

José Weiss 1859-1919



Weiss in his studio, taken about 1918

Vincent Nicholas Francis Joseph Weiss (known as José Weiss) was a Frenchman, born in Paris in the year 1859.ⁱⁱ His father's family originally came from Alsace which was transferred from France to Germany in 1871. In his early life Weiss worked in the wine trade and his job entailed crossing the Channel once or twice a week on business. On one trip he stayed for a few days holiday at the village Post Office in Amberley and painted a picture of the local scenery; the painting was sold for £12 at the Goupil Gallery in London. From then on he realised that he could make a living as an artist and he gave up the wine trade.ⁱⁱⁱ He married an English woman, Agnes Mary Ratton, at St Edmund's Houghton in 1894 and they went to live in Meadow Cottage, opposite Amberley Station. In 1897 they moved to Houghton House, Houghton, near Arundel and he there stayed for the next 23 years. In August 1899 Weiss became a British citizen by naturalisation^{iv}.

"Mr. Jose Weiss, the Sussex landscape painter, though German by name, was born in Paris, but educated partly in Germany and partly in Paris; and, coming of a commercial family, his father having no respect for art as a profession, he was forced into business which he cordially hated and at which he never did much good. From a child he had always devoted the whole of his spare time to sketching and painting from nature, and he has never had any training in painting beyond the kindly hints and criticisms of his brother artists. Mr Weiss has now been living here for some six years and is so fond of England and her people and ways that it is his intention to become naturalised. Already one of our most popular landscapists, he has made Sussex peculiarly his own, and has settled at Amberley in that county." -The Artist vol.25 1899

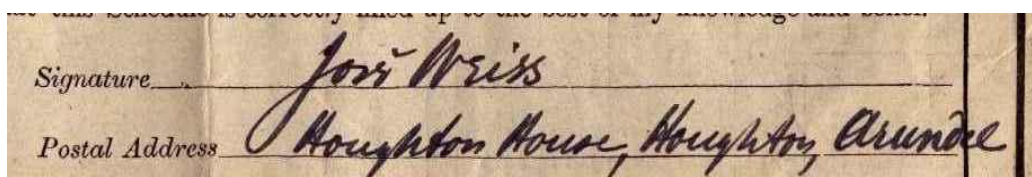


Jose Weiss "Bury Hill and Village with a View of the North Downs"
Collection of City of London Corporation- Guildhall Art Gallery.



Jose Weiss with his wife and son Bernard taken at Bognor.^v

Weiss made his living as an artist. He was famous for his paintings of the Sussex landscape, which often included views Arun beautyspots. He exhibited thirty-three times at the Royal Academy and sold his paintings to a wide group of admirers, particularly in the United States. His work is represented in galleries in Winnipeg, Chicago, St Louis, Buenos Aires, Johannesburg, and Dublin.^{vi} The BBC website has 16 of his paintings from British galleries:
<http://www.bbc.co.uk/arts/yourpaintings/artists/jose-weiss>



All of his spare cash Weiss spent on conducting experiments in aeronautics.

"Jose Weiss was a genius whose work has not been sufficiently appreciated. He was typical of the amateur enthusiast of the time. By profession an artist of no mean merit, he would return to his painting when funds ran out, and by the sale of his pictures provide the necessary money to continue his flying experiments." - Lord Sempill Flight July 5th 1934

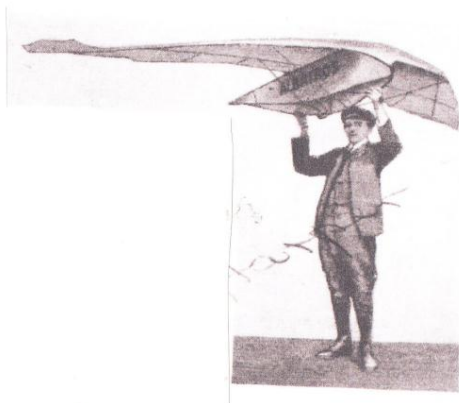
He was fascinated by gliding birds such as eagles, and studied their dead bodies in detail to try and find out how birds manage to stay stable in flight. At a meeting of the Aeronautical Society in 1905 he stated that -

"I succeeded last year in making a dead bird fly right across our lawn, which is 40 yards".^{viii}

He applied this knowledge to making model gliders; the models started at two pounds but got larger and larger until they reached 200 pounds. In 1905 Weiss took his models to Paris to attend the "Premier Concours d'Aviation de l'Aero Club de France" and won a medal for the longest flight. He was also an exhibitor at the British Aero Club's show at The Agricultural Hall in 1907.

"The model birds of Mr. Jose Weiss, exhibited by him in various sizes, from the size of a rook to one nearly as large as a full grown albatross, excited the greatest amount of attention among the visitors. As most of our readers are probably already aware these models are exactly like headless birds with the wings outstretched. All Mr. Weiss' models have a strong family resemblance- there is a central body shaped as closely to resemble that of a bird as possible, and outstretched wings in which the shape, curve, and general dimensions of the wings of a soaring bird are followed as closely as possible. The framework of these "birds" is made of tense bamboo, stayed by piano wire, and covered with muslin, over which white paper is pasted, the whole being varnished to give a smooth surface. The tendency of the model to rise or fall is controlled by the extent to which the forward edge of the wing is bent over, deciding the extent of the value of the lifting component. One of these remarkable models, which has a lifting surface of 26 feet, Mr. Weiss assures us, has executed a free flight of half a mile. As it weighs with the lead balance weight altogether some 26 lbs. this is a very remarkable performance. Mr. Weiss does not claim to have solved the problem of flight, as to his great annoyance he is misrepresented in several of the daily papers to have done, but he does claim to have largely, if not quite, solved the problem of automatic stability in gliding bird models, and that, at any rate, is a great step to have achieved. Among the curious results of his experiment must be mentioned the fact that his models do not behave well unless they carry a very considerable additional weight, the lump of lead mounted inside the body of the big bird totalling some 15 lbs. It is arranged between indiarubber springs so as to diminish the shock when the model reaches the floor."
- The Auto: motorist's pictorial, Volume 12 1907

"How do these models fly? In short: they are no different to the soaring vulture". -Jose Weiss^{ix}



(Centre) Mr. Jose Weiss with one of his bird gliders

Competition at Alexandra Palace 1907: Mr Weiss with one of his gliders.-

Flight November 25th 1948

Weiss persisted with his model gliders launching them from Houghton Hill near his home.

