

Pilot's Watch: The B-UHREN

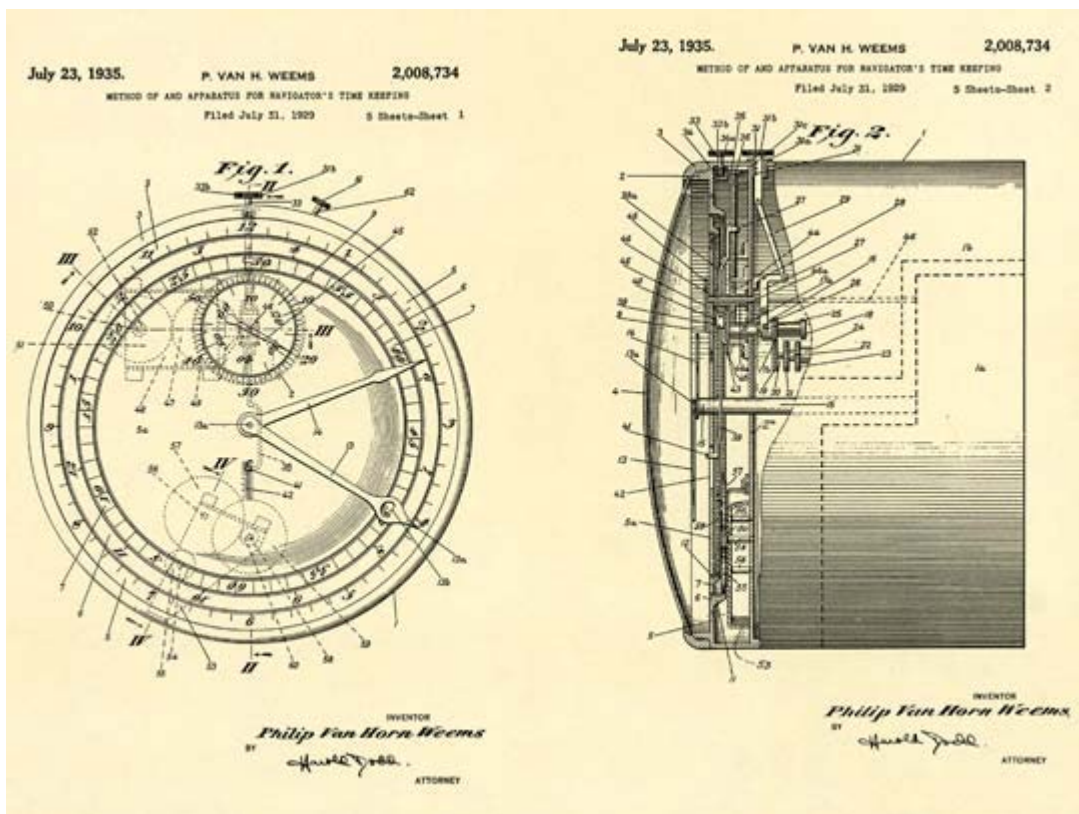
by Jason Ang



The Big Pilot's Watch: *Supplied to the German Luftwaffe in 1940 in an edition of 1,000 watches. With a case diameter of 55mm, a height of 16.5mm and a weight of 183g, it was the most imposing IWC wristwatch ever built.* Let's face it, most of us dream about becoming pilots or astronauts at some point in our lives. For the determined few, they fulfill their dream and become pilots, while for the uninitiated like me, I just like to wear the watches and leave the dream where it's supposed to be. So when I came across pilot's watches a few years ago, I started to learn more about their origins and histories. Many questions came up like "why is the design used by so many brands with no end in sight"? I

will start with its early origins, its association with pilots and if you're really interested, some B-uhr's that are worth owning.

The earliest known origin of the Navigator's watch came in the form of the Longines Weems second-setting watch. This was created by Lt Commander Philip Van Horn Weems in conjunction with Longines, and had a rotating center seconds dial and a 48mm diameter case. This watch was patented in 1929 and went into production. Later editions of the Longines Weems had a rotating bezel which showed the seconds register engraved on the bezel in a smaller 33mm case size (which was the accepted size at the time). Since these watches were the tools used in conjunction with sextants, compasses and flight charts, adjustments were necessary for time error as small deviations in time accuracy would lead to a huge error in flight calculations (fuel consumption, longitude/latitude position and time to destination calculations). Pilots would listen to the minute by minute beeps broadcast from the main base over the radio to adjust the center seconds dial down to the nearest second. This would readily show the time error on their watch so they could do calculations more accurately.



1929

Weems: *The diagram for the watch patented in 1929 by P. v. H. Weems in liaison with Longines. It allowed synchronization to the second with a radio time signal, without adjusting the minute and hour hands.*



2007 Longines: *The Weems Second- Setting watch by Longines pays homage to the man who may have started it all.* Unfortunately World War II broke out. Since combat aircraft had become such a powerful wartime tool, navigator's watches were put into full production along with the other more direct weapons. The German government demanded five manufacturers to build competent B-uhr watches which were both anti magnetic and able to be chronometer certified. It is believed that A. Lange & Sohne, a principal supplier of the time, could not deliver the watches in time for the amounts needed. The German government therefore brought the raw movements and cases to other watchmakers for mounting and regulating. The five companies that were assigned to build the watches were A.Lange & Sohne, International Watch Company, Laco, Stowa and Wempe. B-uhr was derived from the German word "Beobachtungs-uhr" meaning "Observation Watch". It is also referred to as the "Navigator's watch" or "Pilots watch". Approximately 1200pcs were built in 1942 and they were eventually commissioned to German Luftwaffe pilots and British deck officers. To this day, no watch manufacturer can claim credit to its exclusive rights hence numerous companies can pay homage to the original design.

