



SONOMA COUNTY SHERIFF'S OFFICE

BASIC 80 HOUR MOTORCYCLE TRAINING

CCN 5380-32550 REVISED JULY 2023

- Purpose of Training:
 - This course prepares students to become qualified as a motorcycle officer by teaching basic riding skills, patrol procedures, and safety practices.

I. Welcome

A. Instructors for the 2 week POST Motorcycle Course

- a. Deputy Wade Borges, Sonoma County Sheriff
- b. Deputy Aaron Hunt, Sonoma County Sheriff
- c. Deputy Kalvin Goforth, Sonoma County Sheriff

B. Housekeeping

- a. Administrative duties
 1. Course registration / POST Roster
 2. Course goals and objectives
 3. EVOC Orientation
 4. Course schedule
 5. Requirements to pass the course
 6. Testing forms overview
 7. Scoring of the Basic Skills Test Evaluation

II. Safety Equipment Inspection (P.O.S.T. 1.0)

A. Uniform

- a. BDU, class "D" Uniform or equivalent

B. Gloves

- a. Leather or adequate alternative
- b. Appropriate for the weather
- c. Must not interfere with motorcycle controls or firearms manipulation

C. Footwear

- a. Leather or adequate alternative material boots which cover ankles

D. Eyewear

- a. Safety glass
- b. Scratch free
- c. No obstruction to peripheral vision
- d. Appropriate to lighting conditions

E. Helmet

- a. D.O.T. approved

- b. Good condition
- c. Properly fitted
- d. Properly strapped

III. Maintenance / Components / Pre-ride checklist (POST 4.1.0, 4.1.1, 4.1.2)

A. Controls

a. Cables/ Hoses

1. Brakes, clutch & Throttle

- i. Inspect for proper operation, adjustment, wear

B. Chain / Belt

- a. Inspect for proper adjustment, lubrication, wear

C. Safety equipment

a. All required lighting

- 1. Headlights
- 2. Tail & Brake lights
- 3. Turn signals
- 4. Auxiliary lights
- 5. Horn
- 6. Mirrors
- 7. Brakes

D. Fluids

- a. Oil
- b. Antifreeze
- c. Fuel
- d. Brake fluid

E. Tires

a. Matching:

- 1. Correct matching of front and rear tires is critical to obtaining optimum performance and handling
- 2. Use the tires recommended by the motorcycle manufacturer to reduce/negate the possibility of high-speed wobble
- 3. Ensure directional tires are mounted properly.
- 4. By combining a new tire with a worn tire you may cause handling instability

b. Air Pressure: Tires

- 1. Check air pressure while tires are cold

c. Use pressures recommended by the motorcycle manufacturer and never exceed the maximum pressure stamped on the tire sidewall

- 1. Front & rear tires will not necessarily have the same pressure

2. Air pressure too low can build up excessive heat which may result in:
 - a. Adversely affect cornering
 - b. Reduction of the tire's life
 - c. Result in premature sidewall fatigue cracks
 3. Too high an air pressure could result in a blowout, which might not occur when impacting an object operating within pressure guidelines
- d. Tread depth:
1. Road tires with a tread depth of 1/32nd inch or less must be discarded and replaced immediately
 2. Off-road tires with insufficient tread depth will affect traction/handling
- e. Tire failure:
1. React quickly
 - a. Maintain a firm grip on the handlebars. Relax your arms and body, and maintain balance
 - b. Steer as straight as possible
 - c. Use only the brake on the tire that is not affected by the flat to slow motorcycle until slowly exiting the roadway
 - d. A front flat will cause the steering to feel "heavy" and sluggish
 - e. A rear flat will make the motorcycle feel like the rear tire is swinging from side-to-side

F. Shocks.

- a. Seals intact
- b. No leaks
- c. Air Pressure

IV. Pre-ride Instruction (P.O.S.T 1.1.1, 1.1.2, 1.1.3, 1.1.4, 1.1.5.)

- A. The student will demonstrate the ability to put the police motorcycle on and take it off the center stand and side stand
- B. With the engine not running, the student will upright a police motorcycle that is lying on the ground
- C. The student will demonstrate the ability to safely mount and dismount from both sides of the police motorcycle
- D. While standing next to and/or straddling a police motorcycle, the student will demonstrate the ability to push the motorcycle forward and backward

- E. While straddling the motorcycle, the student will push the motorcycle backward against a minimum uphill grade of six percent. Time and distance may be considered

