It was the genesis of aviation, as mankind first broke free of the shackles of Earth, taking our first tentative journeys aloft. We owe to these hardy pioneers our age of convenience and commerce where passengers and cargo cross the globe in hours rather than weeks. Without these aspiring aviators Neil Armstrong would have never set foot on the surface of the Moon, Concorde would not have traversed and tamed the mighty Atlantic Ocean and humanity would be firmly rooted to terra firma, able to look upon, but never able to reach out and float amongst the clouds. These intrepid adventurers balanced ingenuity with injury as their lives hung from a thin thread of good fortune, with Lady Luck as their co-pilot, their ramshackle contraptions were coaxed airborne in direct defiance of gravity. Against all the odds, they succeeded in their quest and our world was never quite the same again. We invite you to join these heroes in the ultimate aviation adventure, reliving their successes in five painstakingly recreated aircraft and authentic missions, to fly with the few whose exploits defined the course of human history.

“I cannot describe the delight, the wonder and intoxication, of this free diagonal movement onward and upward, or onward and downward....The birds have this sensation when they spread their wings and go tobogganing in curves and spirals through the sky.”— Alberto Santos-Dumont

Installation

Please insert the Early Years of Flight CD into your CD ROM drive and the installation should start automatically. If the autostart function has been deactivated, to start the installation you will need to click on My Computer, choose your CD or DVD drive and then double click the file with the name setup or setup.exe.
Once the installation has started please follow the on-screen instructions. During the install you will be asked to enter a serial key. This can be found on the front of the printed manual.

You have the choice of installing for Microsoft Flight Simulator 2004 or Microsoft Flight Simulator X. After you have chosen the version you wish to install, the installation programme will search the registry for the path to your installation of the simulator. This path will then be displayed for confirmation. Check that the displayed path is correct before you continue with the installation. If this path is not correct then you will have to manually navigate to the MAIN folder of your flight simulator installation.

The default installation of FSX will have installed the flight simulator to the following path:

C:\Program Files\Microsoft Games\Microsoft Flight Simulator X

And FS2004:

C:\Program Files\Microsoft Games\Flight Simulator 9

Should you wish to remove the Early Years of Flight expansion then click Start – All Programs – First Class Simulations – Early Years of Flight and choose Uninstall Early Years of Flight FSX to remove the FSX version or select Uninstall Early Years of Flight FS2004 for the FS2004 version.

Product Registration

Once you have installed the software we strongly recommend that you register this title with First Class Simulations. The key benefit of registering is that we can keep a record of your purchase, this means that we will have your serial number kept safely should you mislay it in the future. For protection of copyright we will not disclose new serial keys without proof of purchase.

Registration can be done on-line

http://www.contactsimulations.com/acatalog/ONLINE_REGISTRATION.html

or by e-mail to customers@firstclass-simulations.com

We no longer include cards for postal registration, if you do not have access to the internet you can telephone us on: 01869 338428.

There are a number of missions included for FSX users. Please refer to the documentation that you will find by opening the Windows Start menu and selecting All Programs/First Class Simulations/Early Years of Flight.

Wright Flyer Model B

The Wright Flyer model B was designed by Orville and Wilbur Wright in 1910 to capitalise on their success of the original model A. Whilst still retaining many of the features of the model A, the Model B generation benefitted from the inclusion of elevators on the tail. As such, the Model B became one of the first aircraft in the world to utilise elevators on the
tail to control aircraft pitch for cruise, climb and descent, a method still employed to this day.

The aircraft was designated as a two seater, with, rather alarmingly, the passenger and pilot seated side by side on the leading edge of the wing. Nevertheless, the aircraft proved extremely successful and soon went into full production and was the first US aircraft to be licenced for overseas production. Purchased by both civilians and the US military over 100 aircraft were built. There are currently believed to be 3 examples in museum preservation.

General characteristics

Crew: One pilot
Capacity: 1 passenger
Length: 26 ft 0 in (7.93 m)
Wingspan: 39 ft 0 in (11.89 m)
Wing area: 480 ft² (44.6 m²)
Empty weight: 800 lb (363 kg)
Gross weight: 1,250 lb (567 kg)
Powerplant: 1 × Wright, 35 hp (26 kW)

Performance

Cruise speed: 40 mph (64 km/h)
Range: 110 miles (177 km)

“Those who understand the real significance of the conditions under which we worked will be surprised rather at the length than the shortness of the flights made with an unfamiliar machine after less than one minute’s practice. The machine possesses greater capacity of being controlled than any of our former machines.”—Wilbur Wright
Blériot XI

The Blériot XI was a record breaking monoplane, manufactured from oak and poplar wood, with the surfaces being cloth covered. With its sleek, almost waspish appearance, the XI had remarkable aerodynamic properties offering unprecedented stability for an aircraft of this era.

