standards were set by government agencies for radar and laser guns. NHTSA, the National Institute of Standards and Technology (NIST), the International Association of Chiefs of Police, and the National Bureau of Standards have all established lists of radar and laser guns approved for use in speed enforcement. The police officer should be able to produce evidence the radar or laser gun used appears on such lists. The IACP publishes a CPL (Consumer Products List) of approved radar and laser guns. See www.theiacp.com.

8. What radar training program did the police officer complete?

If the police officer states the training was given by radar or laser gun manufacturer's representatives, such training violates the court ruling of Judge Michael S. Ullman, *California v. Kruger, Pantos, and Payne*, case # 887092, DP 44339, DP 54571, 1986. In this case, speeding tickets were dismissed when the judge discovered training and certification were inadequate. The court said, "training programs should be conducted by highly qualified radar operators consistent with NHTSA 24/16 guidelines and not by manufacturer's representatives." State and local jurisdictions have specific training requirements.

9. At what distance are laser speeding tickets valid?

Laser is infrared light and has a very narrow beam divergence. At 500 feet, its beam is a mere 18 inches in diameter. Unlike radar, laser can target one vehicle in a group. However, Judge Reginald Stanton, New Jersey Supreme Court, 1998 issued a national laser usage precedent in stating laser gun speed measurements may not be made past 1000 feet due to the possibility of a laser "sweep error". There is a possibility past 1000 feet that part of the laser's beam could strike an adjacent vehicle and show the operator that vehicle's speed instead of the vehicle targeted by the laser gun. A laser speeding ticket should show the distance at which the laser captured the speed and the make and model of the laser gun.

(It is our view, when technology catches up, that a printed "timed" phase lag, from beginning to end, will be introduced as critically essential.)

10. State the steps in a valid visual tracking history and does the radar comply with OSHA safety standards? (Canada's counterpart, WHMIS, has none.)

The police officer should answer with the proper steps in establishing a valid visual tracking history. These steps are: Visual Observation of the suspect vehicle, including the distance of the vehicle and being able to identify the vehicle by make and model; Audio Confirmation of the vehicle's excessive speed using and understanding the radar gun's Doppler audio controls; Radar Verification of the visual observation with the radar reporting the speed of the target vehicle; and Speedometer Verification of the patrol speed of the police vehicle matches the patrol speed of the police vehicle as reported by the radar. This verification should be done twice and the speeds should match. OSHA in conjunction with NHSTA, the IACP, and the National Bureau of Standards have set model minimum performance specifications (1994) for radar gun including the maximum amount of allowable microwave radiation emitted by the devices to be considered safe to operate by police officers and safe to the public. The current maximum allowable radiation is 5mW/cm². Older radar guns do not comply with this radiation standard. The police officer should be able to produce documents verifying compliance with these radiation standards of the radar gun used to issue speeding tickets.

11. Do laser guns use the Doppler principle like radar guns or some other principle?

The answer is that some do but only as an audio alert to direct the police officer's attention, if need be, to "look" for an up and coming target. Some police officers may not know this since the particular type of equipment they have been trained on and use has no audio alert. However, not giving this answer immediately, but rather, stumbling about trying to answer laser gun operations in some other way could immediately imply that the police officer is generally insufficiently trained in the use of laser guns *per se* and that their certification in laser gun usage is suspect.

NOTE: For example, there is at present what is called a CO₂ laser based differential absorption LIDAR (DIAL) system that measures "speed" by back-scatter return, which is entirely based on the Doppler principle to measure speed. (More about this in Appendix F.)

12. In what way are radar speed guns different from laser speed guns?

A police officer not knowing this and giving a fumbling, cover-up answer puts in question their capacity for being a helpful witness for the court. Radar devices operate in a passive mode, sending out microwaves in large enveloping envelopes, waiting to read, by Doppler effect, vehicle speeds within this envelope. The police officer also waits passively until their unit alerts them (or their screen displays a speed in excess of a pre-set speed threshold) to a speeding vehicle. Only then do they take enforcement action.