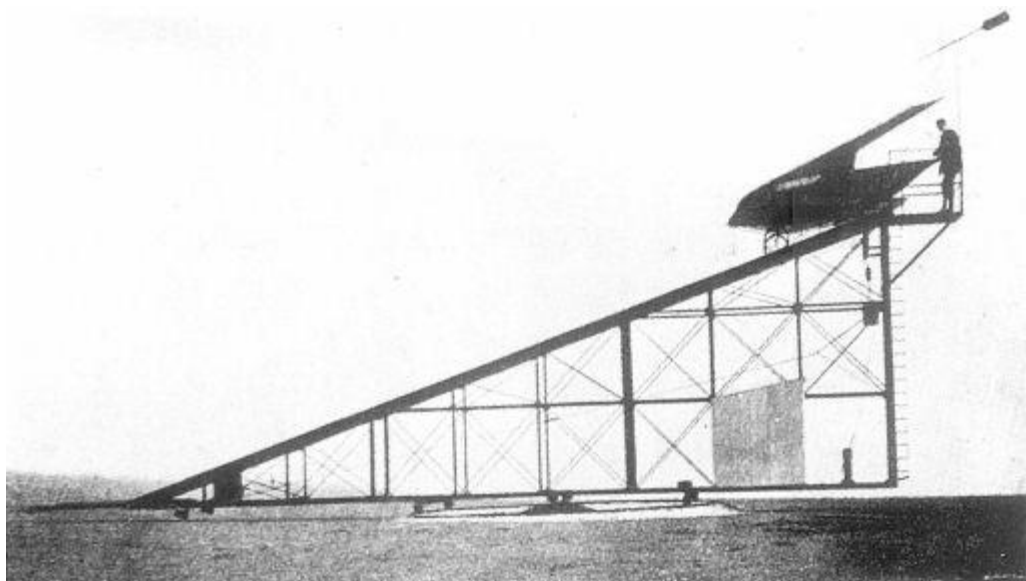
After many years of labour, his exhaustive knowledge of birds- their weights, measurements, wing-spread, and all the principles on which they are made, & meaning thereof -has enabled him to determine the principles of flight for a bird or any other body, and to demonstrate the same, whether in the simple toy-cut out of a sheet of note paper-that sailed over our heads that night, or in the 30ft steel model that sails over Amberley slopes. ... Everyone who heard him hopes and believes that one day the big reward of the century will come to this "seeker after truth"... and Jose Weiss may rise with tubes and canvas to paint his cloud effects "close to nature."- Report on a lecture on Flying to St Mary's Club, Pulborough. West Sussex Gazette 26th December 1907.

From 1908 he tested very large models using a specially constructed launching ramp that he built on Bury Hill; as described by his son:

"This was a rigid structure made of light steel joists and resting on a pivot; it was steadied by four rollers running on a circular rail placed on the ground. At the top was a small platform reached by means of a ladder. The glider to be launched was brought to the foot of the ways and hauled up backwards by means of a windlass."^x

His daughter remembers:

"He built a tower on the slope of the downs, not far from the house, up which he climbed on a ladder and from the top of which he launched the weighted models. They used to fly across a field and over the chalk cliff and the river and would be picked up by the village boys (who would get a copper or two for the service) a couple of miles away."^{xi}



A Weiss model on the launching ramp 1908.^{xii}

William Davis who was a lad living in Houghton at the time recalled:

"Us lads used to get that excited and make up paper gliders of our own and show them to Mr Weiss and he'd get just as excited as we were and fly them off the top of a pinewood launching platform he set up on the hill. I remember one day he let off a biggish model about 4 ft. across the wings. It sailed out over the valley, then turned round, and came back towards us and crashed into the bottom of the hill among the trees and bushes. Mr Weiss offered us half-a-crown if we could find it. We searched all over the place until we did find it and he gave us the half-crown."^{xiii}

All the models Weiss made at home in Houghton House. His daughter Sylvia has described his workshop:

“He was a capable and competent craftsman and handyman. All the jobs of general maintenance of the property inside and out he could do, and did himself. He built a skylight into the roof of a large stall at the end of the stable, lined it with boards and converted it into an excellent studio. Later he constructed a really large workshop, a good 30’ x 20’, of corrugated iron sheets lined with wood. It had a high roof which was most useful for hanging his model aeroplanes..... During these years a large part of the end wall in the workshop was covered with cuttings from the newspapers and from Flight Magazine, and pictures of the latest developments in flying, many of which were about my father’s work.”^{xiv}

Soon his machines came to the attention of the government as the War Office was interested in the military applications of aeronautics. However, the demonstration was less than impressive as Weiss recalled-

“The last time Colonel Fullerton came on one of his visits, it never stopped raining the whole time. I was hoping to show him a really fine model, which I knew was a very good one indeed, but by the time we got to the flying ground the model had been soaked for a couple of hours, with the result that the canvas had stretched the thing out of shape, and it would not perform at all.”^{xv}

Weiss patented his wing design and formed the *Weiss Aeroplane and Launcher Syndicate* on 10 June 1908, to exploit his product. Frederick Handley-Page, an electrical engineer, took a financial interest in the syndicate and gained the right to use the Weiss patented wing. By 1908 Weiss was already in his late 40s and described as “bearded, elderly and knickerbockered”^{xvi}. He was well versed in aerodynamics but he seems to have known little about the internal combustion engine. Handley-Page was far younger and more innovative, described as “ebullient”^{xvii} and Page encouraged Weiss to add power to the gliders. Again the War Office came to see a demonstration – this time of a powered machine, but with similar disappointment.

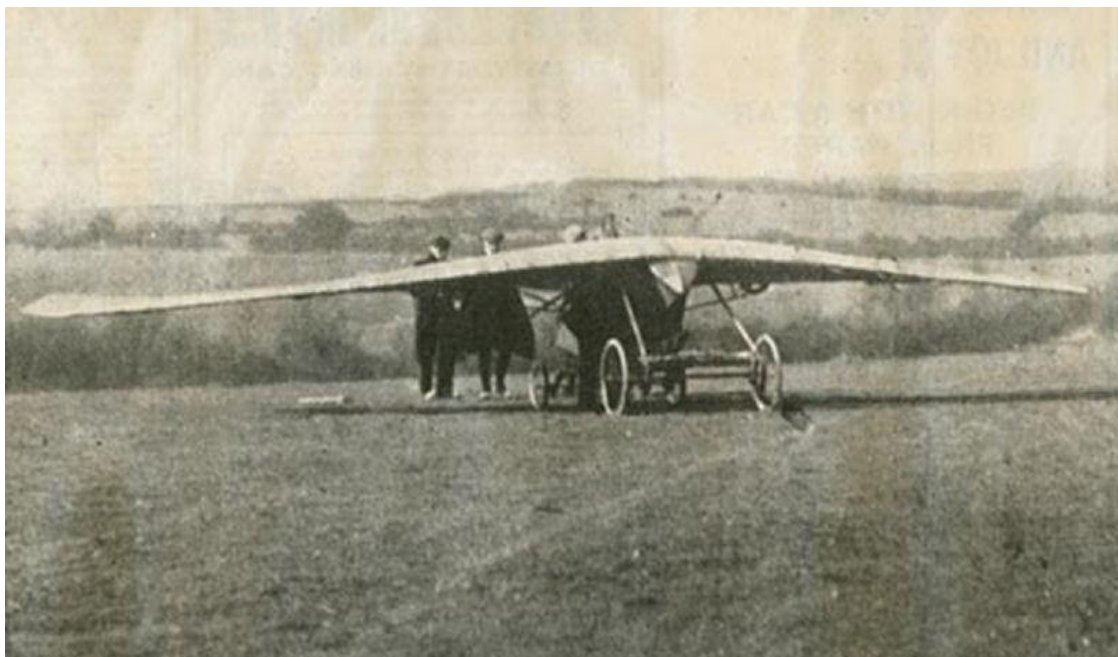
“Weiss had for some years been experimenting with both gliders and powered gliders. During this particular summer (1908) he had produced a most promising machine, made of bamboo canes and linen, which he called the 'Flying Albatross.' It was powered with a small motor-cycle engine. Well, the great day came for the final test. One Saturday afternoon we all trooped up to the Mount, and among the visitors was Colonel Capper of the War Office Balloon Section. A few of the small gliders really did glide, but the 'Flying Albatross' refused to soar higher than the nearest clump of bushes, where it crashed. We were all very disappointed. The Morning Leader 'guyed' Weiss's experiments unmercifully, the account of the tests giving one the impression that we should never fly.”^{xviii}
Apparently, the Albatross was dismantled and stored in an annexe at Sydenham of the Science Museum.^{xix} Where it is now is not known.

