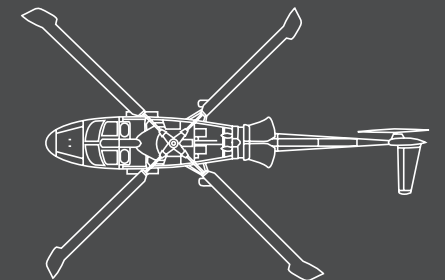
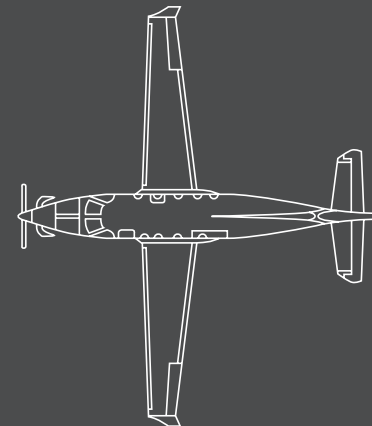
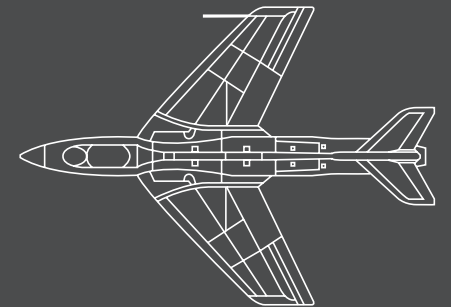
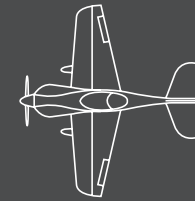
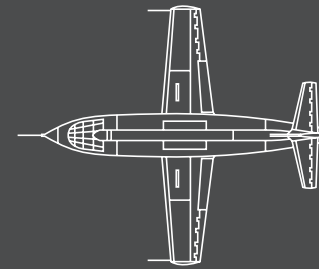


ORIS
Swiss Made Watches
Since  1904

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real watches for real people

AIR TIME

INTRODUCING THE MOST INNOVATIVE
PILOT'S WATCH ORIS HAS EVER MANUFACTURED:
THE ORIS BIG CROWN PROPILOT ALTIMETER

Oris SA, Ribigasse 1, CH-4434 Hölstein, www.oris.ch



ORIS
Swiss Made Watches
Since  1904

THE PILOT'S CHOICE

Oris's relationship with aviation stretches back almost 80 years. Since it made its first pilot's watch, it has pioneered numerous innovations that have made Oris watches the pilot's favourite

A HISTORY IN AVIATION

TAKING FLIGHT

Oris made its first pilot's watch in 1938. It was innovative, accurate and highly reliable – the same values that inform Oris pilot's watches today

Oris has a proud reputation for making 'real watches for real people'. In the 'real' world, that means sensibly priced, stylish mechanical watches designed to perform all manner of useful functions.

That's why so many professionals choose Oris watches – particularly experienced pilots. Oris's collection of aviation-inspired watches has roots that stretch back almost 80 years, to 1938, when it released the first Pointer Date. It had an oversized crown, so that gloved airmen could make quick adjustments. Over time, this feature would become integral to the Big Crown line, still in the Oris collection today.

Many innovations have followed in the decades since: watches with rotating bezels and slide rules for making calculations during flight; watches with glare-proofed anti-reflective sapphire crystals and Super-LumiNova detailing for maximum legibility; watches with regulateur dial layouts and second time zones – the list goes on.

The philosophy continues this year with the launch of the ProPilot collection (pictured), which includes the world's first automatic altimeter watch (previous page).



THE NEW ORIS
PROPILOT COLLECTION
(l-r) the Big Crown ProPilot
Chronograph GMT, the Big
Crown ProPilot Day Date,
and the Big Crown ProPilot
Date. All three pieces boast
a coin-edged bezel – a
design element inspired by
the turbines of a jet engine

1938 THE ORIS POINTER DATE

CROWNING GLORY

Oris has made iconic watches throughout its history, but arguably none more so than the original Pointer Date, a classic pilot's watch

By the 1930s, Oris had been producing watches for nearly three decades. The Swiss brand's pocket watches, handsome tonneau and delicate Art Deco-inspired wristwatches were shipping all over the world.

By the mid-1930s, huge advances had been made in aviation, and Oris – characteristically – had been working on innovations of its own. The company saw the chance to produce something sturdier and more practical, specifically for those early airborne pioneers.