Laser devices, by contrast, require the active participation of a police officer who uses a mounted but stationary gun that fires pulsed bursts of infrared bundles in a line-of-sight mode like a rifle (the officer personally sighting the gun to do this). A laser speed gun shoots a very short burst of infrared laser light and then waits for it to reflect off the vehicle and return. The gun counts the number of nanoseconds it takes for the round trip, and by dividing by 2 it can calculate the distance to the car. If the gun takes 1000 samples per second, it can compare the change in distance between samples and calculate the speed of the car. By taking several hundred samples over the course of a third of a second or so, the accuracy can be very high.

QUESTIONS ATTORNEYS MAY ASK WHILE CROSS-EXAMINING A POLICE OFFICER

The following questions are capable of being asked a police officer by a defendant or his attorney, especially in a case where more than just a speeding offence occurs. Charges such as impaired driving (DUI), reckless driving, resisting arrest, and several others wrapped together often occur (but not necessarily).

It really depends upon the judge and how much latitude they will allow. Of course, the reason these types of questions are asked is in an attempt to discredit the credibility of a police officer. It has been our unfortunate experience to see very excellent, well trained and experienced officers made out to be foolish and incompetent, and hence become so thoroughly confused, abused and humiliated by this calibre of questioning that their testimony is thrown out.

1. Are you a drinking man?
2. Do you ever get nervous on the job?
3. Have your judgments ever been overturned? (Why? Why not?)

4. Do you think about other things while on duty? (Do you ever daydream?)
5. What do you think about sex? (Have you ever had sex with someone else in the same week? Month? How about homosexuals, do you like them?)
6. Does using speed monitoring devices give you a thrill? A high? A power trip? (Why? Why not?)
7. What's your real reason for becoming a police officer?
8. Have you ever carried a grudge against anyone or anything? (Never?)
9. Do you like fast cars? (NASCAR? Indy 500? Why not?)
10. What kind of drugs do you and your family take? (Ever take non-prescription drugs? How about pot? Ever tried it a little?)
11. Were you ever divorced for what your ex-wife/ex-husband regarded as criminal behaviour?
12. Did you ever speed yourself? (Why? Why not?)
13. Was that your favourite colour of car? (What is your favourite colour?)
14. What do you think about policemen making their monthly quota? (Good? Bad? You don't believe they do?)
15. Ever had a wee drink before driving? (How many?)
16. How many car accidents have you ever had? (Were speeders involved?)
17. Ever stopped the same driver twice?
18. Ever get bad mouthed by a driver? (and got even? This is the real question being asked.)
19. Do you think white drivers are better than black drivers?
20. Do you ever hear voices? (Why? Why not?)
21. Do you wish you had a better job? (How about a promotion in the department?)
22. Do you have a temper? (How do you manage it?)

And there are countless others.

You can well wonder why a judge would ever allow a defence lawyer (or an advocate for the defendant) to ask such questions. The truth is that some do and a good lawyer can find ways around almost any prosecu-

tor's objections by re-wording such questions to make them allowable. (Just by providing a good reason that has supposed bearing on the as yet-to-be-introduced other charges in the case is often sufficient to be allowed.)

The problem here is that a good police officer is only human; and because of their endeavour to be honest, they can be tied up in such bad knots that by the end of their testimony their credibility is highly questionable.

These questions demand that police officers provide suitable answers that will not anger them nor personally debase them. A good weekend "workshop" on handling these types of offensive questions, without looking foolish is an absolute must.

Also, remember that there is nothing more wanting by a good defence lawyer, on cross-examination, than to get you angry. For then, your case is likely lost.

