

TBM850

by DAHER-SOCATA

NEWSLETTER
WINTER 2010



**SOCATA:
NEW YEAR, NEW HOPES!**

No one would argue with the statement that 2009 was a challenging year for us – with all that came with the current economic turmoil and the introduction of the new DAHER-SOCATA organization. But we coped with it! DAHER and SOCATA partnered successfully to create a strong team with the resources – and the will – to continue developing and enhancing our aircraft product line.

DAHER-SOCATA's TBM 850 very fast turboprop aircraft is well-positioned for continued success, especially in today's challenging times for the business aviation and owner-pilot sectors.

We first have to thank the loyalty and confidence of our customers...old and the new...who have recognized the continued value of our product. Thanks also are due to the energy and commitment of our sales and support network, and all of those in our team who continue to make the TBM 850 a success.

In 2009, we delivered 36 brand new TBM 850s, which is a real accomplishment during troubled economic times, and we registered new orders from both existing and new customers. At year-end, less than 10% of the TBM 700/850 fleet was on the pre-owned market. This is a good sign that the TBM is a real asset – something which is highly desirable for any aircraft in its category.

2010 will be a transition year, as well as a time to consolidate valuable assets. To develop our activities, DAHER-SOCATA will focus on several areas during the coming 12 months:

- Product enhancement
- Listening to our customers
- Reinforcing customer support excellence
- Tailored solutions for corporate operators
- Positioning ourselves for 2011 and beyond

All of these topics are detailed in this issue of our Newsletter, which I hope you will enjoy.

We wish you a happy New Year, and safe flights in 2010!

Nicolas Chabbert

Senior Vice-President Airplane Division
DAHER-SOCATA





CONTENT

EVENTS

6TH TBMOPA CONVENTION
IN TUCSON

AGENDA 2010

CUSTOMER PROFILES

ALAIN RAMERY, SN 148

RAMIRO URENDA, SN 508

NETWORK

ROB CARATELLO,
THE NEW DIRECTOR
OF TBM SALES AT EXECUTIVE
AIRLINES, AUSTRALIA

NATIONAL AIRWAYS
CORPORATION,
TBM DISTRIBUTOR
AND SERVICE CENTER
IN SOUTHERN AFRICA

SUPPORT

AVIONICS UPGRADE
SPECIAL

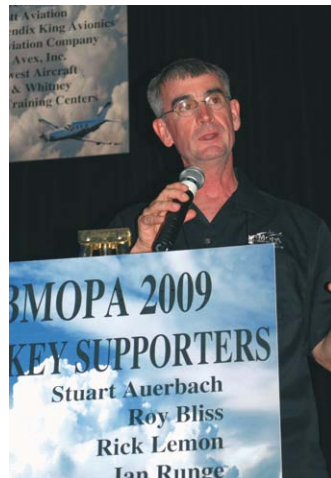
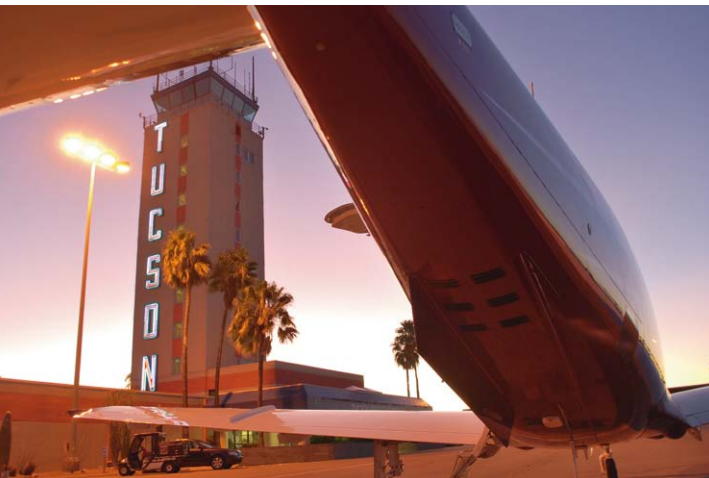
RECURRENT TRAINING

HISTORY

MS 230, THE KING OF
THE PARASOL-TYPE
MORANE-SERIES AIRCRAFT

TBM FLEET STATUS REPORT





QUIT

BACK TO
THE TABLE
OF CONTENTS

6TH TBMOPA
Convention
in Tucson

Agenda 2010

6TH TBMOPA CONVENTION IN TUCSON

The 6th TBM Owners and Pilot Association (TBMOPA) Convention, which was held in Tucson, Arizona during October, set a new attendance record – with more than 225 participants coming to the event, along with the presence of 85 aircraft.

