



**Sheriff**  
MAGAZINE

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# The Skills of Motorcycle Officers

**W**inding down the graceful mountain curves I begin to relax. A glance in my mirror shows flashing red and blue lights on the motorcycle behind me. My relaxation turns to anxiety. The speedometer reads 70 mph. What is the speed limit here? Damn! I don't remember. Should I try to run for it? How fast is that bike? I quickly drop this idea and begin to wonder about the cop behind me as I pull to the side of the road.

What bike handling skills are required of a motorcycle officer? How are these skills taught and how are they tested?

To answer these questions, I attended the Arizona Highway Patrol's motor officer training school. Phase I includes seven days at Phoenix International Raceway. Phase II consists of four days of structured street riding and a day of pursuit tests at the Firebird Racetrack. Phase III, the final phase, is on-the-job and lasts four weeks. Sgt. Larry L. Kenyon is the lead instructor, assisted by seven motorcycle officers. Twelve students—prospective motorcycle officers—are enrolled in the course, which begins at 6 a.m., not in a classroom, but at the edge of a vast parking lot at Phoenix International Raceway.

Instructors lead students to a row of Kawasaki KZ1000 police training

motorcycles, workhorses retired from active use. Faring, saddlebags, radio, lights, and siren have been stripped from the bikes.

Arizona's Department of Public Safety offers training to a number of state agencies. While agencies have different criteria, all prospective motor officers for the Department of Public Safety must have been a highway patrol officer for at least two years, have a clean record, and a referral from their department. They also must have spent the previous six months in the Phoenix metro area.

Who do they want to apply for this program? Kenyon explains, "Someone wanting to be part of a pretty elite squad with a strong desire to ride a motorcycle. We like to see some prior motorcycle riding experience. Good dirt riders seem to do best in the class. Experienced street riders sometimes have bad habits that must be unlearned."

## Phase I: The Track

Instructor Troy Titzer describes the Kawasaki KZ1000, its controls and idiosyncrasies. The KZ1000s, although 20-year-old technology, have good clearance and a fairly short wheelbase for a big bike, allowing excellent maneuverability.

The bike is placed on its side. Students are taught to pick it up correctly, a

skill they all end up using frequently during the class. The only time you might see bikes dropped more frequently is at a hill-climb after a rain-storm. Students learn to lube the chain, check the oil, and adjust the clutch and brake. From this point on, they are responsible for the care of the bike for the duration of the class. After starting techniques and basic control operation, it's off to riding and the first exercises to learn the capabilities of the bikes.

A key to nearly every exercise is the "gray zone," also known as the "friction zone." It involves precise throttle, brake, and clutch inputs combined with turning the handlebars and leaning the bike to smoothly execute an exercise. Each exercise begins with an instructor explaining the exercise, correct procedures, purpose, and objectives of the exercise, and tips on the best way to get through it. At first, students usually feel the exercise is impossible. Then, an instructor demonstrates. Easy as pie. Students mount up and begin. First attempts result in crashes and students riding out of the cones.

Why all the low speed maneuvers? Kenyon explains: "Low speed is where you learn to control and master the motorcycle. Very little skill is required to ride fast. Speed often masks poor riding skills or faulty technique. Placing students into extremely small spaces where they must go slow forces them to learn the right way to do things. There are not multiple ways to get through most of these exercises; there is only one. Unless you do it precisely right, it won't work."

## Wash Outs

Near the end of the first day, while picking his bike up for the umpteenth time, a student slips and injures his ankle. He's out. Day two passes without incident, but day three results in another withdrawal from the class. A student says to Kenyon, "Sergeant, I thought about it over the weekend and this isn't for me. I'm not getting it and if I keep going, I'll get hurt." Instructor Titzer explains: "The minute we reach consensus that a particular student will not be able to complete the class due to an inability to deal with either the physical or mental requirements, we get them out to avoid endangering themselves or other students."

Each exercise develops skills for the next exercise. Highly difficult, stressful exercises are followed by ones involving competition and fun, like a relay race, or a dirt ride through the gullies and sand hills at the raceway. The pace is fast and intense. Students get a 15-minute break in the morning, another in the afternoon, and 30 minutes for lunch. Other than that, students are riding or listening to instructions for the next exercise.