In 1938, Oris introduced the Pointer Date, which used a central hand to point to a date scale around the dial. It also had a 'big crown', designed so pilots could wind and adjust the watch even when wearing thick gloves. This innovation would lead to Oris's Big Crown line. It's still useful to pilots, but today it's as much appreciated for its charming aesthetic.



LEFT: SYNCHRONISED
Accurate wristwatches played a vital role in the war effort. Here, US pilots synchronise their timepieces before take-off

ABOVE: ORIS BIG CROWN SMALL SECOND, POINTER DAY
Stainless steel watch with automatic mechanical movement



FLYING HIGH AND LOW The Oris story

- | | |
|--|---|
| <p>1904
Paul Cattin and Georges Christian found Oris in the Swiss town of Hölstein.</p> <p>1969
Oris booms, with over 800 staff, and production at 1.2 million units in a year. But it suffers in the 1970s as the Quartz Crisis sets in.</p> <p>1982
The comeback begins</p> | <p>as Dr Rolf Portmann and Ulrich W. Herzog lead a management buyout. Oris SA is born.</p> <p>1990
Oris coins 'High-Mech'. Its aim is to be a global leader in offering the best value for mechanical watches.</p> <p>2002
The Red Rotor becomes Oris's official trademark.</p> |
|--|---|



- 2010**
Oris launches its new company slogan, 'real watches for real people'.
- 2014**
The company celebrates 110 years of watchmaking, and releases its first in-house calibre for 35 years. Calibre 110 features a 10-day power reserve and a patented non-linear power reserve indicator.



THE ORIGINAL
ORIS POINTER DATE
Produced in 1938, the Oris Pointer Date had a central hand indicating the date and an oversized crown. Today it has become the brand's signature design

LOOK TO THE SKIES
How the world fell in love with flight

1903 December 17
The Wright brothers make the first powered, manned, controlled flight near Kitty Hawk, North Carolina. The flight lasts 12 seconds and covers a distance of 120 feet.

1906 September 13
Brazilian aviator Alberto Santos-Dumont makes the first officially recorded aeroplane flight in Europe, at Bagatelle Airfield, Paris. It lasts eight seconds.

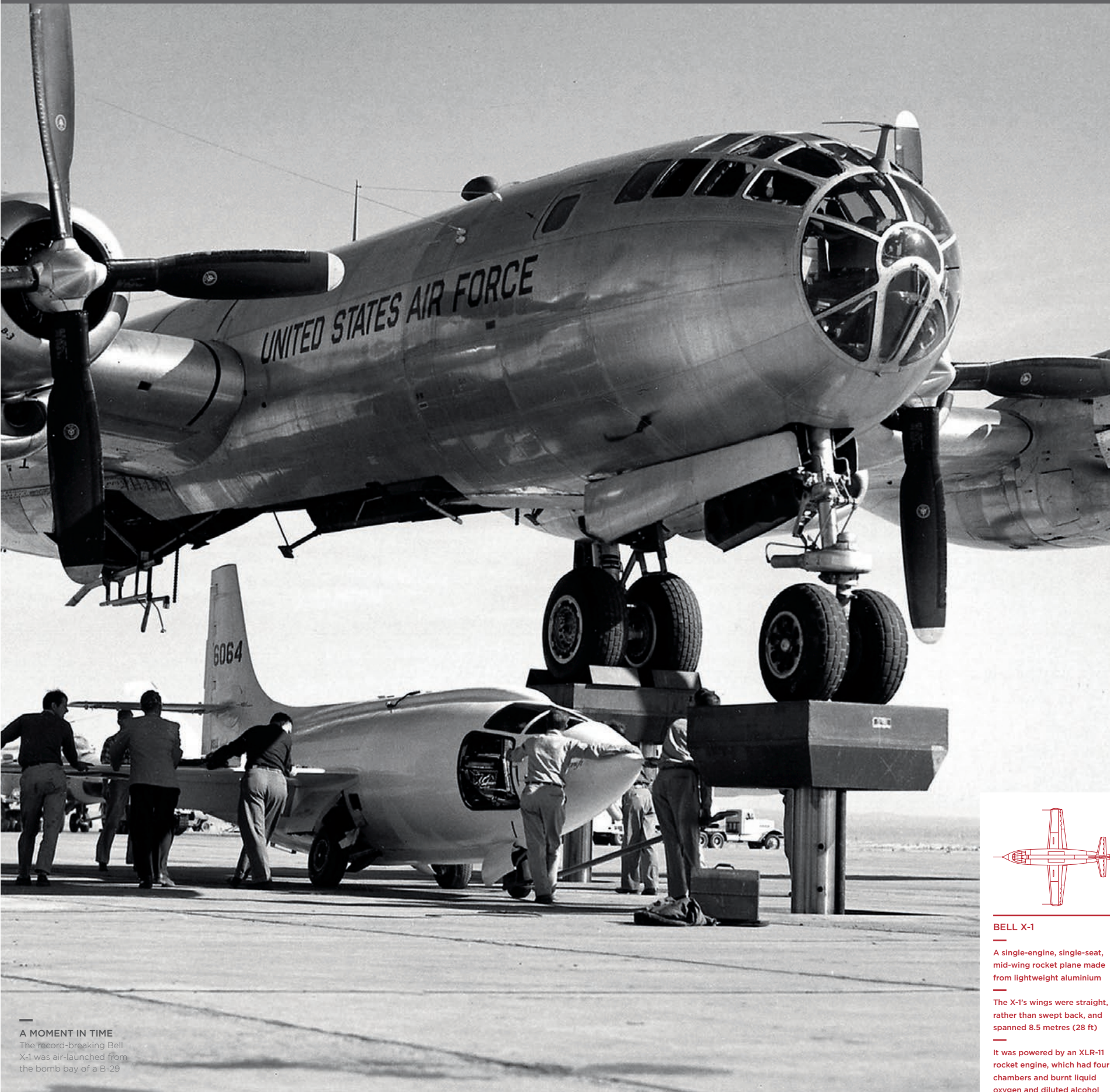
1909 July 25
Louis Blériot becomes the first man to fly across the English Channel in his monoplane, Blériot XI. The feat wins him a prize of £ 1,000 from *The Daily Mail*.

