Purpose: To provide the trainees with the knowledge, skills and proficiency to safely operate a police motorcycle during the performance of their traffic duties.

I. ADMINISTRATIVE

A. Course Objectives

- 1. Safe Operation of a Police Motorcycle
- 2. Confidence on a Police Motorcycle
- 3. Enforcement on a Police Motorcycle

B. Safety Orientation

- 1. Always complete a pre-ride inspection of the motorcycle.
- 2. Ride only when instructors are present.
- 3. Any time the motorcycle is running, operator must wear approved helmet securely attached, gloves, eye protection, and boots.
- 4. If a whistle, air horn, or siren is sounded, students are to immediately stop their motorcycle, turn off the engine, and await further instructions from an instructor.
- 5. Speeds will be set instructors and students will not exceed that limit.
- 6. If a motorcycle goes down, immediately shut off the engine using the ignition.
- 7. When aiding an operator who is down, ensure the ignition has been turned off.
- 8. At least two people will lift a downed motorcycle during training exercises.
- 9. Immediately notify an instructor of any unsafe condition.
- 10. Immediately notify an instructor of any injury.
 - a. A trauma kit and fire extinguisher will always be at the training site.
 - b. Instructors will always have a police radio and cellular telephone immediately available for emergency calls.
- 11. Reckless riding will result in immediate dismissal from the course.
- C. This training course will not be available to outside agency personnel. Students will be sworn NBPD police officers only.

II. PRACTICAL EXERCISES

A. Introduction to the Motorcycle

- 1. Control and Gauges
- 2. Lighting Equipment
- 3. Emergency Equipment
- 4. Side Stand
- 5. ABS Indicator
- 6. Fuel Cap
- 7. Detachable Saddlebags
- 8. Retractable Windshield

B. Motorcycle Maintenance

- 1. <u>Daily</u> Check oil level, tire pressure/tread, lights, horn, and controls.
- 2. Keep motorcycle clean and presentable.

C. Down Motorcycle

- 1. Lay Bike Down Demo by Instructor
 - a. Immediately turn ignition off
 - b. Assist rider check for injuries
 - c. If motorcycle is on its right side, put side stand down
 - d. Demonstrate methods used to pick-up the bike (single person)
 - e. During future training exercises bike, will be picked-up by two people
- 2. Practical Demo by Students
 - a. Student will demonstrate procedures detailed above to lift motorcycle
 - b. <u>Pass/Fail</u> If a student is not able to lift the motorcycle from a downed position, they cannot continue in the NBPD Motor Academy.

III. LECTURE ON BASIC RIDING CONCEPTS

- A. Balance
 - 1. Counter Balancing vs. Leaning Into a Turn
 - 2. Proper Seat Position
- B. Head and Eyes
 - 1. Head Up
 - 2. Look Where You Want to Go
 - 3. Look Before Turning
- C. Clutch and Throttle
 - 1. Smooth Transition From Clutch to Throttle
 - 2. Use the Minimum Amount of Throttle
- D. Look Where You Want to Go
 - 1. Don't Look Down Look Down, Go Down

- 2. Scan Ahead
- E. Leaning
 - 1. Aids in Turning
 - 2. High Speed vs. Low Speed
- F. Braking
 - 1. Front Brake Equals About 80% of Stopping Power
 - 2. Interlinked Braking System
 - 3. Both Brakes ABS Controlled
 - 4. Braking in Turns

IV. LECTURE ON STREET AND FREEWAY RIDING / SHORT AND LONG RIDE CONCEPTS

- A. Lane Choice
 - 1. Decide which lane makes you most visible to other traffic
 - 2. Which lane provides the widest range of view; includes large vehicles and other obstacles/conditions blocking view
 - 3. Anticipated turns
 - 4. Which lane allows for safety (evasive) movements
 - 5. Generally the #1 lane is preferred
- B. Lane Placement
 - 1. Never use center of the lane due to oil buildup and debris
 - 2. #1 track in generally preferred
 - 3. Use the track that provides the most safety
- C. Speed
 - 1. Match flow of traffic
 - 2. Maintain safe distance from vehicle ahead of you
 - 3. While Code 3, speed should not prevent evasive maneuvers
- D. Apex
 - 1. Enter high, Low at 2/3, Exit high
 - 2. Accelerate upon exiting turn
 - 3. Look ahead for oncoming traffic
- E. Surface Appraisal
 - 1. Be aware of debris, fluid, glass, dirt, loose asphalt, etc.
 - 2. Condition of surface: holes, ruts, tar strips, uneven surface, etc.
 - 3. Railroad tracks

