

Denver Health Paramedic Division All Terrain Medical Unit

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The Denver All Terrain Medical Unit's (A.T.M.U.) inception was in 1990, though the team's debut was the 1991 Denver Grand Prix Auto Race. Because of the track configuration, a large part of the downtown would be without ambulance coverage when the race track was "hot". The Denver Paramedic Division would need to have crews within these areas. Vehicle access inside this area was impossible. The A.T.M.U. assignment was to cover the inside of the perimeter as well as spectators in the stands outside.

The team's success was immediate. A 911 call for chest pain was initiated from a high-rise inside the perimeter. The A.T.M.U. team was dispatched and arrived at the building in 1-2 minutes. The team entered the building through open doors and entered an open elevator. The surprise of the bystanders on the 9th floor, as the team exited the elevator on bikes, said it all. They arrived at the side of the patient, who was having an acute M.I., and began Advanced Life Support treatment. The patient was then transported over a bridge by golf cart to an ambulance waiting outside the perimeter.

From that call forward, the A.T.M.U. has excelled in complex special event medical coverage. The team covers sporting events such as the Colorado Rockies and the Denver Broncos games, concerts, parades, and festivals, and provides patrol along Denver's pedestrian 16th Street Mall. The bikes have excellent response times to medical emergencies at all events. Paramedics on foot or in golf carts are no match for the bicycles.

Initially, bikes were either the personal property of the members, or bicycles impounded by the Denver Police Department. In 1993, Maxim Bicycles of Boulder donated 16 custom-built Stowe cross-bikes. These bicycles were built with larger wheels and higher gears for speed, as they were rarely used off-road. We are currently using a fleet of 12 Schwinn Moab-3 bicycles purchased in the spring of 1999. These bicycles have proven to be better suited for our use, which sometimes involves riding down flights of stairs with full equipment loads.

All bicycles are ALS resources. They are equipped with rear Blackburn racks, REI trunk packs and Arkel-OD panniers. Viewpoint headlights supplemented with Cateye removable five LED lights are used for night duty. A rear red LED strobe is mounted to each trunk pack. Conterra Patrol III Aid "waist packs" are worn. Safety equipment includes Giro bicycle helmets with retro reflective decals. Uniforms are custom-made light polo shirts and cycling shorts. Each bicycle carries a variety of equipment including a Heartstream AED with manual override, a small oxygen cylinder, emergency medications, IV solutions, and intubation equipment. All of our bikes are set up identically for paramedic use and all of our maintenance has been done "in house" for the past ten years.

The first fleet of new bicycles was put in service for coverage of the week-long World Youth Day event in August of 1993. This event, which drew 3/4 of a million people to Downtown Denver, culminated with Pope John Paul II saying Mass for 350,000 pilgrims at Cherry Creek State Park in nearby Arapahoe County. The bikes performed flawlessly when the mass site became a mass-casualty incident. The bike team responded across the county line to Cherry Creek Reservoir, where the conventional EMS responders were overwhelmed. Ten team members rode over the rough prairie for 24 hours without incident. Because of the A.T.M.U., the Denver Paramedic Division accounted for well over 50% of the thousands of patient contacts made that weekend. World Youth Day was a fantastic learning experience, and has helped us to

refine the role of the A.T.M.U. as the team evolved. We are constantly studying potential uses for the team in daily operations, as well as complex event coverage.

The A.T.M.U. members generally work in pairs at events. However, if call volume increases, teams may split up. The bikes are most effective staying on the perimeter of large crowds. The strategy is to cover the largest distance of a response on the perimeter of a crowd, then access the patient through the crowd as you get closer. The bikes can be called in to back up a busy first aid room or be dispatched to cover a busy area. From almost any location, the bicycles still provide a quick response to most areas of any event.

Should a patient require transport, an ambulance can be dispatched to the team. Golf carts are often used to take patients to a triage area or to a waiting ambulance. In a typical year we cover about one hundred events with our bike team.

Members are physically tested once a year as a requirement to maintain their member status. Over the past fourteen years this test consisted of an off-road time trial on a course just under one mile in length and with an elevation gain of 950 feet. We had a thirty minute time limit for completion and walking was not permissible. Members would attempt this on their personal bikes. This year we moved our time trial course to a flat paved area with the distance being three miles in length and finishing with a carry of the loaded bike up a flight of stairs. A completion time of twelve minutes and sixteen seconds was imposed. This time trial is attempted on fully loaded bike team bikes. This new course has proven to be a better test of what physical abilities would actually be required to perform the job.

All new members who successfully complete the time trial have been required to complete an agility course. This course was designed to work on slow, tight maneuvering drills. This typically took three hours to complete. Last year we received administrative approval to begin training to IPMBA standards and certifications. We were lucky to have Kirby Beck fly in and put on an EMS Cyclist Course for us in December 2006. We had eight longstanding members of our bike team attend. This course taught each of us new skills and provided very useful didactic information. All attendees benefited from this and the course increased our team camaraderie. Our goal is to have all thirty of our members become IPMBA EMS Cyclist certified. The best way for us to reach this goal will be to have two "in house" IPMBA certified EMS Cyclist instructors. With two instructors we will be adequately staffed to make sure all of our members are IPMBA EMS Cyclist certified as well as teaching EMS bike team members from outside agencies. This higher level of training will prove valuable as the Democratic National Convention will be in Denver in 2008, and we anticipate many opportunities to deploy the A.T.M.U. during the events surrounding the Convention. To this end, Marc Scherschel and I were certified as IPMBA Instructors at the conference in Baton Rouge.

The A.T.M.U. generates quality public relations for the Denver Health Paramedic Division. This high-profile team has attracted a lot of positive media coverage, and public accolades. From the perspective of the paramedics, the diversity in work assignments that the bike team creates for employees promotes increased job satisfaction and morale.

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