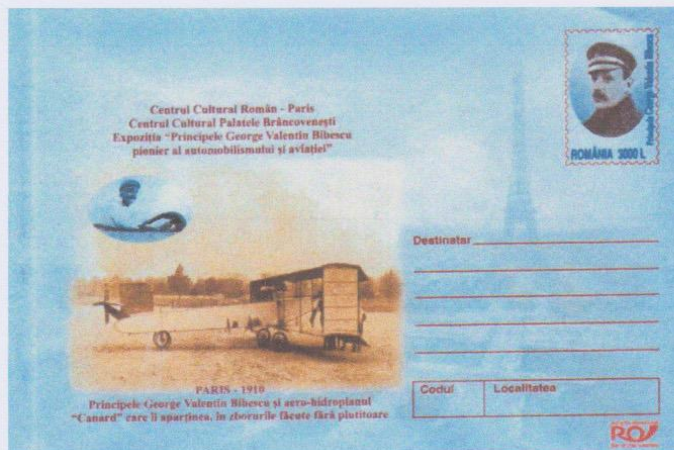


FLIGHT IN ROMANIA

PRESENTATION

Romania has a rich tradition in the aviation sector. At the beginning of the 20th century, pioneers such as Traian Vuia, Aurel Vlaicu, Henri Coanda and George Valentin Bibescu made a fundamental contribution to the history of early aviation with the construction of revolutionary airplanes and changing the mentalities of the time. In the history of the invention of the plane, there are several brilliant Romanian characters such as, for example, Traian Vuia (the inventor who designed, built and flew the first heavier-than-air self-propelled plane in Europe, in 1906), Aurel Vlaicu, the avant-garde airplane manufacturer, inventor and pilot of aircraft and Henry Coanda, the inventor, aerodynamics pioneer and manufacturer of the world's first propulsion plane, the Coanda-1910, Hermann Oberth, one of the fathers of the astronautics and finally the first Romanian astronaut Dumitru Dorin Prunariu.

In this short collection of only 30 maximum cards, I will try to describe the long, fascinating and extraordinary history of flying in Romania through its heroic protagonists and in all its many aspects.



Romania- Stationery cover 2002 - Paris - Exhibition Prince G.V.Bibescu pioneer of aviation

COLLECTION PLAN

PRESENTATION AND COLLECTION PLAN

VUIA - WRIGHT - VLAICU - COANDA

AIRSHIP AND GLIDERS

BLERIOT - BN 2 - TUPOLEV - DE HAVILLAND DH-9

IAR 80 - IAR-817 - ILYUSHIN IL-18 - BOEING 707

BAC 1-11 - IAR-330 - HERMANN OBERTH - DUMITRU PRUNARIU

SHEET 1

SHEETS FROM 2 TO 7

SHEETS FROM 8 TO 10

SHEETS 11 AND 12

SHEETS 13 AND 14

SHEETS 15 AND 16

VUIA - WRIGHT - VLAICU - COANDA

FLIGHT PIONEERS IN ROMANIA

Traian Vuia (Bujoru, 17 August 1872 - Bucharest, 3 September 1950) was a Romanian inventor, a world aviation pioneer, who designed, built and flew the first fully autonomous propulsion airplane

Traian Vuia

Issue 18-12-1978 Romania
Spec. cancell. 17-8-1982 Judetul Timis
Celebration of 110th anniv. birth
Edition A.F.R. Timis
Cercul Filatelic Timisoara