- F. Traction
 - 1. Maximum traction is with motorcycle upright
 - 2. Traction diminishes as motorcycle is leaned to the side
 - 3. In turns, traction maintained by speed or clutch/throttle
 - 4. Tire condition and shape influence traction
- G. SPA (Scan, Predict, Act)
 - 1. Scan ahead 11 second rule (high visual horizon)
 - 2. Predict the actions of other drivers/pedestrians
 - 3. Act decide a course of action and execute
- H. Formation Riding
 - 1. Pairs abreast of each other
 - 2. Offset curves, high winds, etc.
 - 3. Distance between motorcycles depends on speed and conditions
 - 4. Lane changes
 - 5. Paired U-turns
 - 6. Parking

I. Night Riding

- 1. Recognize limited visibility
- 2. Speed should be reduced at night
- 3. Use other vehicles headlights/ taillights to note their position/ speed
- 4. Use other vehicles lights to detect objects/ defects in roadway

V. LECTURE ON TACTICAL AND TRAFFIC STOPS

- A. Solo Enforcement
 - 1. Pursuit of violator/ use of equipment
 - 2. Location of stop/ dismount
 - 3. Driver contact
 - 4. Position of advantage for cites
- B. Paired Enforcement
 - 1. Communication
 - 2. Teamwork during the stop
 - 3. Position/ contact
 - 4. Tactics
- C. Tactics
 - 1. Cover/Concealment

- 2. Response to priority calls
- 3. Mindset/Equipment

VI. SKILL EXERCISES

- A. <u>40 Decel (TEST PATTERN)</u> Collision avoidance exercise. This pattern is designed to teach the student proper emergency braking skills. Student will approach the first set of cones at 40 mph/ 3rd gear. Once the front tire is through the gate, the student will begin emergency braking using demonstrated technique to reduce speed. No movement or braking is allowed prior to the first set of cones. Student will then enter the U-turn portion of the pattern and complete the U-turn under power/ control.
- B. <u>30 Cone Weave (TEST PATTERN)</u> Collision Avoidance Exercise This exercise is designed to teach the student to proper and quickest way to avoid a collision at speed. Student will approach the first set of cones (gate) at 30 mph/ 3rd gear. Student will line up to the left of the cones. Just prior to the first gate, student will begin to maneuver the motorcycle to the right by employing the "counter steering" method. The student will continue this maneuver, going back and forth until the student has passed all seven gates. A speed of 28-32 mph must be maintained for the entire run (7 gates).
- C. <u>180 Decel (TEST PATTERN)</u> This pattern is designed to teach the student how to transition from speed to slow speed maneuvering while controlling the motorcycle in various turns. The student will approach the pattern at a speed of 30 mph/ 3rd gear. As the student enters the pattern, he will decelerate using the braking skills taught previously. As the student approaches the first right hand 45-degree turn, the student will release the brakes and continue through the pattern making various left and right turns under controlled power. Once the student reaches the first turn, no brakes are allowed to be utilized for the remainder of the pattern.
- D. <u>Circles and Figure Eights</u> (No Diagram) This exercise is a basic warm up exercise, allowing the student to demonstrate proper slow speed riding skills in an open, cone free area. Two painted parking stalls will be used for circles and four painted parking stalls will be used for figure eights. Both exercises are "No Brake" exercises.
 - a. Circles student will enter the parking stalls (two side-by-side stalls) and complete 2-3 circles in one direction using proper riding skills. This will be repeated for the opposite direction.

