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New TBM 960 also flies in Switzerland











Interview with Lorenzo Stoll, Head von Swiss WorldCargo



Retrospect: Fighter Zero Decision in 1972

Daher launches the high-end version of its turboprop family

First Swiss TBM 960

The advanced PT6E-66XT engine from Pratt & Whitney Canada, the fully digital throttle, an all-new environmental control system, LED lighting and electrically dimmable windows - these are the new features of the TBM 960 to be launched in the spring of 2022, and one of the first will arrive in Switzerland at the end of September. The enthusiastic TBM 930 owner Paolo Buzzi will fly it from Lausanne.

Report Hansjörg Bürgi

The decisive factor in his decision to replace his six-year-old TBM 930 with a brand-new TBM 960 was his wife. She accompanies him on most of his flights. The new TBM 960 features what's called the "Homesafe Button." A knob in the cockpit which, in an emergency situation, automatically guides the aircraft to the nearest airfield and lands automatically - if the pilot can no longer do this himself for health reasons.

"Flying away" from the pandemic

Initially, his wife was not at all enthusiastic about flying, says Paolo Buzzi, now 60. She asked him never to fly anywhere with her or the children. But for his 50th birthday, she gave him the gift of a flight with her. "The conditions were perfect and she loved

it," he says happily. Since then, she has been his most loyal "co-pilot," even though she does not have a flying license. Today, it is even his wife who often encourages him to take a flight. In the new TBM 960, Paolo Buzzi will also instruct her on what to do in the event of an emergency and how to operate the "Homesafe Button," he says.

The Buzzi couple also spent a lot of time abroad with their TBM during the pandemic, in 2020 and 2021. In each case, they looked at the individual country restrictions and then spontaneously decided where to travel. "With the fast turboprop, an 'escape' from new restrictions was always possible," says the TBM pilot.

So, in June 2020, they flew to Venice, where they were practically the only tourists and the whole city was "at their feet." They realized that this was a unique opportunity to enjoy Italy for once in the

summer without tourists. In Sicily, people were very surprised how they, as Swiss people, had got there at all, because there were there were no flights, boats, buses or taxis running. ... quite simply, with our own airplane!

TBM 930 bought spontaneously

But it is not only his wife who is the decisive factor for the new acquisition, but also Paolo Buzzi's technical interest, as well as financial considerations. Because his TBM 930 is now coming out of its warranty period and there are maintenance works, which he would rather spare himself in favour of a new aircraft. As an engineer, he is also the new engine and the other new features of the TBM 960.



Paolo Buzzi in front of his TBM 930 in the hangar in Lausanne. At the end of September, he will be the first Switzerland to fly a TBM 960.

Photo Hansjörg Bürgi

When I had sufficient confidence in my TBM, I fulfilled a childhood dream: Flying around the world myself.

Paolo Buzzi

He spontaneously bought his TBM 930 at the AERO in Friedrichshafen a few years ago. Actually, he just wanted to look around a bit. But then he suddenly saw this TBM 930 and was blown away! His first aircraft was a Beech A36 Bonanza, with which he also completed his instrument flight training. But Paolo Buzzi remembers that it was a challenge each time, to fly through clouds because of ice formation.

SkyNews.ch Juni 2022

SkyStory

So, he replaced the Bonanza with a very special aircraft, namely an Extra 500, a single-engine high-wing with pressurized cabin and turboprop engine. With a cruising speed of 200 knots, it was quite nippy. But only seven of these Extra 500s were built in all, and the entire factory was sold to China.

With his new TBM 930, he feared he would fly less, as it is much faster than the Extra at 300 knots. But he doesn't fly less, he just flies farther. Today, he is still in the air once or twice a week, mainly on private flights and only rarely for his company. Paolo Buzzi is co-founder of the well-known online banking group Swissquote.



The TBM 960 during a test flight. At the heart of this latest TBM version is the PT6E-66XT engine and Hartzell's five-bladed Raptor™ composite propeller.

Photo Daher/Jean-Marie Urlacher

Around the world with the TBM

When he had gained sufficient confidence in his TBM, he fulfilled a childhood dream:

The fifth evolution of the fast TBM turboprops

"The TBM 960 is the quintessential TBM and represents the fifth evolution of our very high-speed turboprop aircraft family since the introduction of the TBM 900 series in 2014," commented **Nicolas Chabbert**, Senior Vice President of Daher Aircraft Division. "It optimally exploits the advantages of today's turboprop technology and offers digital control of the engine and the propeller." At Daher's recommended cruise speed of 308 knots (570 km/h), he said, fuel consumption is only 57 U.S. gallons per hour, which represents a ten percent savings percent over the maximum cruise speed, Daher said.

But at the heart of this latest TBM version is the intelligent PT6E-66XT engine and Hartzell Propeller's five-blade Raptor™ composite propeller, both of which are equipped with the dual-channel digital electronic engine and propeller control system (EPECS). With the EPECS, the PT6E-66XT is fully automatic after activation of a single switch.

