

traser[®]
B watches

«I read my traser[®] H3 watch
in a blink of an eye.»



www.traser.com

AVIATOR more light.

traser® H3 watches

All traser® H3 watches are the finest quality, most durable Swiss-made timepieces and equipped with mb-microtec's patented illumination technology trivalight® – the best available today. These timepieces are the easiest in the world to read in low light conditions and even in total darkness. These merits have made traser® H3 watches the first choice among emergency, safety, and protection task forces, and among people who are in high-alert situations.

Innovative Swiss Technology

Small glass tubes are coated on the inside with a phosphorescent material, then filled with a minute amount of tritium gas and hermetically laser sealed. Electrons emitted from the gas excite the material to release a cold light. mb-microtec's ability to manufacture trivalight® (gaseous tritium light sources) are the result of decades of research in the field of radio luminescence. trivalight® are self-activated and self-powered light sources. They function independently from a battery or any other source of outside energy. They never need recharging or servicing, and there are no buttons to push. They are 100 times brighter than any other illumination system and have a lifespan of over 20 years.



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traser® H3 Aviator – the Bucker revival

Based on the tradition of the amazing Bucker aeroplane construction and our state-of-the-art watch and instrument lighting trivalight®, a new traser® H3 series of watches has been developed: the traser® H3 Aviator watches in the following models:

traser® H3 Aviator Jungmann
traser® H3 Aviator Jungmeister
traser® H3 Aviator Bestmann

Aviator contents

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Images do not match the original size.
Prices/models subject to change.
May 2009

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The traser® H3 **Aviator Jungmann** is based on the success formula of Carl Clemens Bucker: compact, first-class features and easy to maintain. Ticking inside the traser® H3 Aviator Jungmann is a reliable Swiss quartz movement; the 46 mm steel frame with sapphire glass is prepared solidly and in good quality; the rotating bezel sundial provides you with a simple but efficient aid to orientate yourself more easily; and the unique trivalight® lighting means the traser® H3 Aviator Jungmann can be read perfectly at all times, whether it be day or night.

Aviator Jungmann – Chronograph quartz

- Swiss quartz movement Ronda 5030.D chronograph
- 46 mm steel case, sundial, unidirectional rotating steel bezel
- Date
- Sapphire crystal, onesided antireflexion coating
- Water resistance to 330 ft / 145 psi
- 1–11 hour positions and hands with white trivalight® illumination, 12 o'clock position orange
- Available in black Aviator leather strap with safety folding clasp, CHF 625.–
- Available in Aviator steel strap, CHF 685.–

All rates VAT excl./2009



Bücker Bü 131 Jungmann

Single-motored, training and sports aircraft suitable for aerobatics, two-seated double-decker; first flight in April 1934.

• Engine:	100 HP Hirth HM 504 A
• Wingspan:	7.4 m
• Wing area:	13.5 m ²
• Flight weight:	680 kg
• Travelling speed:	170 km/h
• Ascent time to 1000 m:	6.3 min

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The traser® H3 **Aviator Jungmeister** lives up to its role model, the Bü 133 Jungmeister, a unique aeroplane in the upper echelons of numerous aerobatics teams, in every aspect. Based on the aircraft instruments of this single-motored, one-seater double-decker, the steel frame of this watch visibly houses the Ronda 5010.B quartz movement with central stop-seconds and 30-minute/12-hour counter in the lower half of the dial. Time-stopping was key when flying Bücker aircraft, both for navigation and for calculating fuel consumption. Of course, flawless instrument readability was also essential here – which is certainly catered for with our unique trilight® lighting.

Aviator Jungmeister – Chronograph quartz RETRO

- Swiss quartz movement Ronda 5010.B chronograph
- 46 mm steel case, sundial, unidirectional rotating steel bezel
- Sapphire crystal, onesided antireflexion coating
- Water resistance to 330 ft / 145 psi
- 1-11 hour positions and hands with white trilight® illumination, 12 o'clock position orange
- Special wooden watch box
- Available in brown Aviator leather strap with safety folding clasp, CHF 795.–
- Available in Aviator steel strap, CHF 855.–

All rates VAT excl./2009



Bücker Bü 133 Jungmeister
Single-motored, aerobatics and exercise aeroplane, one-seater double-decker; first flight in summer 1935.

