

THE BASICS OF DRAG RACING

- **WHAT IS A DRAG RACE?**

In basic terms, a drag race is an acceleration contest from a standing start between two motorcycles over a measured distance. The accepted standard for that distance is either a quarter-mile or an eighth-mile. These contests are started by means of an electronic device commonly called a “tree”. Upon leaving the starting line, each contestant activates a timer, which is stopped when the same motorcycle reaches the finish line. The start-to-finish clocking is the motorcycle’s E.T. (elapsed time), which serves to measure performance and often serves to determine handicaps during competition.

- **WHO CAN COMPETE?**

Virtually anyone can compete in drag racing. Riders are required to have a valid AHDRRA Competition License and must be capable of the safe operation of the motorcycle. The motorcycle must meet basic safety criteria (i.e.; have good brakes, be equipped with good tires, etc.). This applies to most street legal and mildly modified motorcycles. Faster, all-out race motorcycles must meet more stringent requirements as outlined throughout this AHDRRA Rulebook and must have a current AHDRRA competition License.

- **SAFETY’S IMPORTANCE**

Prime responsibility for the safe condition and operation of a motorcycle in competition rests with the motorcycle’s owner and rider. The track operator’s main concern is that of providing a place to conduct events. AHDRRA produces guidelines based on experience gained at many events each year and circulates valid information to help perpetuate the sport and maintain organization. However, total responsibility for drag racing’s progress must be shared by everyone associated with the sport. Close observance of the standards set forth in this Rulebook is an important fundamental.

- **WHO WINS WHAT?**

A drag racer’s primary objective is to become the overall winner of the category of competition in which his/her motorcycle is classified. A series of two-motorcycle, tournament-style eliminations are conducted. The losing motorcycle in each race is eliminated, while the winning riders progress into succeeding rounds of competition. This series of races continues until one winning rider remains. That rider is declared the category’s winner.

- **E.T. HANDICAPPED RACING**

While some racers choose to race motorcycles they build to specifications that fit a certain AHDRRA class (outlined elsewhere in this rulebook), an ever-growing number of racers choose to race on a local level in categories divided on the basis of performance or E.T. (elapsed time) Brackets. This is known as E.T. Handicap racing. This form of drag racing offers a good starting point for the novice wishing to become involved in the sport. (However, thousands of drag racers enjoy E.T. Handicap Racing so much that they have participated in it for many years.) In this form of racing, two motorcycles of varying performance levels can race on a potentially even basis. The anticipated elapsed times for each motorcycle are compared, with the slower motorcycle receiving a head start equal to the difference of the two. With this system, virtually any two motorcycles can be paired in a competitive drag race. For example: motorcycle “A” has been timed at 17.78, 17.74 and 17.76 seconds for the quarter-mile and has opted for a 17.75 “dial-in”. Motorcycle “B” has recorded elapsed times of 15.27, 15.22 and 15.26 on the same track, and he has opted for a “dial-in” of 15.25. Accordingly, motorcycle “A” will get a 2.5 second head start over motorcycle “B” when the “tree” counts down to each motorcycle’s starting green light. If both motorcycles cover the quarter-mile in exactly the predetermined elapsed time, the win will go to the rider who reacts quickest to the starting signal. That reaction to the starting signal is called “reaction time”. Both lanes are timed independently of one another, and the clock does not start until the motorcycle actually moves. Because of this, a motorcycle may sometimes appear to have an advantage in comparative elapsed times, but mathematically, actually lose the race once

the reaction time is factored in. This fact makes starting line reflexes extremely important in drag racing.

- **THE STARTING SYSTEM**

Essentially, drag racing is a pairing of two motorcycles against one another in a race through a straightway course. Hence, the start is the key to its uniqueness, because all races start from a standstill. Today's modern starting system, commonly referred to as the "tree", is a product of continued development, designed to provide each competitor with the fairest start possible. The system features a vertical series of lights, displaying a visual countdown for each rider. Most riders try to make their move between the last amber light going off and the green light coming on. Technique in staging and starting is one of the most vital skills a drag racer can develop, since many races are won or lost at the starting line. Close observation and a lot of practice pay off.

- **TIMING METHODS**

Two separate performances are monitored for each run: the elapsed time and the speed. On an elapsed time run, the motorcycle first leaves the starting line "breaking" the beam, which activates the electronic timer. As the motorcycle continues through the course, the timer records the elapsed seconds and fractions of seconds until the motorcycle breaks the finish line beam and stops the timer. Top speed (mph) is determined by the motorcycle breaking two additional light beams at the finish line.

- **WHAT IS "BREAK-OUT" AND/OR "RED LIGHT"?**

Should a rider go quicker than his/her predetermined E.T. "dial-in", it is a "break-out" and is grounds for disqualification. In the case of both motorcycles making their runs under their dial-ins, the win goes to the rider who breaks out the least. Another form of disqualification is a foul start ("red-light"). This happens when the rider reacts to the "tree" too quickly and drives away from the starting line before the green "go" signal. Should dual infractions occur, a red light and then a breakout, the red light would be classified as the worst infraction.