1. In addition to other restrictions listed in this document, all speed measuring instruments approved for use after January 1, 2006 are made subject to and restricted as follows:

   a. Instrument must be constructed in a manner that is user friendly and rugged enough to meet the rigors of law enforcement demands. Instruments with moving mode capabilities must be designed to offer minimal distraction to the operator while operating in a moving mode.
   b. All instrument light segment tests must display only "8" or "8." in each segment of each display window for a minimum of three seconds. During or after the 8's appear, all icons, lights, and indicators on the control box must also illuminate/display. No other words, numbers, or indicators shall display or appear prior to, during, or upon completion of, the light segment test.
   c. Instrument must perform a test of all light segments and internal circuitry during power up (see b & e).
   d. Instrument must have only one button/switch which allows the operator to manually test all light segments and the internal circuitry at any time during operation. This test must be an exact duplication of the power up test.
   e. An internal circuitry test must immediately follow all light segment tests. All instrument internal circuitry tests must only display "PAS" or "PASS" upon completion of the test to indicate the instrument passed the test. If the instrument does not pass the test, only "FAIL" or "ERR" must appear in the target display window(s). No other words, numbers, or indicators shall display or appear prior to, during, or upon completion of, the internal circuitry test.
   f. Instrument must not be capable of clocking front and rear targets simultaneously, lock more than one speed at a time, or have more than three speed display windows.
   g. Instrument must not have a fastest vehicle mode feature or any indicator of same on the instrument or remote.
   h. RADAR and LIDAR instruments must not have a time-distance/stopwatch mode feature or any indicator of same on the instrument or remote.
   i. Instrument must not have an automatic mode switching feature.
   j. Instrument must default to off if the power is lost during operation.
   k. RADAR and LIDAR Instruments shall have a volume control which must not be capable of being muted.
   l. If an instrument possesses a mode or feature, which has not been previously reviewed and approved for use in North Carolina, such instrument is subject to be recommended for approval only after the mode or feature receives a favorable review by the SMI Advisory Committee.
   m. Instruments approved for use after January 1, 2006 will be marked by an "*" on the approved list.
   n. Instruments marked with double asterisks "**" indicate the instrument is on the staggered deletion list. Refer to section 8 of this Appendix for removal date of the instrument.

2. All approved RADAR/LIDAR speed measuring instruments are made subject to and restricted as follows:
   a. The instrument shall not have any automatic violation alarms (audio and/or visual) or automatic locking functions that occur prior to the instrument being manually locked by the operator. This does not include "auto-test" features.
   b. The instrument shall not have a high speed lock function.
   c. The instrument shall not have an external control that would permit the adjustment or correction of the zero or calibration readings.
   d. The instrument shall not have a feature and/or function which compensates for any angle (cosine effect) that may be present between the target vehicle and the RADAR antenna or LIDAR.
   e. RADAR instruments shall be capable of being tested for accuracy by use of a tuning fork.
   f. RADAR instruments shall have a squelch control.
   g. RADAR instruments shall have a radio frequency interference feature that disables the instrument when radio frequency interference is present.
   h. The instrument shall have a low voltage feature/indicator.
   i. The instrument shall be designed to be manually activated, by the operator, upon the presence of a violator vehicle.

3. All approved time-distance speed measuring instruments are made subject to and restricted as follows:
   a. The instrument shall not be capable of accepting double time or double distance into the computer.
   b. The instrument shall be designed to be manually activated, by the operator, upon the presence of a violator vehicle.

4. The following modes, functions, and/or configurations shall not be used on RADAR, LIDAR, or time-distance instruments unless the operator is certified in its use by the North Carolina Criminal Justice Education and Training Standards Commission:

a.	Single Antenna	c.	Dual Antennae
b.	Stationary Mode (RADAR and/or LIDAR)	d.	Moving-Opposite Direction Mode
e.	Moving-Same Direction Mode	f.	Basic configuration Time-Distance clocks

* "Time-Distance and/or Stopwatch" features, "Fastest Vehicle" mode, "Automatic Mode Switching" feature, and "Safety Zone" features on RADAR/LIDAR instruments shall NOT be used.

* "Ranging" technology is approved for use effective June 1, 2011.

* For moving mode operations, a "certified" patrol vehicle speedometer is not required effective June 1, 2012.