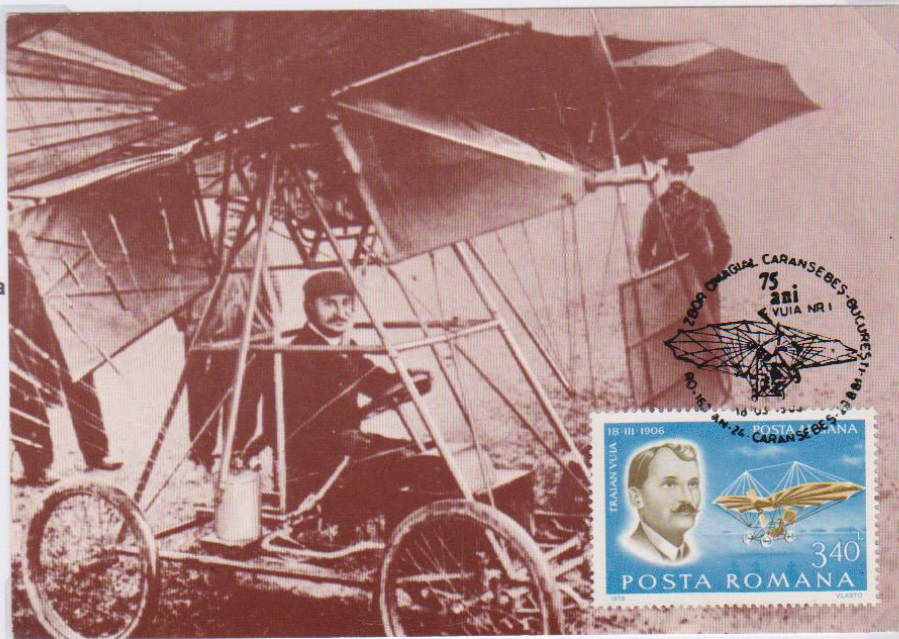
It was in fact the first vehicle heavier than air that managed to take off without any external help: in fact the Traian Vuia aircraft detached from the ground on March 18, 1906 (the Wright brothers' aircraft, whose first flight had taken place three years first, it took off instead with the help of a catapult, while Alberto Santos-Dumont's flight took place a few months later). With his inventions, Vuia was the first to demonstrate that a flying machine can lift itself up into the air while traveling on wheels on a normal road.

Wright Brothers 17-12-1903
Issue 18.12.1978
Romania
Spec. cancell. 19.4.1981
Buzau
Pioneers Aviation Day
Edition Not indicated



**VUIA - WRIGHT
VLAICU-COANDA**

Cent. of the flight
of Traian Vuia
Issue 18-12-1978 Romania
Spec. cancell. 18-3-2006
Bucharest - variant
Edition not indicated



Traian Vuia continued to believe in his project and on February 16, 1903, he sent it to the French Academy of Sciences (therefore, exactly ten months before the Wright brothers' flight - December 17, 1903), presenting both the possibility of flying with a more heavy air, both the take-off process: the project was rejected as utopian, with the added comment:

"The problem of flying with a machine that weighs more than air cannot be solved and it is only a dream".

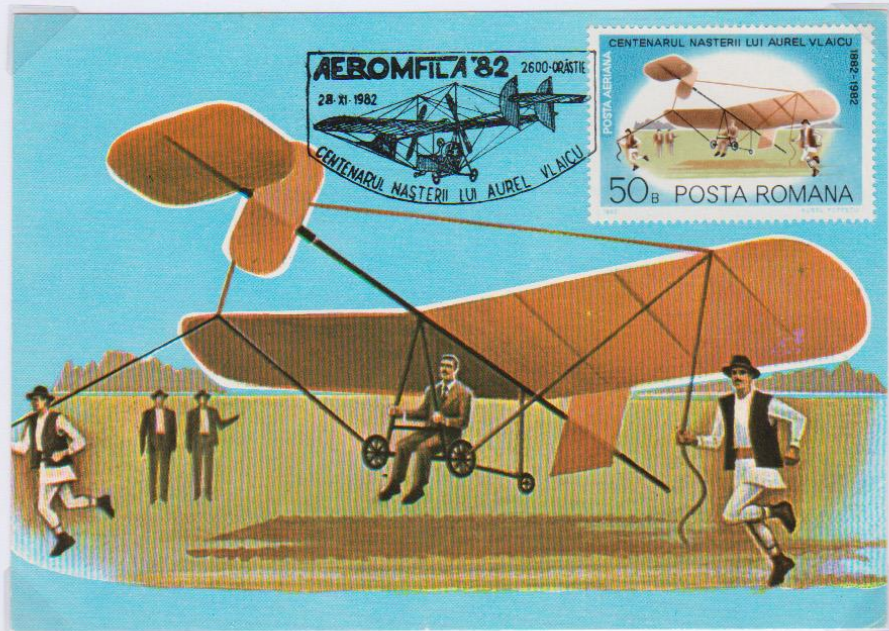
Despite all this refusal, Vuia did not give up and filed for the patent, which was granted to him on August 17, 1903 and which was published on October 16, 1903 (respectively four and two months before the Wright brothers' flight). His patented invention was called airplane-automobil. The problem of flying with a machine that weighs more than air cannot be solved and it is only a dream".