At first, I'm impressed with the instructors' skill in controlling motorcycles. They display a fierce dedication to turning out competent motorcycle officers. On the practice field and the track, they throw themselves into helping and coaching each student. Encouraging and cajoling, mixing humor and exaggerated exasperation, they constantly work to get the best from their students.

Criteria for becoming a motorcycle officer include three areas: mastery of the motorcycle, proper use of controlled aggression, and good judgment.

Five days in and the class is down to eight students from the original twelve. About one of them, Kenyon says, "He thought he was doing fine but he wasn't." The instructors felt the student never really knew why something had or hadn't worked in a given exercise. Plus, he was sketchy, meaning he'd do fine once or twice, and then completely blow an exercise, mowing down cones. Kenyon says, "When we move to controlled aggression exercises, we may lose a couple more. The judgment part we won't know until after they complete all of the

proficiency tests and spend four weeks with their Field Motor Training Officer. We may lose someone even at this late point, although less likely."

Wednesday: Bikes are inspected and serviced. By 6:30, the students are practicing. The first exercise is on the high-banked raceway track for practicing pullouts. Students line up three feet apart along the inclined track, six feet from the barrier. The exercise involves riding forward about three feet, executing a sharp 90-degree turn, and then riding between the row of bikes and the walled barrier. Turn too soon and the back of your bike hits the motorcycle next to you. Go too far and you are unable to make the 90-degree turn, so you hit the barrier, fall over, and land on the bikes beside you. Remember, you are on steep incline. Critical to success in this exercise is the coordinated use of the throttle, clutch, and rear brake, while leaning the bike and turning. It's a difficult area of the gray zone.

Next, we practice brake and escape. Nothing is driven home harder through word and repeated practice than the importance of proficient hard braking. Students begin the exercise 500 feet down the track, accelerate to 35 mph, cross between two marker cones, and then bring the bike to nearly a complete stop, using maximum braking, before hitting a line of cones 70 feet directly in front. Riders then turn 90 degrees to finish the exercise. A radar gun records whether students are at the required speed as they pass through the first two cones. Students are dinged for not reaching the required speed, for braking too early (a common problem), locking up either brake, or for running through the cones.

Our next exercise is a circle of cones, 18 feet in diameter, with an entrance on one side. The objective is to enter the circle through three entrance cones, ride the interior of the circle

without running over the cones, and exit the circle through the gate you entered. The exercise is done first to the left, then to the right. Once a level of proficiency is obtained and instructors see some consistency, two students are told to ride into the circle at the same time.

After that, three bikes go in, and finally, a set of students doing very well are challenged to ride the circle with four bikes in at the same time.

Once most students have mastered this exercise, we move to two circles of cones, side by side. Students execute a figure eight by first doing a circle in one direction and then the other. As before, when proficiency increases, more bikes are added to the circle at the same time.

At this point, we've reached what would equate to a full day's effort in any other training program and would have exhausted the average person. But our day is not yet over. Next up are 140-degree pullouts. This involves placing the bike's rear tire against a board lined up at a 140-degree angle to a concrete barrier. Students are required, from a stop, to exit in the opposite direction from the way they are facing, without hitting the barrier. After 30 minutes of this, we ride back to the high-banked track of Phoenix International Raceway to repeat pullouts against the wall on the steep incline. In this exercise, at least the bikes are set at 90 degrees from the wall, not 140.

After the pullouts, students shut off their engines, start at the top of the inclined, banked track and coast toward the infield in a series of s-turns. As they reach the bottom and run out of incline, they jump start the bike and ride back to the top to repeat. This exercise teaches control of the bike when you don't have the engine to rely on. Just as this exercise is beginning to be fun, we go back to the difficult, frustrating, and intimidating pullouts done close to the wall.



