

A Concise History of Air Racing

By Don Berliner

Introduction

Air racing has been part of the scene almost as long as airplanes have been flying. It has survived despite frequent and serious shortcomings and limitations because of its simple, obvious appeal. It is the simplest form of aerial competition (the pilot of the airplane in front is winning!), and is the fastest form of motor racing, in which the best racers whip around at double the speed of the fastest race cars.

The following concise history is aimed primarily at those who are visiting the Society's website for the first time, and who have little or no prior knowledge of the sport. For those who wish more detailed information we suggest joining our Society, reading our newsletter, attending our International and/or European Symposiums, and making use of our Internet billboard.

Regardless, you are most welcome to visit at any time for your enjoyment and your education.

Chapter I – The Early Days

Part 1 -- 1909

The First Air Race at Reims

Just as auto racing was born just a few years after the invention of the automobile, so air racing followed quickly on the achievement of heavier-than-air flight. It is apparently in man's nature to use any type of locomotion to go as fast as possible for sport as well as practicality.

The invention of air racing came in August, 1909, at Reims. France, just a few tens of miles to the northeast of Paris. It was the Great Week of the Champagne, where vineyards for that classic beverage stretch to the horizons. Until then, few people had seen an airplane on the ground, let alone in the air, and so hundreds of thousands descended on what had been a large vacant field for as long as anyone could remember.

The schedule called for contests to challenge pilots, mechanics and builders in all aspects of flight: distance, duration, altitude, and of course SPEED. Most of Europe's top aeronauts were there, but only Glenn Curtiss traveled from America. The Wright Brothers were focused on the business of building airplanes, while others may not have realized the significance of this first public gathering of the men who had conquered gravity.

Once the rain had eased and the area surrounding the ornate grandstands had dried out, airplanes were rolled out of their hangars and their pilots and crews prepared to better their rivals and the existing records. Large cash prizes, trophies and the adulation of the huge crowds combined to motivate the most experienced, along with some true rookies, to take to the sky and show the world what they could do.

There were six major events, along with numerous lesser ones. Of the major competitions, one was for duration, one was for altitude and the other four were for speed around the six-mile, four-pylon course. It is clear what excited the organizers, the competitors and thus the crowd. The battle for speed was mainly between Frenchman Louis Bleriot, who had recently conquered the English Channel, and Glenn Curtiss, who had designed and built not only his airplane but its engine.



Glenn Curtiss, the first winner

The event that survived for years was the James Gordon-Bennett Race, for two laps around the course, and open to solo attempts on just one day, unlike most of the others which could be flown any day and any number of times. Bleriot's best was 15:56.2, but was bettered by Curtiss with 15:50.6 for an average of 47.07 mph. To the sole American competitor went what would become the first classic air racing trophy and first prize of 25,000francs.



Gordon-Bennett Trophy

When the full week of aerial competition ended, hundreds of thousands of people had seen air racing, and many times that many had read about it in their newspapers. The sport was suddenly alive and thriving.

Part 2 – 1910

The First American Air Race

The next year saw air racing come to the USA for 10 days—January 10 to 20, at Dominguez Field, outside Los Angeles. Despite efforts by the Wright Brothers to interfere via legal actions claiming patent infringements, the event went off well, attracting hundreds of thousands to the first public airplane flights west of the Rocky Mountains. Pre-race ads trumpeted a total purse of \$80,000.

The entry list for speed and distance events included 10 pilots, flying 11 airplanes. The best known were Louis Paulhan, who arrived from France with a Farman biplane and a Bleriot monoplane, and Glenn Curtiss in a new Curtiss biplane.

The long-term impact of the meet was not its racing action, nor its many failed attempts to break records. It was in the introduction of aviation to a completely new audience, and the resultant, sudden expansion of airplane building, pilot training and general enthusiasm for everything related to this new form of transportation.

The London-to-Manchester Race

The first true cross-country race was over the 185 miles from London to Manchester, England, for a prize of £10,000 (then equal to \$50,000) offered by the *Daily Mail* newspaper. After abortive starts, it got underway at 5:40 p.m. on April 27, when Louis Paulhan took off in a Farman biplane. Just over an hour later, Claude Grahame-White left in his earlier model Farman.