Cent. of the flight of
Traian Vuia
Issue 18-12-1978
Romania
Spec. cancell. FD 18-
3-2006 Bucharest
Edition Rom filatelica

**VUJIA - WRIGHT - VLAICU
COANDA**

Aurel Vlaicu: Cent. birth
Issue 27-9-1982 Romania
Spec. cancell.28-11-1982
Orăștie
AEROMFILA '82
Edition Oset.com



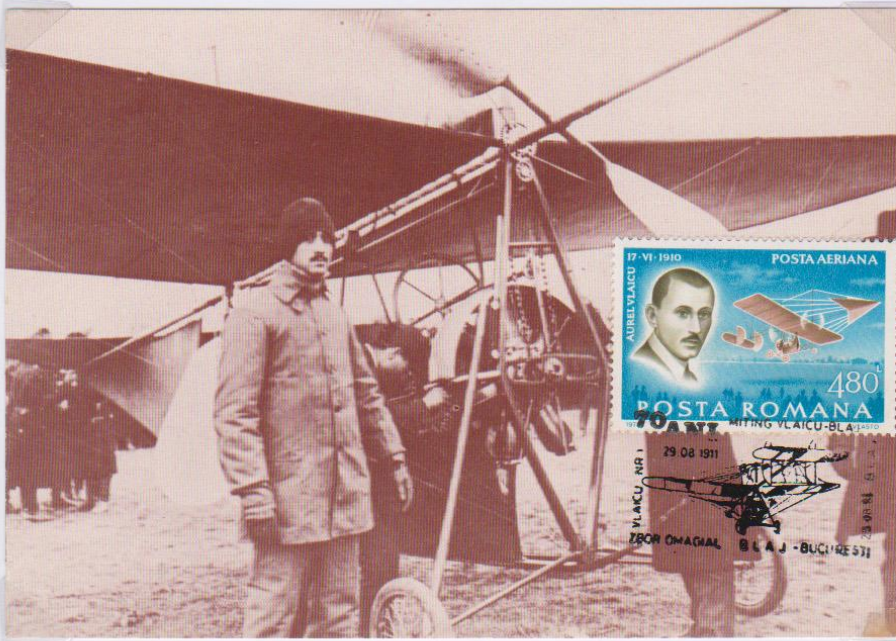
Among the visionary and enthusiastic aviation pioneers, Romanians also include **Aurel Vlaicu**, the avant-garde airplane manufacturer, inventor and airplane pilot. Aurel Vlaicu was born in Bințiți (now renamed Aurel Vlaicu), near Orăștie, in Transylvania, the famous historical region of Romania. He attended the Calvinist High School of Orăștie (renamed "Liceul Aurel Vlaicu" in his honor in 1919), graduating in 1902.

His remarkable skills in the fields of geometry and mathematics as well as his ambition to discover the secrets of flying led him to register at the Technical University of Budapest. Dissatisfied with the lack of documentation relating to flying machines, he left the university after two quarters of studies and enrolled at the Ludwig-Maximilians university in Munich, where he graduated in 1907.

One of his most ambitious dreams was to build a flying machine for his country. Therefore, Vlaicu returned to Romania and, facing numerous bureaucratic difficulties and strong rivalries, he built a glider with which he undertook a series of flights. The successes with the glider encouraged him to build an original arrow-shaped airplane with the Arsenal of the Army in 1910. On June 17, 1910 on the Cotroceni field, near Bucharest, Vlaicu took off for the first time, flew about 40 meters to 3-4 meters high and landed quickly. This flight is one of the most important events in the history of Romanian flight. During the summer of 1910, Vlaicu flew several times at heights greater than hundreds of meters and lengths of several kilometers. Since that summer, his plane could have competed with the best airplanes in the world.



Aurel Vlaicu
Issue 18-12 1978
Romania
Spec. cancell.18-4-1981
Buzau
First piloting school
Romanian Aviation
Edition Not indicated



**VUIA - WRIGHT -
VLAICU – COANDA**

Aurel Vlaicu

Issue 1978 Romania
Spec.cancell.29-8-
1981 Bucharest
Commem. flight Vlaicu
Edition not indicated

Variant

Vlaicu called his first prototype aircraft "Vlaicu I", and managed to fly it without any modification to the first project which was exceptional for that time. Vlaicu performed his plane during some military exercises carried out in the autumn of 1910, effectively making Vlaicu I the first Romanian military plane. In 1910, on board "Vlaicu I" and, a year later, on board the second plane "Vlaicu II", which he personally designed and built, Aurel Vlaicu was able to demonstrate remarkable performances with his planes flight.