It is perhaps best remembered for being the aircraft in which Louis Blériot entered the record books by crossing the English Channel from Calais to Dover on July 25, 1909 in 36.5 minutes. Visibility was poor and it was said that Blériot did not even possess a compass, but by maintaining a straight line after take-off he was eventually able to spot the White Cliffs of Dover looming out of the fog. By following the line of the cliffs he was able to spot the landing ground marked by a French reporter frantically waving the French flag. Flying more by luck than judgement, admitting that for over ten minutes he was blind and lost, Blériot successfully made the first flight across the Channel.

Blériot also unwittingly, was the first airborne arrival into the UK ever to be greeted by Immigration and Customs officials. Without any formal procedure in place for airborne travel it was decided by officials that Blériot would be regarded as a ship’s Captain and his aircraft would be regarded as a yacht for entry into the United Kingdom. Shortly thereafter, a procedure was put into place for all air travellers entering the UK, which lasts to this day.

General characteristics

Crew: one, pilot
Length: 7.62 m (25 ft 0 in)
Wingspan: 7.79 m (25 ft 7 in)
Height: 2.69 m (8 ft 10 in)
Wing area: 14 m² (150 ft²)
Empty weight: 230 kg (507 lb)
Powerplant: 1 × Anzani 3-cylinder fan-type, or 120° cylinder angle “true radial”, 16-19 kW (22-25 hp)
* Propeller: Chauvière Intégrale
Diameter: 2.08 m (6 ft 10 in)
Thrust: 105 kg @ 1,450 rpm (231.5 lb @ 1,450 rpm)
Performance
Maximum speed: 75.6 km/h (41 knots, 47 mph)

“I headed for this white mountain, but was caught in the wind and the mist . . . I followed the cliff from north to south, but the wind, against which I was fighting, got even stronger. A break in the coast appeared to my right, just before Dover Castle. I was madly happy. I headed for it. I rushed for it. I was above ground!” — Louis Bleriot, first across the English Channel.

Santos-Dumont 14-bis
The 14-bis was a biplane designed and built by Brazilian inventor Alberto Santos-Dumont. On October 23rd 1906 Santos-Dumont entered the record books by performing the first publicly witnessed European unaided take-off with a heavier than air aircraft. French authorities, looking to spur aviation development within the country announced that they would be holding a special contest. They offered prizes for the first heavier than air machine to be flown for 25 metres and the first to be flown for 100 metres. The challenge was on, and Santos-Dumont who was domiciled in Paris was determined to be a prize winner. In response the 14-bis was developed, apparently inspired by speedboats that Santos-Dumont had witnessed in action on the Cote D’Azur. His aircraft, made from exotic bamboo and Japanese silk utilised the Antoinette engine that was currently in vogue with the speedboat manufacturers.

Santos-Dumont made his first attempt at Bagatelle, France, on September 13th 1906 but mechanical issues with the cylinders robbed him of any prize. Undeterred a further attempt was planned for October 23rd. This time there was no mechanical error, and the 25 metre challenge was easily broken, coming close to simultaneously achieving the second target of 100 metres. The first prize was his, but the 100 metre prize was in Santos-Dumont’s sights. On November 12 1906 the 14-bis again took to the air, clearing the ground by only 10 feet but travelling for 220 metres, smashing the target of 100 metres and earning both prizes for its intrepid pilot.

As the Wright Brothers aircraft required complex launching catapults it is believed by many that Santos-Dumont heralded the real birth of practical aviation with the unaided 14-bis
General characteristics
Crew: one pilot
Capacity: one
Length: 9.70 m (31 ft 10 in)
Wingspan: 11.20 m (36 ft 9 in)
Height: 3.40 m (11 ft 2 in)
Wing area: 52 m² (560 ft²)
Empty weight: ? ()
Loaded weight: 210 kg (462 lb)
Powerplant: 1× Antoinette V-16, 37 kW (50 hp)