• Engine:	160 HP Bramo Sh14 A-4
• Wingspan:	6.6 m
• Wing area:	12.0 m ²
• Flight weight:	615 kg
• Travelling speed:	200 km/h
• Ascent time to 1000 m:	2.8 min

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The traser® H3 **Aviator Bestmann** is a homage to the last Bücker aeroplane built, the single-motored cabined low-wing of the same name, and one of the best aerobatics planes of its time, the Bü 181 Bestmann. This automatic series, limited to 200 items, with Bücker logo on the dial, is also available in a retro look with curved sapphire glass, as well as mineral glass base, which allows the ETA movement 2824-2 to be seen. The white trigelight® lighting tops off the design with flawless readability guaranteed in all lights, as it does for aircraft navigation instruments.

Aviator Bestmann – Automatic RETRO Limited Edition (200 pieces)

- Swiss automatic movement ETA 2824-2 EL
- 46 mm steel case, sundial, unidirectional rotating steel bezel, mineral crystal case back
- Date
- Sapphire crystal double domed, on-sided antireflexion coating
- Water resistance to 330 ft / 145 psi
- 1–11 hour positions and hands with white trigelight® illumination, 12 o'clock position orange
- Special wooden watch box
- Available in brown Aviator leather strap with safety folding clasp, CHF 950.–
- Available in Aviator steel strap, CHF 1'010.–

All rates VAT excl./2009



Bücker Bü 181 Bestmann

Single-motored, training and travel aeroplane, cabined low-wing with two adjacent seats, suitable for aerobatics. First flight in February 1939.

- Engine: 105 HP Hirth HM 504
- Wingspan: 10.6 m
- Wing area: 13.5 m²
- Flight weight: 765 kg
- Travelling speed: 200 km/h
- Ascent time to 1000 m: 5.3 min

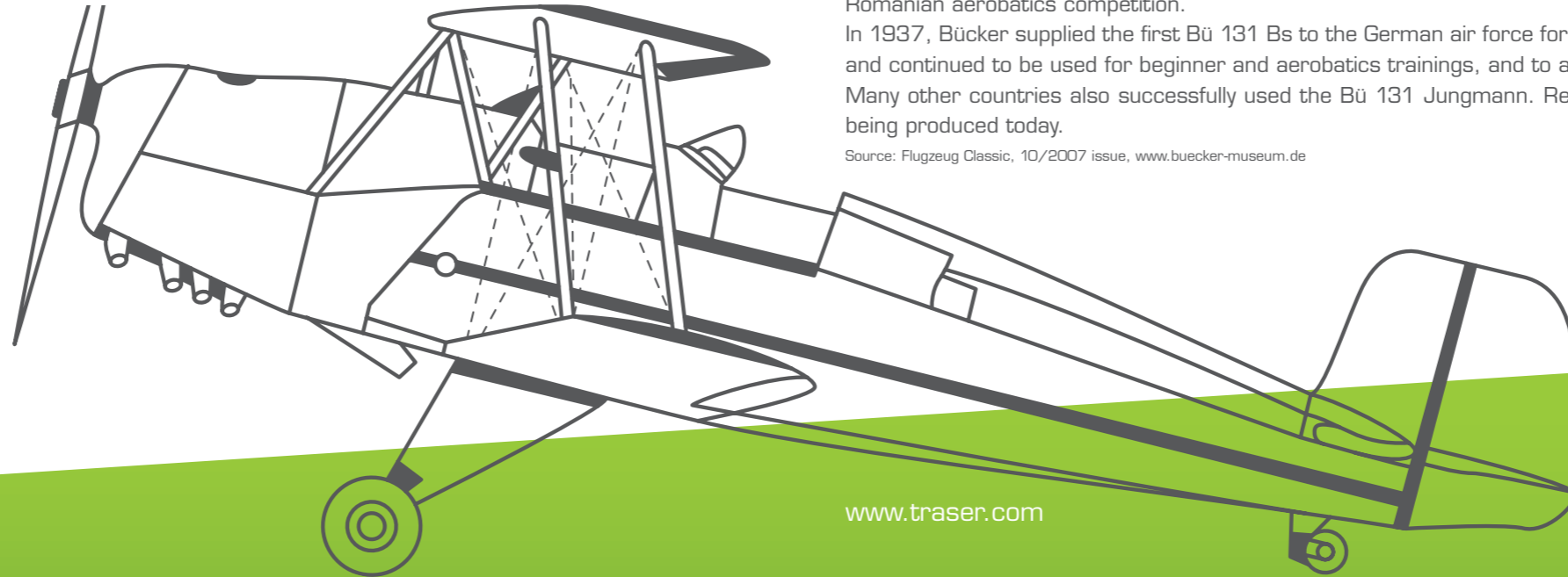
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The story: Carl Clemens Bücker