Using his second plane "Vlaicu II", he participated in the international flight competition of June 1912 which was held in Aspern - Vienna. Because of his achievements during the competition, the press of that time considered Aurel Vlaicu the second pilot of the competition after the famous French aviator Roland Garros. The originality of the aircraft design solutions lay in the arrow shape the front position of the depth rudder, the wing of the airplane with variable height that it adopts during the flight. The field of vision open for the pilot, regardless of the flight route, was characteristic of his aircraft.

Aurel Vlaicu
Issue 10-8-1972 Romania
Spec. Cancell. FD
Bucharest
Edition CP.CS





VUIA - WRIGHT - VLAICU – COANDA

Encouraged by the successes achieved with his plane, Vlaicu made the courageous decision to cross the Carpathians from the southern part of the country to Transylvania. On September 13, 1913, on board his "Vlaicu II", while trying to cross the Carpathians, he made an unfortunate flight error and crashed near the Banesti village. After Vlaicu's death the plane was completed by his good friends Giovanni Magnani and Constantin Silisteanu, and in 1914 several short experimental flights were made. Giovanni Magnani was a Romanian-Italian entrepreneur who lived in Bucharest in the early 20th century. In 1911 he made a series of propellers for a Vlaicu II airplane thus becoming the first propeller manufacturer in south-east Europe. Before meeting Vlaicu, Magnani had built an ornithopter in Bucharest in 1910 that never flew. Parts of the wreck are kept in several Romanian museums: the Aurel Vlaicu Memorial, the National Military Museum of Bucharest and the Air Force Museum of Bucharest.

Aurel Vlaicu
 Monument in Branesti Prahova
 Issue 8-11-1982 Romania
 Spec. cancell. FD Branesti
 Cent. birth of Auel Vlaicu
 Editura Meridian

Henri Marie Coandă, Bucharest, 7 June 1886 - Bucharest, 25 November 1972) was a Romanian scientist and engineer. Aviation pioneer, physicist and inventor, creator of the jet engine and discoverer of the effect that bears his name. He was the son of General Constantin Coandă, Prime Minister of Romania in 1918. In 1910 he presented the first jet aircraft (only 7 years after the first flight of the Wright brothers) thus giving birth to the first aircraft with a jet engine in the history of the aeronautics. Henri Coandă is also famous for discovering the so called Coandă effect, an important fluid dynamic phenomenon.

Henri Coanda
 Issue 24-1-1983 Romania
 Spec. cancell. 9-6-1983 Pucioasa
 Model aircraft competition
 Memorial Henri Coanda
 Edition AFR Filiala Dimbovita



**VUIA - WRIGHT -
VLAICU - COANDA**

Henri Coanda

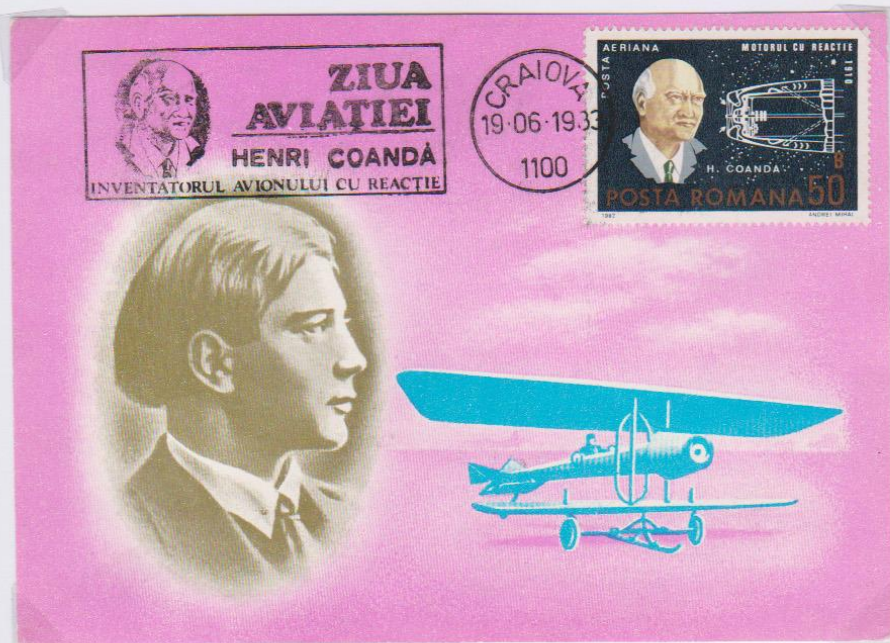
First flight of a jet plane
1910

Issue 1-12-1970 Romania
Spec. cancell.FD
Bucharest
Edition CP.CS



Between 1911 and 1914 he designed several aircraft, known as Bristol-Coandă aircraft and introduced the first twin-engine aircraft for a single propeller. These planes became famous for their stability and maneuverability compared to the competition, and enjoyed wide diffusion among the major world fleets, including Romania. Bucharest Otopeni International Airport is dedicated to him.