- b. Figure 8's student will enter the parking stalls (two stalls wide x two stalls deep) and maneuver the motorcycle in a figure eight pattern by using proper riding skills. The "X" formed in the middle of the four stalls will be used as a guide for proper transition from one side of the figure eight to the other.
- E. <u>Offset 90's (Flat)</u> This pattern is designed to teach the student how to maneuver the motorcycle under power using proper riding skills, head turns and peripheral vision. The student will enter the pattern and begin a series of "rolling U-turns" driving the motorcycle through each gate. This exercise is a building block to the "Incline Offset 90's". This is a "No Brake" exercise.
- F. <u>Intersection</u> This pattern is designed to teach the student how to make a U-turn under power in a small confined space utilizing proper riding skills. The student will enter the intersection from a predetermined point and begin a series U-turns and 90 degree turns while maintaining control of the motorcycle. The student will demonstrate this skill set in both directions. This is a "No Brake" exercise.
- G. <u>Keyhole</u> This exercise is designed to teach the student to increase the amount of turn learned in the "Intersection". The Keyhole U-turn is increased so that the rider is exiting at a different location than the entry point. This exercise is a building block for test pattern #3. The student will enter the pattern from one of two gates. The student then will make a U-turn and exit in the opposite gate. The student will perform this exercise from both sides. This is a "No Brake" exercise.
- H. Long Cone Weave This exercise is designed to teach the student the fundamentals of balance and moving the bike side to side at slow speeds. This exercise is a building block for the "Short Cone Weave". The student will enter the pattern at the first gate. The student will maneuver the motorcycle through the cones going side to side and around each cone. The student will do this until he exits the gate at the opposite end of the starting gate. This is a "No Brake" exercise.
- <u>Short Cone Weave</u> This exercise is designed to build on the skills learned in the "Long Cone Weave". In addition to those skills, the student will learn how to utilize the rear brake to assist in getting the motorcycle around each cone in a smaller space than used in the "Long Cone Weave". The entry and performance for this pattern is the same as the "Long Cone Weave" with the addition of utilizing the rear brake.
- J. <u>Pullouts (Flat)</u> This exercise is designed to teach the student how to maneuver the motorcycle in tight spaces from a stop, utilizing proper clutch/

throttle and body placement. The student will enter the gate and come to a stop. The student will raise the inside foot (determined by which direction the rider is to go). Once cleared by an instructor to begin, the student will begin to drive the motorcycle in the designated direction and exit the pattern. This exercise will be completed in both directions. Once the student comes to a stop, no further application of the brakes will be allowed.

- K. <u>Cone Pattern #1</u> This exercise is designed to teach the student how to control and maneuver the motorcycle in tight turns beginning from a stopped position utilizing proper riding techniques. The student will begin by entering the pattern and coming to a complete stop in the designated area. The student will raise his left (inside) foot. The student will then begin to drive the motorcycle forward and conduct a series of turns, finishing with a U-turn as he exits the pattern. Once the student enters the pattern and comes to a stop, no further application of the brakes will be allowed.
- L. <u>Cone Pattern #2</u> This exercise is designed to teach the student how to maneuver at slow speed through a series of turns simulating congested traffic. Additionally, the student will learn how "rear wheel cheat" (or how the rear tire does not track where the front tire tracks). The student will learn how to position the motorcycle to compensate for rear wheel cheat. The student will enter the pattern at slow speed and maneuver through several turns under power and exit via a left hand curve. This is a "No Brake" exercise.
- M. <u>Cone Pattern #3 (TEST PATTERN)</u> This exercise is designed to teach the student to maneuver the motorcycle under power and in control during a series of tight and consecutive U-turns. The rider will need to utilize proper clutch/ throttle use and head/ eye placement in quick succession. The student will enter on either side of the pattern and conduct a series of three U-turns by placing the motorcycle in the proper position for each turn. The student will perform this exercise from both sides. This is a "No Brake" exercise.
- N. <u>Incline Pullouts</u> this exercise is designed to teach the student how to safely drive the motorcycle from a stop on an incline surface, utilizing proper amounts of clutch/ throttle and lean angle. The student will enter the gate and come to a complete stop. The rider will hold the motorcycle on the incline by use of the "friction point" (rear brake may be used when the rider is turning to the right). The student will raise his inside foot as determined by the direction the student is to travel. Once stopped, the student will use clutch/ throttle to drive the motorcycle in the intended direction. The student

will perform this maneuver in both directions. Once the student has begun his turn, no further application of the brakes is allowed.