1927 May 20-21
Charles A. Lindbergh makes the first non-stop solo flight across the Atlantic in the Spirit of St. Louis. 'Lucky Lindy' (below) travels 3,610 miles from New York to Paris in just under 33½ hours.

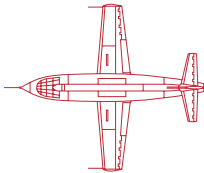


1947 October 14
Captain Charles E. Yeager becomes the first man to fly faster than the speed of sound, in the rocket-powered Bell X-1.

1995 Aug 15-16
Concorde sets a new around-the-world speed record of 31 hours, 27 minutes and 49 seconds. Concorde makes its last flight on October 24, 2003.



A MOMENT IN TIME
The record-breaking Bell X-1 was air-launched from the bomb bay of a B-29



BELL X-1

A single-engine, single-seat, mid-wing rocket plane made from lightweight aluminium

The X-1's wings were straight, rather than swept back, and spanned 8.5 metres (28 ft)

It was powered by an XLR-11 rocket engine, which had four chambers and burnt liquid oxygen and diluted alcohol

1947 BREAKING THE SOUND BARRIER

THE X-1 FACTOR

The Second World War led to rapid advances in aviation. Shortly after it ended, man focused his energies on flying faster – faster than the speed of sound

On October 14, 1947 the Bell X-1 became the first manned aircraft to break the sound barrier, earning its place in the history books. It was piloted by Charles E. ‘Chuck’ Yeager at Mach 1.06, and at an altitude of 43,000 ft.

The story of this legendary plane begins in 1945 when the US Air Force contracted the Bell Aircraft Corporation to build three experimental supersonic planes. The project was originally named XS, but later became X.

The designers of these supersonic planes based their ideas on a bullet, which at the time was one of the few stable forms known to be capable of breaking the sound barrier – the X-1 was essentially a bullet with wings.

In 2011, Oris commemorated this pioneering aircraft with the Big Crown X1 Calculator, a bold automatic chronograph. Its dial design is based on cockpit instruments from those early supersonic jets, which had to be legible while carrying lots of information. The letter ‘X’ and the numeral ‘1’ appear in relief on the tips of the pushbuttons. The Calculator refers to the rotating slide rule.

It might appear old-fashioned, but mechanical devices still serve as back-up for onboard electronic instruments today.