In 1934 he obtained a French patent on the method to divert a jet of fluid that enters a different fluid, referred to as the "Coanda effect" and which consists in the diversion of a flow of fluid that flows along a convex wall, a phenomenon noted in 1910, when testing its first jet plane. In 1934 he made use of this principle to build the first hovercraft and for the first project of "flying saucer" or "Aerodina Lenticulara" for the shape of a lens, capable of performing a vertical flight, even stationary, without the aid of propellers or moving mechanical parts. This aircraft first flew in 1954 and was very similar in shape to the VZ-9-AV Avrocar, developed by Avro Canada before being purchased by the USAF and classified as a secret project.



Henri Coanda
Jet engine
Issue 24-1-1983
Romania
Spec. cancell. 19-6-
1983 Craiova
Aviation Day
Edition Filiala AFR
Dolj



**AIRSHI PAND
GLIDERS**

**Airship LZ 127 Graf
Zeppelin**
flies over Bucharest on
16-10-1929
Issue 1978 Romania
Cancell. 1978
Bucharest
Edition not indicated

The LZ 127 Graf Zeppelin was a rigid airship built in 21 months by the Officine Zeppelin of Friedrichshafen, which entered service on September 18, 1928. The Graf Zeppelin was the passenger ship that was most successful in that period. Originally built as an experimental airship, the LZ 127 proved so reliable that it was soon used for spectacular travel, including around the world and the arctic crossing.

The **British Airship R-34** landed in New York on July 6, 1919, , completing the first crossing of the Atlantic Ocean on an airship. The chronicles of the time say it was as large as an battleship and compare it to the "Dreadnought", which entered service in the British Royal Navy in 19



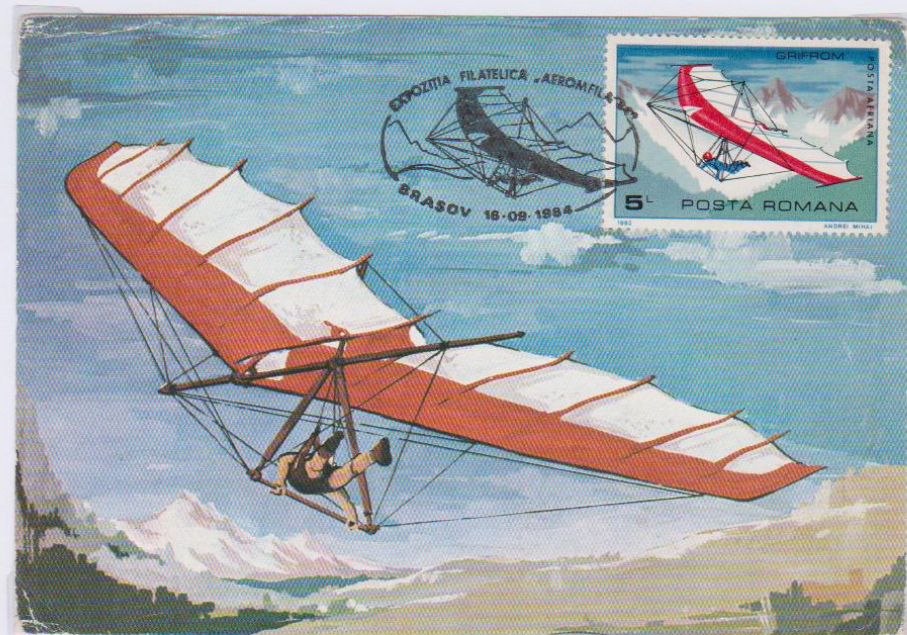
British airship R-34
arrives
in New York on 6-7-1919
Issue 1978 Romania
Cancell. 1978 Bucharest
Edition not indicated

AIRSHIP AND GLIDERS



ICAR-1
Issue 20-2- 1977
Romania
Spec. cancell.
9.6.1983 Pucioasa
Memorial Henri
Coanda
Edition AFR Filiala
Dimbovita

The Romanian Aeronautical Construction Company, (ICAR) was an aeronautical company in Bucharest, which operated from 1932 to 1951. ICAR built several aircraft, including original and licensed gliders. In the CM the ICAR-1 glider. Ghimbav is a Romanian city of 5,357 inhabitants, located in the Brasov district, in the historical region of Transylvania. From an economic point of view, the most important industry is the IAR, the namesake of the aeronautical company present in Braşov in the period between the two wars, which deals with the construction of helicopters and small planes, including licensed Eurocopter helicopters. In the CM the "GRIFROM" (Ghimbaş's I.C.A.).



