

Year	Milestone
1903	First flight
1906	Rotary motor
1907	Joystick
1908	Fins
1909	Turbo-prop Coandă
1910	Air-to-ground radio link
1911	200 km/h
1912	Automatic pilot
1913	All-metal aircraft
1914	Air-air radio link
1915	Firing through propeller
1916	
1917	
1919	
1920	
1921	
1922	Flight refueling
1923	Radionavigation
1924	
1925	
1926	
1927	
1928	
1929	Operational retractable landing gear
1930	
1931	
1932	
1933	Ground based radar
1934	
1935	
1936	Airborne radar
1937	Jet engine
1938	
1939	Ramjet
1940	Jet aircraft
1941	Operational ejection seat
1942	
1943	Axial flow reactor
1944	Air-surface missile
1945	
1946	Aircraft fitted with ramjet
1947	Sound barrier broken
1948	Afterburner
1949	
1950	Servo-control
1951	
1952	
1953	Mach 2
1954	
1955	Inertial navigation
1956	Vertical takeoff and landing
1957	
1958	Mach 3
1959	
1960	Integrated circuits
1961	
1962	
1963	
1964	"Swing wing"
1965	
1966	
1967	
1968	
1969	
1970	
1971	
1972	
1973	Artificial stability
1974	
1975	
1976	
1977	GPS
1978	
1979	
1980	Stealth technologies
1981	
1982	
1983	High manoeuvrability
1984	
1985	Integral design using CAD/CAM
1986	
1987	Integral design using CAD/CAM
1988	
1989	Vectorial thrust and removal of the fin
1990	
1991	Integral design using CAD/CAM
1992	
1993	Super cruise
1994	
1995	Operational electronically scanning antenna on jet fighter
1996	
1997	
1998	
1999	
2000	
2001	UCAV
2002	
2003	Two X-45A UAVs fly simulated combat mission
2004	
2005	
2006	
2007	
2008	
2009	
2010	
2011	
2012	
2013	First aircraft carrier takeoff/landing of an UCAV
2014	
2015	
2016	
2017	
2018	
2019	
2020	
2021	
2022	First flight with 100% sustainable aviation fuel (SAF)
2023	
2024	

Timeline of Aviation Milestones:

- 1903: Wright brothers flight
- 1907: First lift of a rotary wing aircraft
- 1908: First closed-circuit flying kilometer
- 1909: Louis Blériot crosses the Channel
- 1910: Aircraft participation in military manoeuvres over Picardie (observation)
- 1911: First deck landing
- 1912: Turco-Italian War: first military use of aviation (observation, bombing)
- 1913: Roland Garros crosses the Mediterranean
- 1914: First regular passenger service
- 1915: First air combat
- 1916: Battle of Verdun: first aerial battle in history
- 1917: First flight across the Atlantic from West to East by John Alcock and Arthur Whitten Brown
- 1918: Creation of the Royal Air Force
- 1919: First airlines
- 1924: First round the world flight
- 1927: Charles Lindbergh's solo flight across the Atlantic from West to East
- 1928: Creation of the French Air Ministry
- 1930: Deudonné Costes and Maurice Bellonte cross the Atlantic from East to West
- 1934: Amelia Earhart's solo flight across the Pacific
- 1935: Creation of the Luftwaffe
- 1936: Bombing of Guernica
- 1937: Battle of Britain
- 1940: Pearl Harbour
- 1941: First launch of V2 missile
- 1942: Me 262, first operational jet fighter
- 1943: Battle of the Marianas, air combat
- 1944: Atomic bombing of Hiroshima and Nagasaki
- 1945: First aerial combat with jet fighters (P-80 against MiG-15)
- 1946: Creation of the US Air Force
- 1947: First airline to use a jet aircraft (BOAC with the Comet)
- 1948: Sputnik, first artificial satellite
- 1950: First flight of the P 1127 vertical takeoff aircraft, prototype of the Harrier
- 1951: First flights of the Alouette II, Caravelle and Mirage
- 1952: Yuri Gagarin, first man in space
- 1953: First spacewalk, by Alexei Leonov
- 1954: Neil Armstrong, first man on the Moon
- 1955: First flight of the Boeing 747
- 1956: First flight of the A 300B
- 1957: First Ariane launch
- 1959: First launch of a space shuttle
- 1960: Jean-Loup Chrétien, first French astronaut
- 1961: First non-stop flight around the world
- 1962: First parts of the Mir station sent into orbit
- 1963: Launch of the Hubble space telescope
- 1966: Ariane 5
- 1967: First Chinese manned space flight
- 1968: First non-stop solo round the world flight by a plane (GlobalFlyer)
- 1969: Europe's Huygens probe lands on Titan
- 1970: Successful maiden launch of the new Vega rocket
- 1971: First stage of SpaceX Falcon 9 launcher lands back on Earth
- 1972: Starship reusable launcher first flight
- 1973: James Webb Space Telescope launched
- 1974: Last launch of the U.S. Space Shuttle
- 1975: Construction of ISS completed
- 1976: The IXV (Intermediate eXperimental Vehicle) atmospheric reentry demonstrator's first mission
- 1977: Operational use of observation drones (HALE and MALE)
- 1978: First manned private space flight by SpaceShipOne
- 1979: First flight of the Airbus A 380
- 1980: First flight of the Airbus A 380
- 1981: First flight of the Airbus A 380
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- 2024: First flight of the Airbus A 380

