DAY WIRELESS SYSTEMS

FILED
JUL 15 2016
LYNNWOOD MUNICIPAL COURT

DAY WIRELESS SYSTEMS
2902 Hewitt Avenue
Everett, Washington 98201
(425) 258-0554
Inventory #416298

CERTIFICATE CONCERNING DESIGN AND CONSTRUCTION OF ELECTRONIC SPEED MEASURING DEVICES
IRLJ RULE 6.6 EFFECTIVE 1/3/2006

I, **Les J. Boyd**, do certify under penalty of perjury as follows:

I am employed with **DAY WIRELESS SYSTEMS**. My duties include supervising the maintenance and repair of Doppler and Laser speed measuring devices (SMD's) used by **LYNNWOOD POLICE DEPARTMENT.**

Manufacturer	Model	Serial Number
APPLIED CONCEPTS	STALKER II MDR	AS008834
	25.25 MPH Tuning Fork	FA202766
	40.25 MPH Tuning Fork	FB306236

I have the following qualifications with respect to the above stated SMD:

Washington Technical Institute for Radio/Electronics, Bell & Howell for Electronics and Advanced Schools Incorporated for Automotive/Electronics, plus numerous courses pertaining to communications and electronics, trained by a State licensed technician. Thirty years experience in repair, maintenance, and calibration of electronic products. Successfully completed the MPH Ind. Factory training on the moving and stationary Doppler SMD's and was trained by a certified SMD technician on repair/calibration of the Laser Technologies INC. (LTI) Lidar products.

Day Wireless Systems maintains manuals for the above stated SMD. I am personally familiar with those manuals and how the SMD is designed and operated. **On JULY 13, 2016,** I, Les J. Boyd, performed testing of the above SMD. The unit was evaluated to meet or exceed existing performance standards. Day Wireless Systems maintains a testing and certification program of this SMD.

The Doppler program specifies: test procedures consisting of utilizing precision signal generators, connected to a factory waveguide assembly via coaxial cable; to simulate speeds at 5 mph increments from 20mph to 120mph to verify accuracy. In moving mode; two signals are applied simultaneously, separated through attenuation. Measurements are taken of transmit frequency; transmit output, operating current, receiver sensitivity and any accompanying tuning forks. Operational functions are tested.
The Laser SMD sends out a series of much focused light wave pulses each time the trigger is pulled and utilizes two laws of physics, time and distance (i.e. 3.5 feet in diameter at 1000 feet). Since the speed of light is a known value, the distance of the target can be determined by calculating how long it takes for the signal to travel to the target and back. This series of measurements will allow the SMD to calculate the speed of the target by measuring the distance traveled in an amount of time (usually less than a second for a veritable display). The displayed speed will be accurate to within +/- 1 mph. Day Wireless Systems does hereby certify the above listed SMD meets manufacturer's published specifications and has been calibrated using standards whose accuracy's are: In compliance and traceable to the National Institute of Standards and Technology.

Based upon my education, training, experience, and knowledge of the SMD listed above, it is my opinion that each of these pieces of equipment is so designed and constructed as to accurately employ the Doppler effect in such a way that it will give accurate measurements of the speed of motor vehicles when properly calibrated and operated by a trained operator or, in the case of the laser SMD, each of these pieces of equipment is so designed and constructed as to accurately employ measurement techniques based on the velocity of light 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.

Les J. Boyd
Certified by: Les J. Boyd
Place: Everett, Washington

SUSAN C. GORGAS
COMMISSION EXP.
NOTARY
PUBLIC
JAN. 5, 2017
STATE OF WASHINGTON

STATE OF WASHINGTON)
) ss.
County of Snohomish)

Signed or attested before me on **JULY 13, 2016** by Les J. Boyd

Susan C. Gorgas
Susan C. Gorgas
NOTARY PUBLIC in and for the State of Washington, residing in Everett. My Appointment expires January 5, 2017