ORIS BIG CROWN X1 CALCULATOR
Stainless steel, grey PVD-coated, 46 mm case, automatic chronograph movement, bi-directional rotating bezel with circular slide rule, day and date indication, dark brown leather strap, water-resistant to 30 metres

FASTER THAN A SPEEDING BULLET The world's fastest aircraft



X-15A-2

The fastest manned rocket-powered aircraft was the North American Aviation X-15A-2. It reached Mach 6.7 (7,274 km/h or 4,520 mph) when piloted by United States Air Force Major William J Knight over the Mojave Desert in 1967, setting an unofficial absolute human speed record.



Lockheed SR-71A

The world's fastest manned jet-powered aircraft is the iconic United States Air Force Lockheed SR-71A Blackbird stealth plane. On its first flight on December 22, 1964, it reached a top speed in excess of Mach 3 (3,185 km/h or 1,980 mph) at an altitude up to 85,000 ft.



NASA X-43A

The fastest recorded unmanned aircraft is NASA's hypersonic, scramjet-powered X-43A. It hit Mach 9.6 (11,250 km/h or 7,000 mph), nearly 10 times the speed of sound on November 16, 2004 at an altitude of 110,000 ft. Parts of the plane hit 3,600 F during the flight.

1958 HAWKER HUNTER

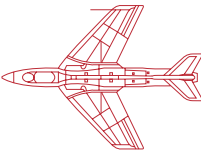
A LEGEND OF THE SKIES

Few planes evoke nostalgia like the Hawker Hunter, which served in the Swiss Air Force for almost 40 years

In January 1958, when the Swiss Air Force ordered 100 Hawker Hunter aircraft from British developer Hawker Siddeley, it can only have imagined the impact the plane would have. The Hunter was a single-seat subsonic jet aircraft first built in the early 1950s, and at the time it was one of the world's most advanced planes. It remained in service until 1994, by which time it had become a national icon.

In total, 1,972 Hawker Hunters were built, and following its retirement from the Swiss Air Force, a number of Hawker Hunters were taken on by a group of enthusiasts at the Fliegermuseum in Altenrhein, near St Gallen.

Today they form the Oris-supported Swiss Hunter Team (see panel, opposite). Oris makes a contribution towards the upkeep of the display team's planes, part of which is funded by sales of watches such as the Oris Swiss Hunter Team PS Edition, which was developed in homage to the famous plane. It features the Oris pilot watch signature big crown and fluted bezel, as well as oversized numerals coated in Super-LumiNova, and serves as a fitting tribute to an iconic aircraft.



HAWKER HUNTER

British-built Hawker Hunter Mk58 jets served in the Swiss Air Force from 1958 to 1994

The Hawker Hunter Mk58 was powered by the Rolls-Royce Avon 207 turbine engine, and had swept-back wings

It had a wingspan of 10.24 m and a top speed of 620 knots (1,149 kmh/714 mph)



RESCUE MISSION

The Swiss Hunter Team

There are few pilots as devoted to the iconic Hawker Hunter as Paul Ruppeiner (above). The former fighter pilot joined the Swiss Air Force as a cadet and qualified as a jet pilot when he was just 22. He flew de Havilland Vampire and Venom jets before moving onto the Hawker Hunter – an aircraft he continues to fly nearly 40 years later.

In 1994, the Swiss Air Force announced plans to retire the Hunter and dismantle its fleet. Ruppeiner offered to preserve them, but was told he could only take possession of the planes if he had a museum to put them in. So he and two fellow enthusiasts founded the Fliegermuseum near St Gallen, and were rewarded when the Swiss Air Force gave them two planes.

Since then, the museum has acquired four further Hunters, which form a display team that attends air shows across Europe. Thanks to Paul, now the museum's chief pilot, the legend of the Hunter lives on.