Chapter 18

CONCLUSIONS

In the preceding seventeen chapters we have shown what constitutes the offence of speeding and its relegation into the third class of statutory offences as an absolute liability offence (see *R. v. Hickey*¹). There are some other aspects of speeding which we may describe as regulatory, dealing with topics which are ancillary to the legal requirements of speeding. We hope, by now, that the reader has a firm grip of what speeding is and how speed detection devices operate. Some very novel and interesting situations have arisen and, as can be expected, many innovative arguments and strange procedures have been advanced by defendants and legal practitioners in the Provincial Offences Appeal Court.

We shall, in this closing chapter, examine some of the appeals that have reached the Provincial Offences Appeal Court and extract from these many appeals the law governing the more important questions of onus of proof, costs, constitutional issues, the reverse onus principle and related matters regarding the offence of speeding and the procedures to be followed since the *Provincial Offences Act*² came into force, and with it, the creation of the Provincial Offences Appeal Court.

Radar, laser and other speed detection devices discussed in earlier chapters are the devices that are currently in use to track down drivers who speed. One has to realize that many of the speed detection devices are highly scientific instruments and function properly only if the rules and conditions regulating their use are strictly adhered to and faithfully observed.

MOTION FOR NON-SUIT — “NO CASE SUBMISSION”

After the prosecution's case is closed, it very often happens that the defendant or his lawyer submits that there is no case to answer, commonly called “no case submission”. This is often referred to as a motion for

¹ [1976] O.J. No. 2149, 12 O.R. (2d) 578, 68 D.L.R. (3d) 88, 29 C.C.C. (2d) 23 (Ont. Div. Ct.).

² R.S.O. 1980, c. 400 (now R.S.O. 1990, c. P.33).

non-suit. This is a rather unfortunate expression to use in proceedings that are designed and geared to try quasi-criminal offences. The offences that are amenable to prosecution under the procedures set out in the *Provincial Offences Act* of Ontario are not crimes, but for all practical purposes the procedures adopted in prosecuting these infractions follow the same rules and guidelines as if the matter were being prosecuted in the criminal courts. For example, the law governing the onus of proof, the *voir dire* procedure regarding the voluntariness of a statement made by a defendant, the law regarding hearsay evidence, *res gestae*, similar facts and arraignment, to mention a few areas, are the same as if the matter were a full-blown criminal trial.

The justice of the peace is not assisted by a jury. He has to make findings of fact based on the evidence before him. He has to assess the credibility of the witnesses who gave evidence before him and he has to evaluate the evidence. If the trier of fact finds that there is no evidence adduced by the prosecution to prove the charge, he must, at the close of the case for the prosecution, dismiss the charge. It is after the prosecution has closed its case that the no case submission is made. In *R. v. Cahill*,³ Campbell C.J. said: "It is manifestly improper to put an accused person on his defence if the Crown has not produced evidence on which he might properly be convicted".⁴

If there are doubts or questions raised with respect to the truthfulness or reliability of the witnesses, or the weight or sufficiency of the evidence adduced by the prosecution, and if the evidence is insufficient to establish the guilt of the accused beyond a reasonable doubt, then the benefit of such doubt must be given to the accused.⁵

At the close of the Crown's case, the trial judge, if requested by the defendant, must rule whether or not a *prima facie* case has been established: see *R. v. Kennedy*⁶ and *R. v. Snyder*.⁷ In *R. v. Angelantoni*,⁸ it was held that a trial judge must dispose of a motion for dismissal before he may put the defendant to his election as to calling evidence.⁹

³ (1962), 132 C.C.C. 252, 40 C.R. 166 (P.E.I.S.C.) (subsequent references are to C.C.C.).

⁴ *Id.*, at 254.

⁵ See *R. v. Morabito*, [1949] S.C.J. No. 2, [1949] S.C.R. 172, [1949] 1 D.L.R. 609, 93 C.C.C. 251 (S.C.C.).

⁶ [1973] O.J. No. 108, 11 C.C.C. (2d) 263, 21 C.R.N.S. 251 (Ont. C.A.).