- O. <u>Incline Offset 90's</u> This exercise is designed to further enhance the student's abilities to maneuver the motorcycle through a series of U-turns with the added challenge of traversing an incline surface. The student will use the rear brake to assist in the downhill portion of the exercise, adding another level of complexity to the exercise. The student will enter through the first gate and begin a series of U-turns, going from an incline direction to a decline direction. This travel will be repeated for a series of turns. As the student begins his decline portion of the pattern, the rear brake should be used to assist the decent of the motorcycle. No use of the brakes will be allowed during the incline portion of the exercise. The student will perform the exercise in both directions.
- P. Incline Figure 8 This exercise is designed to further enhance the student's abilities to maneuver the motorcycle in a figure eight pattern with the added challenge of traversing an incline surface. The student will use the rear brake to assist in the downhill portion of the exercise, adding another level of complexity to the exercise. The student will enter the pattern at the designated entry point and complete a series of figure eight's, exiting at the discretion of the instructor. The student will perform this exercise in both directions.
- Q. <u>Firearms Training</u> The purpose for this section of training is to expose the new motorcycle officer to firearms manipulation while wearing the safety equipment and uniform of a motorcycle officer. This section of training will also demonstrate the limitations and reduced tactile feel of shooting a weapon while wearing motorcycle safety equipment. This course of fire will incorporate deployment of the handgun from the holster while wearing helmet, gloves and protective eyewear typically worn during motorcycle operations. Shooting drills will include magazine changes/ reloading while wearing motorcycle specific protective equipment and stoppage and malfunction drills. All firearms training will be conducted under the supervision of the NBPD Range Master.

VII. SKILL EXERCISE – PRACTICAL

- A. Explain Concept of Exercise
 - 1. Clutch and Throttle

- 2. Head and Eyes
- 3. Turning
- 4. Braking
- 5. Counter Steering
- 6. Collision Avoidance
- 7. Confidence
- B. Walk Through Exercise
 - 1. One instructor explains while another walks the exercise
 - 2. Key cones are pointed out
 - 3. Reference points are noted
 - 4. Position in the pattern is stressed
- C. Demonstrate the Exercise
 - 1. One instructor will ride the pattern
 - 2. Second instructor will point out key points as the first instructor rides through the exercise
 - 3. The exercise may be demonstrated several times so the students can focus on a variety of aspects each time

VIII. DAILY EVALUATIONS

- A. Evaluation forms will be completed daily
 - 1. Evaluations will be discussed with students
 - 2. Evaluations will be signed by both the student and the instructor
- B. Scoring
 - 1. Score (1) Unsatisfactory: drops motorcycle, rides out of pattern
 - Score (2) Needs Improvement: foot down; seven or more checked comments
 - 3. Score (3) Below Standards: six or less checked comments, erratic movements, struggles through pattern but completes the event
 - 4. Score (4) Qualified: no checked comments, smooth, steady control, good body placement
 - 5. Score (5) Highly Qualified: above average skills demonstrated, confidence and ability to control the motorcycle

IX. TESTING

- A. Requirements
 - 1. 40 Deceleration, 10 runs maximum
 - a. Speed between 38-42 mph

- b. Must have 7 successful runs in 10 attempts
- c. No braking while turning
- d. Dropping the motorcycle while braking is a failure retest required
- 2. 30 Cone Weave, 10 runs maximum
 - a. Speed between 28-32 mph
 - b. Must have 7 successful runs in 10 attempts
- 3. 180 Deceleration, 10 runs maximum
 - a. Speed between 28-32 at gate
 - b. Must have 7 successful runs in 10 attempts
 - c. No braking past the first turn
- 4. Pattern #3, 10 runs maximum in each direction
 - a. Must have 7 successful runs in 10 attempts in each direction
 - b. No braking
- B. Re-Test
- 1. In the event a student fails a test, they will be allowed to retest after remedial training
- 2. Only the failed test needs to be retested
- 3. A failure on the retest will result in a student failing the course

X. DISQUALIFYING

- A. Students may be disqualified for reasons other than failure of the requirements listed in section IX. Students may fail due to:
 - 1. Violation of safety rules as listed in section I-A.
 - 2. Inability or refusal to follow instruction or direction of instructors
 - 3. Failing to demonstrate overall competency to operate a police motorcycle (Example: timid or erratic riding during street/freeway rides)
 - 4. Preventable collision while on a street/freeway ride
- B. Disqualified students will not be allowed to continue participation in the current course.