

Modern Aviation

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The Wright Brothers' First Plane

Photo by David Jamesom

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When many people think of flight, the first thing to come to mind is Orville and Wilbur Wright, who built and the piloted the first aircraft. While this happened over a century ago, people are still fascinated with the pictures of the first airplane.

Join us as we honour the forefathers of modern flight, and feature pictures of the Wright brothers' first airplane.

Research and Development

When you look at the Wright brothers' plane pictures, remember that designing, planning and building an aircraft takes a lot of time. Here are the major steps of their journey.

The first Wright aircraft was actually a glider flown on a string, much like a kite. To improve the model, they spent time observing birds to learn about wing shape and lift.

The kite glider then went through multiple iterations, and by 1900, they had developed a glider and successfully demonstrated it in a piloted flight.

More gliders were constructed after the flight, and by 1902 they decided to build a powered aircraft.

The result was the Wright Flyer – a biplane made out of wood. The engine was custom built, and they even carved the propellers by hand. People were amazed and couldn't wait to snap pictures of the Wright Brother's airplane.

The First Flight

On December 17, 1903, the Wright brothers decided to test their flying machine just outside of Kitty Hawk, North Carolina. Winds of over 20 miles per hour helped to gather the airspeed necessary for takeoff, and soon Orville was in the air – the first man to ever accomplish such a an amazing feat.

In-air photos are some of the most popular of all Wright brothers' airplane pictures.

The first flight lasted 12 seconds, and the plane travelled a mere 120 feet – but this proved that piloted flight of an engine-powered aircraft was possible. The Wright brothers improved upon the plane to create the Wright Flyer II, and in less than a year they were able to accomplish a flight of over five minutes.

Early Airplanes Pictures

Interest in flight is about as old as mankind. Throughout the years people have experimented with all kinds of flying instruments and aircrafts. Let us take you on a visual journey as we feature fascinating antique airplane pictures.



The Beginnings

Greek philosopher Archytas built a bird-shaped model back in 400 BC. Records claim that it flew about 200 meters.

From that time, mankind continued to explore flight with flying devices like kites, balloons and gliders. While people could achieve flight, for the most part these early attempts were unmanned.

Jean-Marie Le Bris was the first person to fly higher than his original departure point, using a glider named the Albatros. For those who like early airplanes, pictures of Albatross are as cool as they get.

Flight Is Achieved

The Wright brothers also began their exploration of flight with gliders. In 1900, they made many models that were flown successfully. After multiple designs, they eventually created the Wright Flyer.

The Wright Flyer was made of wood, with custom built propellers. To power the flying machine, the brothers commissioned an employee to make a combustion engine suitable for flight. Images of the Wright Flyer are among the most popular antique airplane pictures ever.

While others claim to have made the first flight, historians give credit to the Wright brothers, in 1903. They say it was the first ever manned flight of a powered and controlled aircraft that is heavier than air. It was a sustained flight that lasted 12 seconds.

Continued Development

After the Wright brothers' successful flight, people became obsessed with aircrafts. Many people began to build them, and pictures of these early airplanes were taken at air shows around the country.

Beyond amusement, much of the development of early airplanes was focused on military aircrafts. For example, the Curtiss Model H family was a series of flying boats, capable of landing on the water. These aircraft were used by British Royal Navy and the US Navy.

World War 1 Airplanes Photos

With the first official airplane flight by the Wright brothers in 1903, planes became an instant sensation. While many planes were initially built for amusement, it wasn't long before most of the developments of the time focused on creating military aircrafts.

When it comes to World War 1 airplanes, photos of the aircrafts began to appear in the pre-war days. While many military officers were doubtful about the use of WWI planes, pictures of their combat potential soon won over the sceptics. When design teams solved the problems concerning the mounting of machine guns on the planes, the combat aircraft was born.

Photo by David Jamesom

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Air-to-Air Combat

When it comes to World War I planes, pictures of the aircraft can be located for many different countries. The US, Britain, France, Italy, Russia and Germany all had military planes.

The first fighter aircraft made for air-to-air combat was the British plane the Vickers F.B.5. As you examine the image below, consider these facts.

The abbreviation F.B.5 stood for Fighting Biplane 5. A biplane is an aircraft with two stacked wings.

The F.B.5 was equipped with a Lewis gun, a light machine gun that was first used during WWI.

When it comes to World War I airplanes, photos of the F.B.5 are relatively scarce since it was only in service one year (1915-1916).

Soon after the world caught a glimpse of the British WWI airplanes, pictures of the German version – the Fokker E.I – came out. With improved technology, this aircraft could even fire through the propeller without hitting its blades.

Bombers

In terms of World War 1 planes, pictures of bombers are also a treat for aviation lovers.

Perhaps the most notorious bomber was the German Gotha G.V. This heavy bomber was capable of long range flights and was typically used for dropping bombs at night.