John Hinshaw, President of the TBMOPA.
Patrick Daher

The TBMOPA is the independent user's organization for DAHER-SOCATA's TBM 700 and TBM 850 very fast turboprops. For its 2009 convention, the site at La Paloma was nestled in 250 acres of the high Sonora Desert foothills of the Santa Catalina Mountains, with picturesque views amidst an intriguing landscape and abundant wildlife.

"Our 6th convention was a huge success. Feedback from surveys completed by our members indicated they appreciated the academic program, especially the proper use of onboard radar," explained John Hinshaw, TBMOPA President. "They said also they had a good time at the event. We want to thank Patrick Daher, Chairman and CEO of the DAHER Group,

as well as DAHER-SOCATA and its distributors and TBM vendors for their support."

The meeting's dynamic academic sessions were customized for TBM aircraft owners, and were accompanied by a record number of vendor displays. Several presentations highlighted the convention, including the keynote speeches delivered by Craig Fuller, president of the Aircraft Owners and Pilots Association (AOPA) and Patrick Daher, chairman and CEO of the DAHER Group. Daher energized the audience with positive remarks on the future of the TBM product line.

▶ NEXT



The 2009 TBMOPA convention captured widespread attention with DAHER-SOCATA's announcement of a retrofit program that enables the installation of Garmin's G1000 integrated flight-deck on all TBM 700 A and B models.

With more than 20 convention sessions in three days, the packed audience was given additional insight into the TBM's systems and operations, as well as the TBM insurance market. In addition, the 6th annual safety review provided an overview of the TBM's in-service safety record, and highlighted the lessons that can be learned from the aircraft's operational experience.

The next annual convention will take place at Homestead Resort, Hot Springs, Virginia on September 8-12, 2010.

▶ For more information About the TBM Owners and Pilots Association, visit www.tbmowners.org

Patrick Daher takes control of a TBM with Nicolas Chabbert. Craig Fuller, President of AOPA and convention keynote speaker; with John Hinshaw Charlie Holomek, Vice President - Customer Support of DAHER-SOCATA North America, receives the Outstanding SOCATA Employee Award from the TBMOPA Board. Pictures by Bill Alberts, Nicolas Chabbert and Raphaël Maître

TBM850

by DAHER-SOCATA



QUIT

▶ BACK TO
THE TABLE
OF CONTENTS

6TH TBMOPA
Convention
in Tucson

Agenda 2010

AGENDA 2010

EUROPE

8-11 April	AERO Friedrichshafen, Germany
4-6 May	EBACE, Geneva, Switzerland
28-30 May	Aero-Expo, Prague, Czech Republic
4-6 June	EUR-AVIA, France
8-13 June	ILA, Berlin, Germany
25-27 June	Aero-Expo, Wycombe Air Park, UK
19-25 July	Farnborough, Farnborough, UK
23-25 Sept	Monaco Yacht Show

AFRICA

27-30 Jan	Aero-Expo, Marrakech, Morocco
14 July	Durban Air Show, Durban, RSA

NORTH AMERICA

13-18 April	Sun N Fun Lakeland, FL
11-12 June	Parade of Planes Atlanta, GA
26 July - 1 Aug	EAA AirVenture Oshkosh, Oshkosh, WI
8-12 Sept	TBMOPA Convention, Hot Springs, VA
27-30 Oct	MMOPA, Amelia Island, FL
19-21 Oct	NBAA Annual Meeting & Convention, Atlanta, GA
11-13 Nov	AOPA Aviation Summit, Long Beach, CA

LATIN AMERICA

23-28 March	FIDAE, Santiago, Chile
12-14 Aug	LABACE, Sao Paulo, Brazil



QUIT
▶ BACK TO
THE TABLE
OF CONTENTS

▶ **Alain RAMERY,
SN 148**

▶ Ramiro URENDA,
SN 508

**ALAIN RAMERY,
SN 148**

A lawyer by trade and aviator by passion, Alain Ramery purchased a TBM 700B (SN 148) in the U.S. He flew his new acquisition to France just after the 2009 TBMOPA Convention's conclusion. With his French compatriot and fellow TBM "veteran" David Fabry as co-pilot, Ramery traveled from Tucson to Paris by the Northern Route, carrying a VIP passenger: DAHER Group Chairman and CEO Patrick Daher.