⁷ [1974] S.J. No. 50, [1974] 3 W.W.R. 372, 16 C.C.C. (2d) 331 (Sask. Q.B.).

⁸ (1975), 28 C.C.C. (2d) 179, 31 C.R.N.S. 342 (Ont. C.A.) (subsequent references are to C.C.C.).

⁹ *Id.*, at 182.

SECTION 9 OF PART I OF THE *PROVINCIAL OFFENCES ACT*

Many citizens receive their offence notice from the police officer and do nothing about it. The offence notice is an important document that is served upon the citizen and it tells him: (1) of the offence with which he is charged; and (2) what he should do if he wishes to defend the charge. Many people just deliberately fail and/or refuse to read the offence notice and the attached instructions giving clear directions as to what is to be done if the citizen wishes to plead guilty, plead guilty with an explanation which may mitigate the penalty or plead not guilty. This procedure, established by the *Provincial Offences Act*, has been in existence since April 1, 1980.

This is what the Ontario Court of Appeal in *R. v. Carson*¹⁰ had to say about s. 9(1) of the 1980 *Provincial Offences Act*:

Section 9 is found in Pt. I which establishes a simple expeditious procedure for dealing fairly with provincial offences and imposes a limitation as to penalty. This is as opposed to the procedures under Pt. III of the Act by way of information and summons in which case a greater penalty may be attracted. The procedure under Pt. I was intended to alleviate inconvenience, cost and hardship to those charged with offences under provincial Acts. It was also intended to remedy the over-taxed Court system which was very costly to people of the province. Under the scheme of Pt. I the person charged may complete the offence notice and deliver it, specifying, from the available options, how his case is to proceed. As indicated above, he may plead guilty and pay a fine that is fixed without having to go to Court. He may also plead guilty with an explanation and simply appear at a court office at a convenient time to explain the situation to the person in authority. Finally, he may plead not guilty, in which case there is a trial. However, the scheme imposes a time limit within which the person must act as requested. *If he does not act, and that is his choice, the section provides and the notice states, "you will be deemed not to wish to dispute the charge, and a Justice shall enter a conviction in your absence."* We think that this approach is both fair and logical in the circumstances.¹¹

If the defendant pleads not guilty then he must proceed to lead evidence to prove his case. If the defence is that the speed detection device (let us say radar) was not working properly and gave a wrong reading, then the defendant must adduce evidence for the court to adjudicate on the

¹⁰ [1983] O.J. No. 2996, 41 O.R. (2d) 420, 147 D.L.R. (3d) 754, 4 C.C.C. (3d) 476, 4 C.R.R. 289, 34 C.R. (3d) 86, 20 M.V.R. 54 (Ont. C.A.) (subsequent references are to M.V.R.).

¹¹ *Id.*, at 57.

issue. The defendant or his counsel must put the facts on which the defendant is relying when cross-examining the police officer in order to give him an opportunity to admit or deny what the defence is relying upon. Bear in mind that speeding in Ontario is an absolute liability offence and the mere driving above the speed limit constitutes the offence. The amount in excess determines the penalty. In some Canadian provinces and in some countries where speeding is a strict liability offence, the defence of "due diligence" is available to the defendant. Some courts have held that "necessity", if fully and properly established, can be a defence to the absolute liability offence of speeding.

The onus is on the defendant to show he was not speeding and he must adduce evidence before the court to prove the issues raised in his defence. Although this is a heavy burden to discharge, there are many instances where the defendant was successful in proving either that the device was not functioning properly or that the test carried out by the police officer to prove that the device was functioning properly was not in accordance with the manufacturer's specifications as set out in the manufacturer's manual. It is one thing for the officer to say he tested the device and found it to be working properly, but it is quite a different situation when the test carried out could not be verified as the recommended test set out in the manufacturer's manual (which many police officers admit they have never seen). The defendant or his counsel can, with diligent and careful cross-examination, make serious in-roads in the prosecution's case. See the case of *R. v. Phillips*¹² referred to in Chapter 3, where Mr. Justice Sullivan held that the evidence adduced by the Crown at trial was not of the quality to prove the case "beyond a reasonable doubt", especially in view of the evidence that the perfect radar equipment can become most unreliable when unqualified and untrained people undertake its operation.

