

IN THE MAGISTRATES COURT OF VICTORIA
AT DANDENONG]

[CRIMINAL DIVISION]

POLICE

Informant

V

KS, DT & IY

Defendants

<u>MAGISTRATE:</u>	CURE
<u>WHERE HELD:</u>	DANDENONG
<u>DATE OF HEARING:</u>	27 JANUARY 2010
<u>CASE MAY BE CITED AS:</u>	POLICE v KS, DT & IY

REASONS FOR DECISION

Catchwords:

Eastlink speeding charges - section 83A Road Safety Act 1989

<u>APPEARANCES:</u>		<u>Solicitors</u>
For the Police	Senior Constable Chiodo	Dandenong Prosecutions
For the Defendants	All unrepresented	

The hearings

[1] Three separate hearings were joined before me on 27 January 2010 at Dandenong Magistrates Court where each defendant contested speeding fines issued by Civic Compliance in relation to Eastlink.¹

[2] In each of the cases the Prosecutor, represented by Senior Constable Chiodo of Dandenong Prosecutions tendered a section 83A Certificate under the Road Safety Act 1989, ("RSA").

Section 83A of the RSA says:

83A Evidence relating to prescribed detection devices

(1) A certificate in the prescribed form purporting to be issued by an authorised person certifying-

(a) that a prescribed detection device for the purposes of section 66 was tested, sealed or used in the prescribed manner, or

(b) that an image or message described in the certificate was produced by a detection device prescribed for the purposes of section 66 or by a prescribed process; or

(c) as to any other matter that appears in, or that can be determined from, the records kept in relation to the detection device or the prescribed process by the police force of Victoria-

is admissible in evidence in any proceeding and, in the absence of evidence to the contrary, is proof of the matters stated in the certificate.

¹ A decision of this nature would not usually result in written reasons, after a transcript was obtained the view was that a written decision to assist with future matters given the volume of challenges to fines issued on Eastlink.

- (2) In this section **authorised person** means a person authorised for the purposes of this section by the Chief Commissioner of Police.

Also relevant is section 81 of the RSA:

81 Certain matters indicated by speed cameras are sufficient evidence

(1) If in proceedings for an offence to which section 66 applies the speed at which a motor vehicle or trailer travelled on any occasion is relevant, evidence of the speed of the motor vehicle or trailer as indicated or determined on that occasion by -

(a) a detection device prescribed for the purposes of section 66 when tested, sealed and used in the prescribed manner, or

(b) an image or message produced by a detection device prescribed for the purposes of section 66 when tested, sealed and used in the prescribed manner; or

(c) an image or message produced by a prescribed process when used in the prescribed manner -

is without prejudice to any other mode of proof and in the absence of evidence to the contrary, proof of the speed of the motor vehicle or trailer on that occasion.

- (2) If in proceedings for an offence to which section 66 applies the speed limit at the time and place at which a motor vehicle or trailer travelled on any occasion is relevant, evidence of the speed limit at that time and place as indicated or determined on that occasion by an image or message produced by a prescribed process when used in the prescribed manner is, without prejudice to any other mode of proof and in the absence of evidence to the contrary, proof of the speed limit on that occasion.

[3] Tendering a section 83A Certificate is all that is required for the Prosecution to prove the matters necessary in the case and once I am satisfied that the section 83A certificate contains the requisite matters the charge is proven *in the absence of evidence to the*

contrary. What is evidence to the contrary has been the subject of cases in higher courts and can be summarised as being evidence “to the opposite effect”² and concerning the accuracy of the matters asserted by the Certificate. As the parties were unrepresented, they were invited generally to make any submissions or give any evidence they sought to give.

Prosecution of KS:

[4] The Prosecution tendered a section 83A Certificate in respect of the single charge against KS as proof of the following:

1. That on 4th October 2008 the Gatsometer Digital Radar Camera system - Parabolic (DRCS-P) was a prescribed detection device for the purposes of section 66 of the RSA and was tested, sealed and used in the prescribed manner and produced images produced and printed therein.
2. The printed images were produced for the purposes of sections 81(1) and 81(2) of the RSA. The certificate showed a photograph of a motor vehicle with a registration plate - registered to KS proven by a section 84 RSA Certificate.
3. That at 12.32.34pm on 4 October 2008 KS was the owner driving a motor vehicle detected at 110kph on lane 2, Southbound on the Wellington Road Bridge at Rowville on Eastlink and the speed limit is 100 kph.
4. That certificate is produced by Serco Traffic Camera Service and signed by one Bernard Shelton who certifies that the information is true and correct for the purposes of section 83A RSA.