During a stopover at DAHER-SOCATA's Tarbes headquarters for his first recurrent training course, Ramery talked about his 41 years of flying activity. His total flight time has now reached 1,700 hours, of which 200 hours have been on TBM aircraft. His logbook includes eight Atlantic crossings in both directions, and he currently is thinking about a new transatlantic adventure.



QUIT

▶ BACK TO
THE TABLE
OF CONTENTS

Alain RAMERY,
SN 148

Ramiro URENDA,
SN 508

RAMIRO URENDA,
SN 508

When turning 50 Ramiro Urenda, decided to achieve his dream: learning to fly. This was in 2005. Four years later, he purchased a pre-owned TBM 700 (SN 2) in Europe and flew it back to Chile. Six months later, he became such a fan of the TBM he wanted to have the latest model, and he purchased a 2009 TBM 850 model last fall (SN 508, seen in our pictures), which became the first TBM 850 in Chile. A successful businessman, Urenda is the President of Derco Group, the largest car and machinery distributor in Chile, Peru, and Bolivia, which has exclusive representation for eight automotive brands, including Suzuki, Mazda, and Renault and several world-known machinery brands, such as JCB, Komatsu and Massey Ferguson. With an average annual sales volume of over \$1 billion in recent years, Derco is one of Latin America's foremost business groups.





QUIT
▶ BACK TO THE TABLE OF CONTENTS

▶ **Rob CARATELLO, the new director of TBM sales at Executive Airlines, Australia**

▶ National Airways Corporation, TBM Distributor and Service Center in Southern Africa

ROB CARATELLO, THE NEW DIRECTOR OF TBM SALES AT EXECUTIVE AIRLINES, AUSTRALIA

A family man at the ripe age of 39 and having flown professionally for 18 years, Rob Caratello already is an aviation industry veteran. The holder of an ATP license, he has been involved in many areas – including the charter and airline sectors, and also in management. Caratello had the opportunity to fly numerous aircraft types while logging his 10,000-plus hours, including most of the Cessna singles, a number of light twins (such as the Shrike Commander and Partenavia P68), and he holds type ratings on the

Cessna Sovereign, BAe146, Saab 340, Fairchild Metro 23 and the Embraer 120 Brasilia. “My work in selling the TBM 850 is made easier by the fact that it is such an impressive aircraft, and I look forward to showing the world what it is capable of offering!” he stated.

▶ www.executiveairlines.com.au



**NATIONAL AIRWAYS CORPORATION,
TBM DISTRIBUTOR AND SERVICE CENTER IN SOUTHERN AFRICA**

DAHER-SOCATA last year appointed National Airways Corporation (NAC) as its exclusive TBM aircraft distributor and service center for Southern Africa.

Offering a full range of aviation services and products to the fixed wing and helicopter markets, NAC specializes in aircraft sales, aircraft maintenance, avionics, parts sales, charters, international operations and pilot training.

For NAC Chief Executive Officer Martin Banner, the African market offers excellent sales opportunities for the TBM 850. "It is the perfect answer for dynamic entrepreneurs who enjoy flying fast across the vast open ranges of Africa, and the TBM 850's range is ideal for covering most destinations in Southern Africa," Banner explained. "With its combination of jet-like performance and turboprop efficiency, the TBM 850 offers the most economical solution available in our market."

NAC was created in 1946 as one of South Africa's first air charter services. The company has spread its wings over the years, becoming the largest general aviation company in Africa, and one of the largest of its kind in the world.

