



**SOUTH CAROLINA  
CRIMINAL JUSTICE ACADEMY  
TRAFFIC SAFETY UNIT**

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**Speed Measuring Device**

Road Proficiency

Field Testing Forms

Revised 06/2019

**Student's Name:** \_\_\_\_\_

**Student's Academy ID:** \_\_\_\_\_

**Student's Department:** \_\_\_\_\_

**Student's Email:** \_\_\_\_\_

**Student's Phone Number:** \_\_\_\_\_

**Course Title:** \_\_\_\_\_

**Classroom Location:** \_\_\_\_\_

**Course Dates:** \_\_\_\_\_

**Road Proficiency Date:** \_\_\_\_\_



**SC Criminal Justice Academy  
Traffic Safety Unit**

**Police Traffic Speed-Measuring  
Device Operator  
Road Proficiency Testing Booklet**

**Instructions:**

The Speed-Measuring Device Instructor should administer the road proficiency portion of the Basic Police Traffic Speed-Measurement Operator course to the Speed-Measurement operator trainee/student within the prescribed four (4) weeks from the conclusion date of the classroom portion of the course as set forth in the CJA Policy and Procedures (General Training Requirements). The instructor should evaluate the Speed Measuring Device being used for operational condition. In the event the instrument fails either internal or external tests or has missing parts, the condition should be noted and no road test performed with that instrument.

There is a demonstrated process for calculating the average error rating for the student's visual speed estimates on the page prior to the Radar evaluation. **At a minimum, the student must show proficiency with one form of speed measuring device (Radar/Lidar/Average Speed Computation). If that device is a radar unit, forward stationary and moving mode must as a minimum be completed.** For the RADAR instruments designed with Rear Antenna stationary/moving, Same/Opposite Direction, Digital Signal Processing, Time/Distance, or Dual Antenna capabilities, the instructor should complete the appropriate sections. In the event the student advises the instructor that these available functions will not be applied for enforcement purposes, the instructor can omit those applications, but must note clearly in the instructor comments area this fact. Stopwatch/Average Speed Computation is provided near the end of this packet, and Lidar proficiency testing is included at the end. **THE STUDENT MUST COMPLETE PROFICIENCY FOR ANY MODE OF SPEED MEASUREMENT TO BE USED IN SPEED ENFORCEMENT DURING THEIR CERTIFICATION PERIOD.**

If the student fails to demonstrate Acceptable levels of performance with the visual speed estimates, the instructor should document the deficiencies in the comments section and reschedule the student for further practice and testing (original certifications only). Upon completion of the road proficiency testing, the data from this form should be submitted to the SC Criminal Justice Academy Traffic Safety Unit via the SCCJA website through the submittal option under forms. This must occur by the conclusion of the fourth week of the course. Any proficiency forms received after the fourth week will be considered failures. Make sure the course type/location and dates are clearly written on the cover sheet. **SMD RECERTIFICATION PROFICIENCIES ARE DUE WITHIN TWO WEEKS OF THE COURSE TEST DATE, AND THERE ARE NO RETESTS FOR RECERTIFICATION FAILURES.**

*Note: Student(s) failing to meet field proficiency testing standards (ORIGINAL CERTIFICATIONS ONLY) should be rescheduled for further practice sessions. If, after a third failed attempt at meeting standard, the student should be recycled through the classroom portion of the Speed-Measuring Device Operator Training course. The Academy Program Director should be notified of student recycles. SMD RECERTIFICATIONS ARE GIVEN ONLY ONE ATTEMPT AT PASSING THE PROFICIENCY WITH NO RETESTS.*



## Radar Functionality

### *(Required for Radar Proficiency)*

#### **PROPER RADAR SET-UP: ABC'S (CHECK ONE):**

	<u>Acceptable</u>	<u>Unacceptable</u>
<b>Antenna(s):</b>		
<b>Box:</b>		
<b>Current:</b>		