Developments continued and the Weiss-Page plane ‘The Madge’ was exhibited on the Handley Page stand at the March 1909 Aero Show at Olympia. (Madge was named after one of Weiss’s daughters.) The Madge was a single-seat tailless monoplane on the same general lines as the previous gliders. Powered only by a 12-hp Anzani engine driving two pusher propellers through chains, unfortunately the frail cloth-covered bamboo craft did not prove capable of flight, although their future planes performed quite well.



Weiss 'The Madge' at Olympia^{xx}

By the end of 1908 Weiss had felt ready to test a glider (unpowered) that could carry a man. He constructed a full size glider, named 'The Olive' after another of his daughters. The machine was made largely of bamboo held together with string; it had a wing-span of 26 feet and weighed 100lbs. It had no tail and no rudder, but was steered by the pilot operating foot pedals which moved the trailing edge drag-flap at the root of each wing.



Weiss 'The Olive' *Aeroplane Monthly* January 1996

The first pilot was Weiss himself; then Gerald Leake, a wallpaper designer who lodged with the headmaster of Amberley Church of England School; and finally the task was given to a boy called Eric Gordon England. There were numerous outings in 1908 and 1909 which were largely unsuccessful but which provided good entertainment for the locals, including the 11 year old William Davis.

“When the first trial was being arranged on top of Amberley Mount there was great excitement in the village. All us young people gathered outside Mr Weiss workshop next to the cart-shed. I think it

was about mid-day or early afternoon on a Saturday. We were invited to help them push the machine to Houghton Bridge and up to High Tilton on the Mount. I remember it was rather windy when one attempt was made. The machine was pushed off the ground, turned over and landed upside down. The pilot got a nasty knock on the head and neck.”^{xxi}

But then came a breakthrough- on 27th June 1909 the Olive piloted by Gordon England (aged 17) took off from Amberley Mount. It lifted 40 feet above the launch point and flew for about a minute, covering a distance of about half a mile. This is regarded as the first ever “soaring flight” made by a glider; previously gliders, such as those made by the Wright Brothers, had just floated down a valley. By rising in the air Weiss and England had established a world record.

“Gordon England began his practical experience in the air by being pushed over a kind of precipice in a small Weiss glider without any controls. Rushing down a slope of 1 in 3 the wind soon caught the little craft, and lifted it a clear 30 ft. into the air, after which it began to drift backwards, while still advancing through the wind. In the course of time, the man-bird settled lightly, away down in the valley. The longest glide ever accomplished in this way lasted 59 sees., the best of many attempts, which were made in the roughest as well as the finest weather”. Flight 15th August 1912.



Weiss glider 'The Olive' piloted by Eric Gordon England^{xxii}

In 1966 Eric Gordon England recalled that momentous flight.

“To my joy Weiss asked me to join his team and off we set for Houghton. José Weiss will always occupy a unique place in my memory, respect and veneration almost amounting to a form of hero worship. He had started his pioneer aeronautical work in 1900. I joined him in 1909. Such was my confidence, and indeed his, based on his years of development of his long line of inherently stable Weiss gliders that when we built on our return to Houghton a man-lifting glider- which was christened “The Olive” after one of Weiss’ daughters-we had complete faith that it would perform. So on one windy day with a suitable north wind, the Olive was carted to the top of Amberley Mount and I was to make my initial flight from its highest point. After some careful instruction from José Weiss he launched the Olive down the precipitous north face. I suddenly found myself high above Weiss’s head and in fact in soaring flight. I was able to keep the machine’s head to the wind and I proceeded to glide out over the valley and out of the up current; after what seemed a very long time the Olive came gently to rest on its keel in a ploughed field at the bottom of the hill. There I remained seated until the breathless Jose Weiss arrived and announced that his stop watch had clocked 58 seconds

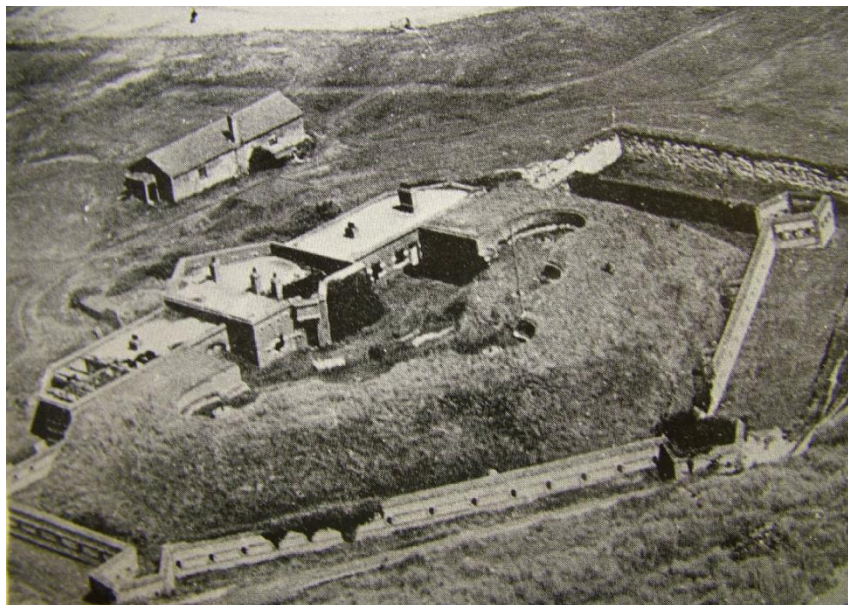
flight and the machine had soared high above its starting point. This flight remained a record until after the First World War.^{xxiii}

One big problem facing Weiss was the lack of a suitable aerodrome to test and refine his machines.

“Mr Weiss remarked that the chief obstacle which now stood in the way was the fact that they had no suitable ground on which to make their experiments. The military grounds on which the French aviators practised were he stated, often a mile square and regular in surface, whilst the grounds at home were generally speaking much too small, and also very irregular. Despite all difficulties, however, he was, he said as certain as it was possible to be that in less than ten years aeroplanes would be fitted with wireless telegraphy crossing over to Paris and perhaps the Atlantic as well, with anything from 50 to 100 passengers in each.” – Report of a Talk to the Storrington Social and Literary Society- West Sussex Gazette 25th November 1909.

Undeterred, Weiss continued to experiment with engine-powered planes. He named two new models after two of his other daughters – Elsie, and Sylvia. These planes he tested on the sands at Littlehampton, using Littlehampton Fort as a base.

“The Duke of Norfolk, the present Duke’s father, said we could use the old fort in the south-east corner of the (golf) course overlooking the harbour mouth, and we made it our headquarters and lived there in rather rigorous conditions, with hammocks and so on.” – Eric Gordon England, West Sussex Gazette December 12th 1968



Littlehampton Fort from the air.^{xxiv}

The Elsie, Weiss's first tractor monoplane (with a front propeller), with a 25hp Anzani three-cylinder air-cooled fan type engine, appeared in 1910. Its undercarriage consisted of a pair of wheels either side of a central skid.^{xxv} It was being tested on the sands at Littlehampton on 16 April 1910 when it crashed, causing Gordon England to scrape the skin off his face^{xxvi}.

“Mr. Weiss at Littlehampton. HAVING taken his monoplane to Littlehampton, Mr. Weiss carried out several experiments on Saturday. After a flight of about two hundred yards the machine capsized, and the damage to the propeller, &c., prevented any further flying for the time being.” Flight April 23rd 1910.