+10,000  
aircraft sold within  
a century in more  
than 90 countries





THE FAMILY OF WINGS

First flights



**1916 Éclair propeller**  
This first airplane product developed by Marcel Bloch<sup>(1)</sup> was used on French and Allies airplanes, notably the Spad VII flown by French ace Georges Guynemer.



**1918 SEA IV**  
First production aircraft by Marcel Bloch.



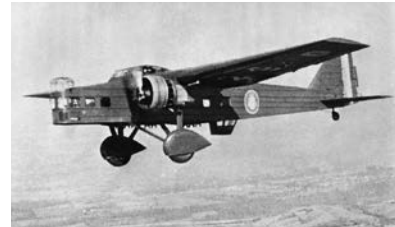
**1930 MB-60**  
First all-metal postal French aircraft.



**1932 MB-80**  
First French all-metal ambulance aircraft.



**1932 MB-120**  
First Bloch production commercial airliner.



**1933 MB-200**  
First Bloch bomber ordered, mass-produced and exported.



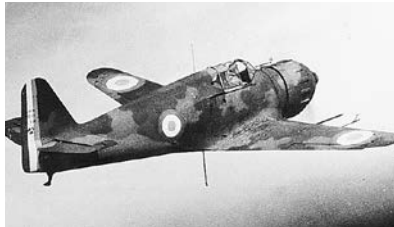
**1935 MB-210**  
Bomber with a retractable gear and variable pitch propeller, produced and exported.



**1936 MB-220**  
First Bloch production airliner, used by Air France.



**1937 MB-160**  
First Bloch production four-engine airliner.



**1938 MB-152**  
First mass-produced and exported Bloch fighter.



**1939 MB-174**  
First Bloch production recon aircraft, piloted by Antoine de Saint-Exupéry.



**1947 MD-315 Flamant**  
First Dassault production aircraft after World War II.



**1949 MD-450 Ouragan**  
First French production jet fighter, exported.



**1951 MD-452 Mystère II**  
First French production aircraft to break the sound barrier in a dive.



**1952 Mystère IV**  
First French production supersonic jet for the French Air Force, exported.



**1956 Étendard IV**  
First French production carrier-based jet fighter.



**1956 Super Mystère B2**  
First European production supersonic aircraft with afterburner, exported.



**1956 Mirage III**  
First European aircraft to reach Mach 2, produced and exported.



**1959 Mirage IV**  
First production bomber for the French Strategic Air Force arm.



**1961 Balzac V 001**  
Prototype of the only vertical takeoff aircraft to have reached Mach 2.



**1963 Mystère Falcon 20**  
First Dassault Aviation business jet, selected by Charles Lindbergh for Pan Am.



**1965 MD-620**  
First post-WWII European ballistic missile.



**1966 Mirage F1**  
First Dassault production jet fighter with integrated digital weapons suite, exported.



**1967 Mirage G**  
Swing wing jet prototype whose G8 version reached Mach 2.34.



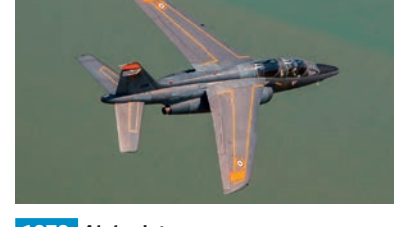
**1968 Jaguar**  
First Dassault production jet fighter built as a cooperative venture, exported.



