24 Hour 4350-23820-Expanded Course Outline

### DAY ONE

#### I. INTRODUCTION AND ORIENTATION

A. Introduction, Registration, Facilities Orientation, Course Overview, Objectives, Written/Practical Examination

### II. HISTORY OF POLICING ON BICYCLES

- A. Bikes first used by police
- B. Modern day police use
- C. Public relation tool at first
- D. First used during summer months, daylight hours only
- E. Today used widely during night time hours
  - 1. Apprehension of drug dealers/users
  - 2. Apprehension of prowlers/burglars
  - 3. Higher arrest rate
- F. More mobile in/out of traffic
- G. Less visible than patrol car/motor officer
- H. Cost effective

#### III COMMUNITY RELATIONS

- A. Communities are very supportive
  - 1. Funds
  - 2. Equipment
  - 3. Letters of support
- B. Bike officers are closer to the public
  - 1. Approachable
  - 2. Positive image
  - 3. Better problem solving

#### IV. LEGAL/RULES OF THE ROAD

- A. Bicycle laws same as for motorists
- B. Local Ordinance required permitting Police riding on sidewalks

#### V. NUTRITION/HEALTH

- A. Keep Hydrated
- B. Energy Bars
- C. Eat Healthy

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#### VI. NOMENCLATURE

- A. Bicycle Components
  - 1. Top tube
  - 2. Seat tube
  - 3. Down tube
  - 4. Brake bridge
  - 5. Seat stay
  - 6. Chain stay
  - 7. Dropout
  - 8. Bracket button
  - 9. Steerer tube
  - 10. Head tube
  - 11. Fork crown
  - 12. Fork blade
  - 13. Fork tip
  - 14. Brake stud

#### VII. MOUNTAIN BICYCLES/ROAD BICYCLES

- A. Mountain Bike
  - 1. All-terrain bike
  - 2. Wide gear range
  - 3. Comfortable pedaling
  - 4. Hill/rough terrain capable
  - 5. Resistant to abuse
    - a. Dirt, gravel, rough terrain etc.
  - 6. Fat tires
    - a. Better traction
    - b. Heavy duty
  - 7. Frame somewhat higher
    - a. Ground clearance
    - b. Cyclist in an upright position
    - c. Rough terrain somewhat comfortable
- B. Road Bicycle
  - 1. Generally 12 speed
  - 2. Light weight
  - 3. Frame/parts susceptible to damage if abused
  - 4. Thin tires
    - a. Clincher
    - b. Sew-up
    - c. Made for speed

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#### VIII. PRE-RIDE INSPECTION/MAINTENANCE

- A. Quick Release Levers/locked
  - 1. Seat post
  - 2. Wheels
  - 3. Brakes
- B. Wheels
  - 1. Check for flat spots
  - 2. Properly centered in the forks/frame
  - 3. No side-to-side play
  - 4. Check for loose/broken spokes
  - 5. Dirty rims
- C. Tires
- 1. Use hand pump
- 2. Inflate to proper pressure only
- 3. Check for cuts/wear
- 4. Avoid gas station air pumps
- D. Caliper Brakes
  - 1. Check for binding when applied
  - 2. Proper cable adjustment
- E. Keep chains lubricated

#### IX. RIDING POSITIONS

- A. Arms
- 1. Bent for shock absorption
- 2. If arms are locked a shorter stem may be necessary
- 3. Lean forward more
- 4. Fatigue in upper arms/shoulders
  - a. May need longer stem or longer top tube
- B. Hands and Wrist
  - 1. Must be relaxed
  - 2. Keep thumbs wrapped around grips
    - a. Sudden jolt could cause hands to slip off
  - 3. Rough terrain grasp handle bar firmly
    - a. Shock is transferred
  - 4. Light grip vibrates hands
    - a. Causes stinging or numbness
- C. Upper body should be relaxed and loose
- D. Back should be at least 45 degrees
  - 1. Weight is shifted to the arms
    - a. Butt does not get sore

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### E. Gluteus Maximus (butt)