Two hours later, Paulhan landed after flying 57 miles farther. But Grahame-White took off again at 2:30 the next morning, more concerned with wining than with the obvious dangers of night-time flying over unlit countryside. He was forced down by high winds after less than two hours of the most difficult flying. Paulhan, who had taken off at 4 a.m., managed to continue on to the finish. His time was 4 hours, 12 minutes for an average speed of 44 mph.

The race was really the first public demonstration of cross-country flying, and showed that it could be conducted under pressure and despite high winds and without even the crudest forms of navigational equipment.

The Second Gordon Bennett Race

When Glenn Curtiss won the first Gordon Bennett Race, it became the duty of the USA to stage the second, which was soon scheduled as the feature of the first major air race in America, October 22-30 at Belmont Park, Long Island, New York. By scheduling the meet so late in the year and on an island jutting into the Atlantic, cold and windy conditions were guaranteed.

The Gordon Bennett Race was for 20 laps around the 5-km./3.1-mi., pylon-marked course. Claude Grahame-White, of England, set the pace in his new, modified French 100 hp Bleriot XIbis monoplane, with a total time of 1:10:04.74 and a speed of 61.0 mph, which was a new world record for the distance. Next to fly was Alfred LeBlanc, of France, in a stock Bleriot XI. Each of his lap times was faster than Grahame-White's, and all were much more consistent. By the end of Lap 19, LeBlanc was leading by more than five minutes

Then, racing luck intervened when LeBlanc ran out of gas on the last lap. While making a dead-stick landing, he smashed into a telegraph pole, demolishing his airplane, but escaping with minor injuries. Almost an hour back in second place was American John Moissant, whose Bleriot XI averaged 33.7 mph.

The meet ended on a sour note as the rules for the race to the Statue of Liberty and back became embroiled in a dispute, and many of the pilots boycotted the awards banquet. But it had demonstrated the rapid advances in airplane performance to the world.

Part 3 – 1911

Circuit of Europe Race

There was no lack of imagination in air racing's early years. The Circuit of Europe Race, scheduled for June 18 to July 7, would start in France, go to Belgium, then to the Netherlands, back to Belgium and France, across the England and finally back to France, for a total of almost 1,000 miles. A purse of more than \$90,000 attracted scores of pilots, few of whom had done much cross-country flying, and none under pressure. Most of their airplanes lacked the durability for such a long grind, while navigation aids were still in the future. But it was a time in which courage seemed to matter more than skill and experience.

Of the 42 who started, fewer than half made it to the end of first leg. One observer and one competitor crashed fatally at the start, though there were no more fatalities. As the others chugged along, engines quit at the most awkward moments, airframes broke on hard landings, and pilots got lost and sometimes landed in the wrong country.

Eight pilots made it all the way back to Paris, though only one was flying an airplane that hadn't been completely rebuilt or even replaced. The winner, Jean Conneau, flew a Bleriot, completing the distance in 58 ½ hours for a speed of 17 mph and winning by more than three hours. He and all the other starters learned valuable lessons about the need for pre-race preparation, practice, and a qualified ground crew.

The Third Gordon Bennett Race

The race was held July at Eastchurch, England, and provided the closest finish in any race to date, along with the first race-modified airplane seen. Gustave Hamel's Bleriot had its wings severely clipped, with the major result being to reduce the effectiveness of his wing-warping roll control. He failed to complete his first pylon turn, slamming into the ground and demolishing his airplane, while escaping with no serious injuries.

The surprise winner was Charles Weymann, an American born in Haiti, whose Clean 100 hp Nieuport completed the 25 laps of the 6-km./3.7-mi. course in 1:11:36.2 for an average of 78.11 mph. Close behind was last year's hard-luck pilot, Alfred LeBlanc, in a Bleriot, who was clocked in 1:13:40.2 for 75.91 mph. Third was Edward Nieuport in one of his own airplanes in 1:14:37.2 and 74.98 mph.

The formula for long-term success in air racing was taking shape: more horsepower and less aerodynamic drag.

The Circuit of Britain Race

The third major race of the year was a 1,010-mile cross-country event having 11 compulsory stops, which started and finished at Brooklands, site of the world's first paved auto race track. Twenty-one airplanes started, thanks in no small part to the \$50,000 first prize offered by the *Daily Mail* newspaper. Half of them were British aeroplanes, flown by British pilots.