#### **PROPER RADAR TESTING PROCEDURE (CHECK ONE):**

	<u>Acceptable</u>	<u>Unacceptable</u>
<b>Internal/Light Segment Tests:</b>		
<b>Tuning Forks Test (Stationary):</b>		
<b>Tuning Forks Test (Moving):</b>		
<b>Explain Tracking History</b> (for all modes of expected operation):		

#### **REMOTE CONTROL FUNCTIONS:**

	<u>Acceptable</u>	<u>Unacceptable</u>
<b>Front/Rear Antenna Switching</b> (Explain and demonstrate the use of the remote buttons if applicable):		
<b>Faster/Slower Button</b> (Explain the use of the button in conjunction with same direction mode if applicable):		
<b>Target Verification Window</b> (Explain the target verification speeding up and/or slowing down):		
<b>Lock-Release</b> (Explain function)		

#### **RADAR INSTRUMENT INDICATORS**

	<u>Acceptable</u>	<u>Unacceptable</u>
<b>Antenna Direction Indicators</b> (Explain function if applicable):		



## Road Proficiency Visual Estimate Test Scoring Example:

<b><u>Stationary</u></b>				<b><u>Moving</u></b>			
<b>Target Vehicle</b>	<b>Estimate</b>	<b>Actual</b>	<b>Error MPH</b>	<b>Target Vehicle</b>	<b>Estimate</b>	<b>Actual</b>	<b>Error MPH</b>
<i>1</i>	40	45	5	<i>1</i>	45	45	-
<i>2</i>	45	45	-	<i>2</i>	42	45	3
<i>3</i>	43	45	2	<i>3</i>	50	45	5
<i>4</i>	42	45	3	<i>4</i>	46	45	1
<i>5</i>	45	45	-	<i>5</i>	47	45	2
<i>6</i>	42	45	3	<i>6</i>	45	45	-
<i>7</i>	44	45	1	<i>7</i>	45	45	-
<i>8</i>	45	45	-	<i>8</i>	41	45	4
<i>9</i>	40	45	5	<i>9</i>	45	45	-
<i>10</i>	45	45	-	<i>10</i>	45	45	-

**Average Error MPH Stationary: 1.9**

**Average Error MPH Moving: 1.5**

**Average Error MPH Overall (add above two lines together and divide by 2): 1.7**

**\*Simply add the error totals for each side then divide by ten. This is done for each mode separately. Then add both stationary and moving error totals and divide by 2. The student must not exceed +/- 3.0 MPH average in EACH TESTED MODE (e.g. stationary-front, moving-front, moving-front-fastest, etc.) or it is considered unsatisfactory**



## Radar Unit Identification

<b>Make:</b>	
<b>Model:</b>	
<b>Serial Number:</b>	
<b>Condition:</b>	

## Visual Estimate Tests Front Antenna

### FRONT ANTENNA ONLY: Minimum Required For Radar

<u>Stationary</u>				<u>Moving</u>			
Target Vehicle	Estimate	Actual	Error MPH	Target Vehicle	Estimate	Actual	Error MPH
1				1			
2				2			
3				3			
4				4			
5				5			
6				6			
7				7			
8				8			
9				9			
10				10			

Average Error MPH Stationary: \_\_\_\_\_

Average Error MPH Moving: \_\_\_\_\_

Average Error MPH Overall (add above two lines together and divide by 2) : \_\_\_\_\_

### Instructor Comments:

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**Instructor Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Student Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_



## Visual Estimate Tests Rear Antenna

### REAR ANTENNA ONLY: If Utilized

<u>Stationary</u>				<u>Moving</u>			
Target Vehicle	Estimate	Actual	Error MPH	Target Vehicle	Estimate	Actual	Error MPH
1				1			
2				2			
3				3			
4				4			
5				5			
6				6			
7				7			
8				8			
9				9			
10				10			

Average Error MPH Stationary: \_\_\_\_\_

Average Error MPH Moving: \_\_\_\_\_

Average Error MPH Overall (add above two lines together and divide by 2): \_\_\_\_\_