SECTION 11(D) OF THE CANADIAN CHARTER OF RIGHTS AND FREEDOMS

The defence is rejected by the judge, then a conviction is entered and the court proceeds to penalty. Some judges sometimes fine the defendant the maximum or a higher fine than would normally be imposed on a person who did not defend the case. This, it is respectfully submitted, is not the proper course to follow under the pretext that the defendant "wasted the court's time" when he could have pleaded guilty and paid a

¹² (1972), 10 C.C.C. (2d) 39 (N.S. Co. Ct.).

much lower fine. The defendant's rights are protected in s. 11(d) of the *Canadian Charter of Rights and Freedoms*¹³ which preserve the doctrine of the presumption of innocence of a defendant. The court can also order the defendant to pay costs. This is dealt with a little later in this chapter. See the important cases of *W.H. Valley Auto Wreckers Ltd. v. Township of Roxborough*,¹⁴ where Judge J.M. Harris examined the principles governing the payment of costs. In *Lupo v. The Queen*,¹⁵ costs were ordered to be paid to the appellant. The question of "systemic delay" is fully discussed in Chapter 5. A full examination of the use of the speed detection devices mentioned in this Book has been competently discussed in depth and graphically illustrated in Chapters 6 – 17 by the co-author of this Book.

NON-COMPLIANCE

By 1981, the procedures as set out in the *Provincial Offences Act* had been severely challenged and many appeals were brought on the ground that there was non-compliance with many of the provisions of the Act. For about 18 months His Honour, Provincial Court Judge R.B. Dnieper presided over the Provincial Offences Appeal Court at Old City Hall, Toronto and dealt with the majority of those appeals. In *Greenspan v. The Queen*,¹⁶ it was argued that the certificate of offence was a nullity because the Provincial Offences Court of the judicial district of York was not "named in the certificate in accordance with the requirement in s. 3(1) of the *Provincial Offences Act*, R.S.O. 1980, c. 400".¹⁷ Dnieper Prov. Ct. J. held that the certificate was not a nullity and that there was compliance with s. 3(1) of the Act. Leave was then sought to appeal to the Ontario Court of Appeal. Mr. Justice Brooke refused leave to appeal and upheld the ruling of Dnieper Prov. Ct. J., stating that His Honour had properly applied the law.

Several other appeals dealt with ss. 3(1) to 3(4) of the *Provincial Offences Act*. Provincial Court Judge J.L. Addison ruled in the *Schweyer*¹⁸ appeal that the court must examine the nature of the non-compliance with the provisions of the Act and then decide whether the irregularity or defect

¹³ Part I of the *Constitution Act, 1982*, being Sched. B to the *Canada Act 1982* (U.K.), 1982, c. 11.

¹⁴ (20 September 1984), unreported (Prov. Ct. Crim. Div.).

¹⁵ (29 November 1984), unreported (Prov. Off. App. Ct.).

¹⁶ (1982), 17 M.V.R. 57 (Ont. Prov. Off. Ct.).

¹⁷ *Id.*, at 58.

¹⁸ *R. v. Schweyer* (25 June 1981), unreported (Prov. Off. App. Ct.).

was "on the substance or form". Like s. 9 of the *Provincial Offences Act*, s. 3(4) has evoked many innovative arguments. Section 3(4) states that:

Upon the service of an offence notice or summons, the person charged may be requested to sign the certificate of the offence; but the failure or refusal to sign as requested does not invalidate the certificate of offence or the service of the offence notice or summons.

