

Presents:

## **XVIII WORLD AEROBATIC CHAMPIONSHIP**

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**The History of the World Championships**  
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### **From Origins to the Olympics: The First World Aerobatic Championships**

The World Aerobatic Championships is often described with the analogy "The Aerial Olympics". Although the comparison may be a bit overstated in scope -- a true aerial Olympics would feature other air sports such as soaring, skydiving, helicopter and balloon competition -- it is entirely correct with regard to the amateur status of the athletes, the level of competition, the international participation and the spectacle and nobility of the Championship event. None the less, even aerobatic enthusiasts might be surprised to learn that the first series of World Aerobatic Championships began in 1934, and reached its apex with an event that was part of one of the most notorious Olympic Games in history, the 1936 Olympic Games of Berlin.

In the following excerpts from Annette Carson's definitive history of aerobatics, "Flight Fantastic", the little known details of the first World Aerobatics Championships are presented.

In the world of 1930s competition aerobatics, each nation and each aircraft factory strenuously promoted its own stars of the genre. During that period, aerobatics had become a high prestige activity in which almost every European country participated. The competitions were thought of less as a sporting event than as a trial between the various masters of the art and their aeroplanes, and were usually arranged as grand public spectacles with the usual attendant airshow attractions, parachute jumps, etc. It was the heyday of the professional test pilots who had the advantage of the very latest purpose-built aerobatic machines supplied and maintained by the major companies.

#### **Paris, 1934**

There was great speculation when a World Cup competition for aerobatics was announced in early 1934, to take place at Vincennes, Paris, on 9-10 June. The French Aero Club's invitation to this first ever World Championship included total prize money of 275,000 francs on offer. The winner would receive 100,000 francs.



Poster from the first World Aerobatic Championships  
Vincennes, Paris, June 1934 From *Flight Fantastic*

It was an enormous event, a high-spot of the Paris society season, with 150,000 spectators crowded into the military parade-ground at Vincennes which had been converted expressly for the occasion, with grandstands specially erected. Nine competitors took part, drawn from six nations: Ambruz and Novak from Czechoslovakia, Cavalli and Detroyat from France, Achgelis and Fieseler from Germany, Christopher Clarkson from Great Britain, Ambrogio Colombo from Italy and Placido d'Abreu from Portugal.

The initial compulsory programme required a list of figures to be performed within a time limit of eight minutes, including a right-hand and a left-hand spin, a bunt, a negative loop forward and upward, and an inverted 360 degree turn. On the Sunday, each contestant flew his free programme, for which he had ten minutes: his sequence was submitted in advance to the Jury, and each manoeuvre was assigned a difficulty coefficient already set out in the rules, new figures were also awarded appropriate coefficients, but most were to be found already in the current catalogue of 87 manoeuvres. The task of the judges was to assign each figure a mark between I and 5 for quality of performance, with a zero mark for figures not executed. These were then multiplied by the difficulty coefficients, the totals of all the judges were added together, then they were divided to arrive at an average.



Gerhard Fieseler (left) and Michel Detroyat, two of the brightest stars in European aerobatics between the wars, finished first and second, respectively at the first WAC in Vincennes in 1934.

From *Flight Fantastic*

On the second day, Sunday, after the morning's air display, German star Gerhard Fieseler had the harrowing experience of watching a French pilot crash to his death on landing right next to him shortly before the contest resumed. The atmosphere became charged, but this was only a foretaste of later events: the fourth competitor of the afternoon, the Portuguese Captain d'Abreu, mishandled his controls during a half-roll from inverted and got into a spin at very low altitude, his aircraft speared into the middle of the field and burned . . . pandemonium reigned. Two men dead in the space of an hour.

The organisers were at a loss; should the competition be stopped? Many felt that it should. Gerhard Fieseler stepped forward and assumed the role of spokesman for his fellow pilots: " Each man among us knows that he may meet his fate at any time. We are prepared for that. What if the early pioneers had given up when one of their number lost his life to aviation? I believe we will best honour our comrade by continuing to fly."