Carl Clemens Bücker was born in Ehrenbreitstein (today a district of Koblenz) in 1895. In 1914, he completed his training as a marine pilot, and worked as an advisor and test pilot with the Swedish marines after the war ended. He founded Svenska Aero AB in Sweden in 1921, and built Heinkel aeroplanes under licence, as well as his own constructions later on. In 1932, he sold his company in Sweden to return to Germany. In 1933, Carl Clemens Bücker founded Bücker-Flugzeugbau GmbH in Berlin-Johannisthal to produce training and sports aircraft. The Soviets seized the Bücker factory after World War II. In 1946, Bücker-Flugzeugbau GmbH in Rangsdorf was classified as an armature establishment, initially seized, then expropriated. Carl Clemens Bücker died in 1976 and is buried in Koblenz. The city of Koblenz honoured the aircraft builder by naming a square after him.

Source: www.buecker-museum.de



Bücker Bü 131 Jungmann

The two-seated double-decker Bü 131 Jungmann embarked on its first flight as the first Bücker aeroplane in Germany on 27 April 1934, and soon reaped praise in the press. The training and aerobatics double-decker plane impresses not just with its sleek appearance, but also with its excellent flying features. **Compact, versatile, first-class flying features, as well as affordable for purchasing and maintaining, was Bücker's formula for success.**

In 1935, Bücker-Flugzeugbau moved to the premises of Rangsdorf airport, located south of Berlin and which was still under construction. In the new halls and the company-owned factory premises, production of the Bü 131 Jungmann expanded into a much larger series manufacturing process. The flight performances were also reflected in the remarkably good showings at competitions. Of particular mention were successes such as the 1st and 3rd place in the "Round the Reef" air race in South Africa, and the 3rd place at the Dutch Aerobatics Championships in June 1938, as well as the 1st, 2nd and 4th placings in a Romanian aerobatics competition.

In 1937, Bücker supplied the first Bü 131 Bs to the German air force for training. They also enjoyed immense popularity there, and continued to be used for beginner and aerobatics trainings, and to a lesser extent also as liaison aircraft, until 1944/45. Many other countries also successfully used the Bü 131 Jungmann. Replicas of this agile, sleek classic are, incidentally, still being produced today.

Source: Flugzeug Classic, 10/2007 issue, www.buecker-museum.de

Bücker Bü 131 Jungmann

Single-motored, training and sports aircraft suitable for aerobatics, two-seated double-decker; first flight in April 1934.