It seems that the first part of the section requires the provincial offences officer to request that the person charged sign the certificate of offence. The request must be made. There must be evidence of this, but if the person charged refuses to sign, this does not invalidate the certificate of offence.

The matter came up for consideration before His Honour, Provincial Court Judge W.A. MacDonald in the appeal of *R. v. Poos*.¹⁹ The basis for the appeal was the allegation by the appellant that s. 3(4) of the *Provincial Offences Act* was not complied with by the officer.

His Honour, stated *inter alia*:

The language, the officer shall request a person sign the certificate is clearly mandatory. The fact is that the Legislature provides no remedy for the lack of request by the officer, but in the same paragraph provides a remedy for the lack of signature by the person charged. It leads to no other interpretation other than what the Legislature intended, the lack of request by the officer shall invalidate the certificate of offence.

In the result, the appeal was allowed and the conviction was set aside.

The controversy continues. Many still urge that failure to request does not amount to a procedural error but that it is a jurisdictional matter cured by the defendant attorning to the jurisdiction. Since some evidence has to be led as to the failure on the part of the officer to request the person charged to sign the certificate of offence, it is quite clear that a motion to quash cannot be brought prior to plea.

SUFFICIENCY OF INFORMATION

It is convenient to examine at this stage some important decisions of the Ontario High Court that have settled many questions that have been raised and argued robustly in the Provincial Offences Appeal Court.

¹⁹ (13 August 1986), unreported (Prov. Off. App. Ct. Brantford, Ont.).

In *R. v. Thompson*,²⁰ the defendant was acquitted of the offence of speeding on April 30, 1981, and no issue was raised at trial concerning the validity of the certificate of offence. An appeal was taken from Thompson's acquittal. After hearing the appeal on its merits, His Honour, Judge Bice, without hearing argument, held that the certificate of offence by which Thompson had been charged was a nullity in that, by omitting the word "issuing", the certificate did not comply with the prescribed form and failed to satisfy the requirements of s. 3 of the *Provincial Offences Act*. The Crown felt that the learned trial judge in the Provincial Offences Appeal Court had erred and brought *mandamus* proceedings asking for an order that Bice J. be directed to exercise his jurisdiction and to determine the appeal from the respondent's acquittal, notwithstanding the variation between the certificate of offence charging the offence and the form of certificate prescribed by the regulations. Mr. Justice Griffiths delivered an oral judgment and stated:

Here, I regard the omission of the word "issuing" as constituting a defect in form or at worst a defect in substance. It has been held that a defect in substance is one relating to the sufficiency of the charge but where the defect relates only to the means of alleging the charge it becomes one of form. . . . The omission of the single word "issuing" amounts to a defect in form. . . . there will be an order of *mandamus* directed to His Honour Judge Bice to exercise his jurisdiction to determine the appeal from the respondent's acquittal, on the merits, notwithstanding the variation between the certificate of offence charging the offence and the form of certificate prescribed by the regulations.²¹

In *R. v. West*,²² Madam Justice Van Camp reviewed the provisions of s. 26 of the 1980 *Provincial Offences Act* dealing with sufficiency of information and held that the information was not a nullity and could be amended, despite the fact that the said information was not couched in the language of the relevant section, namely, s. 306 of the *Highway Traffic Act*.²³ The learned judge granted an order setting aside the quashing of the information and ordered that the offence be tried by a provincial court judge.

In *R. v. Johnson*,²⁴ the charge was for disobeying a stop sign. The defendant failed to appear at the trial and a conviction was entered. He appealed to the Provincial Offences Appeal Court and Provincial Court

²⁰ [1981] O.J. No. 257, 61 C.C.C. (2d) 214, 12 M.V.R. 196 (Ont. H.C.J.) (subsequent references are to M.V.R.).

²¹ *Id.*, at 198-99.