The Gotha G.V engaged in combat from 1917 to the end of the war in 1918. The Entente Powers had bombers of their own, including the Curtiss Model H family of flying boats (US), and the British Vickers Vimy.

Pictures of World War 2 planes

The Second World War, fought on two global fronts, and involving more than a dozen major world powers, ignited an arms race that rapidly advanced the technology used in armed air combat. Numerous iconic and heavily used aircraft were put into service during the nearly decade of war in Europe and the Pacific.

We've gathered some of these WW2 aircraft pictures to show you exactly what was in the sky during those years and what impact the aircraft had in the fight.

P-51 Mustang (North American)



No plane during World War II was as successful as the P-51 Mustang. Introduced late in the war by the United States, the Mustang carried 281 Ace pilots and spearheaded the success of Allied fighters in retaking the skies of Europe.

Fw-190 (Focke-Wulf)



The Fw-190 arrived in 1941 and was a wakeup call for Allied fighters who had been developing a keen sense of superiority in the air battles in recent years. Otto Kittel piloted one of these and they were used as bombers and fighters alike across Europe.

Spitfire (Supermarine)



While the Mustang may be a gamechanger, the Spitfire was the aircraft that defined the Allied effort in Europe. One of the most famous airplanes in history, no collection of World War 2 airplane pictures would be complete without this machine. This is one of the best fighters ever built.

A6M Zero (Mitsubishi)

Photo by David Jamesom

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Japan's signature fighter, the A6M Zero was a smaller, more nimble plane than any American plane at the time. It was carrier-borne as well, giving it the kind of range that no other plane could match until the F6F Hellcat was introduced.

Il-2 Shturmovik (Ilyushin)

Photo by David Jamesom

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The Il-2 was a tank buster with a great combat record, and with more than 36,000 of them built by the Soviet Union during the war, it is also the most numerous on this list. Germans were terrified of the plane and it had a huge impact on the war on that front.

Bf-109 (Messerschmitt)



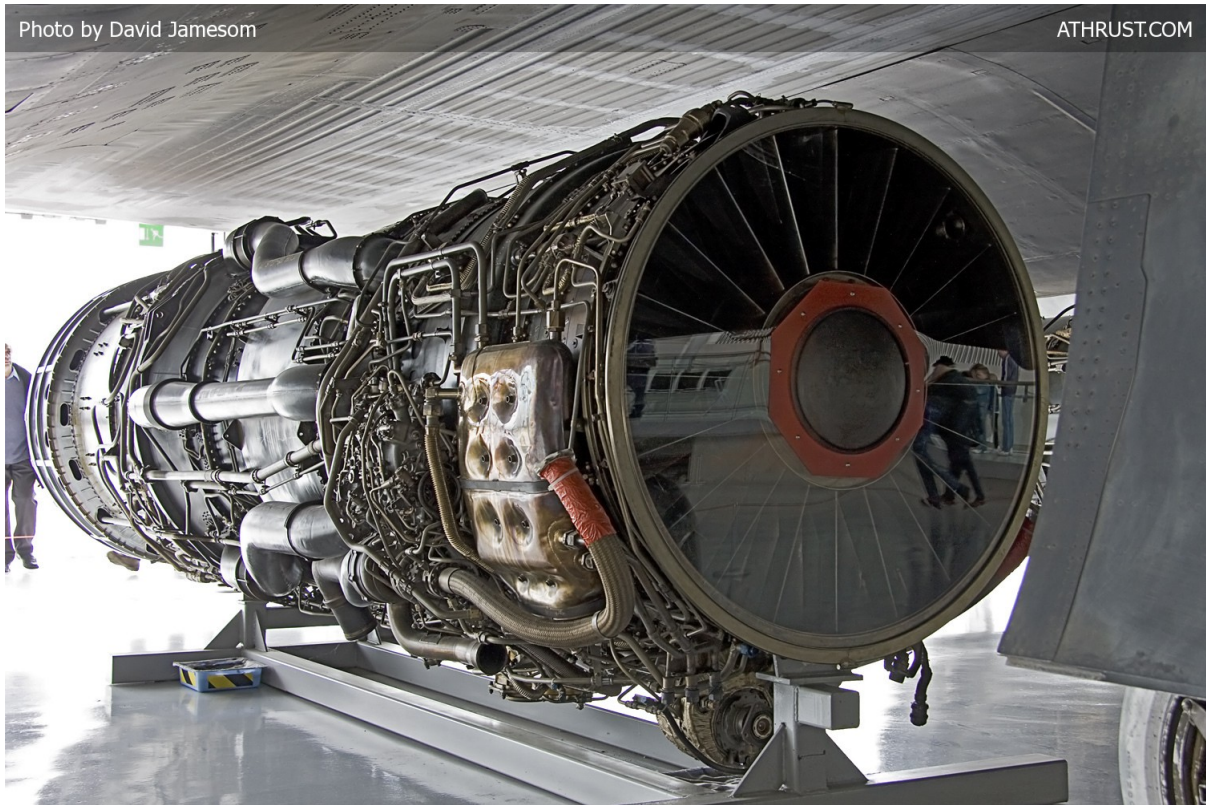
Germany produced numerous planes during the war, always trying to wrest control of the skies from Britain and later the US. The Messerschmitt was their best effort in the early years of the war and was on par with the Spitfire in many ways, but because they were used primarily as escorts, they were often outmatched by higher altitude fighters like the Spitfire. There are plenty of WWI airplane pictures of these and Spitfires alike.