The propellers for Weiss' planes were made by a carpenter called George Fonteneau, who was born in Amberley but whose father was French^{xxvii}. In 1909 Fonteneau lived at 95, Bayford Road, Littlehampton^{xxviii} and previously had transported his propellers from Littlehampton by train to Amberley station.^{xxix}



Elsie on the sands at Littlehampton 1910 before the crash.^{xxx}



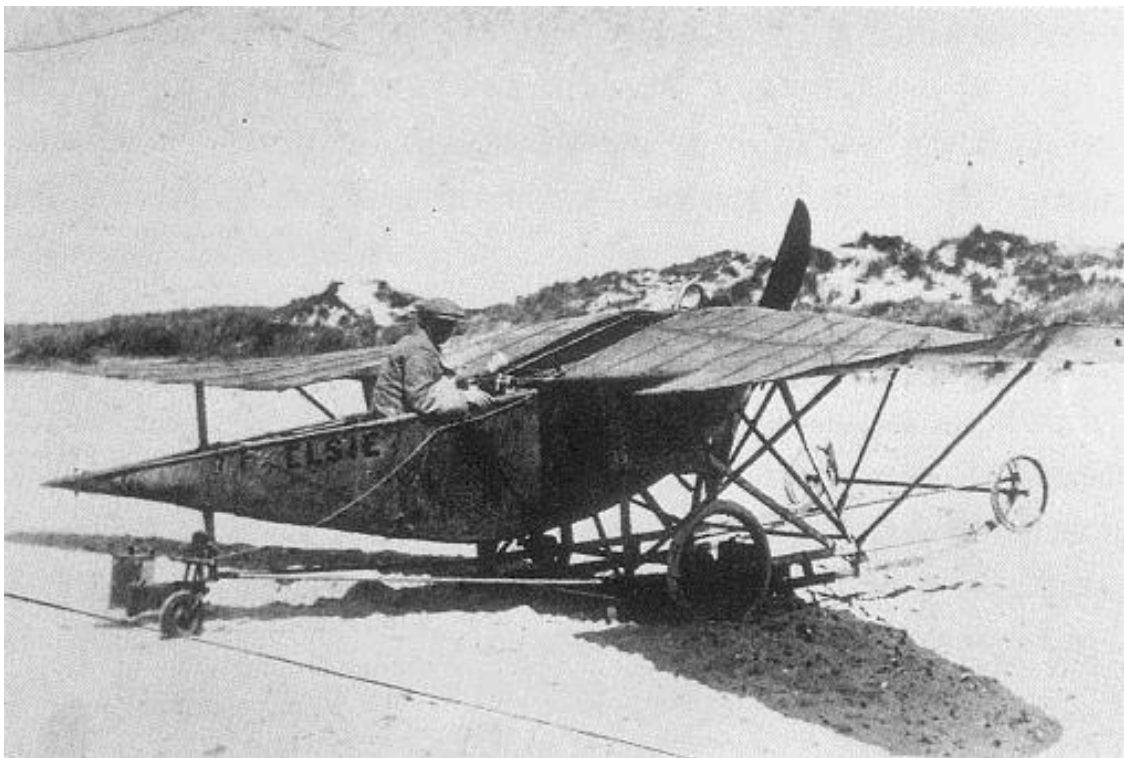
The crash on Littlehampton sands.^{xxxi}



The rescue^{xxxii}



Above – Two pictures of ‘The Elsie’ at Littlehampton after it had been altered to have a wider undercarriage.^{xxxiii}



Gerald Leake in the Elsie^{xxxiv}

"Weiss had now two "power machines", one fitted with a 3 cylinder Anzani, the other with a 4 cylinder Warren Lambert, and these were taken down to Littlehampton sands, which was to become our aerodrome" – Eric Gordon England Journal of the Royal Aeronautical Society 1966 pg198

The second monoplane, The Sylvia, was also tested in 1910, but by now Weiss had abandoned the tailless configuration. The airplane was fitted with a Penaud tail, but still retained the distinctive curved, twisted wings designed by Weiss^{xxxv}. It had a wingspan of 34 feet and weighed 750 lbs.



Weiss tractor monoplane No.2 'The Sylvia' piloted by Eric Gordon England- *Flight* January 14th 1911.

Weiss was convinced that the monoplane was the future of aviation, despite developments in the USA.

"I remember when the Brothers Wright made their first flight, a friend was arguing with him about the greater stability of the bi-plane, and my father getting quite excited over the argument, and thumping the table saying, "I tell you that in fifteen years from now, we shall fly the Atlantic with 100 passengers aboard, but it will be in a monoplane and never in a bi-plane". How right he was." ^{xxxvi} – Sylvia Weiss

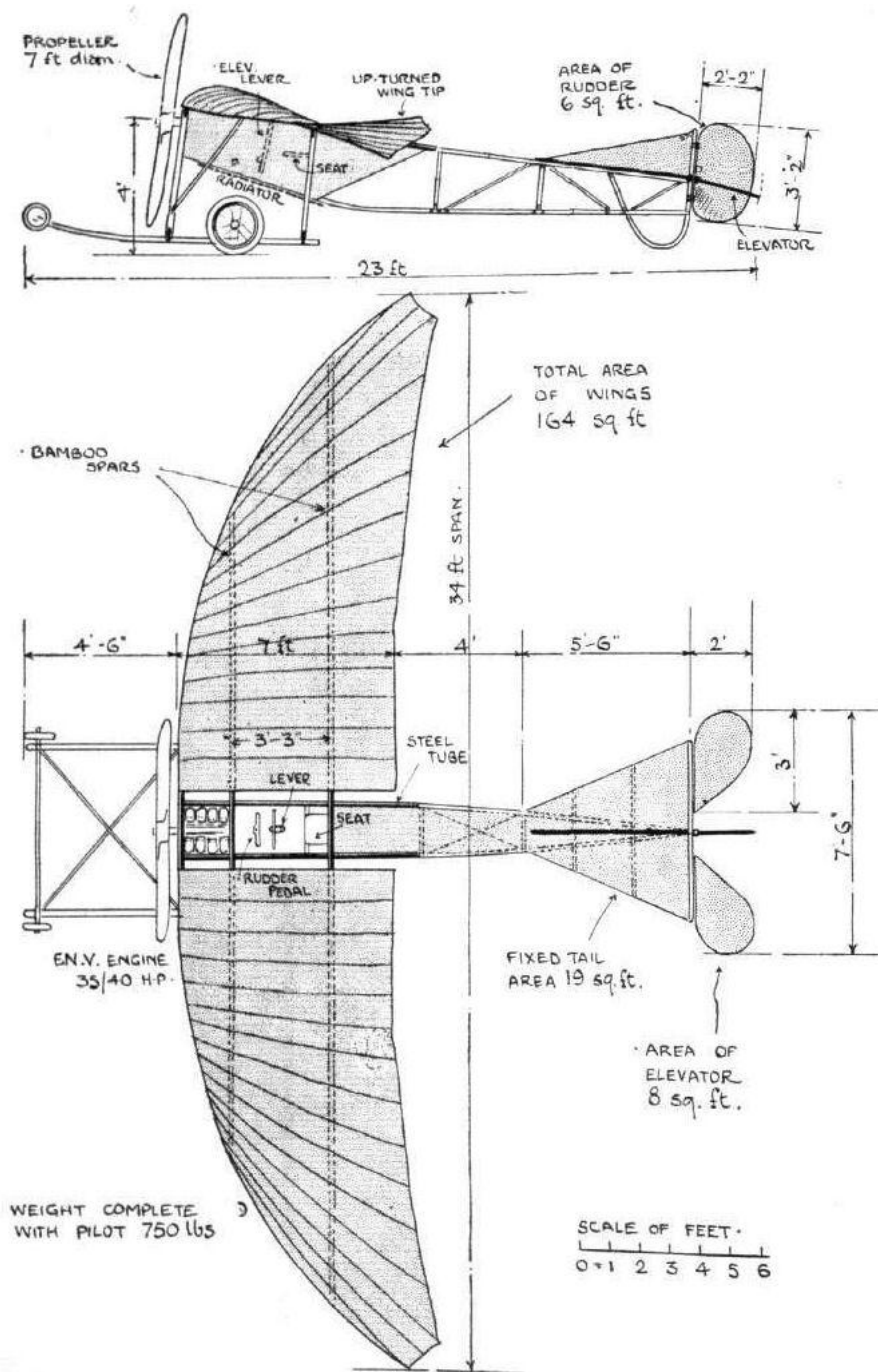
The photographs of Littlehampton seem to show the West Beach sands.