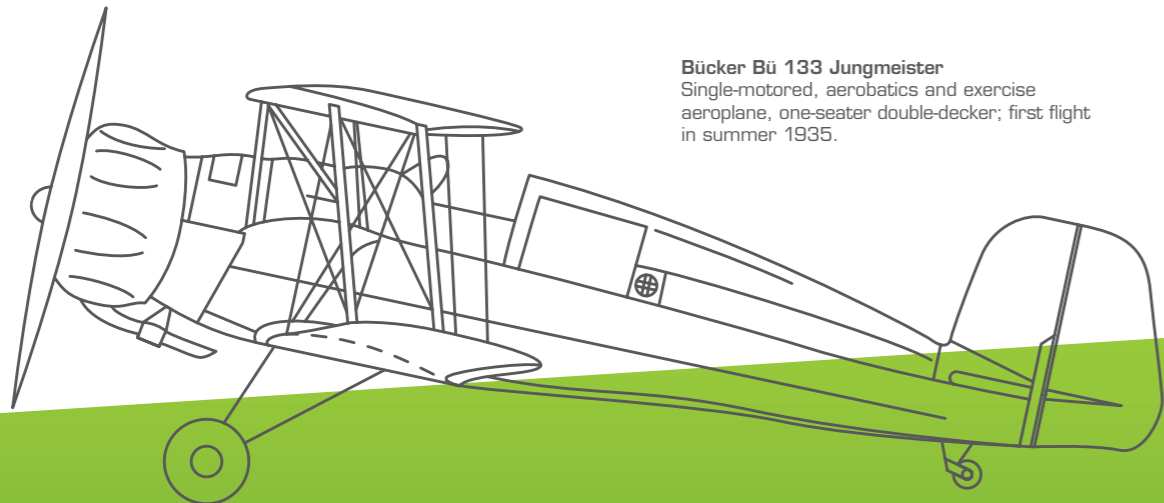
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Bücker Bü 133 Jungmeister

1936 saw the start of series production of the one-seater aerobatics and exercise aircraft Bü 133 Jungmeister. It became the most successful aerobatics plane over the following years. Aviation journalists described the aeroplane as “perfect in form, and efficient” in the 1930s. The Bü 133 Jungmeister was considered to be extremely versatile and agile. The famous German actor Heinz Rühmann was, incidentally, an avid admirer of the Bü 133 Jungmeister. Unlike the Bü 131 Jungmann, which was purely designed as a training aircraft, the Jungmeister was reserved for specialists and pilots aspiring to full aerobatics. The Bü 133 Jungmeister was the sports car of the motorised planes. Although manufacturing stopped in 1941, the success of this aerobatics plane continued even after the war. In Switzerland, for example, the air force used the Bücker aircraft, built in Altenrhein under licence with Dornier, for training until 1968. And, of course, numerous championships were also won with the Bü 133 Jungmeister, such as the first five aerobatics championships of the young republic. Swiss aerobatics pilot Albert Rüesch incidentally flew over the Alps in a Bü 133 Jungmeister – upside down...