The basic design principles of the B-uhr watch were the 55mm diameter (the size of high-quality pocket watch movements of the era were around 42mm-46mm in diameter therefore watch cases were limited to > 50mm), the use of arabic numerals, central seconds hand (must be hack capable to allow adjustments in time error), large onion or diamond shaped crowns (to allow for easy adjustments using thick gloves) and the ultra long double riveted buffalo strap to be worn over thick pilot's jackets (the rivets were actually used to adjust for different wrist sizes). Distinctive was the essential triangle marker at 12 o'clock with two dots on both sides. The triangle marker was used for the upward orientation of the dial during night flight. Furthermore, it was also used as a solar compass to find the earth's true north in conjunction with sextants, compass and data charts. An anti-magnetic capability was needed hence all pilots watches used an iron inner core which also contributed to its large case design.



Archimede Flieger: *A 42mm diameter B-uhr homage by Ickler GmbH.*

Some other German watch manufacturers that continue to produce B-uhr homages to this day are Aristo, Archimede, Damasko, Hanhart, Junghans, Junkers, Sinn, Steinhart / Debaufre and Tutima. Some manufacturers still make Pilot's watch models in the original 55mm diameter, and these can be highly collectible though impractical for everyday use. One interesting brand is Archimede made by Ickler Germany. Ickler GmbH, based in Pforzheim, Germany, has over eighty years of watchmaking expertise. Its Pilots watch comes in two case sizes - 39mm and 42mm diameter. Instead of a polished case, Archimede utilized satin finishing on its stainless steel case which is sort of in-between a brushed and a polished look. The movement used is the proven ETA 2824-2 swiss automatic movement, and the case has a mineral display back. The workmanship far outweighs its asking price, though some would argue it's not the "real deal" B-uhr watch as it lacks a soft iron core and comes in an automatic mechanical movement without hack seconds (original B-uhr's used handwound movements). But look past its weaknesses, it's probably one of the best value pilot's watch available.

Another company is Stowa (also based in Pforzheim). The company has been making B-uhr watches since 1927 and has a long historical lineage making pilots watches. The Stowa Airman has a 40mm diameter case and uses the same ETA 2824-2 swiss automatic movement. It has three movement choices - a stock 2824 movement with an engraved rotor, a decorated 2824 movement with a German silver engraved rotor and a COSC movement with added decoration. The dial comes in a choice of logo or non-logo (no brand name on the dial). There is sapphire crystal front and back, and a double riveted nappa leather strap comes with every Stowa Airman. Based on numerous German watch forums, the Stowa Airman is the quintessential B-uhr watch based on polls conducted. It's not surprising since it offers the best balance in terms of affordability, durability and historical significance.



Stowa Airman: *A date model with logo and a spartan variant without logo--both 40mm in diameter--these Stowas are considered quintessential B-uhr watches on German watch forums.*



Special Pilot's Watch: A mid 1930's IWC watch made for the civil aviation sector. IWC, the premium International Watch Company and most well known of the original names, gets the credit for the successful revival of the Navigator's/Pilot's watch in the luxury watch market. Indeed, it is arguable that Winston Churchill's famous quote is quite applicable now to those producing the Pilots watch because of IWC's successes with it. The company has been manufacturing pilot's watches since the nineteen thirties. In 1988, it released a range of pilot's watches directed towards the luxury end of the market. Since the end of world war II, B-uhr watches were never perceived as a luxury timepiece, and were generally only collected by a handful of military watch enthusiasts. IWC succeeded in creating a range of high quality yet user friendly pilots watches with modern automatic movements sourced from JLC, ETA and later, using their own 30110 calibre movements. The Mark XII was introduced in 1993 with a 36mm diameter case sporting the soft iron core (the antimagnetic was retained to continue its historical lineage). This watch was based on the British pilot's 6B/346 navigators watch design. The simplistic dial with one to eleven Arabic numerals is now coupled with a date indication. At the upper end of the price scale, the IWC Big Pilot is one of the most sought after pilots watch to date , and uses a 46mm case size (they created it as close to the 55mm original yet more wearable for an average consumer). It too uses an inner soft core and a dial reminiscent of the original Big Pilot of the 1930's (the Cal. 52 Fliegeruhr). Double metal stud crocodile leather strap and a diamond shaped large crown add distinct similarities to the Cal. 52 Big Pilot. IWC used their tried and tested 51110 movement seven days power reserve with Probus Scafusia engraved on the rotor. The Big Pilots watch was modelled on the cockpit of the Junkers Ju-52 aircraft. Reliability was the fundamental criteria behind the creation of the Big Pilot, just as with the Ju 52 aircraft itself.



Current IWC Pilots: *The recent pilot's watches from IWC still stay true to primary design criteria, even though they have drifted into a much higher price range.*

War is an unpleasant experience for everyone. When humanity's darkest hours unfold, there are still good things that can come out of it - humility, courage and honor to name a few. Despite all the bad publicity of war, the pilots watch came out of the ravages of time unscathed. No doubt these watches were used as tools of war but in context, the watch was, like much of the world at the time, a victim of a person's greed and his wrong idea of greatness. The B-uhr moved from its tainted existence to become an average consumer tool, but somehow its relevance on our wrist, isn't merely just telling time. If we look beyond the confines of a B-uhr as a watch, it makes us realize how fortunate life is during time of peace. Though war was for many their darkest hour, for some, it too was their finest. Same thing can be said of the pilots watch!



IWC's Flying Ambassador: *A rejuvenated 1940's vintage Junkers Ju-52.*