In 1910 Pall Mall Magazine published a (fictional) story about an aviator. The story began:

*"From the golf links by the sandhills of Littlehampton an eerie, throbbing sound rose suddenly and disturbed the serenity of a calm May evening; it floated seaward on a light land breeze, and here and there among the tawny grass and sand it roused a martin or a plover to troubled flight. Following the unusual sound came a hurried opening-out movement among a score or so of men who, for some time, had grouped about a queer-shaped machine which stood about two hundred yards inland on the links. As they stepped away from it this machine darted swiftly upward, and, while humming pulsations of a powerful engine mingled with the shrill whir of a lifting fan, it hovered for a moment above its starting place and then, like some strange, new bird went skimming down the wind. Half a mile away it described a graceful curve, and returned on a downward slant that landed it, lightly, almost as a snowflake, beside the men who had surrounded it two minutes before. When it touched the earth a young man stepped from it — a young man slightly built and with a grave, cleanshaven, clever face — and stood silent, but with a quiet smile. - "The Wickham Aeroplane" by Francis Marlowe in *Pall Mall* vol.45.pg 319*

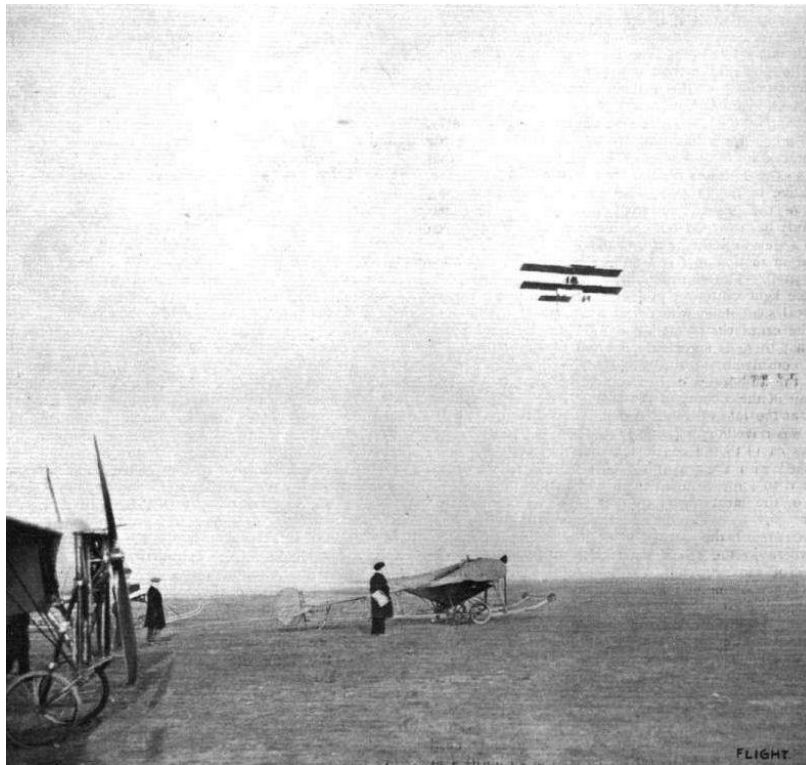
From Littlehampton Eric Gordon England, George Fonteneau and Gerald Leake took the Elsie and the Sylvia, the powered machines, to Brooklands aerodrome, Weybridge Surrey, where they continued to develop and fly them with some success. Brooklands had a group of wooden sheds known as 'the Flying Village' and the exploits of the men who worked there were depicted in the film 'Those Magnificent Men in Their Flying Machines'.

Construction of The Sylvia- *Flight* June 17th 1911



"WHETHER from the point of view of construction or design, there is no more interesting machine at Brooklands to-day than the Weiss monoplane, which is British built, not to say home made, and is the outcome of many years' pains taking experimental work on the part of Mr. Jose Weiss who was one of the earliest and likewise one of the most persistent investigators of that branch of aerodynamics concerned with the principle of automatic stability. It is to this side of the problem of flight that Mr. Weiss has devoted most of his energy and model after model was made and flown on the hillside

near Arundel long before the habitués of Brooklands received him and Mr. Cordon-England, who piloted a man-lifting model of that period, as newcomers amongst them.” – Flight June 17th 1911



Eric Gordon England and the Sylvia on the ground at Brooklands. Lieut. Watkins, with a passenger, on Mr. Maitland's Howard Wright biplane flying overhead. Flight 25th March 1911

Eric Gordon England recalled testing the Sylvia at Brooklands.

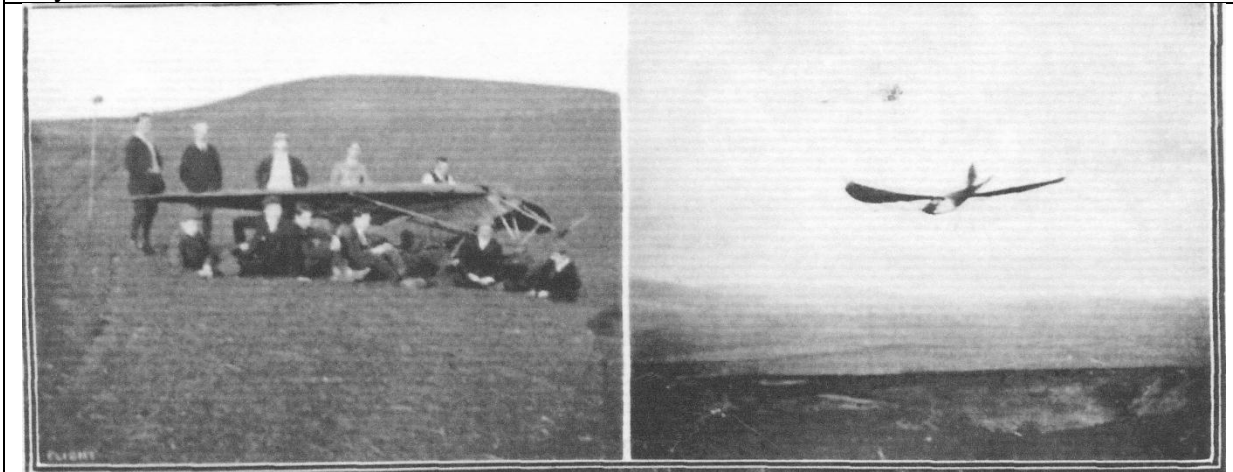
“I started to fly the newly engined Weiss monoplane at Brooklands, where Weiss had moved his activities. He had enjoyed one of his particularly successful painting expeditions into rural England and his following in the USA had bought his pictures at very good prices. He was thus in a position to buy a brand new 40 E.N.V. After making a few straights (with Weiss as a spectator) I decided to make a few circuits to reward him for his many years of patient and courageous pioneering. The machine handled well in the air and on the ground and so not mentioning anything to Weiss I took off and started at once, what was in those days, a fairly stiff climb. I passed over the famous Brooklands Paddock at about 100ft. Full of joy at the splendid behaviour of the engine and machine and proceeded to make a wide turn over the infamous sewage farm inside the confines of the track. It could almost be said in truth that until you had crashed into the sewage farm you had not become a fully fledged pilot! Cogitating on the triumphant feelings of Jose Weiss at seeing at long last the child of his great intellect really flying, I passed over the sewage farm; as I did so something gave way in the structure of the machine! With more luck than management I kept the machine the right way up in a form of stall and the machine hit the softest and slimiest part of the sewage farm, turned right over and forced me head downwards into the glutinous mess. But I was quite unhurt and soon emerged covered all over in the green slime. Having spotted the structural failure Weiss remained unperturbed and joyous, typical of the man.” Eric Gordon England Journal of the Royal Aeronautical Society 1966 pg198