The contest was resumed, and immediately afterwards another mishap occurred: the Italian Ambrogio Colombo, flying a newly-built aircraft from the Breda factory in Milan, started a spin without enough height and collided with the top of a tree. He retired with a branch embedded in his landing gear. On a later take-off, with the machine repaired, he had an engine failure and crash-landed the aeroplane rather than risk coming down in the public enclosures; the aircraft was destroyed, though he himself escaped without serious injury. The crowd remained calm.

The afternoon wore on: Cavalli, Novak, Ambruz, Achgelis, Detroyat; Fieseler flew last. He had spent five weeks practising his free programme, which contained 38 extremely complicated and taxing figures, among them super-slow rolls which carried very high marks if performed precisely. Suddenly, four minutes before the end, he felt his shoulder harness come loose. This was his main security during manoeuvres under negative g; and it had happened at the worst possible moment: immediately before a negative loop. His only solution was to make a much bigger circle - widen the diameter of the loop - so as to reduce the amount of negative g he would have to sustain. But in doing this he consumed vital seconds from his time limit, and at the end of the sequence he had over-run by three whole manoeuvres. Surely this must dash his hopes of the title.



Judges line at the the first World Aerobatic Championships, Vincennes, Paris, June 1934.  
From *Flight Fantastic*

When the results were announced however, Fieseler had a lead over Detroyat by 23 points despite the over-run; he was the first World Aerobatic Champion in history. Michel Detroyat finished second, Gerd Achgelis third. Fieseler now took the decision to retire from the sport at the pinnacle of his success. He is a valued patron of sport aerobatics to this day, and thanks to his generosity the Fieseler Trophy contest is one of the most prestigious international events in the modern competition calendar. Fieseler is remembered today as the designer of the Fieseler Storch, a utility aircraft

with remarkable STOL capabilities.

### World Aerobatic Championships, Paris 1934

1. Gerhard Fieseler	(F2 Tiger)	German	645.5
2. Michel Detroyat	(MS225)	French	622.9
3. Gerd Achgelis	(FWStieglitz)	German	537.6
4. Frantisek Novak	(Avia B. 122)	Czech	451.8
5. Jerome Cavalli	(Gourdou-Leseurre)	French	361.0
6. Ambrogio Colombo	(Breda 28)	Italian	344.8
7. Placido d'Abreu	(Avro Tutor)	Portugese	337.3
8. Jan Ambruz	(Avia B. 122)	Czech	309.2
9. Christopher Clarkson	(Tiger Moth)	British	144.0

### Berlin, 1936



Olympic posters from the Archives, Olympic Museum Lausanne, from the book [The Olympic Spirit](#), published by [Tehabi Books](#)

Perhaps the most splendid aviation events in pre-World War II Germany were those held in connection with the 1936 Olympic Games, though only the glider events featured as Olympic contests. There was an Olympic Air Display at Berlin Tempelhof aerodrome, a balloon race, two air rallies and on 29-31 July an International Aerobatic Competition consisting of a compulsory and a freestyle programme. Pilots from Germany and Czechoslovakia dominated the results, with a striking difference in placings between the two programmes: Willi Stor, winner of the compulsory programme came only sixth in the overall results; while young Otto von Hagenburg overall winner (and master of the eye-level inverted pass!), achieved only eighth place in the compulsory. He owed his eventual success to a freestyle programme of unparalleled brilliance with the Focke-Wulf Fw 44 Stieglitz (Goldfinch).



1936 World Aerobatic Champion Graf Otto von Hagenburg in 1938 with his Jungmeister, which he began using in 1937 at the International Aerobatic Competition in Zurich.  
From *Flight Fantastic*

Frantisek Novak was winner of the first Czech National Aerobatic Championship in 1935, but did not compete in subsequent years, preferring instead to act as judge together with fellow team member Petr Siroky. Then in 1936 Siroky joined Novak and Jan Ambruz in the Berlin Olympic Games competition, all three flying the little yellow and red Bal 22 which had now been equipped with the more efficient 350-380hp Avia Rk-17 engine. Siroky and Novak achieved second and third place, after the winner Graf von Hagenburg, against a very strong field of top pilots (mostly military trained) from six European countries. The overall results were as follows: [note the close competition in 1936 compared to 1934.]