Leaving the racetrack and arriving back at the asphalt practice area, we begin the last new exercise of the day, the single cone Bump & Go. Students ride up to a single cone and bring the bike to a stop as they gently bump the cone. Then immediately, as the bike begins to fall left or right, students must keep their feet on the pegs while applying throttle to straighten the bike, turn and ride to the next cone. Key to this exercise is keeping head and eyes up while looking where you want to go. Instructors aren't happy until students come to a near full stop and the bike begins to fall just before the power is applied.

The day ends with another 45 minutes on the critical brake-and-escape exercise. This exercise is pass/fail. A record is kept of each attempt by each student during all runs of this exercise. Their speed is noted, whether they brake too early, if they lock up either brake or if they hit any cones or put a foot down. A student will wash out of the course faster by mistakes in this maneuver than any other.

### Controlled Aggression

Midway through the second week of the Arizona Highway Patrol training program, students are introduced to accelerated u-turns. Two cones are set up 200 feet apart (later moved to 225 and 250). Fifteen feet to either side of each cone is a line of four cones. Four students begin the exercise by following an instructor around one cone and then applying maximum acceleration to head toward the cone at the other end. Applying maximum braking, the instructor executes a 180-degree turn around the center cone, avoiding the four cones on either side, then accelerates again toward the cone at the other end. Back and forth they go, with the instructors quickly pulling ahead of the students. Before four laps are completed, the instructor is almost always coming up on the back of the last student. The instructor then slows, waits for everyone to catch up behind him, and takes off again.

Accelerated u-turns not only bring together everything the students are learning, but has them doing some-



thing they'll do nearly everyday as a motor officer—chase down speeders. Instructor Titzer says, "I'm stopped at the side of the road running radar when someone comes by me at 80 to 85 mph or more. How much faster do you think I need to go to catch him/her? And once they decide to pull over, how fast do I need to be able to stop? This exercise imparts the skills and practice to do this safely. You must be willing to do this aggressively and be able to do it safely if you're going to be a motor officer."

Kenyon adds, "To be a motor officer, you must have the right amount of aggression. Too little, and you're not going to be effective; too much, and you'll ride over your head and get someone killed. We have to assess where each student is on this scale and make sure they're going to end up at the right point. The competition of the accelerated u-turns exercise exposes the aggressiveness of the students to us." Instructor John Allison says, "Face it, these folks are all competitive. The guy in front of this pack hates that the instructor is faster. The second guy back thinks he should be first and right on down the line."

### Proficiency & Qualification Testing

Friday, the seventh and last day of Phase I training, consists of a short practice and then a test. A half-mile course has been laid out, interrupted by the various exercises the students have been practicing. Timing begins: First, a 140-degree pull out. Second, ride through the four quadrant intersection. Third, aggressively accelerate across the parking lot, then quickly decelerate into two sets of cone weaves. Fourth, execute the brake and escape. Fifth, more cone weaves down the straight to the other end of the course for more exercises, including a complex cone setup known as the In & Out House. A high-speed section follows with a long sweeping turn and finishes in a snowman of three circles, 19, 18, and 17 feet. Timing ends when a rider exits the last circle. Students must complete the course in less than 6.5 minutes. Five seconds are added for every cone knocked over or foot touched down. No more than five faults are allowed before the run is scratched. Dropping the bike or riding out of an exercise disqualifies a run. The test combines every aspect of the training up to this point. Students are allowed up to six runs.

All eight of the remaining students pass the qualification test. One student makes it with only a couple of seconds to spare after two unacceptable runs. He is what instructors call "on the bubble." He could go either way. Another student, also on the bubble, has two runs that qualify in his first five attempts. It all comes down to his last run. Can he make it? He needs a time of six minutes, 30 seconds to pass. As he crosses the last set of cones, the timing officer hits the stopwatch at six minutes and 11 seconds. However, his cone-hitting penalties give him an adjusted time of 6:31, one second over.

Instructors huddle in the trailer, evaluating everyone, but focusing on the two on the bubble. They evaluate the student's entire effort in the first seven days. The first of the two bubble students is the easier, as technically he passed. The second is more difficult because, technically, he's failed. After more discussion, they decide they will not hold someone back for being only one second over, particularly as this student has always ridden safely and shows constant improvement. The student sits down with Kenyon, who says, "You've made it to Phase II, but only by the skin of your teeth. We'll be watching you very carefully to ensure you continue to improve."