- F. Basic instruction of motorcycle operation
 - a. Understanding of clutch, throttle, braking, shifting, etc
 - b. Introduce the concept of “Head & Eyes” and the importance of looking ahead at the high horizon
 - c. Introduce the concept of “Grey Area” and control of the motorcycle
 - 1. Demonstration of minimal movement of the clutch lever to set motorcycle in motion
 - 2. Four finger coverage of clutch
 - 3. Power to rear wheel keeps motorcycle upright and in motion
 - 4. Explain the importance of avoiding the clutch all the way to the bar or all the way out during slow speed operation
 - 5. Explain “Combination Braking”
 - a. Four finger braking
 - b. 70 to 80% of braking force comes from front brake
 - c. Threshold brake without locking up brakes
 - d. Head & Eyes straight ahead
 - e. Rear brake lock up leads to oversteer
 - f. Front brake lock up leads to possibly going down
 - 6. Start / Stop exercise to show competency in using clutch, throttle, braking and shifting
 - 7. Familiarization ride for students
 - a. Slow speed led by instructor to evaluate roadway position, head and eye placement and braking skills

- V. Surface appraisal (P.O.S.T. 3.1.1)
 - A. Various surface concerns
 - a. Bumps, dips, crowns, steep slopes, etc.
 - b. Foreign objects
 - 1. Mufflers, large rocks, lumber spills, etc.
 - c. Gravel, mud, sand, wet concrete, antifreeze, painted lines
 - d. Steel surfaces
 - 1. Bridges, temporary metal covers, etc.
 - e. Rain grooves
 - 1. Relax, they are safe to ride over; the slight wobble motion of the motorcycle is normal
 - f. Railroad tracks
 - 1. Cross with as much right angle as possible
 - g. Wet leaves
 - 1. Can be very dangerous
 - a. Commonly found on curving mountain roads

- h. Dirt roads
 - B. Consider appropriate braking techniques for the above surfaces
 - C. Speed reduction might be necessary
 - a. As surface friction coefficient drops, stopping distances increase at any given speed.
 - D. Balance front to rear for conditions i.e. riding over a foreign object
 - E. Consider another route for:
 - a. Extended construction zones, etc.
- VI. Braking (P.O.S.T. 2.1.4)
- A. The student will use a law enforcement motorcycle to successfully complete a series of exercises using the front brake controls only, the rear brake controls only, and the front and rear brake controls in combination.
 - a. 70%-80% of the motorcycle's stopping power comes from the front brake
 - b. Use approx. 50% initial grab on the front brake to transfer weight onto the front tire, then continue to squeeze the front brake
 - c. Maintain high visual horizon
 - d. Use of downshifting during braking
 - e. On motorcycles not equipped with ABS i.e. off road bikes/dualsport
 - 1. Threshold braking on rear wheel. If rear wheel locks, release rear brake and reapply. Rear wheel will have a tendency to lock easier the more weight transfer is moved forward
 - 2. Threshold braking on front wheel. If front wheel locks, release front brake IMMEDIATELY and control motorcycle straight ahead. Reapply front brake as necessary.
- VII. Basic Riding Techniques (P.O.S.T. 2.1.0, 2.1.1, 2.1.2, 2.1.3., 2.1.5., 2.1.6, 2.1.7., 2.1.8. and 2.1.9.)
- A. All practical exercises will be practiced on paved roadways. Many of the exercises will also be conducted in selected dirt areas, and other difficult terrain so as to acclimate the operator to proper surface appraisal and varying riding techniques
 - B. All exercises shall be demonstrated by the instructor(s) prior to the student's demonstration of the exercise
 - C. All exercises will require the operator to read each pattern and demonstrate proper wheel placement in order to attain an error free

negotiation. While occasional errors are expected, the advanced operator is expected to demonstrate and increasing proficiency in each exercise