5. North Carolina Approved RADAR Speed Measuring Instruments (Revised: June 1, 2014)
(Note: See section 8 of this appendix.) The following RADAR instruments are approved for use provided they are operated in compliance with (1) and (2) above:

Manufacturer	Model	Mode
1. Applied Concepts, Inc.	Stalker DUAL SL	M/S
2. Applied Concepts, Inc.	Stalker DUAL DSR	M/S
3. Applied Concepts, Inc.	Stalker Dual DSR-E*	M/S
4. Applied Concepts. Inc.	Stalker Basic	M/S
5. Applied Concepts, Inc.	Stalker II SDR*	S
6. Applied Concepts, Inc.	Stalker II MDR*	M/S
7. Applied Concepts, Inc.	Stalker Dual E*	M/S
8. Decatur Electronics, Inc.	Genesis II Select-Directional*	M/S
9. Decatur Electronics, Inc.	Genesis II Select*	M/S
10. Decatur Electronics, Inc.	Genesis-VP Directional**	S
11. Decatur Electronics, Inc.	Genesis Handheld Directional (GHD)*	S
12. Decatur Electronics, Inc.	Scout*	S
13. Kustom Signals, Inc.	HR-12	M/S
14. Kustom Signals, Inc.	Falcon	S
15. Kustom Signals, Inc.	Talon**	M/S
16. Kustom Signals, Inc.	Pro-1000**	M/S
17. Kustom Signals, Inc.	Eagle**	M/S
18. Kustom Signals, Inc.	Eagle Plus**	M/S
19. Kustom Signals, Inc.	Silver Eagle**	M/S
20. Kustom Signals, Inc.	Golden Eagle	M/S
21. Kustom Signals, Inc.	Golden Eagle II*	M/S
22. Kustom Signals, Inc.	Directional Golden Eagle**	M/S
23. Kustom Signals, Inc.	Directional Golden Eagle II*	M/S
24. Kustom Signals, Inc.	Raptor RP-1*	M/S
25. Kustom Signals, Inc.	Directional Talon*	M/S
26. Kustom Signals, Inc.	Talon II*	M/S
27. Kustom Signals, Inc.	Falcon HR*	M/S
28. MPH Industries, Inc.	BEE III	M/S
29. MPH Industries, Inc.	Enforcer	M/S
30. MPH Industries, Inc.	Z-25 / Z-35	S
31. MPH Industries, Inc.	Python-Series II**	M/S
32. MPH Industries, Inc.	Python-Series II FS**	M/S
33. MPH Industries, Inc.	Python III*	M/S
34. MPH Industries, Inc.	Speedgun	M/S
35. MPH Industries, Inc.	Ranger EZ*	M/S

6. North Carolina Approved LIDAR Speed Measuring Instruments (Revised: June 1, 2012)
(Note: See section 8 of this appendix.) The following LIDAR instruments are approved for use, provided they are operated in compliance with (1) and (2) above:

Manufacturer	Model	Mode
1. Applied Concepts, Inc.	Stalker LIDAR LR	S
2. Kustom Signals, Inc.	ProLaser III	S
3. Kustom Signals, Inc.	ProLaser 4	S
4. Laser Technology, Inc.	Ultralyte 200 LR*	S
5. Laser Technology, Inc.	Ultralyte LR B*	S

7. North Carolina Approved Time-Distance Speed Measuring Instruments (Revised: June 1, 2014)
(Note: See section 8 of this appendix.) The following time-distance instruments are approved for use, provided they are operated in compliance with (1) and (3) above:

Manufacturer	Model	Mode
1. Kustom Signals, Inc.	Tracker	M/S

8. North Carolina is committed to providing law enforcement agencies with various instrument choices that are standardized, available for repair, and has the latest cutting-edge technology proven to be reliable during testing. Due to this commitment, it requires us to revise the "Approved for Use" list as necessary on occasion to ensure the instruments meet our objective. (Revised: June 1, 2012)

The following speed measuring instruments will be automatically removed from the "Approved for Use" list on the effective date shown for that particular instrument.

Manufacturer	Model	Mode	**DATE OF REMOVAL**
1. Decatur Electronics, Inc.	Genesis VP Directional	S	**06/01/2017**
2. Kustom Signals, Inc.	Eagle	M/S	**06/01/2015**
3. Kustom Signals, Inc.	Eagle Plus	M/S	**06/01/2015**
4. Kustom Signals, Inc.	Silver Eagle	M/S	**06/01/2015**
5. Kustom Signals, Inc.	Directional Golden Eagle	M/S	**06/01/2017**
6. Kustom Signals, Inc.	Talon	M/S	**06/01/2017**
7. Kustom Signals, Inc.	Pro-1000	M/S	**06/01/2017**
8. MPH Industries, Inc.	Python Series II	M/S	**06/01/2017**
9. MPH Industries, Inc.	Python Series II (FS)	M/S	**06/01/2017**

The below instruments were removed 1 June 2014

Applied Concept, Inc.	Stalker DUAL
Decatur Electronics, Inc.	Genesis Handheld
Kustom Signals	Trooper
Kustom Signals	KR-10SP
MPH Industries	K-55
Traffic Safety Systems	VASCAR - Plus