From its headquarters at Lanseria Airport in Johannesburg, NAC operates a South African network of offices in Cape Town, Durban, Pretoria and at Rand Airport in Johannesburg. NAC also has branches in Botswana and Nigeria, and it established NAC Makana Aviation – a Cape Town-based helicopter company that is a joint venture partnership with Makana Investments (Pty) Ltd. Additionally, NAC has operations on other continents: Awesome Flight Logistics in Perth, Australia; and Specialized Aircraft Services in the United States at Wichita, Kansas. NAC is ISO 9001, 2008 approved.



www.nac.co.za

QUIT

▶ BACK TO THE TABLE OF CONTENTS

▶ Rob CARATELLO, the new director of TBM sales at Executive Airlines, Australia

▶ **National Airways Corporation, TBM Distributor and Service Center in Southern Africa**

After the 2009 TBM 850 demonstration tour in South Africa, the sales team takes a well-earned break: Guillaume Montreau, DAHER-SOCATA's international aircraft sales director for Southern Europe, Middle-East and Africa; JP Fourie, Executive Director Aircraft Sales of NAC; Alain Jaubert, demo pilot and head of flight training at DAHER-SOCATA; and Chris Briers, NAC technical consultant and demo pilot for the TBM. The NAC's facility at Lanseria. Pictures by NAC



QUIT

▶ BACK TO
THE TABLE
OF CONTENTS

▶ AVIONICS upgrade
special

▶ Recurrent training

▶ DAHER-SOCATA
Scores High Marks
in Professional Pilot
Magazine's Annual
Product Support
Survey

AVIONICS UPGRADE SPECIAL

One of the goals of DAHER-SOCATA's Customer Support department is the development of services and upgrades for customers of its older aircraft types. Beginning in 2010, the department will offer a glass cockpit avionics suite retrofit for the TBM 700A and B models, as well as for the TB aircraft series.

G1000 RETROFIT FOR TBM 700A AND B MODELS

The TBM G1000 retrofit is being offered for TBM 700A & B models as an upgrade to the latest avionics standard with a full Garmin G1000 avionics suite. Introduced at the TBM Owners and Pilot Association's annual convention in 2009, this major retrofit involves a full rewiring to support the installation of a large 15-inch multifunction display (MFD) and two 10.4-inch primary flight displays (PFDs), along with the Garmin GFC 700 three-axis, fully digital, dual-channel automatic flight control system (AFCS).

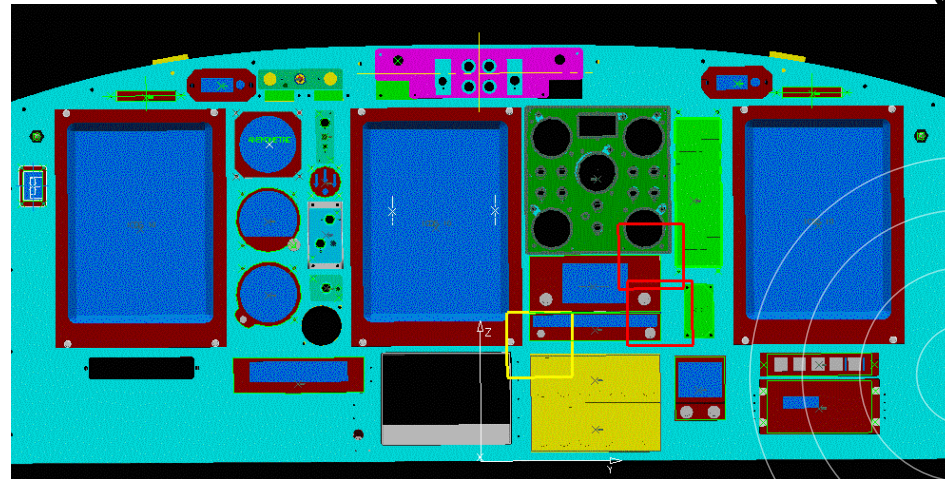
The Service Bulletin for this upgrade is expected to be issued in the second half of 2010. It will include complete documentation for installation and certification, as well as hardware for the new panel and servo mounts. The modification kit will be available through DAHER-SOCATA's Customer Support Network. Service Bulletin price is anticipated at \$86,500.

A complete installation will be available. Estimated cost should be approximately \$390,000, depending on the location where the installation is performed. DAHER-SOCATA already is accepting reservations with refundable deposits of \$5,000.