### Instructor Comments:

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Instructor Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Student Signature: \_\_\_\_\_ Date: \_\_\_\_\_



## Visual Estimate Tests Same Direction

### **FRONT ANTENNA SAME DIRECTION: If Utilized**

<u>Moving</u>			
Target Vehicle	Estimate	Actual	Error MPH
1			
2			
3			
4			
5			

*Add these together and divide by 5.*

### **REAR ANTENNA SAME DIRECTION: If Utilized**

<u>Moving</u>			
Target Vehicle	Estimate	Actual	Error MPH
1			
2			
3			
4			
5			

*Add these together and divide by 5.*

**Average Error MPH Front Antenna: \_\_\_\_\_**

**Average Error MPH Rear Antenna: \_\_\_\_\_**

**Average Error MPH Overall (add above two lines and divide by 2): \_\_\_\_\_**

### **Instructor Comments:**

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**Instructor Signature: \_\_\_\_\_ Date: \_\_\_\_\_**

**Student Signature: \_\_\_\_\_ Date: \_\_\_\_\_**



## Visual Estimate Tests Fastest Mode

### DSP- Fastest Mode Front Antenna: If Utilized

<u>Stationary</u>				<u>Moving</u>			
Target Vehicle	Estimate	Actual	Error MPH	Target Vehicle	Estimate	Actual	Error MPH
1				1			
2				2			
3				3			
4				4			
5				5			

### DSP- Fastest Mode Rear Antenna: If Utilized

<u>Stationary</u>				<u>Moving</u>			
Target Vehicle	Estimate	Actual	Error MPH	Target Vehicle	Estimate	Actual	Error MPH
1				1			
2				2			
3				3			
4				4			
5				5			

Average Error MPH Front Antenna: \_\_\_\_\_

Average Error MPH Rear Antenna: \_\_\_\_\_

Average Error MPH Overall (add above two lines and divide by 2): \_\_\_\_\_

### Instructor Comments:

\_\_\_\_\_

\_\_\_\_\_

Instructor Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Student Signature: \_\_\_\_\_ Date: \_\_\_\_\_





**Average Speed Calculations for the Stopwatch Function (REQUIRED FOR TIME DISTANCE):**

**Stopwatch Set-up (check one): If Utilized**

	<u>Acceptable</u>	<u>Unacceptable</u>
<b>Stopwatch Test</b>		
<b>Enter proper distance</b>		
<b>Familiarity with Time/Distance Principles:</b>		

**Box (Counter) Functions: If Utilized**

	<u>Acceptable</u>	<u>Unacceptable</u>
<b>Stopwatch/Range Selection</b> (Explain proper use of the stopwatch):		
<b>Distance Switch</b> (Explains how to enter distance and converting yards to feet, etc.):		
<b>Display Target Speed</b> (Explain D.T.S. only/display time in seconds):		

**Calculations: If Utilized**

Target Vehicle	Distance	Time	Estimate	Actual Speed	Error MPH
1					
2					
3					
4					
5					

*Add these together and divide by 5.*

**Average Error:** \_\_\_\_\_

**Instructor Comments:**

\_\_\_\_\_

**Instructor Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Student Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_



## Lidar Field Proficiency Testing (REQUIRED FOR LIDAR)

	<u>Acceptable</u>	<u>Unacceptable</u>
<b>Site Selection:</b>		
<b>Officer Safety:</b>		
<b>Operation Safety:</b>		
<b>Conducts Internal Accuracy checks:</b>		
<b>Demonstrates Proper Sight Alignment:</b>		
<b>Demonstrates Valid Range Accuracy:</b>		
<b>Articulates Tracking History of Target Vehicle:</b>		

### Lidar Unit Identification

<b>Make:</b>	
<b>Model:</b>	
<b>Serial Number:</b>	
<b>Condition:</b>	

### Lidar Visual Estimates

Target	Visual Estimate	Actual Speed	Error +/-
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Average Error: \_\_\_\_\_

**Instructor Comments:**

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**Instructor Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Student Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_