The power lever in the cockpit is E-throttle lever that remains in a single forward position from take-off to landing, with the EPECS optimizing the engine's engine over the entire flight envelope. The **Pilot workload** is reduced by integrating all functions and the engine life is protected. The analysis of the engine parameters is controlled by more than 100 data inputs, according to further information provided by Daher.

The Raptor™ propeller is fully integrated into the propulsion system. It has been specifically designed to reduce overall weight and improve the take-off distance, the climb rate and the cruise speed of the TBM 960. The propeller turns at 1925 rpm at maximum power and helps to limiting noise and vibration. The noise level at take-off is only 76.4 decibels, meeting the most stringent international noise standards, Daher adds.

With its integrated **G3000 cockpit**, the TBM 960 retains the e-pilot innovations developed by Daher in the TBM, which can be compared to an "Electronic Co-Pilot". These include an **Anti-icing system**, Flight Envelope Monitoring through the Electronic Stability and Protection System and the Emergency Descent Mode, as well as the "homesafe emergency landing system."

New to the TBM 960 is the **Garmin GWXTM 8000 Doppler weather radar** with lightning and hail prediction, turbulence detection and ground clutter suppression. Daher extends the use of digital technology with an allnew environmental control system, LED ambient lightning strips and **electronically dimmable windows**. Improvements in the cabin include new, ergonomically improved seats, USB-A and USB-C outlets, individual cup holders and headset holders for each passenger.

The TBM 960 has been **certified by EASA**, and the certification by the U.S. FAA is currently underway. Deliveries have begun in the first half of 2022. With the introduction of the new aircraft, the TBM family is now offered by Daher in two versions: the TBM 960 and the TBM 910.

Technical data (all data from Daher)

Engine: P&W Canada PT6E-66XT with 1844 HP/850 HP nom.

Fuel capacity: 292 US gallons/ 1106 liters

 Cabin width:
 1.21 meters

 Cabin length:
 4.05 meters

 Cabin height:
 1.22 meters

 Cabin volume:
 3.5 cubic meters

 Empty weight:
 2180 kg

 Max. Take-off weight:
 3454 kg

 Max. payload:
 656 kg, with full tanks 403 kg

 Max. Speed:
 330 kts / 611 km/h at 28'000 feet

 Max. flight altitude:
 31'000 feet / 9449 meters

 Time for 31'000 feet:
 18 minutes. 45 seconds

Take-off distance: 773 meters Landing distance: 741 meters

Maximum range: 1730 nm / 3204 km with 45 minutes reserve

Price 2022: USD 4'565'789 to USD 4'778'964

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The cockpit of the TBM 960 during emergency training, with the "homesafe button" (in the center) activated.

To fly around the world once himself. Since he lacked the time to organize this "Round the World Trip", he had it done by a professional organization. Five other TBM pilots had the same goal. Paolo Buzzi flew from Lausanne to Altenrhein for a maintenance check and then joined the group in Athens where his wife caught up with him by using an airline. He landed with somewhat mixed feelings, because he knew he would have to spend the next nine weeks with these five other pilots. But it turned out that they were all at "the same flight level," including mentally, and friendships developed that last until today. Since the organizing company managed all the overflight permits and also the hotel bookings, the pilots and their companions could really fly and enjoying the stays in the individual countries.

The whole flight around the world took only about 100 flight hours - the TBM is a fast aircraft.

The nine weeks literally flew by. The routing was as follows: Athens to Jordan, then to Dubai, to the new big Dubai World Central Airport. Afterwards it went on

to Oman and India, where they were able to marvel at the Taj Mahal, thanks to a special landing permit on a military airfield. Then followed Thailand, Laos, Cambodia and Singapore. They always flew in the morning to avoid the big thunderstorms. The ATC guided them perfectly around the storms. Indonesia was the next stop, then they were blocked on Bali for a few days due to a volcanic eruption. This was followed by stops in Brunei, Vietnam, Hong Kong, Taiwan, Japan and finally Russia. Then it went on to the USA, to Alaska and Seattle. There he left the group. With his wife, he visited the USA, Canada and they returned via Greenland and Iceland to Europe and finally to Lausanne. The whole flight around the world took only about 100 hours - the TBM is just a fast aircraft.

His TBM 930 HB-KRJ held up excellently during this nine-week trip. However, after take-off from Altenrhein in the direction of Athens, Paolo Buzzi had to turn back to Altenrhein, because the turbine had issued a indicated a "bleed warning". "It was Friday afternoon and the mechanics in Altenrhein didn't know what to do. They assured me they hadn't touched the bleed air system," he recalls. So, Paolo Buzzi called the manufacturer Daher and flew to Tarbes in southern France the same night. While he was sleeping in a hotel, the bleed air system was being replaced. The next morning the warning was gone and his flight around the world still possible in time.