For more details on the retrofit, see the presentation from the TBMOPA's 2009 annual convention:



www.mysocata.com/mysocatadoc/service_information.php



- QUIT
- ▶ BACK TO THE TABLE OF CONTENTS
- ▶ **AVIONICS upgrade special**
- ▶ Recurrent training
- ▶ DAHER-SOCATA Scores High Marks in Professional Pilot Magazine's Annual Product Support Survey

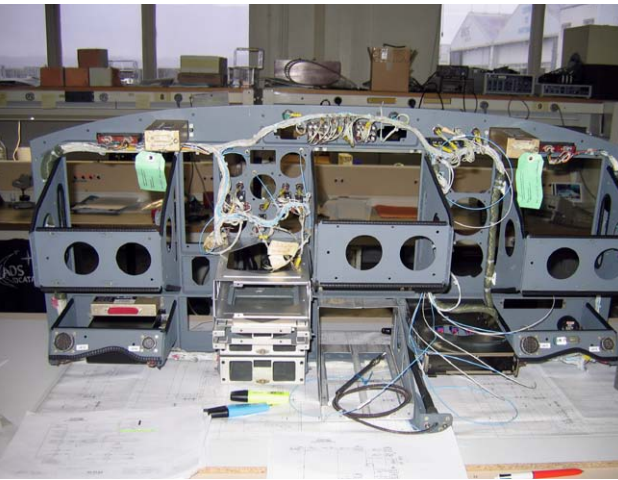
FRENCH MILITARY XINGU AIRCRAFT TO BE IMPROVED WITH AVIONICS UPGRADE KITS FROM DAHER-SOCATA

DAHER-SOCATA's Customer Support department has received an order from the French Ministry of Defense to supply the first 28 avionics upgrade kits for Embraer EMB-121 Xingu multi-engine aircraft, which are in service with the French Air Force and Navy for multiengine training and liaison missions. A total of 39 aircraft will undergo the avionics modernization.

In service since 1982, the Xingu aircraft are operated by the French Air Force's Military Air

Transport School (EAT) in Avord. They are used for multi-engine training of military air transport crews in the French Air Force, the French Navy and certain foreign countries. Some Xingus also are operated for liaison duties with Squadrons 24F and 28F of the French Navy.

This avionics modernization program will enable the Xingu to better operate within the European air traffic environment, and is to provide a high-quality training platform adapted to the requirements and concepts of next-generation military transport aircraft - including the A400M airlifter and the A330 Multi-Role Tanker Transport.



QUIT

▶ BACK TO
THE TABLE
OF CONTENTS

▶ **AVIONICS upgrade
special**

▶ Recurrent training

▶ DAHER-SOCATA
Scores High Marks
in Professional Pilot
Magazine's Annual
Product Support
Survey

The contract award to DAHER-SOCATA is the achievement of a two-year intensive program that included research and development of the new cockpit definition, the modification of two Xingu prototypes (one for the French Air Force and the other for the French Navy), followed by a ground and flight test campaign and fine-tuning.

As a result, the French armed forces will benefit from an aircraft that has been brought up to the latest avionics standard at the lowest cost.

The DAHER-SOCATA upgrade package includes a Sagem avionics suite with two ICDS-10 integrated cockpit display screens as primary flight displays, and an ICDS multifunction screen for engine parameters. It is complemented by a communications and navigation suite with Garmin's GNS 430 and SL30 radios that provide 8.33 kHz spacing, a GTX 330D Mode S transponder with antenna diversity, as well as complimentary systems. Also incorporated in the avionics modernization package is mission preparation software.



QUIT

▶ BACK TO
THE TABLE
OF CONTENTS

▶ AVIONICS upgrade
special

▶ Recurrent training

▶ DAHER-SOCATA
Scores High Marks
in Professional Pilot
Magazine's Annual
Product Support
Survey

TB 20 G500

Since Garmin's introduction of its G500 glass panel display for piston-engine singles, DAHER-SOCATA has worked on a retrofit solution with this package for the TB 20 Trinidad GT aircraft. Unveiled at the 2009 EAA AirVenture in Oshkosh, the G500 avionics suite is an affordable way for aircraft owners to transform their existing "six-pack" avionics panels and step up to a full "glass cockpit" dual-screen display configuration.

In addition to representing a quantum leap forward for pilots' situational awareness and safety of flight, the G500 avionics suite also will help save on maintenance costs associated with aging mechanical gyros. It features a 6.5-inch

primary flight display (PFD) and multifunction display (MFD), plus attitude/heading reference system (AHRS) and more. G500 customers also can install a tailored version of Garmin's Synthetic Vision Technology (SVT™) software and Chartview as an option.