Grifrom hang glider
Issue 30-7- 1982
Romania
Spec. cancell.16-9-1984
Brasov
Philatelic Exhibition
Edition Filiala AFR
Brasov

AIRSHIP AND GLIDERS

GLIDER I.S.-11

Issue 20-2- 1977 Romania
Spec. cancell. 12-6-1983
Pucioasa
Exhib. Aeromfila
Memorial H. Coanda
Edition AFR Filiala
Dimbovita

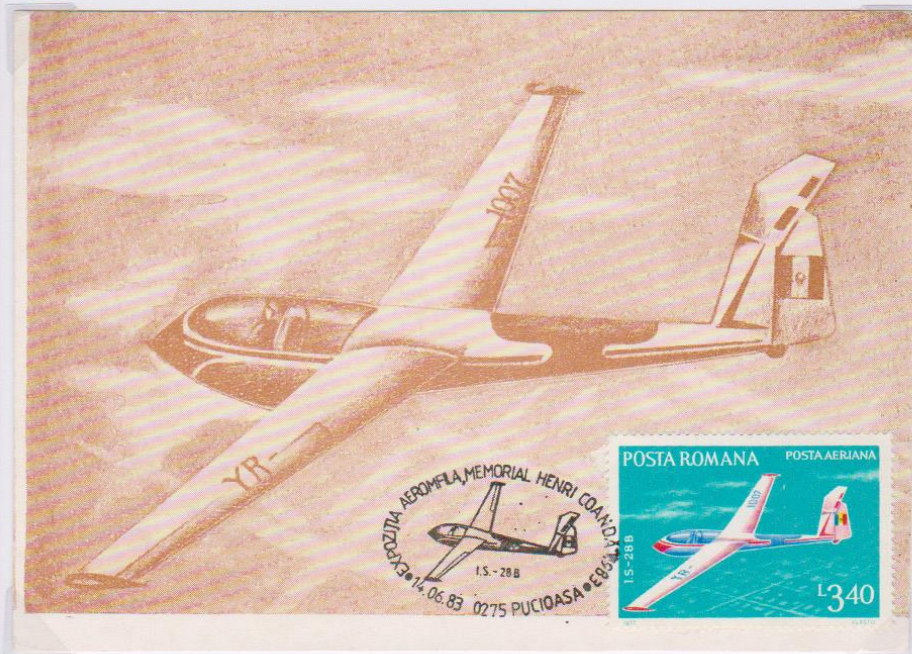


GLIDER I.S.-11 "Machetator" Gd. Eftimescu

Glider: an aircraft heavier than air, supported in flight by the dynamic reaction of the air in contact with its fixed bearing surfaces, whose free flight is not dependent on an engine.

GLIDER I.S.-28B "Machetator" Gr. Eftimescu

To take off the glider needs a motor towed aircraft which, through a long cable, drags the glider up to a predetermined height, at this point the pilot disengages from the mother plane, starting the glide towards the ground.



GLIDER I.S.-28B

Issue 20-2-1977
Romania
Spec.cancell.12-6-1983
Pucioasa
Exhib. Aeromfila
Memorial H. Coanda
Edition AFR Filiala
Dimbovita

BLERIOT - BN 2 - TUPOLEV - DE HAVILLAND DH-9



Louis Blériot on 18-10-1909 evolves on the Baneasa racecourse in Bucharest
 Issue 18-12-1978 Romania
 Spec. cancell. 18-10-1979 Bucharest
 Pioneers' Day Aviation
 Editat AFR Comisia de Aerofilatelie

Louis Blériot (Cambrai, July 1, 1872 - Paris August 2, 1936) was a French aviation pioneer and engineer, first transporter of the English Channel (July 25, 1909) After this feat, he performed in many locations including Bucharest, where it circled on the Baneasa racecourse on 18 October 1909.