Weiss himself returned to Houghton and carried on developing and testing gliders. In 1911 he designed a very small glider named 'Joker', a nickname for one of his sons (Gerard?). This model

Weiss presented in 1912 to the 'Polytechnic Gliding and Flying Society', which held gliding camps in the summer months at Amberley. He also gave them 'the Olive' to which he had added a tail.

Polytechnic Aero Club (REGENT STREET, W1.).

A COMMITTEE meeting of the above club was held on Friday, the 2nd inst., at the Polytechnic, when Prof. II. J. Spooner presided. Mr. Graham Wood announced that Mr. Weiss had offered him the famous "Weiss Glider," the use of the best gliding ground in the country, and the use of the large shed in which the glider is housed, and that he had accepted this munificent offer on behalf of the club. A gliding meeting is being arranged for Easter. Members of the club have already commenced constructing a monoplane glider to Mr. Wood's design, and the prospects of the club seem particularly rosy.



The Polytechnic Flying Society with "the Olive", Mr Graham Wood being in the pilot's seat. On the right "The Joker" in full flight. This Weiss glider is claimed to be the smallest man-carrying glider in world flight.^{xxxvii}

In 1912 Weiss also tested an 'aviette' which was a manned glider where the pilot used foot pedals and levers to make the wings beat.

General Description	Bird type
Weight	Empty=90 lbs., with pilot, 230 lbs.
Supporting Surfaces	80 sq. ft.; two hinges for each wing
Rate of flapping	20 beats per minute
Motor	None, the flapping being done by man-power
Springs	These assist the flapping (details confidential); when at rest they hold the wings outstretched, and this position cannot be altered until the machine is in the air.
Pedals	To work wings, pressed down alternately
Speed	30 m.p.h. estimated.
N.B.-The machine is exceptionally strongly built, and has been frequently launched as a glider with great success. It cannot rise in still air, but a wind of 10 miles per hour would probably enable it to do so. In the latest design it is proposed to use compressed air instead of springs, the pressure of the air being normally such as to allow the weight just to hold the wings horizontal. ^{xxxviii}	

His collaborator on this project was a Scottish medical man, Alexander Keith, who had also studied the structure of birds and the varying functions of wing-curves and cambers- demonstrating the operation of a bird in flight using a swan's wing, to every muscle of which was attached a thin cord.^{xxxix} Keith lived at Crossgate House Amberley where he kept a cable for launching the glider. Later the cable was used as a winding rope for the well in the garden of Crossgate House where it could still be found in 1968.^{xl}

Weiss and Keith patented their design in 1914.



The Aviette. Reay, David, The History of Man-Powered Flight

They wrote up the results of their experiments in a paper called 'Notes on Giant Aeroplanes' published privately in 1916.

"Our free flight experiments during the last 15 years may not have been conducted with the method and the thoroughness generally expected from professional scientists- which we are not. But it must be borne in mind that the difficulties encountered in free flight experiments with heavy models and gliders are only realised by the few who have tried them, and arise from the innumerable mishaps and breakages which prevent one again and again from obtaining in a reliable manner the data aimed at. Nothing else, however, than free flight experiments could possibly reveal the laws which govern gliding flight."^{xli}

The approach of Weiss and Keith to aviation is known as 'biotechnik' which means that "life can be seen as a series of technical problems for which living organisms represent the optimal solutions".^{xlii} However, he lived at a time when a more mechanical, industrial approach was dominant and overshadowed his success. Engineers were studying propulsion and control as separate issues and the emphasis was on the power of the internal combustion engine. By 1910, when Weiss was experimenting on Littlehampton sands, the Wright brothers in the USA had already developed and flown efficient passenger-carrying planes. His discoveries were relegated as old fashioned and romantic, especially by the British War Office which was intent on constructing new war machines.

Weiss' son Bernard wrote in 1923:

"To Jose Weiss it was not granted to see the completion of his work. Lack of support compelled him to abandon experiments, the value of which is only being learnt in the lesson of ten years experience. But such is the way with all pioneers."^{xliii}



Chalk drawing by Jose Weiss showing 'an ornithopter'. ©Science Museum

Weiss, a pacifist, was appalled by the way in which aeroplanes were used to bring destruction in the Great War. He was a strong believer in international co-operation and wrote a pamphlet in 1915 entitled "Armed Peace or Federation" suggesting that a Federation be set up as a basis for ending the war. In 1913 in a speech to the Royal Services Union he said:

"I am one of those who do not believe very much in war, and I am sorry to see that the whole of our work nowadays goes in that direction. I should like to see greater efforts being made to develop the aeroplane from the point of view of a commercial conveyance. I myself am absolutely convinced that large machines are perfectly possible, and I am quite convinced that in five, six or ten years we shall see large machines carrying upwards of fifty or a hundred passengers at a time, and performing direct services between all the capitals of the world. I believe that is one of the main benefits to be derived from the aeroplane that instead of helping us in war, it will lead people away from war, and increase the friendly relations between nations."^{xliv}

José Weiss died in 1919. His daughter recalled that he was worrying about planes right to the end -

"I remember Handley Page coming to visit him, when he was on his deathbed. They spent a couple of hours together and Dada was able to show him where some calculation was wrong. Then, when the fault was corrected, all went well and it flew. Of course this was a great event in the flying world, but Dada's name was not mentioned."^{xlv}

Jose Weiss was buried in the churchyard of the Roman Catholic church, Houghton Bridge. In 1929 his widow, Agnes Mary,^{xlvi} was given a state pension of £50pa in (belated) 'recognition of the pioneer services rendered to the science of aviation by her husband, the late Mr. Joseph Vincent Weiss'.^{xlvii} This was raised by £25 in 1939.^{xlviii}



Weiss grave, Houghton. February 2012.

Jose Weiss' family.

