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R. v. Chow (Alta. Q.B.)

Between
Her Majesty the Queen, Appellant, and
Daniel Chow, Respondent

[1991] A.J. No. 359
DRS 92-01804
No. 9001-0101s1 AO1

Also reported at:
29 M.V.R. (2d) 7
65 C.C.C. (3d) 162
79 Alta. L.R. (2d) 382
118 A.R. 64

Alberta Court of Queen's Bench
Judicial District of Calgary
Conrad J.

April 22, 1991
(15 pp.)

Criminal law — Traffic offences — Evidence — Admissibility — Speeding — Proof — Multanova.

Crown appeal from a ruling as to the admissibility of a photograph. The accused was charged with speeding under section 170(1) of the Highway Traffic Act. The Crown sought to introduce a photograph generated by a Multanova radar camera. The motor vehicle with licence plate was shown along with an imprint of speed, time and date. The trial judge refused to admit the photo as there was no legal sanction for its acceptance. The charge was dismissed.

HELD: Appeal allowed. There was no evidence of speed. Legal sanction was not necessary. Legal sanction was only one means of providing a foundation for admissibility. The issue was rather whether the photo was admissible and if so whether it was admissible to prove speed. No evidence was adduced as to the general trustworthiness of the new technology.

STATUTES, REGULATIONS AND RULES CITED:

Highway Traffic Act, R.S.A. 1980, c. H-7, s. 170(1).

E. Christopher Archer, Crown Prosecutor.
T. Sturgeon, for the Respondent.

REASONS FOR JUDGMENT

CONRAD J.:— This appeal relates to the admissibility of a photograph generated by the Multanova radar camera. Two issues arise:

1. Did the trial judge err in holding that legislative sanction was a precondition to admission of the evidence?
2. Was the photograph in this case otherwise admissible and if so was it admissible as proof of the speed of the vehicle?

The Respondent was charged under 5.170(1) of the Highway Traffic Act. R.S.A. 1980, c.H-71 as being the owner of a motor vehicle, the driver of which was speeding. At trial, the Crown sought to introduce evidence in the form of a photograph generated by a Multanova radar camera. It is a still photograph depicting a vehicle with an identifiable licence plate. Imprinted on the photo are a speed, time and date.

A radar unit attached to the camera through the medium of a computer transposes a speed on the photograph. The photo also bears markings made by a police constable as to time and place. This evidence was introduced through Constable Somerset, as the person responsible for setting up and monitoring the Multanova unit. Constable Somerset's expertise related solely to the installation and use of the Multanova Radar 6F unit. His qualifications do not relate to the technical operation of the camera itself.

The trial judge refused to admit the evidence on the basis that there was no legislative sanction for its acceptance. The charge was dismissed and the Crown appeals.

The hearsay rule lies at the heart of the argument over the admissibility of mechanically produced evidence. The concern is that the evidence stems from the "perception" of a machine which cannot testify. As such, a person must be called to testify as to what the machine "perceived". Thus, while the human element may not be totally removed from the process, it is at least once removed from the evidence gathering process. It is necessary to deal with mechanically produced evidence as an exception to the hearsay rule.

Issue One: Did the trial judge err in holding that legislative sanction was a precondition to admission of the evidence?

Courts have accepted mechanically produced evidence in the absence of legislative authority to do so. In The Statute of Liberty (1968) 2 All.E.R. 195, Sir Jocelyn Simon P. allowed mechanically produced evidence, in the form of photographs emanating from radar echoes, as evidence of how and where a collision between two ships occurred on the Thames River. The radar machine was not monitored by human agency. In holding that the evidence in question had nothing to do with the hearsay rule, the Court concluded with the following oft-quoted words:

> If tape recordings are admissible, it seems equally a photograph of radar reception is admissible--as, indeed, any other type of photograph. It would be an absurd distinction that a photograph should be admissible if the camera were operated manually by a photographer, but not if it were operated by a trip or clock mechanism... The law is bound these days to take cognizance of the fact that mechanical means replace human effort. (emphasis added)

The Crown draws an analogy between this case and radar cases. A. v. Moreau (1978), 42 C.C.C. (2d) 525 (S.C.C.) focused on the legislative scheme contained in the Criminal Code R.S.C., 1985 c.C-46 relating to impaired driving, and specifically the admissibility, within that scheme, of expert evidence tendered to challenge the bias of an authorized breathalyzer device. The majority of the Court, in a 5-4 decision, held that such evidence did not fall within the legislative scheme provided in the Code. in so doing, the majority drew a distinction between instruments that bore statutory authorization and those that did not. Breathalyzer instruments were included in the former category; radar instruments were included in the latter category.