While the skies over Europe and the Pacific were filled with dozens of different aircraft from all of the world's major powers, the WWII aircraft photos above are among the most popular from that era.

Due to their superior combat records, flight capabilities, speed, and firepower, these aircraft became symbols of the efforts made by the countries who flew them. As far as pictures of war planes go, these are among the most common you will see.

Jet engine pictures

The Airbus A380 is the largest commercial passenger airplane in the world. With a maximum take-off weight of 1.2 million pounds, it is amazing that something so large and so heavy can even get off the ground.



So how exactly does an airplane fly?

The answer to that question is complex and requires a scientific explanation of forces like lift, weight, thrust and drag. Today we're going to focus on thrust while featuring some great pictures of jet engines.

How a Jet Engine Works

Jet engines are complex machines that are created by engineers and scientists – but that doesn't mean that you can't have a fundamental understanding of how one works. As you examine the jet engine images on this page, consider this information:

- At the front of every jet engine is a fan that sucks air into the engine.
- The air then flows to a compressor, which is a series of fans and blades in the middle of the engine. It is the compressor's job to compress the air – which means to raise the pressure of the air.
- This high pressure air is then sprayed with fuel, and then ignited with a spark to start a flame. Gases and fire rush out the back nozzle of the jet engine. The flaming gas is sometimes visible in pictures of jet engines and airplanes themselves, particularly at night.

- The backward motion of gases rushing out actually pushes the aircraft forward. The forward motion is known as thrust and is one of four necessary forces required for a plane to take flight.

The Turbofan Engine

Most jet engine images you'll see on airplanes are actually turbofan engines.

A turbofan engine is a specific type of jet engine that is used on most modern aircraft. It operates slightly differently than the basic jet engine model. In particular, it generates thrust not only through the compressor (otherwise known as the core) but also from the fan itself.

For this reason, the turbofan is known as an "air-breathing" jet engine.

Airplanes use the turbofan engine because it produces high thrust but operates with good fuel efficiency. Next time you're in an airplane, you can thank the turbofan engine for thrusting you forward.

5 Biggest airplanes in the world

The first airplane ever constructed and successfully flown was the Wright Flyer. At 605 pounds, people couldn't believe that something so heavy could actually fly. However, on December 17, 1903, Orville Wright piloted the plane for a 12-second flight.

When it comes to big airplanes, pictures definitely tell the best story, so we've compiled a list of the world's top five biggest planes.

5. The C-5 Galaxy – The first on our list of big airplane pictures is the C-5 Galaxy, the largest strategic airlifter in the US Armed Forces. It can carry 840,000 pounds total, including up to 375 troops.



4. The An-124 – If you like big airplane pictures, you've got to love this one. The An-124 is a heavy transport plane used by the Russian military. First flown in 1982, it is the Russian answer to the C-5 Galaxy. Although it only holds 88 passengers, it has a maximum capacity of just under 900,000 lbs.



3. The Airbus A380-800 – If you take a trip on Singapore Airlines you just might be able to ride in one of these passenger planes. It fits up to 853 people on two decks, and has over 5,000 square feet of floor space in the cabin.



2. The Hughes H-4 Hercules – This airplane has the largest wingspan of any aircraft in history, measuring in at 320 feet. The interesting thing is that it is actually a flying boat that was used during WWII. Known as the Spruce Goose, it was constructed out of wood and only made one flight.



1. The An-225 – Topping the chart of big plane pictures is the An-225 – the largest and heaviest aircraft in the world. With a maximum take-off load of over 1.3 million pounds, it has been used to transport things like locomotives, 150-ton generators, and wind turbine blades.



Airplane Runway

Photo by David Jamesom

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The runway, otherwise known as the landing strip, is the designated area where planes take off and land. As such, runways have to be well planned and marked carefully to avoid confusion and collisions. As you enjoy the photos of airplane runways below, consider these interesting facts.

- Most runways are named with a number, ranging from 01 to 36. The number corresponds to the angle of the runway, measured in degrees. For example, the 09 runway will point at 90 degrees (east) and the 18 runway will point at 180 degrees (south).
- As you inspect the photos of airplane runways below, you'll see many markings and signs. The markings show distances such as the length of a runway for a takeoff and the distance available for a landing.
- When you check out airplane runway pictures, you'll notice that most major runways are paved with asphalt or concrete. However, some airplane runway images show alternative surfaces, like grass, dirt, and even ice.

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