- 1. Do not sit squarely on seat
- 2. Slide to rear for added power
- 3. Keep back wheel planted for descent
- 4. Steep hills
  - a. Crouch over handlebar while seated
  - b. Traction is maintained
  - c. Keeps front wheel down

#### F. Saddle

- 1. Level saddle mostly preferred
  - a. Tilted down prevents irritation
  - b. Slightly upward ease arm strain
- 2. Low seat may cause knee problems
  - a. Patellar tendon area
- 3. High seat over extends your leg
  - a. Puts stress on tendons and ligaments behind knee
- 4. Correct saddle height
  - a. Sit on bike wearing cycling shoes
  - b. Proper leg extension
  - c. Knees bent about 20 degrees at bottom of stroke

#### G. Feet

- 1. Ball of foot over pedal axle
- 2. 5 mm clearance between shoe and toe clip
- H. Pedaling Technique
  - 1. Smoothness
  - 2. Hills create a slower cadence
    - a. Non-round chain-rings (bio-pace)
  - 3. Rough terrain
    - a. Take out of saddle
    - b. Crouch over bike so it is free to move

#### X. CYCLING EQUIPMENT

#### A. Helmet

- 1. Most important cycling item
  - a. Reduces head and/or brain injury
- 2. Weight of helmet
  - a. Ranges from 6 oz. 15 oz.
- 3. Ventilation
  - a. Good intake and exhaust vents for heat
  - b. Shell cover used during cooler days/evenings
- 4. American National Standards Institute and/or Snell Memorial Foundation approved
  - a. ANSI/SNELL test helmets integrity against impact

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- 5. Helmet cover
  - a. Limits amount of air into air ducts
  - b. Departments name should be on sides
  - c. Soft badge affixed to front of cover
  - d. Winter cover waterproof
- B. Cycling Glasses
  - 1. Protects the eyes against bugs, dust, sunlight
  - 2. High-impact lenses
  - 3. Smoked lenses to filter out 100% UVA
  - 4. Clear lenses for night time use
- C. Shoes
  - 1. Cycling shoes
    - a. Tennis/jogging shoes absorb energy
    - b. Stress fracture to feet
  - 2. Should be breathable
  - 3. Optimum stiffness
    - a. Stability
    - b. Pedaling efficiency

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### **DAY TWO**

### XI. ORIENTATION and REVIEW

- A. History of Policing on Bicycles
- B. Mountain Bicycles vs. Road Bicycles
- C. Community Relations

#### XII. UNIFORM

- A. Shirts (polo)
  - 1. Long sleeve
    - a. Winter months
  - 2. Short sleeve
    - a. Summer months
  - 3. Silk-screen department badge on front
    - a. "POLICE" on back of shirt
- B. Pants
- 1. Long cycling pants
  - a. May need to be adapted to police use
  - b. Should repel rain and coldness
  - c. Class B uniform shirt is not practical
- 2. Short cycling pants
  - a. Lycra cycling shorts with gel padding
  - b. Prevents chaffing
  - c. Police or departments logo on side
  - d. May need to be adapted to police use
  - e. Class B uniform pants not practicable
- C. Cycling Jacket
  - 1. Waterproof
  - 2. Breathable
    - a. Regular duty jackets keep heat in
  - 3. Capable of wicking away moisture from the rider
  - 4. May need to be adapted to look official
    - a. Department patches/soft badges
    - b. Silk-screening on back side "POLICE"
- D. Whistle
  - 1. Attached to a lanyard
  - 2. Breakaway cord
  - 3. Alerts motorists
- E. Gun Belt
  - 1. Nylon material
    - a. Resistant to wetness

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- b. Weighs less than leather
- c. Flexible
- d. Durable
- 2. Leather material
  - a. Absorbs moisture
  - b. Material will crack and deteriorate
  - c. Heavier less flexible
- F. Firearm
  - 1. Daily maintenance
    - a. Protects from moisture/rust
  - 2. Range Qualification
    - a. Use cycling glove
    - b. Document