I think it can be fairly stated that speeds detected by radar are routinely allowed into evidence without proof of the reliability of radar, radar being accepted as generally trustworthy. What is required is the proper foundation for its admissibility and that can be done without legislative sanction. In The Law on Speeding and Radar, A. Manraj, P. Haines, (Toronto: Butterworths, 1985) the authors state at pp. 21 and 25:

> "Radar has come a long way since the end of World War II and one can fully appreciate what His Honour, Judge R.B. Dnieper, Provincial Court Judge meant, when presiding over the Provincial Offenses Appeal Court on August 20, 1981, in the case of R v Axler, he said:
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> ...Radar alone is good evidence. After 42 years of use, the courts will accept as prima facie evidence, the accuracy of radar devices. No longer is radar merely corroborative evidence. It is now primary evidence.'
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> 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 has to 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."

In my view the judge erred in holding legislative sanction was required prior to admitting the photograph, provided the proper foundation is laid for its admission, legislative sanction being only one means of providing this foundation. The real question is whether the evidence produced from the Multanova camera can, at this time, be admitted as proof of the speed in the same manner as radar.

Issue Two: Was the photograph in this case admissible and if so is it admissible as proof of the speed of the vehicle?

The second issue relates to the admissibility of the photograph on the facts of this particular case. The Multanova photograph was tendered as proof of the fact that a particular vehicle was, at a particular place, at a particular time, travelling at a particular speed.

Constable Somerset was called to verify the photograph. He stated in examination-in-chief that the photograph fairly depicted the scene that was before him on the day in question. (A. B. 6, 8-11) In cross-examination he stated that he remained on the scene while the Multanova unit operated with the purpose of watching the camera as it was activated. He bad no independent recollection of the camera photographing the particular vehicle in question.

Constable Somerset testified he had received training in the installation and use of the Multanova Radar 6F unit and that on the day in question he had tested the unit, both by the machine's self test and by his own visual test, and had come to the conclusion that the camera was functioning properly and capable of accurately measuring the speed of vehicles.

When questioned with respect to the testing of the equipment, he explained that the self-test merely means you turn the handset on and the hand-set will then illuminate and say "selftest OK". With respect to the test which he administered, be visually monitored the traffic before he set up the unit. He made his own visual test where he compared his estimate of the speed to the speed showing in the camera and came to the conclusion the camera was functioning properly and capable of accurately measuring the speed of vehicles (A.B. 4, 8-22). He also testified that he monitored the camera while it operated, that the film was developed and that the picture developed fairly depicted the scene that was before him on that day (A.B. 5, 19-6, 12).

He gave some evidence relating to the internal operation of the camera but, as mentioned previously, was not qualified to give evidence of the internal operation and risks inherent in the machine itself.

The Crown argues that the photograph is akin to a crime-inprogress video and admissible under A. v. Leaney (1987), 38 C.C.C. (3d) 263 (Alta. C.A.). At issue in that case was the admissibility of a video recording of a break-in at a drug store, made by a security camera. In holding the video admissible, Harradence J.A., dissenting on other grounds, cited A. v. Creemar [1968] 1 C.C.C. 14 at 22 (N.S.C.A.), where that court held that:

> All the cases dealing with the admissibility of photographs go to show that such admissibility depends on (1) their accuracy in truly representing the facts; (2) their fairness and absence of any intention to mislead; (3) their verification on oath by a person capable to do so.