The Prosecution of DT

[5] The Prosecutor tendered 5 certificates pursuant to section 83A of the RSA to prove 5 charges against DT. Charge 1 is alleged as follows:

² DPP v Cummins [2006] VSC 327, Road Traffic Authority of NSW v Baldock [2007] NSWCCA 35.

1. On 24 September 2008 the Gatsometer Digital Radar System – Parabolic (DRCS-P) was a prescribed device for the purposes of section 66 of the RSA and was tested, sealed and used in the prescribed manner and produced the images produced therein.
2. The printed images were produced by a process prescribed for the purposes of sections 81(1) and (2) of the RSA.
3. That at 4.52.15 on 24 September 2008 a motor vehicle driven by DT was detected at a speed of 108kph in lane 3 Southbound on the Wellington Road Bridge on Eastlink which is a 100kph zone. (Alleged speed 106kph)
4. That Kevin Boulton of Serco Traffic Management certified that information to be true and correct for the purposes of section 83A.

[6] Including the detail in paragraphs 1, 2 and 4, but not produced here, the remaining charges were the subject of section 83A Certificate as follows:

Charge 2 – At 6.45.08am on 3 October 2008 a motor vehicle driven by DT was detected at a speed of 109 kph in lane 3 Southbound on Wellington Road Bridge on Eastlink, being a 100 kph zone. (Alleged speed 107kph)

Charge 3 – At 4.03.18pm on 8 October 2008 a motor vehicle driven by DT was detected at a speed of 108kph in lane 3 Northbound on Wellington road Bridge on Eastlink, being a 100kph zone. (Alleged speed 106kph).

Charge 4 – At 6.4.36am on 9th October 2008 a motor vehicle driven by DT was detected at a speed of 110kph in lane 2 Southbound, Wellington Road Bridge at Eastlink, being a 100kph zone. (Alleged speed 108kph).

Charge 5 – At 6.35.11am on 10th October 2008 a motor vehicle driven by DT was detected at a speed of 108kph in Lane 2 of Southbound, Wellington Road Bridge at Eastlink, being a 100kph zone. (Alleged speed 106kph).

The Prosecution of IY:

[7] The Prosecution tendered a section 83A Certificate in respect of two charges against IY as proof of the following:

1. That on 2nd October 2008 the Gatsometer Digital Radar Camera system - Parabolic (DRCS-P) was a prescribed detection device for the purposes of section 66 of the RSA and was tested, sealed and used in the prescribed manner and produced images produced and printed therein.
2. The printed images were produced for the purposes of sections 81(1) and 81(2) of the RSA. The certificate showed a photograph of a motor vehicle with a registration plate - registered to IY proven by a section 84 RSA Certificate.
3. That at 8.22.50am on 2nd October 2008 KS was the owner driving a motor vehicle detected at 110kph on lane 2, Northbound on the Wellington Road Bridge at Rowville on Eastlink and the speed limit is 100 kph.
4. That certificate is produced by Serco Traffic Camera Service and signed by one Kevin Boulton who certifies that the information is true and correct for the purposes of section 83A RSA.

[8] Again including the required information in paragraphs 1, 2 and 4, but not reproduced here, Charge 2 alleges that at 8.23.56am on 10th October 2008 IY was the driver of a motor vehicle detected at a speed of 110kph in lane 1, Northbound at Wellington Road Bridge on Eastlink and the speed limit is 100kph.

[9] Section 83A requires no more of the Prosecution than to tender those certificates. In this case, the Prosecutor called Sergio Stefani to give evidence about the speed camera systems as an expert. He holds a Bachelor of Engineering and Master of Engineering and is an Associate at Evans and Peck which is the consultancy firm responsible for the project management of the installation of cameras on Eastlink. He described himself as an expert witness on speed cameras and has expertise based upon his previous work with Poltech

cameras in the development, installation, commissioning and maintenance of speed cameras by that company. I was satisfied he had sufficient expertise to give evidence about the systems being used on Eastlink although his evidence had no impact on my decision to accept the matters contained in the Section 83A Certificate which I am required by law to do.

[10] Mr Stefani described both a primary and secondary speed measuring device relied upon to create the speeding fines issued in these matters on Eastlink. The primary device is the camera installed above the road on the bridges, the Gatsometer Digital Radar Cameras, which are a type of parabolic radar device prescribed by Regulation 302N of the Road Safety Regulations. There is a single camera on each of the three lanes in each direction on the Wellington Road Bridge and Dandenong Bypass.