The new Garmin GAD 43 adapter unit, interface between autopilot installed and the G500, is a part of the retrofit package offer. A G500-equipped TB 20 Trinidad GT has flown on November 13th, 2009 for the Supplementary Type Certification.

For more information, contact François Blumé, DAHER-SOCATA Customer Support in Tarbes, Tel +33 (0)5 62 41 76 75 ; f.blume@socata.daher.com

Digital image by Thomas Jullien



QUIT

▶ BACK TO THE TABLE OF CONTENTS

▶ AVIONICS upgrade special

▶ **Recurrent training**

▶ DAHER-SOCATA Scores High Marks in Professional Pilot Magazine's Annual Product Support Survey

RECURRENT TRAINING WITH DAHER-SOCATA IN TARBES

"Recurrent training is not a luxury, but something that must be done each year by every conscientious pilot if he wants to maintain or regain his flying skills and competence." Henry F. Schoenfeld, Schoenfeld Insurance Associates, Inc.

DAHER-SOCATA is committed to helping its customers retain their flying skills and competence as pilots.

The Flight Operations Department offers all TBM owners and operators one-day and two-day Pilot Recurrent Training Courses that can be easily completed using the trainee's aircraft.

With this course, DAHER-SOCATA's instructor pilots help sharpen a customer's flying proficiency. The course serves as continuing education with information about new operational issues, and includes a review of emergency and normal procedures. The course is followed by an evaluation flight.

Even if safety is the primary motivation for recurrent training, its multiple advantages also include the opportunity to save time and money on maintenance and parts. The best pilots are those who want their

skills and knowledge of the aircraft to be challenged at least once a year, and DAHER-SOCATA's pilots know that the best way to maintain proficiency is to perform recurrent training on a regular basis.

Asked about his recurrent training course experience, TBM pilot Alain Ramery (owner of TBM 700 SN 148) told the TBM Newsletter: "For me it was the excellent opportunity to review TBM performance and emergency procedures. In my routine flying, I don't often perform short landings or low minima IFR procedures. Without a flight instructor you don't practice flight procedures such as cabin depressurization or manual override of the fuel control unit (FCU). After my recurrent training course, I feel that I am a safer pilot, ready to face unusual flight conditions. My only regret was it was just too short."



RECURRENT TRAINING DETAILS OF DAHER-SOCATA'S RECURRENT TRAINING OFFERED IN TARBES:

One-day recurrent training

A 2-hr., 30-min. theoretical course for a knowledge review of the TBM (airframe, turbine engine, instruments and systems, emergency procedures, etc.)

A 1-hr., 30-min. flight covering normal procedures, emergency procedures and system use

Or:

A proficiency flight check, as required, for pilots with European licenses (JAR / FCL).

A 1hr., 30 min. briefing/debriefing (before and after the flight evaluation).

A proficiency flight check for the manufacturer's class rating "Aerospatiale Set," if required, for pilots holding European licenses (EU / FCL).

Two-day recurrent training

An additional 1-hr., 30-min. flight covering IFR flight operations: IFR navigation, IFR approach, missed approach, failure of the main artificial horizon, etc.



- QUIT
- ▶ → BACK TO THE TABLE OF CONTENTS
- AVIONICS upgrade special
- **Recurrent training**
- DAHER-SOCATA Scores High Marks in Professional Pilot Magazine's Annual Product Support Survey

RECURRENT TRAINING AT SIMCOM

The TBM recurrent training programs offered at SimCom Training Centers – the exclusive factory-approved training provider in North America and Mexico – are designed to provide pilots an exceptional learning experience in a safe, comfortable environment. SimCom offers a selection of recurrent training programs designed to meet operators' specific needs. Each course is structured to include classroom training combined with flight instruction in the recently-introduced TBM 850 flight training device (FTD).

The TBM 850 FTD is centrally situated in Orlando, Florida at SimCom's modern training center. Its location on the U.S. South Atlantic coast conveniently positions the simulator for TBM 850 operators throughout the Americas – which is the single largest geographic market for the TBM.

Two recurrent training programs are offered: a standard recurrent course, and an advanced refresher course.

The three-day recurrent course is designed for the operator who is taking the first course of this type, or for those who prefer a moderately-paced learning experience. Class size is limited to a maximum of two pilots, and the information presented is driven by the pilot's individual needs and interests.