### World Aerobatic Championships, Berlin 1936

1.	Otto von Hagenburg	(Fw Stieglitz)	German	658.83
2.	Petr Siroky	(Avia Bal22)	Czech	651.41
3.	Frantisek Novak	(Avia Bal22)	Czech	641.66
4.	Pierre Fleurquin	(MS 225)	French	639.99
5.	Gerd Achgelis	(Fw Stosser)	German	631.41
6.	Willi Stor	(BFWMSS)	German	628.66
7.	Horning	(Bu Jungmeister)	Swiss	619.33
8.	Jan Ambruz	(Avia Bal22)	Czech	597.08
9.	Ercolano Ercolani	(Breda 28)	Italian	544.50
10.	Mario Viola	(Breda 28)	Italian	516.82
11.	Guido Carestiato	(Breda 28)	Italian	487.33
12.	Alexandru Papana	(Bu Jungmeister)	Romanian	435.00
13.	Jerome Cavalli	(Gourdou-Leseurre)	French	418.46
14.	Edmond Blanc	(Morane)	French	409.25



Focke-Wulf Fw 44 Stieglitz flown by Otto von Hagenburg at the WAC accompanying the 1936 Berlin Olympic Games.  
From *Flight Fantastic*

Romanian Alexandru Papana's fellow-countryman Prince Cantacuzino, also a Jungmeister pilot, had entered as a contestant in the Olympic celebrations but was prevented at the last minute when he damaged his aeroplane. This was a great pity: it would have been extremely interesting to compare the two famous Romanians in a large-scale international event.



Romanian Alexandru Papana picks up a handkerchief with the wingtip of his Jungmeister.  
Note the Olympic rings on the vertical fin.  
From *Flight Fantastic*

Frantisek Novak, however, was on top form for the contest and introduced a number of original figures in his free programme which left the opposition gaping. Following Fieseler's lead, rolling turns and circles of every kind were now being performed with any number of rolls in any direction (including alternate rolls to left and right). Rolls were also being added to loops of every kind, and one of Novak's figures was a Vertical 8 started in the middle and featuring four half-rolls. Another was a downward (positive loop integrated with four complete rolls).

But his really outstanding invention was a figure featuring the revolutionary use of flat spins, which most of the aerobatic stars of the thirties left very severely alone! His complete figure-of-eight started with a half-loop from erect to inverted, falling into a negative flat spin at the top and then slow-rolling diagonally (from inverted to inverted) back to his starting altitude, whereupon he commenced a second half-loop from inverted to erect, falling into a positive flat spin, out of which he slow-rolled diagonally to finish erect at his starting point again. The whole figure earned him the maximum 12 points for difficulty.

Although the factory pilots had all the advantages in the competition world, there were still plenty of enthusiastic non professionals going the rounds of the airshow circuits, and a fair number of them were women. Most famous were the Germans: Liesel Bach, the outstanding woman pilot of her day, Vera von Bissing (a pupil of Fieseler's), Hanna Reitsch (who started as a glider pilot) and the swashbuckling Thea Rasche, who turned down an advantageous marriage to lead the life of an itinerant air display pilot. Among the French were Helene Boucher and Maryse Hilsz, both of whom flew Moranes. There were even a number of all-female aerobatic contests, including a Coupe Feminin organized by the French prior to the Coupe Mondiale in 1934, won by Liesel Bach and a special women's event at the 1936 Olympic Celebration Competition which was won by Vera von Bissing.



Messerschmitt M35, the aircraft flown by Vera von Bissing

at the WAC accompanying the 1936 Berlin Olympic Games.  
From *Flight Fantastic*

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