²² [1981] O.J. No. 3208, 35 O.R. (2d) 179, 64 C.C.C. (2d) 417, 13 M.V.R. 70 (Ont. H.C.J.).

²³ R.S.O. 1970, c. 202, as amended by R.S.O. 1980, c. 198, now R.S.O. c. H.8.

²⁴ (30 September 1983), unreported (Ont. C.A.).

Judge R.D. Osborne dismissed the appeal. The appellant then filed an application for leave to appeal to the Ontario Court of Appeal claiming that an important point of law was involved in that he did not "have his day in Court". After considering the ground for the application, Mr. Justice Holden dismissed the application stating, *inter alia*: "I am unable to see that any important point of law is involved in this case. The application is therefore dismissed".²⁵

A very interesting appeal reached the Provincial Offences Appeal Court on February 21, 1985. In *R. v. Polla*,²⁶ the defendant was charged with speeding — doing 79 k.p.h. in an unposted 50 k.p.h. zone. The police officer gave evidence before the justice of the peace to the effect that he was operating a Muniquip 3060 radar device, serial number 2036, which he tested before and after set-up and found to be operating properly and accurately. He stated that the vehicle appeared to be speeding and it was the lead vehicle of several vehicles. The officer activated the radar device and it registered a reading of 79 k.p.h., which was locked in. There was a lengthy and relevant cross-examination of the police officer by the defendant Polla about how radar works and about its accuracy. After the Crown closed its case, the defendant made a motion for dismissal urging that where the Crown is relying on the use of the instrument to prove its case, that instrument must be approved by the prescribed authority. He then posed the question: which radar does the law recognize? After listening to lengthy arguments, the learned justice of the peace registered a conviction. The appeal was heard in the Provincial Offences Appeal Court, presided over by Provincial Court Judge W.P. Ross. Mr. Polla again argued that the conviction was bad as there was no evidence that the radar device used by the police officer was approved by the proper authorities. He urged that under the *Weights and Measures Act*,²⁷ the Department must give the stamp of approval of the instrument used. Again, Mr. Polla asked which radar the law recognizes and which is the approved instrument used by police officers.

The Crown replied setting out the principles of law governing the use of radar devices and submitted that the evidence that the radar was functioning accurately and properly after being tested by the officer is *prima facie* evidence of its accuracy until rebutted by the defendant. The radar set was used as a speed measuring device and the Crown cited the authorities (referred to in Chapter 3) regarding the *prima facie* nature of the evidence registered by the radar device.

²⁵ See His Lordship's endorsement on the court file.

²⁶ (21 February 1985), unreported (Prov. Off. App. Ct.).

²⁷ R.S.C. 1985, c. W-6.

His Honour, Judge Ross dismissed the appeal, holding that the appellant did not destroy the *prima facie* case as established by the Crown. The law does not stipulate what type of radar is to be used, but it does state that whatever the type of device used, there must be clear evidence that it was functioning properly and accurately and that it was operated by a qualified operator whose qualifications were relevant to that particular type of device. As was stated earlier, cross-examination and evidence of the defendant and/or his witnesses can destroy the *prima facie* case established by the Crown.

COSTS

There are several cases dealing with awards of costs. On April 3, 1981, Provincial Court Judge Dnieper held in the case of *R. v. Purchase*²⁸ that costs of \$25 awarded by the justice of the peace against the prosecutor was invalid. The whole question of costs was fully considered by Madam Justice McKinlay in her judgment in *R. v. Moodie*.²⁹ It used to be argued that an award of costs under s. 112 (now s. 129) of the *Provincial Offences Act* only had reference to appeals under Part III of the *Provincial Offences Act*, and that costs under s. 61(2) (now s. 60(2)) were to be awarded in proceedings commenced by certificate of offence (in other words, appeals under Parts I and II of the Act). But this view was held to be wrong and Madam Justice McKinlay had this to say on this issue:

Crown Counsel argues that s. 112 [now s. 129] is only available for appeals under Part III (*i.e.*, appeals in cases commenced by information) because that section follows the heading, found immediately after s. 98 [now s. 115] "APPEALS UNDER PART III". It has already been seen that s. 107 [now s. 124], which also follows that heading refers on its face to appeals under both Parts I and III. As well, as I have indicated, the cost provisions in s. 121 [now s. 135] dealing with fees and expenses for witnesses on the appeal includes appeals under Part III, even though it follows the heading "APPEALS UNDER PARTS I AND III".