The Britten-Norman BN-2 Islander is a light transport high-wing multi-role twin-engine piston engine. In its numerous versions, as an airliner with a capacity of 10 passengers, as a postal and cargo plane, the Islander has been very successful internationally.

BN-2 Islander
 Issue 15-8-1984 Romania
 Spec. cancell. 22-10-1986
 First Raid Bucharest-Craiova 22-10-1911
 Edition Filiala AFR Buzau



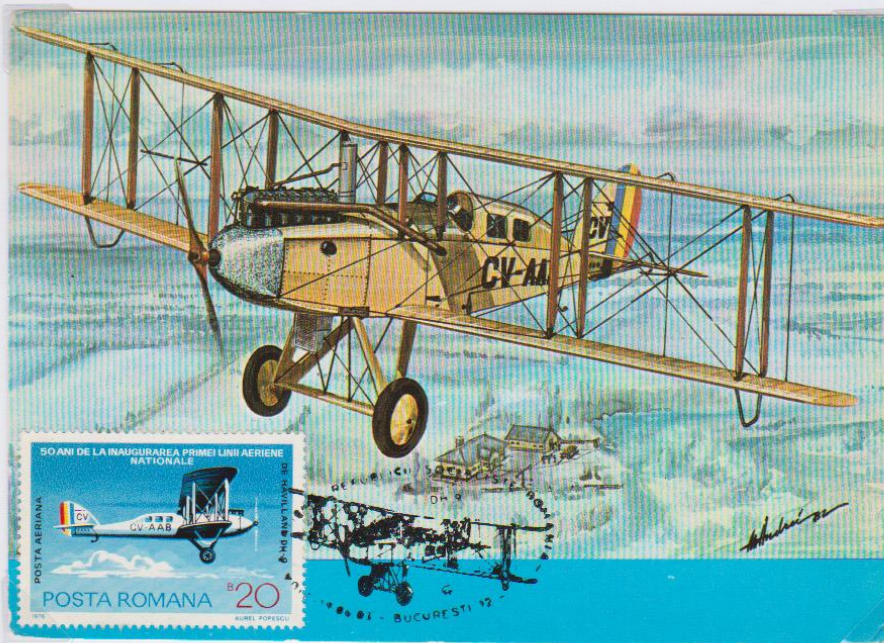
BLERIOT - BN 2 - TUPOLEV - DE HAVILLAND DH-9

**Andrej Nikolaevič
Tupolev**
Issue 18-12-1978 Romania
Spec. cancell.29-8-1981
Bucharest
First transpolar flight
19-20-6-1937
Edition not indicated



Andrej Nikolaevich Tupolev, (Pustomazovo, 29 October 1888 - Moscow, 23 December 1972), was a Soviet aeronautical engineer, head of the technical office (OKB) Tupolev. During his career he directed the design of more than one hundred types of aircraft, which established 78 different world records. The Tupolev ANT-25 was a single-engine monoplane developed in the Soviet Union in the early 1930s.

The **Airco DH-9** (from De Havilland 9) - also known after 1920 as De Havilland DH-9 - was a British single-engine biplane bomber developed and deployed during the First World War. In Romania it inaugurated the first national airline in Romania in 1926.



De Havilland DH-9
50th anniv.
Issue 24-6-1976
Romania
Spec.cancell14-6-1983
Bucharest
Inauguration of the first
national airline
Edition not indicated



IAR 80
 70th anniversary of the
 Romanian aviation
 industry
 Issue 16-11- 1995
 Romania
 Spec. cancell.30-8-1997
 Brasov
 Exhib. Aerofilatelica
 Edition Asociatia
 Filatelistilor din Brasov

The IAR 80 was a low-wing single-engine fighter engine produced by the Romanian Company Aeronautică Română (IAR) in the 1940s and used by the Forțele Aeriene Regale ale României, the air force of the Kingdom of Romania, during the Second World War. From IAR 80 will be developed a variant fighter-bomber / dive bomber that took the new name of IAR 81. As of April 15, 1941, a total of twenty-one Romanian squadrons were progressively equipped with the IAR 80 or its derivative IAR 81. The number of victories in combat was in favor of the Romanian fighter: sources report that the Russian pilot and ace Dan Vizante obtained most of his thirty-two victories by piloting one of the IAR aircraft.

The IAR-817 was a Romanian multipurpose aircraft built in the 1950s. It was used by the Red Cross for health interventions.