Name	Known as	Relationship	Dates
Vincent Nicholas Francis Joseph	José		1859-1919
Agnes Mary Ratton	Pussie	Wife -married 1894	1872-1906
Marie Sylvie	Sylvia	daughter	1895-1986
Joseph Bernard Talbot	Bernard	son	1896-1963
Madeleine Marie	Madge	daughter	1898-1971
Elsie May Frances	Elsie	daughter	1900-1996
Olive Mary	Olive	daughter	1902-1958
Agnes Mary Dorothy Josephine	Josée	daughter	1906-1994
Agnes Mary Corbishley		Wife -married 1910	1880-1962
Gerard Joseph		son	1911-1972
Edmund Joseph Talbot		son	1913-1993
Peter Joseph		son	1915-2000

In 1984 The Vintage Glider Club held a ceremony to remember José Weiss and his machines:

75th Anniversary of the first Soaring Flight 27th June 1984.

“This was held in brilliant sunshine on a hilltop near Parham on the very spot where the 17 year old Eric Gordon England was launched in a Jose Weiss glider on the 27th June, 1909. After a short speech by the Director of the Storrington Museum, a plaque was unveiled by Josée Moseley Williams, daughter of the pioneer glider designer, and Mrs. Gordon England, the wife of Eric. Josée Moseley Williams landed in the field in Ka 13. She went solo at the age of 70 and flies regularly. Altogether, it was unforgettable occasion. Jose Weiss's paintings and work in the field of aeronautics were later the subject of a lecture. The Storrington Museum is to have a permanent exhibition of his work.” – VGN News Summer 1984.

In June 2009 ‘The Southdown Gliding Club’, Parnham, held a rally to celebrate the centenary the flight. A replica Weiss glider was flown and Eric Gordon England’s daughter unveiled a plaque to mark the occasion. Film of the event can be seen on You-Tube.^{xlix}

In describing Jose Weiss's contributions to aeronautics one aviation historian compared him to Leonardo de Vinci:

“Jose Weiss belonged to a type of universal genius of which Leonardo de Vinci was an example. In this type- the mind and the eye of the artist are conjoined with the scientific mind. They think with the eye and the soul as well as with the brain. Such men have the joy of great vision, of peering into the mysteries; but often others, inspired by them, accomplish the practical work.” - Charles Cyril Turner - The old flying days Ayer Publishing, 1927.



“Weiss model in flight 1910”^l

What remains to be seen?

Houghton House; José Weiss’ home.

This is still standing and is a private house. It is a grade II listed building; listed in 1954 for its architectural interest as a late 18th century/early 19th century building. It is not marked by a blue plaque. Throughout the 1920s the illustrator Arthur Rackham and his wife lived there- they have a commemorative plaque in the church of St. Michael at Amberley

Meadow Cottage, Amberley: Weiss' first home.

This is a private house.

South Woods Lodge, Houghton; home of the young William Davis and a place where José Weiss did a lot of his painting. It was also known as Houghton Lodge.

It no longer exists.

Crossgate House, Amberley: home of Alexander Keith

This is a private house.



Houghton Church by José Weiss.

St. Edmunds Roman Catholic Church, Houghton; José Weiss' burial place.

This has been deconsecrated- it is now Stable's antique shop. The graveyard is over the road and the Weiss grave is at the rear left.

Storrington Museum West Sussex

This has obliging staff but no permanent display about Weiss and no artefacts.

Amberley Museum West Sussex

This ran an extensive exhibition about gliding for the duration of the Weiss centenary rally in June 2009. It has no permanent display about him or about aviation but cuttings can be seen on request. It has a stained glass window as a memorial to Eric Gordon England.

Littlehampton Museum West Sussex

In 1993 Littlehampton Museum staged an exhibition called 'Flying Past'. This contained material on Jose Weiss; the US presence at West Sussex airbases in World War 1; the construction of over 200 flying boats at Littlehampton and Middleton in that war; Sir Alan Cobham's Flying Circus based at Ford Aerodrome in the 1930s, experiments with airborne radar and nightflying techniques at Ford in

World War II; early jet aircraft at Ford after the war.ⁱⁱ The museum no longer has anything on display about Weiss but photographs and newspaper cuttings can be seen on request.

Shoreham Airport Visitors Centre West Sussex

This has an exhibition about the history of the airport dating back to 1910, but nothing on Weiss.

Brooklands Museum, Weybridge Surrey.

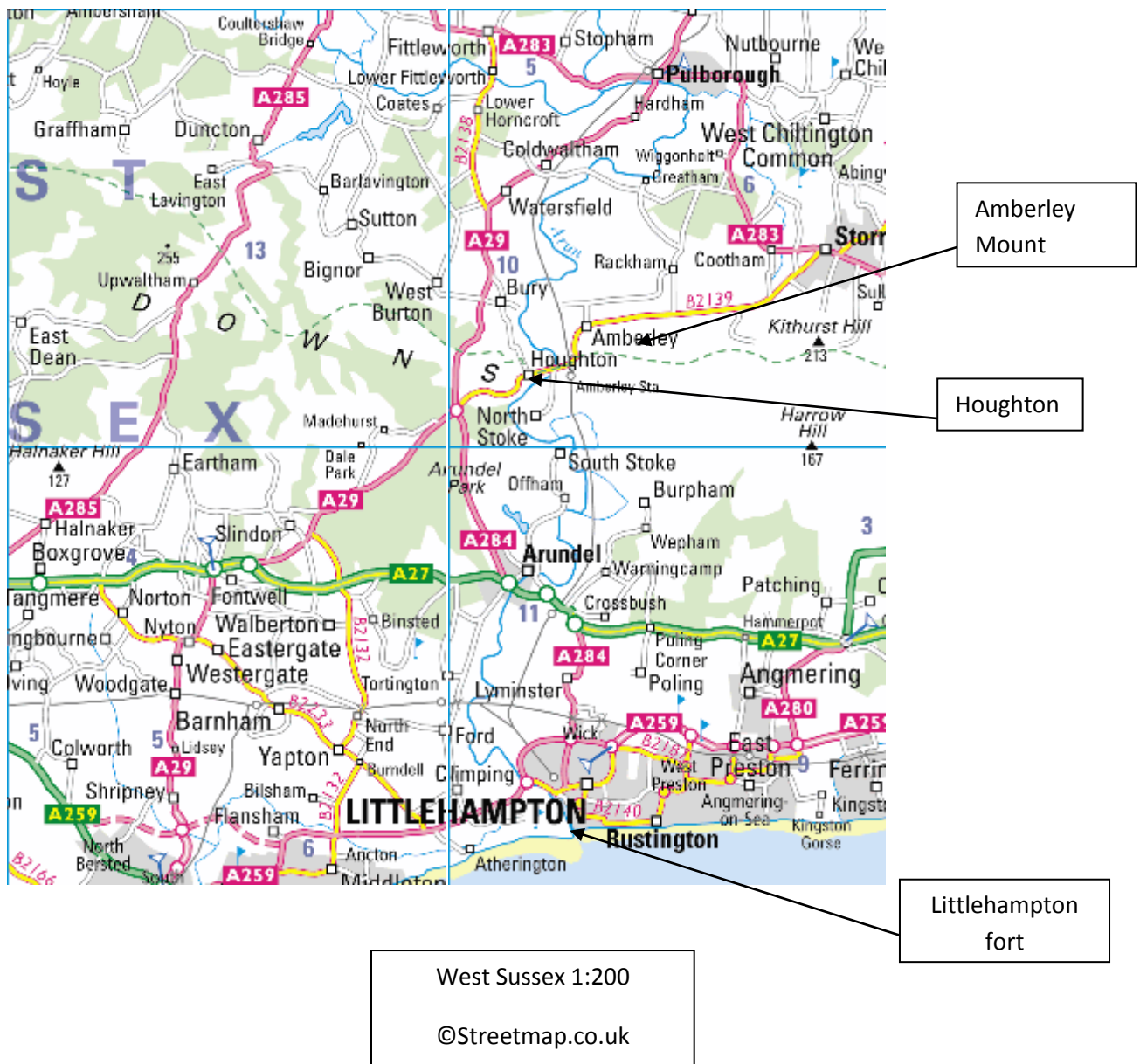
This is a museum dedicated to the birth of aviation and motorsport. It does not have anything specifically on Weiss.