#### XIII. HANDLING SKILLS

- A. Stair Descents
  - 1. Position rear-end to back of seat
  - 2. Extend arms out
  - 3. Use rear brake to slow down
    - a. Never use front brake
  - 4. Stay perpendicular to steps
    - a. Can descend at angle
  - 5. Too steep or numerous steps
    - a. Carry bike on shoulder
- B. Stair Ascent
  - 1. Use high gear
  - 2. Stay perpendicular to steps
  - 3. Continuous pedaling
  - 4. Flight of stairs
    - a. Quicker to pick-up bike and carry it
    - b. Possible damage to derailleur
    - c. Injury to officer
- C. Hopping Curbs
  - 1. Use high gear on approach
  - 2. Pull back on handlebars
    - a. Push down on pedal
    - b. Continue pedaling
- D. Terrain
  - 1. Sand, gravel and/or dirt
    - a. keep front wheel straight
    - b. avoid large rocks

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- c. Rear brake only
- 3. Railroad tracks
  - a. Approach at a right angle
- 4. Wet weather
  - a. Brakes are not as effective
  - b. Reduces visibility/traction
  - c. Ride slower
- 5. Steep Down-hills
  - a. Move back
  - b. Stay low
  - c. Use back brake mostly
  - d. Feather front brake

#### XIV. SUBJECT/SUSPECT CONTACT

- A. Initial Contact with a Subject
  - 1. Dismount
    - a. Never straddle bike
    - b. Loose balance if pushed over
  - 2. Hostile subject
    - a. Keep bike between you and subject
    - b. Defensive tool
    - c. Offensive tool
    - d. Diversion tool
  - 3. Bike can be used as a temporary barrier
    - a. Position bikes to prohibit flight of a possible suspect
- B. Cross-over Technique
  - 1. Used when approaching suspect from behind
    - a. Dismount bike from left side
    - b. Keep left foot on left pedal
    - c. Remove right foot from pedal
    - d. Lift right foot over bike
    - e. Plant right foot on ground
    - f. Left foot comes off of pedal
    - g. Right foot hits ground, lay bike down while walking up
    - h. Apprehend suspect with a control hold
  - 2. Two officers approaching suspect from behind
    - a. Same as above except bike officer on the left lays bike down first to avoid collision
- C. Chasing Suspect on a Bike
  - 1. One officer (point-man) pursue suspect close
  - 2. Other officer (wing-man) stay a distance away

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- a. Right or left side
- 3. Point man looses suspect
  - a. Wing-man positioned to take over pursuit
  - b. Tactics reversed until the suspect is apprehended
- D. Power Slide (broadie)
  - 1. Used to position yourself in front of suspect
    - a. Partner officer uses cross-over technique
  - 2. Can be used when pursuing suspect as a tripping device

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### **DAY THREE**

### XV. COURSE OVERVIEW AND REVIEW

- A. Handling Skills
- B. Subject/Suspect Contact

### XVI. HANDLING SKILLS-PRACTICAL EXERCISES

- A. Stair Descents
  - 1. Perform
  - 2. Evaluation/Critique of technique
- B. Stair Ascent
  - 1. Perform
  - 2. Evaluation/Critique of technique
- C. Hopping curbs
  - 1. Perform
  - 2. Evaluation/Critique of technique
- D. Terrain
  - 1. Sand, gravel and/or dirt
  - 2. Railroad tracks
  - 3. Wet surface
  - 4. Steep down-hills
  - 5. Evaluation/Critique of technique
- E. Initial Contact with a Subject
  - 1. Dismount from bike
  - 2. Hostile subject
  - 3. Use as a temporary barrier
  - 4. Evaluation/Critique of technique
- F. Cross-over Technique
  - 1. Approach suspect from behind
  - 2. Apprehend suspect with a control hold
  - 3. Two officer approach
- G. Chasing Suspect
  - 1. One officer (point-man) pursues suspect close
  - 2. Other officer (wing-man) stays a distance away
  - a. right/left side
  - 3. Point man looses suspect
  - 4. Evaluation/Critique of technique
- H. Power slide (broadie)
  - 1. Perform
  - 2. Evaluation/Critique of technique

#### XVII. EXAMINATION AND COURSE EVALUATION