**1970 Falcon 10**  
First business jet fitted with a wing designed using 3D computer modelling, produced and exported.



**1971 Mercure**  
First jointly-built production jet airliner.



**1973 Alpha Jet**  
First Dassault trainer jet built as a cooperative venture, exported.



**1974 Super Étendard**  
First French carrier-based production jet fighter with modern weapons system, exported.



**1976 Falcon 50**  
First business jet in the world with a supercritical wing, exported.



**1978 Mirage 2000**  
First European operational jet fighter with artificial stability, exported.



**1979 Mirage 4000**  
First jet fighter in the world with composite fin with built-in fuel tank.



**1981 Atlantique 2**  
First Dassault production maritime patrol aircraft.



**1983 Mirage 2000 N**  
First French production jet fighter with automatic terrain following.



**1984 Falcon 900**  
First business jet designed as 3D digital model, exported.



**1986 Rafale A**  
First technological demonstrator of a multirole jet fighter fulfilling the joint specifications of the French Air Force and Navy.



**1991 Mirage 2000-5**  
First French multirole jet fighter, produced and exported.



**1991 Rafale C 01**  
First single-seat "omnirole" fighter, French Air Force variant.



**1991 Rafale M 01**  
First single-seat "omnirole" fighter, French Navy variant.



**1991 Mirage 2000D**  
Penetration and deep attack production jet fighter.



**1993 Rafale B 01**  
First two-seat "omnirole" fighter, French Air Force variant.



**1993 Falcon 2000**  
First business jet built without a physical model, exported.



**2000 Mirage 2000-9**  
First European production jet fighter with avionics comprising a modular data processing suite, exported.



**2002 Falcon 900EX EASy**  
First business jet in the world with enhanced avionics and intuitive cockpit, exported.



**2005 Falcon 7X**  
First business jet in the world equipped with a fully digital control system, exported.



**2009 Falcon 2000LX**  
Intercontinental business twinjet, EASy flight deck, exported.



**2010 Falcon 900LX**  
Intercontinental business trijet, EASy II flight deck, exported.



**2011 Falcon 2000OS**  
Transcontinental business twinjet, EASy II flight deck, exported.



**2012 nEURon**  
First European stealth UCAV (Unmanned Combat Air Vehicle) technology demonstrator.



**2013 Falcon 2000LXS**  
Intercontinental business twinjet, EASy II flight deck, exported.



**2015 Falcon 8X**  
Ultra-long-range business trijet, EASy III flight deck and new-generation all-weather flight management systems, exported.



**2015 Falcon 2000 MRA/MSA**  
Maritime recon/surveillance aircraft, exported.



**2021 Falcon 6X**  
Long-range twinjet with first ultra-wide-body in the world, exported.



**2025 Falcon Albatros**  
The Falcon 2000LXS designed for the French Navy, modified for surveillance and intervention missions.

Rafale exports



**2015 Egypt**  
In February, Cairo signed the first Rafale export contract, for 24 fighters. In 2021, Egypt purchased another 31 aircraft.



**2015 Qatar**  
In May, Doha placed an initial order for 24 Rafales, and 12 more in December 2017.



**2016 India**  
In September, New Delhi acquired 36 Rafales for the Indian Air Force.



**2021 Greece**  
In January, Athens ordered 18 Rafales (including 12 second-hand), and 6 more in March 2022.



**2021 Croatia**  
In November, Zagreb signed a contract for 12 Rafales previously in service in France. Croatia is the second European country to choose Rafale and a new military customer for Dassault Aviation.



**2021 United Arab Emirates**  
Signed on December 3, the UAE order for 80 Rafale is the biggest in the history of Dassault Aviation.



**2022 Indonesia**  
Indonesia signed a contract for 42 Rafales, in February. It is a new customer and the 2<sup>nd</sup> in the Indo-Pacific region.



**2024 Serbia**  
In August, Serbia ordered 12 Rafales. This new customer is the 3<sup>rd</sup> in Europe and the 8<sup>th</sup> worldwide for Rafale.



**2025 India**  
In April, New Delhi ordered 26 Rafale for the Indian Navy.

Developments



**2019 Falcon Archange**  
In December, France notified the program for the strategic intelligence Falcon 8X Archange.



**2020 New Generation Fighter (NGF)**  
Development of a new generation combat system demonstrator, led by Dassault Aviation, in cooperation with Germany and Spain.



**2021 Falcon 10X**  
In May, reveal of the Falcon 10X, a top-notch ultra-long range, high speed, twin-engine business jet fully compatible with SAF.



**2024 Rafale F5 and UCAS**  
In October, the French Minister of the Armed Forces announced the development of a combat drone operating in tandem with the Rafale F5 after 2030, and adapted to collaborative combat.



<sup>(1)</sup> Bloch changed for Dassault in 1947.