The Science Museum, London

This has the Weiss model that won the medal in Paris in 1905. The Olive was a 3 scale enlargement of this.ⁱⁱⁱ

95 Bayford Road, Littlehampton; home of George Fonteneau.

This is a private house.



Sir Frederick Handley Page (1885-1962) went on to have a long career as an aeroplane manufacturer. During the Great War his firm produced a series of heavy bombers for the Royal Navy to bomb the German Zeppelin yards. In 1930, Handley Page produced the first 40-seat airliner, the Hercules, a four-engined plane and during World War II he developed the Halifax bomber, of which 7,000 were constructed.^{liii}

Eric Gordon England (1891-1976) joined the Bristol Aeroplane Company in 1910 as a staff pilot, but was soon recognised as a designer. Between 1913 and 1919, he was a test pilot and consultant engineer to a number of aircraft constructors. In 1914 he was at Shoreham aerodrome flying the Secret Circle plane built by Cedric Lee (a secret project with the plane being built by workers carrying revolvers), which unfortunately he crashed into telephone wires^{liv}. In 1922 he became interested in building bodies for Austin Seven sports cars. Using the skills gained with aircraft, he designed and patented a new lightweight car body made from plywood. In 1925, he entered the 24 Hours of Le Mans race using one of his own designs.^{lv} Gordon England then became director of the Vacuum Oil Company 1934-1942. He was managing director of General Aircraft Limited 1934-1942 and chairman of the Engineering Industries Association 1940-1944. He was responsible for the design of the Hotspur and Hamilcar military gliders in World War II^{lvi}

Gerald Leake (1884-1975) immigrated to the United States splitting his time between New York City and Marathon, Florida. While in Florida, during the winter months, Leake taught art in Key West where he held classes in Ernest Hemmingway's house whilst living on a boat anchored away from shore. He made his mark as a fine artist and illustrator, notably during World War II, when he did poster art for the Navy and his work appeared in magazines, like *Pictorial Review* and *Life*. He also created a famous Coca Cola poster.^{lvii}

George Fonteneau sailed to Australia in 1913 where he set up Australia's first Military Flying School, which evolved into the RAAF in 1921. In 1927 he travelled to New Guinea to join the Bulolo Goldfields Aeroplane Service. He died in 1928.^{lviii}

What happened to Alexander Keith is not known but he died before World War II.

Aviation Timeline.

1903	
December	In Kitty Hawk, North Carolina, Orville Wright piloted the Wright Flyer on a 36.5 metre (120 feet) flight lasting 12 seconds. This was the world's first manned, powered, flight
1904	
November	Wilbur Wright flew 4.43 kilometres (2.75 miles) at Dayton. This was the first flight of more than 5 minutes.
1905	
October	The Fédération Aéronautique Internationale (FAI), the world's air sports federation, was founded in France.
1906	
September	The first international balloon race started from Les Tuileries in Paris and was won by Lieutenant Frank P. Lahm of the United States Army.
November	Alberto Santos-Dumont flew the <i>Santos-Dumont 14-bis</i> a distance of 722 feet (220 m) in 21 seconds near Château de Bagatelle. This is recorded as the first officially observed aeroplane flight in Europe and the distance he flew is the first officially recognized airplane distance record

1907	
August	The first aerodrome with hangars, opened at Issy-les-Moulineaux in France
September	The German Zeppelin LZ-3 set a record by remaining aloft for eight hours
October	British Army Dirigible No 1, <i>Nulli Secundus</i> , the UK's first powered airship, flew from the School of Ballooning, Farnborough, Hampshire, to London in 3 hours 25 minutes.
November	Louis Blériot made his first flight in a Type VII monoplane.
1908	
October	Samuel Franklin Cody made the first officially recognised aeroplane flight in the United Kingdom. Cody, an American born entrepreneur, piloted his own design, British Army Aeroplane No.1 for a flight of 424 metres (1,390 feet) at Farnborough.
December	Wilbur Wright, won the Michelin prize with a flight of 124 kilometres (77 miles) at Camp d'Auvours in France. The flight lasted 2 hours 20 minutes 23 seconds
1909	
June	A Weiss glider piloted by Gordon England took off from Amberley Mount and recorded the first soaring glider flight.
25th July	Louis Blériot became the first man to fly across the English Channel. He won the Daily Mail £1,000 prize.
September	Samuel Cody flew from Aldershot to Farnborough and back (46 miles in 1 hour and 3 minutes). This was the first recorded cross-country flight in the United Kingdom.
1910	
June	Zeppelin LZ7 'Deutschland' began passenger services in Germany.
1911	
February	Under the auspices of the British Army, Mr Henri Pecquet in a Humer-Sommer biplane flew 6,000 letters and cards 5 miles from Allahabad to Naini Junction (India) where they were transferred to rail.
March	Louis Breguet flew the world's first flight with passengers a distance of 5 kilometres (3.1 miles) in his Breguet biplane at Douai, France
April	The Air Battalion of the Royal Engineers was formed. The unit was intended to create a group of skilled military aviators that could be used to form field units in times of war.
June	An English aviator, Tom Sopwith, made the first charter flight, when he was hired by the firm Wanamaker's to deliver a pair of spectacles to Mr W.A. Burpee, a passenger on the liner Olympic, which had left New York harbour on a transatlantic voyage.
July-August	The Daily Mail Circuit of Britain Air Race from Brooklands. Four competitors completed the course, the first and winner of the £10,000 prize was Frenchman Jean Louis Conneau.
November	Italian Giulio Gavotti dropped several small bombs on Turkish troops during the Italo-Turkish War. This was the first time bombs were dropped from an aeroplane in war.
1912	
April	The Royal Flying Corps was formed. It included a naval branch, military branch, a central flying school at Upavon and an aircraft factory at Farnborough.
October	The first aerial bomb was used by Bulgarian Air Force pilots on the Turkish railway station during the Balkan War. This is the first use of an airplane specifically as bomber.
1913	
December	The first flight at an altitude of over 20,000 feet was made by Georges Legagneux, flying at 6,120 metres (20,079 feet) in his Nieuport Type IIN at St Raphael in France.

1914	
April	The battleship USS Mississippi and the cruiser USS Birmingham became the first aircraft carriers to be used in warfare.

WE'VE
FLOWN
TOGETHER
NOW
FOR
FIFTY
YEARS

Handley Page joined the Royal Air Force at the start — and its progenitors before that. Handley Page has been on active service ever since with a steady stream of famous aircraft... from the world's first successful heavy bombers, the big H.P. 0/400s and V/1500s of 1914/18... to the Hampdens and Halifaxes that gave Britain more than forty per cent of its offensive air power in the last war... and on to the massive Victor V-bombers of today.

Handley Page has a double reason for celebration — the RAF's half-century of splendid achievement and its own fifty years of unbroken service with the RAF.

Circle No 11 on Reader Service Coupon

1968

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