ORIS BIG CROWN
TIMER CHRONOGRAPH

Stainless steel grey-PVD-plated 46 mm case, automatic chronograph movement, 48-hour power reserve, bi-directional rotating bezel to adjust inner timer scale, day and date indication, dark brown leather strap, water-resistant to 30 metres



HIGH-FLIERS

The Swiss Air Force ordered 100 Hawker Hunter planes in 1958. Those aircraft remained in service until 1994. Today, a handful of the planes are maintained by the Swiss Hunter Team, which appears at air shows all over Europe

RED ROTOR

The Oris Red Rotor is a registered trademark and a symbol of the company's watchmaking heritage. It is visible through the case back of most of our automatics

2008 THE ORIS BC4

THE LIFE AEROBATIC

When it launched the innovative BC4, Oris chose a daring partner for lift-off

Oris has partnered with many extraordinary organisations and individuals during its long history, but few compare to the Blue Eagles Helicopter Display Team. The team was founded in 1968 and was part of the British Army Aviation Corps, and one of only six professional helicopter teams in the world. For more than 40 years it travelled around the UK and Europe performing audacious, gravity-defying manoeuvres in a range of aircraft that included Apache Attack, Lynx and Gazelle helicopters. Sadly, due to military cutbacks, it was disbanded in 2010.

In 2008, Oris partnered with the team to coincide with the launch of its innovative BC4 pilot's watch, a striking timepiece that would go on to win a prestigious Red Dot Design Award. Oris celebrated the Blue Eagles' 40th anniversary with the Oris Blue Eagles Limited Edition – a dual-time watch that was also Oris's first design with a 24-hour display. The BC4 remains an integral part of the Oris pilot's watch collection.



2010 THE ORIS BC3

RACING PEDIGREE

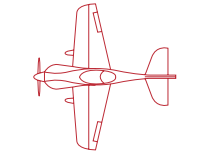
Oris is the main sponsor of the Swiss Air Racing team, the only Swiss to take part in the Reno Air Races

The National Championship Air Races in Reno, America, is one of the most iconic events in aviation, and not only because it's the world's sole remaining pylon race.

The sight of daredevil pilots swooping through pylons at speeds in excess of 800 km/h (500 mph) and as low as 50 ft above the Nevada desert floor harks back to the famous Cleveland Air Races of the 1920s, 1930s and 1940s. The Air Races were set up in 1964 – each year more than 200,000 spectators turn up to see five days of racing.

Last year, Oris-backed pilot Don Vito Wyprächtiger won the event's Formula One class at the helm of the Oris Big Crown Swiss Air Racing Team Scarlet Screamer. His achievement was particularly special because he was the first non-American Gold race champion in the event's 50-year history.

His achievements are marked by the limited edition Oris BC3 Air Racing Edition series of watches. The latest of these is the Air Racing III, an automatic limited to 1,000 pieces.



SCARLET SCREAMER

Many of the aircraft flown in the annual Reno Air Races are heavily modified by the pilots themselves

Wyprächtiger's Formula One Scarlet Screamer racer is powered by a 100 hp Continental O-200 engine (also used in a Cessna 150)

The fastest Formula One aircraft can reach top speeds of almost 250 mph on Reno's 3.12-mile course

BELOW: HE SWOOPS TO CONQUER

In 2013, Oris-backed Don Vito Wyprächtiger became the first non-American to become Gold race champion in the 50-year history of the Reno Air Races. His plane, is called the Scarlet Screamer

DESIGNED FOR THE SKIES The Oris BC4



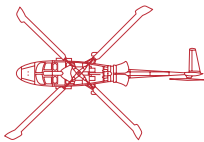
BC4 CHRONOGRAPH
Inspired by the look of cockpit instruments, this BC4 boasts a stainless steel, matt black DLC-coated 45 mm case, an automatic chronograph movement, a red 12-hour counter and large Super-LumiNova numerals for maximum legibility.



BC4 WORLDTIMER
This BC4 shows home time at 3 o'clock; a second time zone via central hands that can be adjusted in one-hour jumps forwards or backwards via two push buttons; and a third on the outer dial ring, which is adjusted using the vertical crown at 2 o'clock.



BC4 RETROGRADE DAY
Housed in its sturdy BC4 case, this 42.7 mm stainless steel timepiece features an unusual retrograde day display. The arrow pointer makes its way down the days of the week, before snapping back to begin the process again once seven days are done.



WESTLAND LYNX
HELICOPTER

Westland Helicopters (now AgustaWestland) built the Lynx military helicopter in Yeovil, Somerset, England

Thanks to its responsive rotor design, it was the world's first fully aerobatic helicopter

The Lynx's rotor diameter spanned 12.8 metres (42 ft), and could reach 201 mph



FLYING DOCTORS
Oris is now a partner of
Australia's Royal Flying
Doctor Service

WWW.ORIS.CH
AIR TIME

AIR TIMERS Oris's limited-edition pilot's watches



ORIS ROYAL FLYING DOCTOR SERVICE LIMITED EDITION
Oris pays tribute to the Royal Flying Doctor Service, which provides vital aeromedical healthcare across Australia. The automatic watch has a day-date function and is limited to 2,000 pieces.