- D. All patterns are designed to reinforce the operator's ability to safely accelerate, turn, stop and shift (up & down) in extreme situations via proper applications
- VIII. Lane to Lane flat turns (16' for off road bikes, 20' for on road bikes)
- A. The student will learn & maintain proper eye position
 - a. By looking ahead at the high horizon
 - B. Ensures that the student "hinges" properly at waist during each weave transition
 - C. Identifies the student with eye positioning and improper hinge concerns
 - D. Teaches proper front wheel placement for turning movements
 - E. Identifies student ability to operate the motorcycle in the "Grey Area" for maximum control of motorcycle
 - F. Teaches proper throttle control in conjunction with clutch operation
- IX. Figure 8 box exercise:
- A. Provides training for circles, U-turns and figure eights
 - B. The student will learn & maintain proper eye position
 - C. Identifies the student with eye positioning concerns and ensures immediate corrective action
 - D. Teaches proper front wheel placement for turning movements
 - E. Teaches proper throttle control in conjunction with clutch operation
- X. 90 degree pull-outs
- A. The student will learn to make immediate right & left turns with forward movement limited to a fixed distance
 - B. To be accomplished with free-space on either side of the student and in both left and right directions
 - C. The student will learn the proper transition of power to vehicle movement via the proper use of clutch, throttle, accelerator and rear brake

- D. The student will learn & maintain proper eye position
 - E. Identifies student's tendency to favor either right turns over left turns, or vice versa
 - F. Allows instructor to take immediate remedial action
 - G. Teaches student to make quick, smooth turn transitions
- XI. Keyhole
- A. Prepares student for the Flat Pattern #3 Exercise
 - B. Turn is greater than 180 degrees
 - C. Identifies student's tendency to favor either right turns over left turns, or vice versa
 - D. Allows instructor to take immediate remedial action
 - E. The student will learn & maintain proper eye position
 - F. Allows the student to familiarize themselves with motorcycle dynamics at aggressive lean angles
 - G. Teaches proper throttle control in conjunction with clutch operation
- XII. Flat pattern #3 exercise:
- A. The student will learn & maintain proper eye position
 - B. Identifies student's tendency to favor either right turns over left turns, or vice versa
 - C. Allows instructor to take immediate remedial action
 - D. Teaches student to make quick, smooth turn transitions
 - E. Teaches proper front wheel placement for turning movements
 - F. Teaches proper throttle control in conjunction with clutch operation

XIII. 180-degree deceleration exercise:

- A. The student will learn proper braking and downshifting techniques from varying speeds
- B. Proper application of front & rear brake without lock-up
- C. Hazards associated with lock-up of front brake
- D. Hazards associated with releasing locked rear brake during rear end slide
- E. The student will learn & maintain proper eye position, coupled with maintaining a high horizon
- F. The student will learn proper wheel placement so as to effect maximum tight turns
- G. Teaches proper throttle control in conjunction with clutch operation

XIV. 40 mph deceleration exercise:

- A. The student will learn to make emergency turns or stops to avoid hazards in the roadway
- B. The student will learn proper braking and downshifting techniques from varying speeds
- C. Proper application of front & rear brake without lock-up
- D. Hazards associated with lock-up of front brake
- E. Hazards associated with releasing locked rear brake during rear end slide

XV. Riding the public roadways

- A. Lane positions
 - a. Be seen
 - 1. Use headlights
 - 2. Don't ride in blind spots
 - a. Mirrors on large trucks, etc.
 - 3. Don't depend on eye contact with other drivers
 - a. If a car wants to enter your part of the lane, it probably will
 - 4. Whenever possible, use lane position that will afford the best view of approaching traffic
 - 5. Be aware of the oily strip in the middle of the lane

- a. Not usually a concern unless wet
6. Consider lane position at toll booths due to grease accumulation
7. Avoid surface hazards
 - a. After stopping behind traffic, and before starting again, consider anti-freeze spills, etc.
 - b. Start slow until front vehicle provides sufficient surface view for objects
8. Communicate your intentions
 - a. Especially lane changes
9. There is no best lane position (dictated by conditions)
10. Always provide an escape route!

B. Lane Sharing/Splitting

- a. Legal in California (not all states)
- b. Considerations
 1. Riding between rows of stopped or moving cars leaves you vulnerable to drivers who want to:
 2. Change lanes or pass
 3. Get angry at you and squeeze the lane

C. You can be cited for unsafe speed for conditions

- a. Generally, don't split any faster than 10 mph past any other vehicle
- b. At no time should you split if vehicles are traveling 30 mph or faster

XVI. Formation riding (P.O.S.T. 2.1.9)

- A. The student will demonstrate the ability to safely ride in formation (i.e.. Single file and side-by-side, to include proper sudden braking techniques)
- B. Responsibilities of rider given different positions in the formation
- C. Proper lane choice and lane position
- D. Proper use of throttle, clutch, gear selection and brakes
- E. Keeping a high visual horizon and alertness to changing traffic conditions ahead
- F. Communication with other riders in the formation i.e. hand signals and verbal communication via radio
- G. Navigation and forethought when leading a formation