Harradence J.A. applied this test, and also discussed problems that may arise where there is an absence of eye witnesses to verify what the video tape purports to prove. At p. 275, referring to the test in Creemar, he said:

> In my view, this is a proper test for determining the admissibility of a crime-in-progress video tape. The party seeking the admission of the video must prove that it is accurate and fair through the verification evidence of a witness or witnesses under oath. In most situations this will be easily done. An eyewitness can testify that the video accurately represents the event that took place. Where there is no such eyewitness, accuracy and fairness will need to be verified by more technical evidence. The United States Court of Appeals examined the possible components of such evidence in United States v. Taylor, 530 F.2d 639 (1976) (at pp. 641-2):
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> > ...The only testimony offered as foundation for the introduction of the photographs was by government witnesses who were not present during the actual robbery. These witnesses, however, testified as to the manner in which the film was installed in the camera, how the camera was activated, the fact that the film was removed immediately after the robbery, the chain of its possession, and the fact that it was properly developed and contact prints made from it. Under the circumstances of this case, we find that such testimony furnished sufficient authentication for the admission of the contact prints into evidence. Admission of this type of photographic evidence is a matter largely within the discretion of the court...
>
> These are the kinds of matters the trial judge may wish to consider in determining the accuracy and fairness of a video tape sought to be admitted into evidence where no eyewitness verification is possible. (emphasis added)

On the other hand, the Respondent argues that the Multanova photograph is distinct from a crime-in-progress video, and from the Leaney case itself. First, and most obvious, the Multanova photograph is a still picture, portraying an instant in time, while a video portrays the occurrence of events in a passage of time. This leads to a subtle but important distinction. A Multanova photograph draws a conclusion for the court; that a particular vehicle at a particular place in a particular instant of time was speeding. All of the elements of the of fence of speeding are presented to the court; the only possible conclusion to be drawn is guilt. A video recording, on the other hand, represents a series of events in time, and leaves for the court the conclusion as to sufficiency of proof of the essential elements of the offence.

The law relating to the admissibility of photographs has been referred to above in Creemar, supra. in 3 Wigmore, Evidence (Chadbourn rev.1970) s. 790 at 218, the principles of admissibility are discussed.

> We are to remember, then, that a document purporting to be a map or a diagram (or a photograph) is, for evidential purposes, simply nothing, except so far as it has a human being's credit to' support it. it is mere waste paper --testimonial nonentity. It speaks to us no more than a stick or a stone. It can of itself tell us no more as to the existence of the thing portrayed upon it than can a tree or an ox. We must somehow put a testimonial human being behind it (as it were) before it can be treated as having any testimonial standing in court. it is somebody's testimony, or it is nothing. it may, sometimes, to be sure, not be offered as a source of evidence, but only as a document whose existence and tenor are material in the substantive law applicable to the case. . .But whenever, such a document is offered as proving a thing to be as therein represented, then it is offered testimonially, and it must be associated with a testifier.

Further, s. 793 at 239:

> The use of maps, models and diagrams as testimony to objects represented rests fundamentally...on the theory that they are communications of a qualified witness who uses this method of communication instead of or in addition to some other method. It follows, then, that the map or diagram must first, to be admissible, be made a part of some qualified person's testimony. Some one must stand forth as its testimonial sponsor; in other words (as commonly said), it must be verified.
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> ...A witness must have had observations of the data in question, must recollect his observations, and must correctly express his observation and recollection. Here, then, is a form of expression ready prepared pictorially; he must supply the missing element; in brief, it must appear that there is a witness who has competent knowledge, and that the picture is affirmed by him to represent it.

In the present appeal, Constable Somerset was called to verify the photograph. He could verify that he was present and operating the camera and that it properly represented the general location but be had no independent recollection of the vehicle in question or the speed at which this vehicle was travelling. Certainly the trial judge could find the photograph admissible on the basis of his evidence as evidence indicating that the car travelled the roadway he was monitoring. However, he had no recollection of the particular vehicle or its speed whatsoever.

The real issue here is not whether the photograph can be admitted in evidence, but whether the impression of speed made by the camera on the photograph is primary proof of speed. Can it be admitted in the same manner as radar by simply establishing that the particular instrument was in proper working order and where operated by a qualified person, or must there be more? In my view it is necessary for the camera in question to also meet the general rules relating to testimony based on instruments. The foundation for such testimony is the trustworthiness of the process. That can be satisfied by:

(a) technical evidence of the trustworthiness of the process in general, and
(b) evidence of the correctness of the particular instrument as one of the trustworthy type.