The standard course consists of four hours of classroom training and two hours of FTD flight instruction per day. Pilots who schedule together have the opportunity to receive an additional two hours of simulator time per day by observing from the right seat. Classroom training includes a comprehensive review of the TBM systems, limitations, and associated normal and emergency procedures.

All presentations are instructor-led and provided in color, supported by computer animation. Classroom training is reinforced and applied in a practical manner with the TBM simulator. ...

▶ NEXT



- QUIT
- ▶ → BACK TO THE TABLE OF CONTENTS
- AVIONICS upgrade special
- **Recurrent training**
- DAHER-SOCATA Scores High Marks in Professional Pilot Magazine's Annual Product Support Survey

RECURRENT TRAINING AT SIMCOM

... The classroom instructor also provides flight instruction to develop progressive, consistent learning. Offering a safe, comfortable and friendly environment, training tasks requiring repetition are easily and efficiently repeated in the training device. Multiple resets allow a pilot to repeat an approach, re-try a flight maneuver, or be repositioned on the runway for another takeoff – all made quick and easy with the touch of a button. Repetitive learning in a secure environment leads to improved performance and operational safety.

SimCom's advanced refresher course is designed for the experienced pilot with previous simulator training. This specialized two-day course is taught one-on-one, with one instructor to one pilot, using the same advanced classroom and simulator training tools offered in the standard recurrent course.

Systems knowledge and operational limitations are reviewed based on an assessment of pilot skills and capabilities at the start of the course. This course offers the same simulator training time as the standard three-day recurrent program, with the pilot's choice of advanced classroom instruction in such subjects as GPS navigation, CFIT (controlled flight into terrain), aviation weather and others. This course caters to the highly experienced pilot who seeks additional training challenges.

Both recurrent courses have the approval of the major insurance companies. They also offer the opportunity to train in the pilot's aircraft when it is provided – whether in Orlando or at the pilot's home base location.



DAHER-SOCATA SCORES HIGH MARKS IN PROFESSIONAL PILOT MAGAZINE'S ANNUAL PRODUCT SUPPORT SURVEY

DAHER-SOCATA has received top-level rankings in Professional Pilot magazine's 2009 Corporate Aircraft Product Support Survey – securing first and second positions in the turboprop category, as well as receiving praise from the publication's editorial staff.

The company and its TBM-series aircraft were rated second in the Overall ranking, and secured first place in the Turboprop category for the quality of its technical representatives – positioning it with jet standards. The survey includes six other categories, and DAHER-SOCATA was positioned in second place for four of these: Service Satisfaction (8.22/10), Technical Manuals (8.11/10), Speed in AOG Service (7.63/10) and Company Response Time (8.26/10).

In its survey introduction, the Professional Pilot editorial staff acknowledged the TBM fleet's product support emphasis that has come with the ownership changeover to DAHER-SOCATA. "DAHER appears to have pumped up new energy and customer focus into TBM," the magazine's survey introduction stated.

"The steady rise from 4th in 2007 to 2nd in 09 is impressive and not easy to do."

Professional Pilot's yearly product support review is considered one of the industry's most viable surveys. Each survey form is filled out in the recipient's own handwriting, and includes the name, ratings and other key information for the respondents.

"This survey has been a reference in corporate aircraft support for 20 years, and we are proud to have been well rated by our operators," said Nicolas Chabbert, Senior Vice President of DAHER-SOCATA's Aircraft Division. "Of particular importance was the recognition of our improved TBM 850 support, which is being well received by users around the world. We also were impressed by the high response rate from TBM 700 and TBM 850 operators to the Professional Pilot survey, representing 68 of the 434 responses from all operators of turboprop aircraft – with generally positive comments."

Socata NA Support Team (L-R) :
President, Nicolas Chabbert,
VP Customer Support Charlie Holomek,
Network & Warranty m Mgr, Phil Santoro,
Field Service Representative Alejandro Prem ,
Technical Support Mgr Marcel Kim.





**DAHER-SOCATA'S
AVIATION HERITAGE**
MS 230, THE KING
OF THE PARASOL-TYPE
MORANE-SERIES AIRCRAFT

The Morane-Saulnier MS.230 aircraft was the most successful member of the high wing monoplane aircraft family created by Morane-Saulnier starting with the Type L in 1913. As the main trainer for the French Air Force when it was created as an independent arm in 1933, the MS 230 and its derivatives were built in large numbers. Equivalent of the Stearman trainer in the U.S. military air services and the de Havilland Tiger Moth in the British Royal Air Force, most French military pilots at the outbreak of World War II had received their wings thanks to this machine.