Only one Britisher finished, with the winner being Lt. Conneau in a Bleriot, who completed the course in 22 hours, 28 minutes to average 45 mph. Emile Vedrines was second in a new type, the Deperdussin monoplane, as was third-placer James Valentine. The top British finisher was Samuel Cody in one of his own biplanes.

With this, the superiority of the monoplane was well on the way to becoming established. The winners of all three 1911 races flew them, as did two of the runners-up.

Part 4 – 1912

The First Handicap Air Race

Hendon Aerodrome, now the site of the RAF Museum, north of London, was the scene on April 14th of the first organized (rather than impromptu) handicap race. Many hundreds of such races have been held in England right up to the present, in which the greatly varying speeds of the airplanes are balanced out by handicapped starting times. This permits a wide variety of airplanes to be raced.

The historic air race was the Cross-Country Handicap for the Grahame-White Cup #3 and a purse of 20 gold sovereigns (\$100). Extending for two laps of the course (to Harrow Church and back), it was won by Bentfield Hucks in a 50 hp Bleriot, followed by Jimmy Valentine in a Bristol Prier P.1, and Gustave Hamel in a Bleriot. This kind of racing stresses piloting skill, and traditionally produces very close finishes.

Coupe Deutsch de la Muerthe Race

The first of three separate series of races sponsored by Henri Deutsch de la Muerthe, a French newspaper tycoon, was for a single 124-mile (200-km.) lap around Paris on May 1. The winner was Emmanuel Helen, in a 70 hp Nieuport, who covered the course in 1 hour, 36 minutes, averaging 77.85 mph.

The Aerial Derby

The first in another series of major races was run on June 8 at Hendon Aerodrome. It consisted of a single lap of 81 miles. The winner, in a field of six monoplanes and one biplane, was T.O.M. Sopwith in a two-seat Bleriot in 1:23:08 for a speed of 58.46 mph. Second was Gustave Hamel in an identical airplane, and third was W.B. Rhodes-Morehouse in Radley-Morehouse, which resembled a Bleriot, but had a fully enclosed fuselage. Sopwith, later famous for his biplane scouts and pursuits, received the *Daily Mail* Gold Cup and \$1,250.

The Fourth Gordon Bennett Race

The second Gordon Bennett Race to be held in America was on September 9 at Clearing, near what is now Chicago's Midway Airport. The race was for 30 laps of the 4.14-mile course. A small crowd was on hand, due in part to the poor location, and to advance publicity which predicted a runaway win by the French.

The great hope of the American Team was the "Defender", which looked like an improved Bleriot. When it wasn't ready in time, only Paul Peck and his Columbia biplane remained, and they were stuck at the starting line with a flat tire.

The French completed the expected Clean sweep. First was Jules Vedrines, in a slick Deperdussin monoplane, in 1:01:51 for a record speed of 105.5 mph. Maurice Prevost was second in an identical airplane, in 1:15:25 for 103.8 mph. Andre Frey, flying a Hanriot monoplane, dropped out late in the race while averaging 94 mph.

Speed flying was fast becoming the preserve of the French, who held most of the important world records and trophies.

Part 5 – 1913

The First Schneider Cup Race

Jacques Schneider was a great supporter of water-borne aircraft, even though the first seaplane had flown barely two years before. His new Schneider Cup Race series was aimed at stimulating technical progress in seaplanes by offering cash prizes and a trophy which would soon achieve great stature in aviation.

The first race was held over the Mediterranean Sea, just offshore at Monaco, on April 14-16. Of six seaplanes at the site, four were ready to start the 28-lap race around a 20-km. (12 ½-mi.) closed course. One, Roland Garros in a Morane-Saulnier, was delayed in starting. Of the remaining three, the winner was Maurice Prevost in a Deperdussin Monoplane, which was much larger than the company's landplane racers. Prevost was timed at 2:50:47 for 45.7 mph. He originally finished while on the water, then had to take off again and complete a flying finish.