Under the heading "Personal knowledge supplied by scientific instruments", Wigmore, supra, explains at pp. 243-244:

> It is obvious that, in using instruments based upon the science of physics, we obtain a representation of things not perceivable by the ordinary senses; for example in looking through a magnifying lens, we are presented with details which are invisible to the naked eye. Upon the principles, then, of testimonial knowledge, can it be said that we have personal knowledge?
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> Our impression is not received by the unaided senses, but depends for its verity upon the correctness of the intermediate instrument or process. it would seem plain, however, that the situation is the same as if our senses had been abnormally enlarged in scope or capacity, and that we may here also claim to have knowledge, in the ordinary sense, provided only that the instrument or process is known to be a trustworthy one. That trustworthiness may be based upon general experience as to the class of instrument in question, together with a knowledge of the mechanism of the particular instrument as one constructed according to the trustworthy type.
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> What is needed, then, in order to justify testimony based on such instruments, is preliminary professional testimony: (1) to the trustworthiness of the process or instrument in general (when not otherwise settled by judicial notice); (2) to the correctness of the particular instrument, such testimony being usually available from one and the same person. Any process or instrument furnishing abnormal aid to the senses may thus be employed as a source of testimonial knowledge.

The Multanova camera is a new technical instrument in our Courts. its potential and margin for error and the working of its triggering mechanism are not known. Could one vehicle trigger the camera and the photograph

capture another? If not, why not? What are the potential problems with this camera? How does it work? What facts could interfere with its operation? Has it been in use in other jurisdictions and generally found to be reliable? How does the trial judge determine its accuracy? While it uses radar which has been accepted as trustworthy, the mechanism which replaces a human activating the radar is not familiar.

The Crown has failed to adduce technical evidence of the general trustworthiness of the process of speed detection by means of the Multanova Radar camera and judicial notice cannot be taken of that fact at this time. That evidence of trustworthiness could be based on general experience as to the class of instrument with a knowledge that the mechanism of this instrument complies with the trustworthy type. There being no evidence on that issue the-trial judge could not consider it. The importance of evidence of general trustworthiness by a person qualified can be seen by the type of evidence referred to in the recent decision of R v Macdonald (1990) 108 A.R. 245 (Prov. Ct). The operator's manual for the Multanova device was adduced at trial. The following extract from the manual was reproduced at p 247:

> "If several receding vehicles appear on the photograph, the vehicle measured is that which last crossed the line drawn with both wheels facing the radar unit or is nearest to it.
>
> "It can occur that the picture does not reliably indicate which of several vehicles was the last to cross the line. Pictures of this kind are suppressed as far as possible by the digital computer. If, however, several vehicles pass the radar unit simultaneously at approximately the same speed, the exposures concerned cannot always be reliably evaluated.
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> "It may also be the case that a more distant vehicle was concealed by a vehicle passing more closely to the radar unit, so that it was not even `seen' by the radar unit.
>
> If a case of this kind occurs, whereby the vehicle measured cannot be positively determined on the basis of the above evaluation rule, then the exposure concerned must not be evaluated.

At this stage of use of the Multanova camera a person qualified to give evidence as to the workings, risks and general reliability of the camera in speed detection is necessary before a court can even consider whether or not it is trustworthy enough to accept as evidence of speed. In R. v. Macdonald, supra, the court admitted the evidence of the Multanova device but acquitted the accused because the crown had not met or satisfied its burden of proof. Laven J. stated at pp. 247-248:

> "...the court must be satisfied that the Multanova machine can at all times of operation and without fail, accurately measure, record and photograph the speed of moving vehicles.
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> It is the considered opinion of the court that the Crown has not met or satisfied its burden of proof.
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> ...that the Multanova device is not by itself, or as operated by the Calgary Police Service, a technically fit and proper device (at all times and without fail) capable of accurately measuring and recording the speed of a motor vehicle - all for the purposes for which it is used and in the manner in which it is operated."

In that case he had some evidence as to general trustworthiness upon which he could base bis ruling.

On the facts of this case there is no testimony by a qualified technician as to the general trustworthiness of the Multanova Radar camera in calculating speed. As such, the photograph cannot be used as proof of the facts of speed of that vehicle. Where the technical evidence, without more, may prove to be the foundation of a conviction, the courts must be apprised by means of technical evidence of the trustworthiness of the instrument. That can easily be done. It was not done here.

This appeal is dismissed on the grounds that there was no admissible evidence tendered of the speed of the vehicle on which a judge could have founded a conviction.

CONRAD J.

/DRS