[11] he gave evidence that a parabolic radar system is a simple device he said which measures speed on a doppler effect:

“As that vehicle hits the location and continues on, it then fades into a lower tone of sound. That’s called Doppler shift effect... what it is hearing is a change in frequency. So the frequency emitted by the vehicle is the is the same, it’s constant, but as its travelling towards you that frequency is squished a little bit and as its travelling away its stretched. The same effect is used by the radar system. So the radar system pumps out microwave radiation at a constant known frequency, a very high frequency, 24 gigahertz. Then that bounces off an approaching or receding vehicle, comes back to the same radar, which then detects that radar frequency. It measures the difference in frequency, and that’s a quite simple technique.”³

[12] The equipment was accredited and certified by the National Association of Testing

³ Transcript of proceedings (“TX”) page 19.

Authorities. The camera is angled at 30.5 which errs slightly on the side of caution so the speed might actually be 100kph but it records at 99kph. The camera self-tests daily and if it fails that self-test, it locks down. There are also other conditions when the camera will shut down such as if the door to the system is opened or it is above a certain temperature.

[13] Mr Stefani said that on the road there are two reflective markers at 31 and 29 degrees. Taking me to a photograph he showed that these markers are significant:

"If you look along the line delineation markers, the lines at the bottom say one quarter of the image, they are two retro-reflective markers on each side of the lane. They basically are positioned at 31 and 29 degrees, and in the back office system there is an overlay that draws a line over the image of where the 30 degree line is at the time of installation, so if the camera has moved at any time since installation by more than one degree the overlay appears outside those markers and the images are rejected." (Tx 26)

[14] The secondary device is a loop based system beneath the surface of the road in each lane in each direction. This was described as follows:

"...for each individual lane there is a loop, a pair of loops a known distance apart. The positioning of the loops is surveyed using surveyors certified equipment so that the distance apart is known to a very high accuracy. The loop system detects a vehicle travelling over each loop. It then performs a distance over time measurement several times, at least ten times. As a car travels over a loop it produces a unique signature, a wave form.... As it travels over the second loop it produces the same wave form. The system then detects points along each- along that wave form 10 points, it says "Okay the speed for each of those ten points was A, B, C, D. It then confirms that each speed measurement is within two kilometres an hour. It then calculates the - I think takes the lowest speed - "the speed of this vehicle was the measured speed to

an accuracy of plus or minus 2 kilometres an hour. So with a system like this the important components are the distance between the loops, which is certified and the timing circuitry within the loop controller card and again that is also tested by SGS, an accuracy vehicle.”⁴

[15] I heard that both the primary device (Speed camera) and the secondary device (Loop System) measure at plus or minus 2 km per hour. If a discrepancy exists between the two devices then a particular incident is checked. It is the primary device that takes the photograph relied upon in the section 83A certificate.

[16] When asked about testing or checking Mr Stefani said that the company “SGS” is responsible for the site accuracy or verification testing. A system is installed approximately every three months - known as a TIRTL or The Infa-Red Traffic Logger. This is for 10 hours and logs a days data against the primary and secondary device. There are monthly site inspections and the loop or secondary device is certified by SGS yearly. There had been additional testing of these devices after it became known that there were concerns about the cameras. I heard nothing specific about that. Mr Stefani had been instructed, he said, to investigate the accuracy of the cameras once the issue had been raised generally by members of the public. Included in that was to check that each camera had passed pre-installation factory testing and was fit for the purpose it was intended for. He also inspected the reports relating to the TIRTL testing and confirmed that it had been done.

[17] The parties were invited to ask Mr Stefani any questions. Mr S asked about whether the cameras had passed Australian Standards. Mr Stefani described the testing being done internationally and there being a pattern approval and certificate to that effect, but there were no specific standards in Australia for speed enforcement and once a camera is

⁴ Tx 29

included in the Road Safety General Regulations as this had been, it was deemed to be prescribed device to be relied upon.

[18] Mr S asked Mr Stefani how it could be proven that an image had not been altered. He answered as follows:

“... what happens is the camera is composed of a calculation unit or a computer type equivalent. It monitors the speeds and it triggers the camera so at that time the calculation unit says, okay, that car was doing above the trigger speed threshold. It then tells the camera to take a picture. It then bundles up image/images - some of the offences have multiple images - associated data such as location, date, time, speed, permitted. All data associated with that incident and then bundles it up into an encrypted file which we will call an incident file. That is a term just for a reference. The encrypted incident file is then downloaded to - and that is encrypted and there is keys and things are needed to decrypt that. The Eastlink system actually has 256-bit encryption which is about as strong as you can get. That is downloaded over a secure dedicated link that only the back office service provider can have access to. No-one else can access that link. It then goes to the service provider where it is archived. It is extracted; at the point of extracting it to load it into the system, the keys are used to confirm it - it is still encrypted - that incident file was not corrupted in any way, so that it's the first point and that is what you call our original evidence. So the original evidence is archived for later use in 83 days. In parallel to that it goes off into the system and is processed. You get your notice. If an 83A needs to be generated, the 83A then says okay, if the incident 1, 2, 3, 4, 5 pull up the associated original evidence. It then runs the same encryption algorithm over that to confirm that the original evidence has not been tampered in any way. It then prints that image on the 83A and there is no way for manual intervention. It is just click a button. It

*extracts the encrypted data, puts it into an 83A and prints it and there is no way that anyone can alter it. If anyone had tried to alter the evidence before that point, it would not decrypt. It would give a decryption error.”*⁵

[19] Mr S asked Mr Stefani about using algorithms MD5 which has not been used since 2002 when they were discovered to be breakable. The new system is SR 256-bit encryption which was described as high level encryption not known to be breakable at this time.

[20] Mr S then raised a number of legal issues and tendered a document setting those out which was exhibited, (Exhibit 1). In essence he argued that the RSA did not apply because it was inconsistent with the National Measuring Act 1960, a Commonwealth law and that the pattern number of the speed camera did not comply with the National Measurements Act 1960. He argued further that there was no proof that he had been the driver. He accepted that he had previously made that concession by not nominating another person as driver which was an obligation imposed on him as the owner of the car and did not persist with that argument.

[21] The written material (Exhibit 1) was an affidavit prepared by Mr S, raising the issue that he objected to the Court's jurisdiction. He issued the prosecution with a notice of default in a private settlement agreement which prohibited the court from intervening. I reject those arguments as the Court is competent to hear these matters and has a statutory obligation to do so. Mr S did not call any evidence to the contrary about the accuracy of the certificate and I found the matters proven against him.

[22] Mr T sought to argue that there is a 10% margin on all speedometers in pre-2006 cars that he could rely upon and wanted to put this matter to a representative of Civic

⁵ Tx 51-53

Compliance. He argued that there is no obligation upon him to ensure his speedo is correct. In Victoria there is no ongoing requirement that vehicles pass roadworthy tests as in other states. He also raised the issue of the inconsistency of state law (RSA) with the National Measurements Act 1960 and said that he had been advised by the General Manager of the National Measurements body that speed measuring devices are not exempt from the National Measurements Act 1960. He argued that the Victorian Government was in breach of a memorandum of agreement with the National Testing Service.

[23] It is not the law that a driver who is alleged to have exceeded the speed limit can rely upon any margin for error in his or her speedometer.⁶ Accordingly I reject that argument. The issue relating to the applicability of the *National Measurements Act 1960 (Cth)* has previously been dealt rejected by Courts as being a basis for attacking the reliability of speed measuring devices.⁷ I reject that argument.

[24] Mr T did not call any evidence in the hearing and I found the matters proven against him.

[25] Mr Y argued that measuring devices required certification by the National body. He also submitted that there was a memorandum of agreement with the Victorian government that every testing device has to go through NATA's laboratories to receive approval. I reject that submission. I also heard argument from Mr Y about the volume or fines occurring on Eastlink and media campaign about the issue. None of that material was based on admissible information and could not be used by me in hearing his case and accordingly I reject those submissions.

[26] Mr Y argued that the photograph (section 83A Certificate) could be tampered with and

⁶ Kearon v Grant [1991] 1 VR 321

showed the court a photograph he had altered. After hearing evidence about the process and in the absence of any material to support that assertion, I reject the contention that the 5 certificates in the cases against Mr Y have been altered in any way and regard them as admissible against him.

[27] Mr Y then gave sworn evidence that he has been driving for 40 years and has never had any speeding fines before he commenced using Eastlink. He said that his first fine - from 2 October 2008 came two weeks later and he stopped using Eastlink from that day. He then received the other notice. He said that he exits from the Eastlink 500 metres after the place where the fines were recorded and suggested that it would be too fast at the speed recorded for him to slow down for the exit ramp. He says that the maximum speed he was travelling at was 95kph and that the cameras must be faulty because so many people have complained.

[28] Despite the sworn evidence of Mr Y - I was not persuaded that his evidence was evidence to the contrary for the purposes of section 83A and I found the two charges proved against Mr Y.

⁷ Re Appeal of White (1987) 9 NSWLR 427, Rumsley v Taylor (Unreported) WASC 10.12.1997.