XVII. Incline / Decline exercises:

- A. The student will learn the proper transition of power to vehicle movement via the proper use of clutch, throttle, and rear brake while riding on paved inclined & declined roadways
 - B. The exercises will incorporate circles, U-turns & figure eights
 - C. The student will learn & maintain proper eye position
 - D. Teaches slow speed balance
- XVIII. Assessment (P.O.S.T. 5.0)
- A. A proficiency test to measure the critical skills of basic riding techniques will be administered to each student. Patterns will be designed to challenge the capabilities of the rider and the motorcycle.
 - a. Testing Exercises
 1. Lane to Lane Flat Turns left and right (16' for off road bikes, 20' for on road bikes)
 2. Figure 8 Box (Student has choice of entering the pattern on the left or right side)
 3. 90 degree pull outs left and right
 4. Keyhole left and right
 5. Flat Pattern 3 left and right
 6. 40 MPH Decel (combination of left and right and 1 full stop)
 7. Incline U turns left and right (16' for off road bikes, 20' for on road bikes)
 8. Decline U turns left and right (16' for off road bikes, 20' for on road bikes)
 - b. Student should demonstrate a minimum of 70% performance score throughout the testing categories of motor operations. Students should display proficiency through consistent successful runs.
 - c. Individual student performance will be recorded on individual competency testing forms for each pattern tested.
- XIX. Off road exercises:
- A. Exercises to be determined by instructor based on the prevailing available terrain
 - B. Will acclimate the student to the severe handling characteristics of the motorcycle often associated with off-road riding
 - C. The student will learn to assess varying riding surfaces and situations

- D. The student will learn when to utilize different riding positions, standing vs. seated given different conditions or terrain
 - E. The student will learn dynamics of clutch, throttle and front vs. rear brake application given different conditions or inclining/declining terrain
- XX. Tactical Operation and shooting from motorcycles
- A. Exercise Guidelines
 - a. All practical exercises will be practiced at the appropriate firearms training facility
 - b. Practical learning exercises will be conducted in a static training environment
 - c. Practical learning exercises will begin with simple tasks and move to the more complex
 - d. Students will demonstrate understanding and proficiency of beginning learning activities before moving to the more complex
 - B. Equipment familiarization
 - a. Static learning activities incorporating helmet and gloves into basic firearms manipulation / engagement
 - C. Dismount drills
 - a. Static learning activities incorporating dismounting the motorcycle
 - b. Dismounting and engaging threats
 - c. Engaging threats and dismounting
 - D. Use of motorcycle for tactical advantage
 - a. Static learning activities incorporating the use of the motorcycle as cover/concealment
 - b. Cover vs concealment in regard to the motorcycle
 - c. Positioning to provide optimum cover
 - d. Using to provide support
 - E. Rolling dismount to engagement – Slow Speed
 - a. Slow speed rolling dismount
 - b. Use of motorcycle for support
 - c. Use of motorcycle for cover/concealment
- XXI. Night Riding (P.O.S.T. 3.1.1)
- A. More difficult to see, and to be seen by others
 - a. Reduce your speed
 - b. Increase distance
 - 1. Distances are harder to judge at night than during the day. Your eyes rely upon shadows and light contrasts to

determine how far away an object is and how fast it is coming. These contrasts are missing or distorted under artificial lights at night

- c. Open up a three-second following distance or more. Allow more distance to pass and be passed
- d. Watch & use cars ahead
 - 1. The headlights of the cars ahead can give you a better view of the road than even your high beam can
- e. Use your high beam whenever possible
- f. Consider lane position
 - 1. Change to whatever portion of the lane is best able to help you see, be seen and keep an adequate space cushion
 - a. Change to whatever portion of the lane is best able to help you see, be seen and keep an adequate space cushion

XXII. Enforcement Stops (P.O.S.T. 3.1.2)

- A. Using a police motorcycle on a selected roadway, the student will utilize proper techniques when stopping simulated violators. The demonstration techniques should include proper speed, distance, placement, positioning and control of surrounding traffic
- B. Techniques to gain other driver's attention
- C. Safe traffic stops
- D. Radio procedures
- E. Discuss the following:
 - a. a. Code 3 responses
 - b. b. Pursuits
 - c. c. High risk/felony stops

XXIII. Graduation

- A. Present certificates
- B. Fill out evaluations