IAR-81 - Aviasan
 Issue 28-2-1968 Romania
 Spec.cancell.5-7-2001Cluj-
 Naoica
 125th anniv. Red Cross
 Edition Circul Filatelic
 Militar Cluj-Napoaca



Ilyushin Il-18

Issue 6-2-1968 Romania
Spec. cancell. 19-6-1983
Flight Timisoara-Bucharest
Edition. OSETOM



The Ilyushin Il-18 was a low-wing medium-range turboprop liner designed by OKB 39 directed by Sergej Vladimirovič Il'jušin and developed in the Soviet Union in the late 1950s. Used since 1957 by Aeroflot, the flagship airline of the Soviet Union, it has proved to be a particularly long-lived aircraft and remains operational in many companies of the former Soviet bloc. A military version called Il-20 was also made. The S.C. Compania Națională de Transporturi Aeriene Române TAROM S.A. is the flag carrier airline of Romania that operates under the commercial brand TAROM, an acronym in Romanian of Transporturi Aeriene ROMâne. It is an almost entirely state-owned company whose 9

The Boeing 707 is a medium-sized airliner, narrow fuselage, dedicated to long-haul routes, with four fan turbines, developed and built by the American Boeing Commercial Airplanes from 1958 to 1979. Its name is commonly pronounced as seven oh seven. The various versions of the aircraft have a capacity ranging from 140 to 219 passengers and an autonomy from 4,630 km to 10,650 km. 5% is controlled by the Romanian Ministry of Finance and the Ministry of Public Transport.



Boeing 707

Issue 25-7-1983
Romania
Spec. cancell. 23-11-1983
Bucharest
Telecomm. Day
Edition OSETOM

BAC 1-11 - IAR-330 - HERMANN OBERTH - DUMITRU PRUNARIU



ROMBAC 1-11
 Issue 1983 Romania
 Spec. cancell. 19-6-
 1983 Craiova
 Aviation Day R.S.R.
 Edition OSETOM

ROMBAC 1-11 is the first passenger transport aircraft built in Romania by Intreprinderea de Avioane Bucuresti under license, derived from the BAC One-Eleven.
 The first specimen was finished in August 1982 and was officially presented on August 27, 1983.
 The first official exhibition took place on September 20, 1982, at the Aeroportul Baneasa in Bucharest.
 The first passenger journey of the ROMBAC 1-11 (YR-BRA) took place on 28 January 1983, on the Bucuresti-Timisoara route, and the first foreign one was on 23 March 1983 for the Bucuresti-London route.
The IAR 330 is the Romanian version of the Aérospatiale SA 330 Puma helicopter, produced by IAR Braşov. Twenty-four helicopters have been upgraded to IAR 330 SOCAT in collaboration with Elbit Systems (Israel). At least 163 of these helicopters have been built, of which 104 assigned to the Romanian military. There is also a search and rescue (SAR) version, equipped with floats inflatables for emergency lan

IAR 330
 "Gloria" marine
 extraction platform
 Issue 10-4-1989 Romania
 Spec. cancell. 1-9-1989
 Sibiu
 Edition Comisia de
 Aerofilatelie
 Filiala Sibiu



BAC 1-11 - IAR-330 - HERMANN OBERTH - DUMITRU PRUNARIU

Hermann Julius Oberth was a physicist and engineer born on 25 June 1894 in Hermannstadt (Nagyszeben), in the then Austria-Hungary, today Sibiu, in Romania. He died in Nuremberg, Germany, December 28, 1989. He is considered one of the founding fathers of missile and astronautics, together with the Frenchman Robert Esnault-Pelterie, the Russian Konstantin Tsiolkovsky and the American Robert Goddard.

Hermann Julius Oberth

Issue 24-1-1983 1983 Romania
Spec. cancell. 23-5-1983
Cluj-Napoca
Edition Filiala A.F.R. Cluj
Gruparea de Maximafilie



Dumitru Dorin Prunariu (Brasov 27 September 1952) is a former Romanian cosmonaut, of the Intercosmos program, flying with Sojuz 40: time in space 7g 20h 42m. Sojuz 40 is the name of a mission of the Sojuz spacecraft to the Soviet space station Salljut 6. The crew was formed by Leonid Ivanovic Popov (second flight), commander and Dumitru Dorin Prunariu (first flight), engineer on board (Romania)

Dumitru Dorin Prunariu
Issue 30-6- 1981 Romania
Spec. cancell. 22-5-1982
Bucharest
First anniv. First flight
Romanian Astronaut
Edition OSETOM