## **Phase II – Street Training**

A new and different phase of the training begins the next Monday. At the Knutson Station, full dress police bikes are issued to all students. Instructor Simon explains that a police motorcycle is a very busy place. So many details require attention that the skills learned the previous week must now be done automatically. With dispatcher instructions, watching for traffic violators, avoiding road hazards, and managing all of their unique equipment, a motor officer has no time to think about correct throttle application, clutching or braking. These activities have to be as natural as breathing. The bike must become an extension of the body.

Most of the lecture focuses on safety basics and riding techniques, including lane selection, surface appraisal, and riding with other officers side by side. Basic procedures for turn-

ing, passing, lane splitting and reacting to hazards are covered.

The afternoon consists of a ride to Tempe and the Fire Department Training facility. Here many of the same cone exercises from last week have been set up. Now students ride them on the full dress bikes with faring, saddlebags, lights, sirens and radios. They find that many of the exercises are more with a faring blocking forward view and saddlebags sideswiping cones.

Students spend a lot of time riding over the next two days: Students in front, instructor following, observing, and coaching. Tuesday is city riding with a strong focus on hazard recognition and the precise action to cope with hazards, such as balls bouncing into the street, cars turning in front of the bike and approaching fast from the rear.

Thursday is the night ride. We leave the station just after noon for a ride along many of the major streets in Phoenix and Tempe before heading into the mountains to Tortilla Flat. This popular tourist stop comes at the end of 35 miles of winding mountain roads. Students ride in pairs with an instructor following, observing, and critiquing their selected corner entry speeds and lines through the curves. From Tortilla Flat, we head back down the mountain to Florence Junction and then east again into the mountains and Globe. In Globe we have dinner and wait for dark. After sunset, students ride down the mountain curves, in the process learning a good deal about the limitations of the Kawasaki's low beam headlights.

Friday it's out to Firebird Raceway for live pursuit and final qualifying. Instructor Mitch Lanoue plays the role of suspect in a white unmarked car, attempting to evade and outrun the motor officers around a 7-mile course. Lanoue goes around the cone weaves and blows through stop signs, but the motor officers must obey the rules, somewhat leveling the playing field and making it a real race. Students take turns chasing the "suspect," while two instructors trail, watching to ensure no cones are knocked down and proper procedures are followed. All eight students pass.

## **Phase III – Field Training**

"We teach them how to ride, first at the track, then on the street, but that doesn't mean they can do the job," Kenyon says. "The third phase of the training, which we do in the field, teaches them how to be motor officers."

Each student is assigned a field motor training officer. They ride together for four weeks. As in each portion of the track training, there are specific objectives and exercises for all four weeks. One requirement is a minimum of 10 brake-and-evade exercises each day, especially at the end of the day, when fatigue has begun to set in. "It's not always at the beginning of your shift, when you're fresh, that some truck pulls out in front of you," Kenyon says.

During the first week of the training, student and instructor student ride side by side, covering a minimum of 1,000 miles. The focus is saddle time, not enforcement.

In week two, the pairs move to lane splitting, riding sidewalks, crossing overpasses, and even riding into oncoming traffic. Of course, this is done only when traffic is stopped. "You are no longer a car officer," Kenyon says, "and you can no longer think like a car officer. Motors think differently; they see traffic differently. Everything is different on a motorcycle. There are far fewer restraints on where a motor officers can go and how quickly they can move, but only if you are thinking right."

Enforcement work begins in week three, including traffic stops, radar work, looking for vehicles and responding to dispatches. Week four is a week-long final exam. Students are on their own, with the instructor observing. At the end of the week, the instructor, in consultation with Sergeant Kenyon, will decide the student's fate. Do trainees ever fail this far along? Kenyon says, "Not frequently, but it does happen. It happened twice last year. Grasping that you are a motor officer, not a car officer, is not something everyone can do."

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