Source: fliegermagazin, 07/2002 issue, www.buecker-museum.de

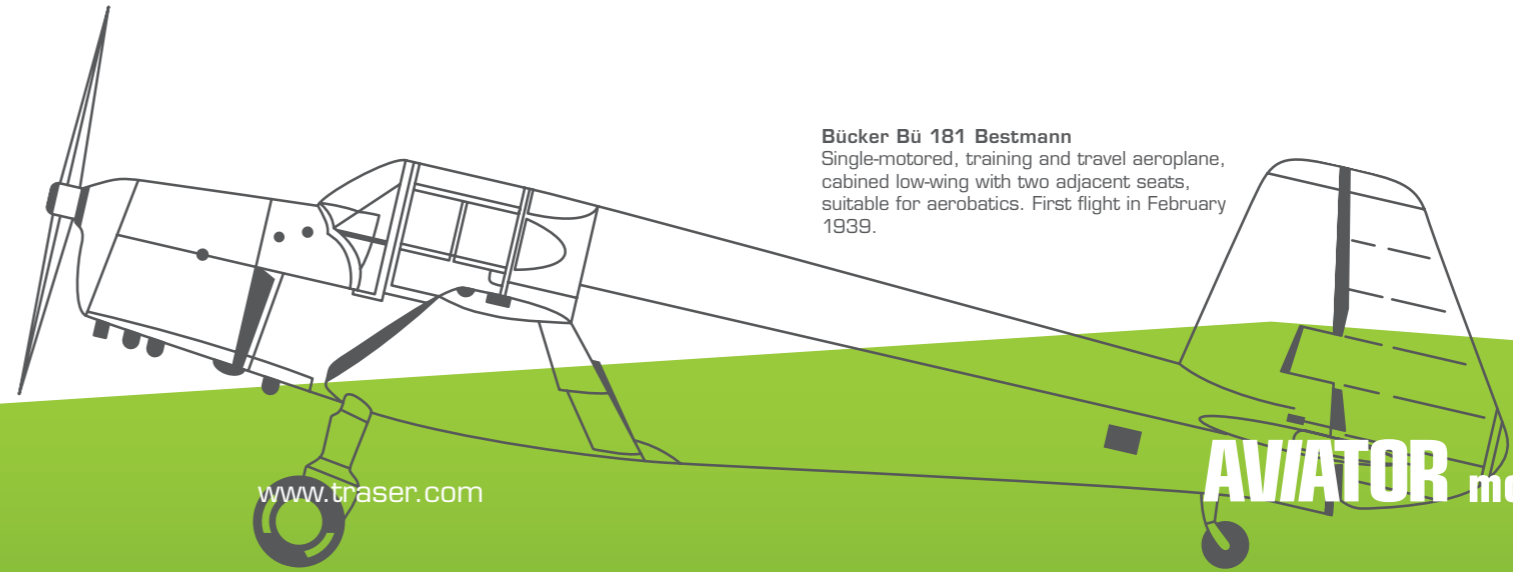


Bücker Bü 133 Jungmeister
Single-motored, aerobatics and exercise aeroplane, one-seater double-decker; first flight in summer 1935.

Bücker Bü 181 Bestmann

The last Bücker plane was built in 1939 – the Bü 181 Bestmann, a cabined low-wing plane with two adjacent seats. The Bü 181 was built in Rangsdorf in April 1945, and superseded the Bü 131 Jungmann as training aircraft in the air force. Building on the long-time experience gained through using the well-known Bücker training planes in practical exercises in various countries, the low-wing construction with adjacent seats was chosen for the new training machine. This construction offered considerable advantages for modern training, such as good communication between the teacher and student during the flight, while also familiarising the student with the low-wing construction for all modern fighter planes. Harmonising the good aviation features of the double-decker, already well known for the previous Bücker training aircraft, with the excellence of the cabined low-wing with adjacent seats, without compromising on the virtues of either, was the constructor's main task when developing the Bü 181 Bestmann. Apart from good vision, a modern training plane also requires versatility and great sensitivity, but it must never have dangerous characteristics, so-called “bugs”, and must instead be flawless and capable of being controlled well, even with little flying. The Bü 181 Bestmann well and truly met these requirements.

Source: www.buecker181.de (“Bücker Werkszeitschrift”, December 1941 issue), www.buecker-museum.de



Bücker Bü 181 Bestmann
Single-motored, training and travel aeroplane, cabined low-wing with two adjacent seats, suitable for aerobatics. First flight in February 1939.

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The design idea: Great ideas are successful because they're simple

Combining known quantities and with proven remedies leads to new features, and enables top performances.

...absolutely reliable, easy to fly, sophisticated controls, the best aviation features and low operational costs; a dream to fly. These are the characteristics used by pilots in the 1940s and aerobatics pilots of today to describe the Bücker aircraft.

This principle has driven us to develop a new generation of pilot watches: the traser® H3 Aviator watches. Well-known, precise Swiss clockwork, combined with the WHITE High-tech lighting trivalight® for instruments and watches, creates new features, and enables optimum reading of the time, during the day and in complete darkness.