ORIS OSKAR BIDER LIMITED EDITION
On July 13, 1913, 22-year-old Oskar Bider became the first man to fly across the Alps. In doing so, he set a new altitude record, piloting his Bleriot XI up to 12,000 feet. Oris's Oskar Bider watch has an automatic chronograph, and is limited to 300 pieces.



ORIS CHALLENGE INTERNATIONAL DE TOURISME 1932 L. E.
The 1932 Challenge International de Tourisme was a series of aviation trials held in Germany. Oris's watch recalls the event with a run of 1,932 vintage-inspired pieces, each fuelled by an automatic movement.



ORIS POLLY VACHER LIMITED EDITION
In 2003, British aviatrix Polly Vacher became the first woman to fly solo around the globe via the North and South Poles. A proportion of profits from the 'Wings Around the World II' watch went to the charity Flying Scholarships for the Disabled.



ORIS FLIGHT TIMER 1945 L. E.
Sixty years after the end of the Second World War, Oris launched the Flight Timer 1945 L. E. This stainless steel automatic watch was engraved with a fighter plane, a dove and '60 years of peace since World War II'. Only 1,945 pieces were made.



ORIS FLIGHT TIMER R4118 L. E.
R4118 is the only Hurricane from the Battle of Britain still flying. The 4,118 watches bearing its name have a vertical crown for setting a second time zone, and a chronograph operated via a left-mounted crown and pushbuttons.

2013 ORIS AND THE ROYAL FLYING DOCTORS

PROPELLED TO SERVE

The Royal Flying Doctor Service covers 80 per cent of Australia, bringing urgent medical care to the country's remotest regions – by air. Last year, Oris became the organisation's official watch partner

Few inventions have changed the world like the airplane. Since the Wright brothers recorded the first heavier-than-air flight in 1903, planes have carried people and cargo all over the world, fought wars – and saved lives. Among the best examples of the latter is the Royal Flying Doctor Service of Australia – one of the largest aeromedical organisations in the world.

The service was the brainchild of the Presbyterian minister John Flynn. Flynn had spent his life in the Australian Outback, and wanted to provide a 'mantle of safety' for those living in remote areas, where it wasn't unusual for one doctor to be the only provider of medical care across an area of as much as one million square kilometres.

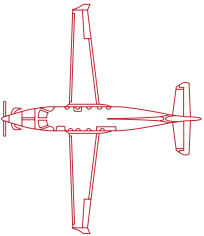
Flynn campaigned for a flying doctor service for the best part of a decade until eventually, in 1928, his Australian Inland

Mission Aerial Medical Service (later renamed the Royal Flying Doctor Service) took to the skies for the first time.

The first doctor-and-pilot team took off from Cloncurry on May 17, 1928. They were flying in a single-engined, timber and fabric biplane called Victory, which was leased to Flynn's service by QANTAS for the handsome price of two shillings per mile.

Today, the service has a fleet of 63 planes and 21 bases across Australia, and covers 80 per cent of the country (an area roughly the size of the USA). Each year, its pilots fly the equivalent of 25 round trips to the Moon in order to deliver healthcare and a 24-hour emergency service to 270,000 patients.

In 2013, Oris became the official watch partner of this incredible not-for-profit organisation, and launched the Oris Royal Flying Doctor Service Limited Edition.



PILATUS PC-12
The Pilatus PC-12 can reach a maximum cruise speed of 519 km/h (322 mph).
The service model's cabin is configured for two stretcher patients and has three further seats for patients, relatives, police and medical staff.
The plane has a front door so the pilot can board and conduct pre-flight checks without disturbing medics.



2014 THE ORIS BIG CROWN PROPILOT ALTIMETER

REACHING NEW HEIGHTS

Introducing the new Oris Big Crown ProPilot Altimeter, the world's first automatic mechanical altimeter watch

For 110 years, Oris has strived to create quality mechanical watches that deliver accuracy, reliability and functionality at sensible prices. The latest watch to bring that philosophy to life is the Oris Big Crown ProPilot Altimeter, a high-functioning instrument that's also the world's first automatic watch with a mechanical altimeter.

