

FILED

NOV 06 2024

Tukwila Municipal Court

**CERTIFICATION CONCERNING DESIGN AND
CONSTRUCTION OF SPEED MEASURING DEVICES (SMD'S)
RE: LIDAR LASER (LIGHT DETECTION AND RANGING)**

**STATE OF WASHINGTON
COUNTY OF KING**

I, **Edward E. Cole**, swear under penalty of perjury of the laws of the State of Washington
that the following is true and correct:

- 1) I am employed by, and proprietor of, **Wescom Communications** located at 14760 Starr Rd. SE, Olalla, Wa. 98359; (206) 579-6690;
- 2) In this employment, I maintain, repair, calibrate and certify the accuracy of electronic speed measuring devices; (SMD's), Lidar Laser, and Radar.
- 3) Wescom is retained by the **City of Tukwila Police Department** to maintain, repair, calibrate, and certify the accuracy of electronic speed measuring devices.
- 4) I have the following education, experience and qualifications with respect to maintaining, repairing, calibrating and certifying speed measuring devices:
 - a) I hold a Federal Communications Commission license with, a radar endorsement; dated August 1984, license #PG-14-1247.
 - b) I have successfully completed a two (2) year course at Clover Park Vocational Technical College and hold a Land, Mobile, Marine Communications certificate, dated July 1985.
 - c) I have successfully completed a Lidar Laser manufacturer's course and training which encompassed design, construction, repair, maintenance, calibration, and certification of the Lidar Laser speed measuring device, and received a Kustom Signals certificate dated November 1997.
 - d) I have successfully completed a radar Manufacturer's training course which encompassed the design and construction of radar instruments, the repair, maintenance, calibration and certifying of speed measuring devices, and hold Kustom Traffic Radar Safety Systems certificates from 1987 and 1997.
 - e) I have accumulated over 35 years and approximately Thirty Thousand (**30,000**) hours in repair, maintenance, calibration and certification of speed measuring devices, as of the date of this affidavit.
- 5) Wescom Communications is an authorized service center for speed measuring devices, and as a course of business, maintain service manuals for the Lidar Laser, of which I am personally familiar, and make these available for inspection, upon request, at the above office address, for any contest of a notice of infraction.
- 6) Through education, experience, and training, I am personally familiar with the design, construction, and operation of these speed measuring devices. In regard to the Lidar Laser, it is designed and constructed so as to accurately and reliably employ measurement techniques based on the velocity of light as a constant in such manner that each Lidar Laser speed measuring device will give accurate and reliable measurements of the speed of motor vehicles when used by a trained operator.
- 7) Wescom maintains a quality assurance testing, calibration, and certification program wherein each speed measuring device is routinely inspected and tested every **12** months by the following means;
 - a) *Self-calibration Test*; wherein each instrument's self calibration is verified during the initial power on and when the self-test switch is activated,
 - b) *Scope Alignment Test*, wherein each instrument's scope aiming reticle is verified to be aligned with the Lidar Laser beam at all target distances,

- c) *General Operation and Maintenance Check*, wherein each instrument's display and all function controls are tested for accurate operation,
- d) *Range Accuracy Test*, wherein each instrument's range measurements are verified to be accurate to plus (+) or minus (-) six inches,
- e) *Speed Accuracy Test*, wherein each instrument's speed readings are compared to speed readings received and displayed by a calibrated Doppler radar speed measuring device, (*Kustom Trooper KK19794 that I personally calibrated and certified for accuracy on 01-17-2024*), and that these speed readings are taken simultaneously on an isolated lone targeted motor vehicle and the speed ready accuracy was within (+) or (-) one mile per hour by comparison,
- f) *Display Test*, where each instrument's display segments are verified accurate,
- g) *Audio Test*, wherein each instrument's audio output is verified,
- 8) The Lidar Laser speed measuring device listed below was submitted to Wescom Communications by the **City of Tukwila Police Department** to be tested and evaluated by the quality assurance program noted above, and pursuant to that request, I Edward E. Cole, performed all of the program tests, and found that this speed measuring device/radar met or exceeded existing performance standards;
- 9) Based upon my education, training and experience, and my knowledge of the Lidar Laser speed measuring device listed below, it is my opinion that this instrument is so designed and constructed as to accurately and reliably employ measurement techniques based on the velocity of light as a constant, in such a manner that each Lidar Laser speed measuring device will give accurate measurements of the speed of motor vehicle when properly tested and operated by trained operator with an accuracy of plus (+) or minus (-) one mile per hour.

Kustom Pro Lite LP02733.
Kustom Pro Lite LP03376.

Test Date 01-17-2024
Test Date 01-17-2024

LTI TRU SPEED TJ004380
LTI TRU SPEED TJ004412
LTI TRU SPEED TJ005356
LTI TRU SPEED TJ005357
LTI TRU SPEED TJ005359

Test Date 01-17-2024
Test Date 01-17-2024
Test Date 01-17-2024
Test Date 01-17-2024
Test Date 01-17-2024

STATE OF WASHINGTON
COUNTY OF KITSAP

Signature: Edward E. Cole
Printed Name: Edward E. Cole.