...absolutely reliable, easy to read, pleasant to wear, a stylish look with white trivalight® lighting, and affordable to buy: traser® H3 Aviator watches; a dream to own.

Bü Jungmann:	Easy to fly, versatile, reliable, forgiving, ideal for aviation students
traser® H3 Aviator Jungmann:	Easy to read, high degree of accuracy, additional aid with chrono display
Bü Jungmeister:	Easy to fly, heavily motorised, reliable, ideal for ambitious aerobatics pilots
traser® H3 Aviator Jungmeister:	Easy to read, high degree of accuracy, reliable, stopwatch like the clock
Bü Bestmann:	Easy to fly, well-balanced motorisation, with two adjacent seats for optimum communication, reliable, ideal for experienced pilots
traser® H3 Aviator Bestmann:	Easy to read, mechanised automatic movement, high degree of reliability

Record: A Bücker aeroplane is so safe, reliable, precise and easy to fly...

- that the Swiss aerobatics pilot Albert Rüesch was able to fly over the Alps upside down in a Bü 133 Jungmeister.
- that, on 26 March 1939, the Darmstadt aerobatic aircraft chain with 3 Bücker Jungmeisters joined at the wing performed precise aerobatics shoulder to shoulder with loopings, double loopings, turns and other figures.
- that the youngest German female aerobatics pilot, Liese-Lotte Georgi got her K1 aerobatic pilot's licence in 1939 at the age of 18 in a Bücker Jungmann.
- that, on 7 July 1939, the aerobatic flying squadron of the German Air Force performed a slowly flown show at the Int. Military Pilots' Meeting in Brussels, to form a giant, rotating clock hand.

Source: Erwin König, Die Bücker-Flugzeuge, NARA-Verlag

Record: Owning a traser® H3 Aviator watch means...

- always being on the innovative side with the unique trivalight® technology produced by the original manufacturer, and thus wearing a watch which guarantees unparalleled readability by day or night.
- owning a watch whose lighting system meets military requirements, and provides 100 times brighter light than any conventional watch lighting technology.
- having a watch whose trivalight® lighting technology does not require any external energy sources such as electricity, as the trivalight® is self-luminous – for at least 10 years.
- owning a watch which is robust, reliable and Swiss made, and which offers first-class quality at affordable prices.

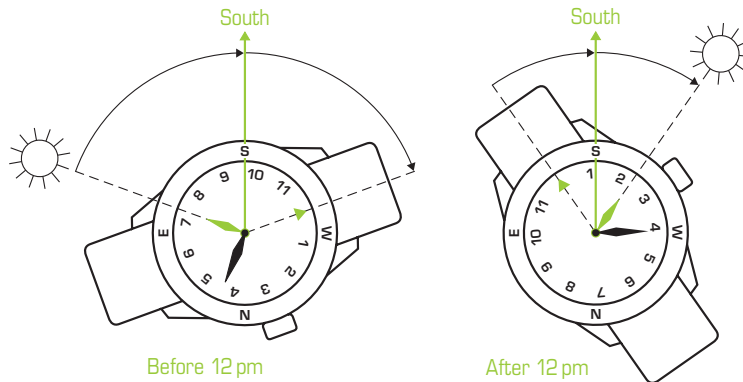
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Sundial: Navigation with rotating bezel

The sun points in a specific direction at set times. Around 6am, the sun rises in the east, is in the south by 12pm, and is in the west at 6pm.

You can easily determine the southerly direction with the help of watch hand: The hour hand points towards the sun. The angle between the hour hand and the 12 o'clock mark is halved. This angle bisector now points directly south. It is important to form the angle bisector in a smaller angle. This rule also only applies north of the Equator. In the southern hemisphere, north and south must be swapped. This rule applies for winter time. In summer time, a direction correction of minus 15° must be made (angle bisector; 1 hour = 30°).



Longitude and equation of time corrections are not usually taken into account with this rule. Deviation can be up to approx. 40°.