Last start in Argentina

His next adventure followed in March 2020, shortly before the pandemic paralyzed the world. The same five pilots decided to fly to South America. The plan was a good one because Covid-19 was sweeping the world from East to West. So, they visited Peru, Colombia, Chile and Argentina, where they flew to the southern tip to Mendoza until the airspace there was closed due to Covid restrictions. The organizers advised them to return to Switzerland immediately, but the Buzzi couple decided to stay in America because Switzerland was now in lockdown. "So, we fled north and I was told that we had been given the last take-off clearance to still be able to leave Argentina...," recalls pilot Buzzi.

The HB-KRJ flew to Chile to refuel. There, he had to negotiate for several hours to obtain overflight permission for Peru. Via Guayaquil in Ecuador, they then reached Costa Rica and flew on to Florida, where they spent four beautiful weeks, because Switzerland had in the meantime "sunk" into lockdown. When the home could be flown to again at the beginning of June, they started the return flight via Canada. "We were able to refuel, but it was absolutely forbidden to leave the plane. We had to hold our passports up to the windshields so that customs could check them." Paolo Buzzi looks back. Then they flew from Goose Bay directly to Iceland.



Portal for private aircraft rental also in Switzerland

Due to the need for fast and flexible travel for companies, the idea to create OpenFly was born in France. The intermediary platform for the rental of private aircraft has developed an application that connects Small and Medium-sized Enterprises (SMEs) with private aircraft owners and professional pilots. According to its Swiss representative Marc Duchesne of SwissFly Aero LLC, the digital portal now lists more than 150 aircraft with an average of 2 to 8 seats (from the SR22 to the TBM, PC-12 and Citation Mustang). Five of these aircraft are already stationed in Switzerland.

How does it work? Customers put together their own trips, with one or more destinations, on one or more days and at the times they want. Then they look for a professional pilot and a suitable aircraft on Openfly. The booking request is completed in three steps.

The advantages for users are numerous: the skills of professional pilots can be used and they can land as close as possible to the desired destination. There is no need to adhere to prescribed flight schedules and you benefit from considerable time savings. Thanks to optimized travel, overnight accommodation costs can be saved and confidential work or discussions can be held during the flight.

For the owner of an aircraft, OpenFly offers an industrialized solution for the rental of his aircraft. He decides rates and the schedule for the availability of his aircraft, and thus has full control over the number of hours that he can rent out his aircraft during the year. This allows him to reduce his fixed costs. For professional pilots, OpenFly offers an additional income. To be listed on the portal, each pilot must be a professional pilot (CPL/IR) and meet other specific conditions (e.g., at least at least 500 hours as a flight captain and 100 hours as an IFR captain), before being allowed to fly on an aircraft listed on the platform with the owner's consent.

https://www.openfly.ch

If you move the throttle lever forward, then only one signal is sent out. This is a new way of flying.

Paolo Buzzi

TBM 960: East Africa is on the agenda. He wants to make this flight towards the end of the year and organize it himself. His passion for flying was already laid in the cradle by his father who gave him a book about Swissair as a gift to inspire young people to fly - he still has it today. At the age of ten he wanted to become an airline pilot and built model airplanes. During his studies at the EPFL, he went through recruit school, but did not want to become a military pilot, because this was too time

consuming. So, he went to Saint Louis in the USA to complete flight training in five weeks. - together with his current business partner. The flying then took a back seat when they founded their own company. But his business partner - still the same one who learned to fly with him in the U.S. and with whom he founded Swissquote - now owns a PC-12 NGX. They often fly together and can thus ideally compare the two aircraft. www.swissflyaero.com

Afterwards we went on to Sweden and finally to Lausanne.

With the TBM 960 to East Africa

Now Paolo Buzzi is looking forward to his new TBM 960, which should be delivered at the end of September. "Before that, I'm going to do a week's training with an instructor so that I can handle the new aircraft properly," he adds. "What gives me a bit of a headache is, that there are no longer any mechanical links between the instrument panel or the throttle and the engine. It's all digital and fully computercontrolled. When you push the throttle forward, only one signal is sent out. For me, this is a new way of flying," says Paolo Buzzi. But he has sufficient confidence in the technology, and after all engine works very well on the PC-12 NGX. Thanks to the engine's digital control system, it only needs to be overhauled after overhaul after 5,000 hours. Paolo Buzzi has already made plans for his first big trip with the new



Marc Duchesne represents Daher and Openfly in Switzerland with his company SwissFly Aero LLC.

Photo Hansjörg Bürgi



DIGITAL TEMPOWER

Our latest TBM very fast turboprop aircraft delivers the full benefits of digital power. Taking maximum advantage of today's turboprop technology, the single-engine TBM 960 provides high efficiency for more sustainability. In its Prestige cabin, passengers regulate temperature and ambiance lighting with exactitude. Featuring outstanding safety systems such as the TBM e-copilot* and HomeSafe™ emergency autoland, the TBM 960 is the quintessential TBM.



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