DATE AND PLACE 10-31-2024 Olalla, WA.

**CERTIFICATION CONCERNING DESIGN & CONSTRUCTION
OF SPEED MEASURING DEVICES "RADAR"**

**STATE OF WASHINGTON
COUNTY OF KING**

FILED
NOV 06 2024
Tukwila Municipal Court

I, Edward E. Cole, swear under penalty of perjury of the laws of the State of Washington that the following is true and correct:

- 1) I am employed by, and proprietor of, **Wescom Communications** located at 14760 Starr Rd SE, Olalla, WA. 98359, telephone (206) 579-6690;
- 2) In this employment, I maintain, repair, calibrate and certify the accuracy of electronic speed measuring devices;
- 3) Wescom is retained by the **City of Tukwila Police Department** to maintain, repair, calibrate and certify electronic speed measuring devices;
- 4) I have the following education, experience and qualifications with respect to maintaining, repairing, calibrating and certifying speed measuring devices:
 - a) I hold a Federal Communications Commission license with, a radar endorsement; dated August 1984, license #PG-14-1247;
 - b) I am a N.A.B.E.R. Certified Electronic Technician, and hold a National Association of Business and Educational Radio certificate, dated August 1984;
 - c) I have successfully completed a two (2) year course at Clover Park Vocational Technical College and hold a Land, Mobile, Marine Communications certificate, dated July 1985;
 - d) I have successfully completed a radar Manufacturer's training course which encompassed the design and construction of radar instruments, the repair, maintenance, calibration and certifying of speed measuring devices, and hold a Kustom Traffic Radar Safety Systems certificate, dated May 1987;
 - e) I have accumulated over 35 years and approximately twenty five thousand (25,000) hours in repair, maintenance, calibration and certification of speed measuring devices, as of the date of this affidavit;
- 5) Wescom is an authorized service center for speed measuring devices, and as a course of business, maintains service manuals with schematics on these radar instruments, of which I am personally familiar, and make these available for inspection, upon request, at the above office address, for any contest of a notice of infraction;
- 6) Through education and experience, am personally familiar with the design, construction, and operation of these speed measuring devices, which are designed and constructed to accurately employ the Doppler radar principal;

- 7) Wescom maintains a quality assurance testing, calibration, and certification program wherein each speed measuring device is routinely inspected and tested approximately every **12 months** by the following means;
- a) **Precision Signal Generator test**; a frequency injection test which simulates a vehicle's speed through changing frequencies wherein each speed measuring device must correctly measure and register those simulated speeds in order to be certified accurate;
 - b) **General Operation and Maintenance Check**, wherein all components of the speed measuring device are checked for accurate operation;
 - c) **Internal Calibration Test**, wherein each speed measuring device's internal calibration is verified ;
 - d) **Radio Frequency Interference Check**, wherein each speed measuring device's Radio Frequency Interference detection circuitry is verified;
 - e) **Tuning Fork Test**, wherein each speed measuring device's measurement and reading is checked against a known result indicated on the tuning fork;
 - f) **Field Test**, where in all operations of each speed measuring device are checked by testing against conditions in the field;
- 8) The speed measuring device/radar instrument listed below was submitted to **Wescom Communications** by the, **City of Tukwila Police Department** to be tested and evaluated by the quality assurance program noted above, and pursuant to that request, **I Edward E. Cole**, performed all of the program tests, and found that this speed measuring device/radar met or exceeded existing performance standards;
- 9) Based upon my education, training and experience, and my knowledge of the speed measuring device listed below, it is my opinion that this instrument is so designed and constructed as to accurately and reliably employ the Doppler effect in such a manner that it will give accurate measurements of the speed of motor vehicles, when properly calibrated and operated by a trained operator, to within plus (+) or minus (-) one (1) mile per hour.

Kustom Talon II TA02582, tuning fork 100312 55mph.
Kustom Talon II TA02583, tuning fork 64453 55mph.
Kustom Talon II TA02584, tuning fork 42281 55mph.
Kustom Talon II TA02585, tuning fork 29462 55mph.
Kustom Talon II TA02586, tuning fork 57958 55mph.
Kustom Falcon HR FH11154, forks 63353 65mph.
Kustom Falcon HR FH11155, forks 63357 65mph.
Kustom Falcon HR FH11160, forks 70843 35mph.
Kustom Falcon HR FH11161, forks 65243 65mph.

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Stalker II SDR AS001925, tuning fork FA148784 25mph.
Stalker II SDR AS001927, tuning fork FB250139 40mph.
Stalker II SDR AS003670, tuning fork 100186 30mph.
Stalker II SDR AS010210, tuning fork FB324930 40mph.
Stalker II SDR AS011017, tuning fork FB341294 40mph.
Stalker II SDR AS012704, tuning fork FB260287 40mph.

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Test Date 01-17-2024.

State of Washington
County of Kitsap

Signature: Edward E. Cole

Printed Name: Edward E. Cole

Date and Place 10-31-2024

Olalla, WA.