An altimeter is an essential tool for pilots, mountaineers, adventurers and explorers, and is one of the six standard cockpit instruments pilots rely on during flight. There have been altimeter watches before. Most have quartz movements and some feature hand-wound calibres. Oris's achievement in combining an automatic movement and a mechanical altimeter is a watchmaking milestone.

Designed for life on a pilot's wrist, the ProPilot Altimeter is loaded with features. Its 47 mm case is cast in stainless steel and houses an automatic movement and the mechanical altimeter.

Its dial is carefully and clearly split into three zones – in the centre is a traditional watch dial showing the time; around that is a gauge showing atmospheric air pressure, read using the red indicator; and an outer ring displays altitude up to 14,500 ft (see next page for a version of the watch with a scale in meters), shown by the yellow indicator.

It's activated and adjusted by unscrewing the crown at 4 o'clock (see overleaf). When the crown is screwed back in, the watch becomes water-resistant to 100 metres.

Its pilot's watch credentials are backed up by glare-reducing anti-reflective coating on both sides of the sapphire crystal, and by the Super-LumiNova finish on the numerals, hands and hour markers, maximising legibility. The watch comes on a leather or textile strap, or on a stainless steel bracelet.

The Oris ProPilot Altimeter is a high-performance timepiece which will no doubt go down in watchmaking history.

HOW AN ALTIMETER WORKS

Behind the science

KEY

- 1. Aneroid wafers
- 2. Kollsman Window
- 3. Barometric scale adjustment knob

Atmospheric pressure is the result of the weight of the atmosphere pushing from above versus the downward force of gravity. The higher the point in the atmosphere, the lower the atmospheric pressure.

An altimeter measures changes in atmospheric pressure to calculate altitude in feet or metres above mean sea level. The most common altimeters are barometric. A chamber inside contains a stack of sealed aneroid wafers, which have an internal pressure equal to standard barometric pressure at sea level. The wafers expand and contract with changes

in static pressure (the name given to atmospheric pressure at the level an aircraft is flying). As a plane descends, static pressure increases, contracting the wafers and causing them to collapse. This is indicated as a decrease in altitude. During ascent, static pressure decreases, allowing the wafers to expand. This is indicated as an increase in altitude.

To compensate for changing weather conditions and to ensure the altimeter reading is correct, an altimeter must be calibrated to a known pressure value at take-off, for example, current air pressure at mean sea level.

THE ORIS BIG CROWN PROPILOT ALTIMETER

HIGH TIME

The new Oris Big Crown ProPilot Altimeter is one of the most innovative mechanical watches ever made. Here's how it works ...



THE CLASP SYSTEM

The ProPilot collection features a patented safety clasp system first pioneered for the Oris BC4 collection. Its design is inspired by an aircraft safety belt. Gently lifting the tab marked 'LIFT' opens the clasp so the watch can be easily put on or removed.

1. NEUTRAL MODE

(Crown position 0)

With both crowns screwed down securely, the ProPilot Altimeter performs like a regular automatic watch. The central dial and hands tell the time and date (adjusted by the crown at 2 o'clock), and the watch is water-resistant to 100 metres.

2. ACTIVATING THE ALTIMETER

(Crown position 1)

Unscrew the crown at 4 o'clock into position 1 to activate the altimeter. A red ring appears, indicating that the altimeter is in use.

3. SETTING THE ALTIMETER

(Crown position 2)

Pull the crown out to position 2. Rotate the crown so that the reference air pressure (supplied by an airport control tower, for example) aligns with the red triangle at 6 o'clock (or set the yellow indicator to a known altitude). The watch now shows the current altitude, yellow indicator, and corresponding air pressure, shown by the red indicator. While activated, a patented Oris altimeter adjustment and venting crown, including a PTFE vapour barrier, prevents ambient moisture from entering the watch.

4. MEASURING ALTITUDE

(Crown position 1)

Once the altimeter has been set, push the crown into position 1. Changes in altitude are shown by the yellow indicator against the outer dial ring, on a scale from 0 - 15,000 ft, or from 0 - 4,500 metres (the watch is available in both, feet and metres). The altimeter hand is made from laminated carbon fibre.

5. RETURNING TO NEUTRAL

(Crown position 0)

To deactivate the altimeter and return it to neutral, screw the crown back into position 0. This also reseals the watch so that it is once again water-resistant to 100 metres.