Charles Lindbergh's transatlantic success in 1927 raised concerns in France about the country's leadership in air power. After the new French Air Ministry was created, it decided to launch an ambitious modernization program for its military aviation and issued requirements for a highly maneuverable training aircraft to prepare future fighter pilots.

After a decade of Parasol-type elementary trainers that began with the Type AR or MS 35, Morane-Saulnier proposed the ultimate evolution of this design – the MS.230 – which offered a good power-to-weight ratio, provided well-balanced controls for good stability in most flight regimes, and enabled a full range of aerobatic maneuvers to be performed. The prototype first flew in February 1929 and demonstrated its handling capabilities as an excellent and stable machine that was easy to fly. Of the 1,100 built before World War II, most went to the French Air Force; the others were bought by the air forces of Belgium, Brazil, the Czech Republic, Greece, Portugal and Romania. Two were purchased by the U.S. Army Air Corps for the military attaché in Paris.

The MS.230 also became a popular aircraft for civilian sport aviation. Morane-Saulnier's chief pilot, Michel Detroyat, earned his fame on the MS.230, as well as

QUIT

▶ BACK TO
THE TABLE
OF CONTENTS▶ DAHER-SOCATA's
aviation heritage:
MS 230, the king
of the parasol-type
morane-series
aircraft

TBM850

by DAHER-SOCATA



QUIT

▶ BACK TO
THE TABLE
OF CONTENTS

DAHER-SOCATA's
aviation heritage:
MS 230, the king
of the parasol-type
morane-series
aircraft

with a special version – a black-and-red MS.234, in which he won several aerobatics cups and became a popular attraction on the European air show circuit during the early 1930s. At the Morane Flight School in Villacoublay near Paris, MS.230s were used to teach aerobatics. Famous French aviatrix Hélène Boucher and Charles Lindbergh were among those to train on these aircraft.

The MS.230 was produced with a metal tubular frame and was covered by fabric, except in the forward fuselage area – which was metal-covered. It had a wide, fixed landing gear that made it very stable during in takeoff and landing. Unlike the majority of biplane trainers of the time, the MS.230 was a high-wing parasol type monoplane. Some MS.230s survived the war, and a limited production was resumed in 1945 to supply trainers to civilian and military flight schools.

Ironically, the most famous Morane MS.230 may be the one that played the role of the “new German

monoplane” in the 1966 film *The Blue Max* starring George Peppard. In that World War I-period drama, Peppard (as Bruno Stachel) is killed during an aerobatic flying demonstration in the “new experimental aircraft” – a rather paradoxical on-screen fate for the MS.230, which earned a reputation for its strength and durability during its distinguished career in real life.

Specifications

- Crew: 2 (one instructor, one student)
- Length: 6.70 meters (22 feet, 10 inches)
- Wingspan: 10.70 meters (35 feet, 1 inch)
- Height: 2.80 meters (9 feet, 2 inches)
- Empty weight: 829 kg. (1,828 pounds)
- Loaded weight: 1,150 kg. (2,535 pounds)
- Powerplant: 1× Salmson 9AB, 9-cylinder, air-cooled radial engine, 109 kW (230 hp.)

Performance

- Maximum speed: 205 km./hr. (127 mph.)
- Range: 579 km. (360 miles)
- Service ceiling: 5,000 meters (16,405 feet)



- QUIT
- ▶ BACK TO THE TABLE OF CONTENTS
- TBM Fleet Status Report

TBM700

Total delivered aircraft:	324
Fleet total time:	678,164 hrs
Average total time per aircraft:	2,113 hrs.
Average usage:	213 hrs./year
Average flight duration:	1.35 hrs./cycle

TBM850

Total aircraft delivered:	184
Fleet total time:	63,522 hrs.
Average total time per aircraft:	464 hrs.
Average usage:	194 hrs./year
Average flight duration:	4.67 hrs./cycle

Data as of January 11th, 2010



Help us keep our fleet data up-to-date.
Please record your data by clicking here:
http://www.mysocata.com/TTR/customer/fleet_track.php