Neither of the other two starters finished, as both Charles Weymann and Gabriel Espanet experienced oil leaks in their Nieuports and dropped out. Garros eventually finished but was not timed. Competitively, it was not much of a race, but it lit a fire which soon blazed throughout aviation.

The Aerial Derby

At Hendon Aerodrome on September 20, the Aerial Derby was run over one lap of a 94.5-mile course which had five turning points. Eleven of the original 15 entries started the race, with the winner being Gustave Hamel in another severely clipped-wing Morane-Saulnier. He completed the course in 1:15:49 for a speed of 76 mph, good for the Gold Cup and \$1,000. In second was R.H. Barnwell, flying a Martin-Handasyde at 72.5 mph, while in third was Frederick Raynham, flying the prototype of the Avro 504 at 66.5 mph.

The Gordon Bennett Race

The race was held on September 29 at Reims, site of the historic first race in 1909. Eight of the nine entries flew monoplanes, and only Henri Crombez, a Belgian, interrupted what would have been an all-French field after Great Britain, Germany and the USA had withdrawn. The race consisted of 20 laps of the 10-km./6.21-mi.) course for a total of 124 $\frac{1}{4}$ miles.

The 14-cylinder, 160 hp Gnome-powered Deperdussins dominated a very close race, with Maurice Prevost winning at a record 124.78 mph to become the first to fly 200 km. in less than one hour. Barely a minute behind him at the finish was Emile Vedrines, the brother of Jules, in a Ponnier at 122.53 mph. Just as close behind him was Eugene Gilbert in a second Deperdussin at 118.51 mph. Bringing up the rear was Crombez in a third Deperdussin, at 106.73 mph. The superiority of this type of wonderfully streamlined monoplane was proven beyond question.

The Coupe Deutsch de la Muerthe Race

The final race in the first series of Coupe Deutsch Races was held October 27 on a course around Paris. The winner was Eugene Gilbert in a Deperdussin Monocoque at an average speed of 101.944 mph. This was the last gasp for the highly successful make of racers, as manufacturer Armand Deperdussin was imprisoned for having established his company with embezzled money. His company then became part of S.P.A.D.

Part 6 – 1914

The Second Schneider Cup Race

The second race in this series was held April 20 at the same place as the first, and conducted over the same course and for the same number of laps. At least 11 seaplanes were entered, while five started and just two finished. All the entries were standard types, many of them landplanes with pontoons added.

It was an easy win for Englishman Howard Pixton in the float-equipped Sopwith Baby, called the Sopwith Schneider. His speed of almost 87 mph was almost double the race record, and could not be approached by any known seaplane. The only other finisher was Ernest Burri, of Switzerland, in an F.B.A. He finished more than an hour later, due in part to the need to land and re-fuel. All the other entries either failed to start the race, or dropped out.

The Circuit of Britain

This race suffered from the traditionally poor English weather, being postponed from May 23 to June 6, and then run in thick mist on a 94.5-mile course around the city of London.

The winner was American William Brock, flying an 80 hp Morane Saulnier at 71.9 mph to win the *Daily Mail* and Shell Trophies, along with 300 gold sovereigns (\$1,500). Following him were R. H. Carr and Pierre Verrier in Henry Farman biplanes.

The London-Paris-London Race

Longer cross-country races were growing in popularity, one of the most interesting in this era being a 500-mile run on July 11 between the two European capitals in a hint of future busy airline routes. Seven pilots started from Hendon Aerodrome, with six being French, and five flying monoplanes.

The winner was again American William Brock in his Morane with a speed of 71.5 mph and time of 7:03:06. The other favorite, Lord Carberry in a Bristol Scout, was doing well until his engine quit on the return flight and he landed safely in the English Channel.

The Aerial Derby

This was to have been the last major race of the year and was scheduled for August 10. Unfortunately, the First World War was declared on July 28, putting an end to all civilian flying for the duration.

Up to this point, air racing was a pretty simple sport, with no classes anywhere but the Schneider which was limited to seaplanes. Otherwise, a pilot could enter an airplane of any shape, size and power. With rare exceptions, all the airplanes raced in the first few years of the sport had open cockpits, fixed landing gears, fabric covering and lots of struts and wires. Bigger engines were finding their way into otherwise stock airplanes, and the beginnings of streamlining could be seen.