In this Act headings are used in an unfortunately inaccurate manner. Counsel for the respondent provided a list of other sections which may have similar dual application to those referred to above. It is not necessary for the purposes of this review to examine each of these provisions in detail. However, one need only glance over the group of sections from s. 99 [now s. 116] s. 117 [now s. 137] to satisfy oneself that these sections

²⁸ (3 April 1981), unreported (Prov. Off. App. Ct.).

²⁹ [1984] O.J. No. 1266, 13 C.C.C. (3d) 264 (Ont. H.C.J.) (subsequent references are to C.C.C.).

are by no means all exclusively concerned with "APPEALS UNDER PART III."³⁰

The Crown appealed to the Ontario Court of Appeal.³¹ In delivering the judgment of the court, His Lordship, Mr. Justice Morden, stated:

This appeal is concerned with the scope of the power of a Provincial Court (Criminal Division) to award costs with respect to an appeal to that Court under the *Provincial Offences Act*, R.S.O. 1980, c. 400 in a proceeding commenced by the filing of a certificate of offence – a Pt. I proceeding.

.....

[W]e are persuaded that it was the intention of the Legislature to place a general limit on the costs of an appeal in Pt. I and Pt. II proceedings. These are less serious (see s. 12 of the *Provincial Offences Act* limiting the penalty in Pt. I proceedings) and less formal than Pt. III proceedings. It is reasonable to think that the Legislature considered the wide costs terms of s. 129 to be inappropriate to an appeal in a proceeding that is intended to be "simple and expeditious". . . .

.....

The appeal is allowed, the order of the High Court is set aside and in its place an order will issue quashing the costs disposition in the order of the Provincial Court (Criminal Division). In accordance with the disposition of this Court . . . the costs of the appeal will be to the respondent.³²

Both authors have observed with satisfaction the emergence of radar, laser, speedometer clocks, photographic imaging, aircraft tracking, VASCAR and AUTOVELOX from obscure and little-understood speed detection devices, to acknowledged, reliable and useful speed detection instruments and systems. Any instrument as reliable, sensitive and delicate (as most speed detection devices are) can give faulty readings if not used properly and in the manner contemplated by the manufacturers. It is hoped that, with the guidelines and scientific explanation set out in Chapters 6 – 17, speed detection by the devices now in use will gain in credibility; also, that the courts' acceptance of radar, laser and other devices will reassure all those involved in the administration of justice that the law is keeping abreast with and taking advantage of modern technology.

Since the appearance of the First Edition of this text, there have been innumerable instances in which its contents were cited by prosecutors,

³⁰ *Id.*, at 268.

³¹ *R. v. Moodie*, [1985] O.J. No. 128, 32 M.V.R. 208, 20 C.C.C. (3d) 189, 9 O.A.C. 281 (Ont. C.A.) (subsequent references are to M.V.R.).

³² *Id.*, at 209 and 212.

defence counsel, justices of the peace and judges. Over the years, the authors have followed with delight the fiery baptism of this text, and it is perhaps a reward for the efforts expended that this text has now become the most referred-to authority in cases involving the offence of speeding and the use of speed detection by radar and other devices. Radar is here to stay. More and better techniques have developed, to the satisfaction of the authors, who continue to follow intently the developing law in this highly scientific age. Perhaps the reader can forgive the use of this pun — the development and changes in the law on speeding are moving forward at a terrific speed.