Performance
Maximum speed: 32 km/h to 43 km/s (25 mph/1.1.)
Range: >220 m (demonstrated) (>720 ft)
Wing loading: 5.7 kg/m² (1.2 lb/ft²)
Power/mass: 0.12 kW/kg (0.075 hp/lb)

In November 1909, during trials at Juvissy Airfield in France the aircraft took to the air, reaching an altitude of approximately 50 metres. The design was refined by Goliescu and by 1910 Goliescu returned to Romania to manufacture aircraft with the new tubular technology. This was not only the first aircraft to be built in Romania, but it was also adopted by the Romanian Air Force earning the accolade of being the first military aircraft in the world to use the now common tubular fuselage, and the second military aircraft in the world ever built, following the French and beating the Wright Brothers model B by some months in 1910.

The tubular design also allowed Goliescu to make advances in aircraft fuelling, offering larger fuel tanks than had hitherto been possible, paving the way for the first non-stop Atlantic Crossing in 1919 as a direct result of the new fuel storage technique being adopted by aircraft designers.
“What? Only sixteen hours! Are you sure?” — Orville Wright, on hearing about the first nonstop flight across the Atlantic, 15 June 1919.

**Handley Page Type E (H.P.5)**

Handley Page believed that if aircraft were able to carry passengers safely then they would be a much greater marketable proposition. His foresight has directly led to the immense airline industry of today.

He designed the Handley Page Type E, with the express intention of carrying a passenger with a degree of safety. The passenger would sit directly behind the pilot in a tandem configuration. The type E was first flown in April 1912 and was further modified after a minor accident in October of that year. In February 1913 the aircraft again took to the air with greater success. By April a new wing was introduced, using the newly designed concept of ailerons for greater control, rather than wing warping which had hitherto been the standard.

The aircraft went on to fly many hundreds of passengers over many thousands of miles, sparking the birth of the passenger aviation industry, albeit with a modest single fare paying passenger per flight! At the outbreak of war in 1914 the aircraft was requisitioned for military use but was quickly deemed unsuitable for combat requirements. Sadly the aircraft was neglected after this decision and never again took to the skies, but an ever increasing demand for passenger aircraft thereafter remains a testament to the vision of Handley Page.

![Handley Page Type E](image)

**General Characteristics**

- **Type:** Two-seat monoplane
- **Powerplant:** One 50 hp Gnome 7-cylinder rotary piston engine
- **Performance:** Maximum speed: 60 mph
- **Endurance:** 3 hours
- **Weights:** Empty: 800 lb
- **Maximum take-off:** 1,300 lb
- **Dimensions:** Span: 42 ft 6 in
- **Length:** 28 ft 2 in
- **Height:** 9 ft 4 in
- **Wing area:** 240.0 sq ft
“Apart from a few tricky minutes in low cloud near the North Downs the journey over Folkestone and Boulogne down to Beauvais was uneventful but wet and hardly ever over 200 feet above ground . . . we eventually landed at Le Bourget at 10:15 a.m. In those days the airfield consisted of several canvas hangars, some wooden sheds and a lot of mud.” — Jerry Shaw, first flight of a paying passenger from England to France.

**Technical Support & Troubleshooting**

Keep posted to www.firstclass-simulations.com for the latest info on Early Years of Flight including any updates that may be released. At www.firstclass-simulations, you can access the Frequently Asked Questions (FAQs) by clicking the PRODUCT SUPPORT/FAQS AND DOWNLOADS link on the left side of the main page. If your problem has not been addressed, or if you want to send any comments on Early Years of Flight, send an e-mail to support@firstclass-simulations.com and our support team will respond as soon as possible.

Before contacting technical support with a problem, be sure you have done the following:

- Followed the Install Guide completely
- Read the Readme file completely
- Have checked the website for any updates
- Have downloaded and installed any updates
- When contacting technical support, be sure to include the following information:
  - Your version of Microsoft Flight Simulator
  - Operating System (Window 95, 98, ME, XP, 2000, Vista)
  - The exact name of the product (Early Years of Flight)
  - Serial key (found on the manual cover)
  - Report any and all error messages reported or report the problem you are having by providing a step-by-step
  - If it is a visual problem, describe the screen with as much detail as you can.
  - Please do not send attachments unless permission is granted ahead of time. If screen-shots are required, please keep them as small as possible (100KB or less) in JPG format.

**Credits**

- Daniel Dunn: Aircraft
- Mike Hambly: Sounds
- Richard Donaldson: German translation and install.
- David Chester: Flight Dynamics