



TYPE-CERTIFICATE DATA SHEET

NO. EASA.A.010

for
TBM700

Type Certificate Holder
SOCATA

65921 TARBES Cedex 9
FRANCE

For models: TBM700 A
 TBM700 B
 TBM700 C1
 TBM700 C2
 TBM700 N



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SECTION A: TBM700 A, Basic TBM700 Type Design**AI. General**

- | | | |
|---|--|--------------------|
| 1. Data Sheet No.: EASA.A.010 | Issue: 01 | Date: 14 July 2004 |
| 2. a) Type: | TBM700 | |
| b) Variant: | A | |
| 3. Airworthiness Category: | FAR-23 Normal Category | |
| 4. Type Certificate Holder: | Socata
65921 TARBES Cedex 9
FRANCE | |
| 5. Manufacturer: | Socata
65921 TARBES Cedex 9
FRANCE | |
| 6. DGAC Certification Application Date: | 31-Oct-1986 | |
| 7. DGAC Type Certification Date: | 31 January-1990 | |
| 8. EASA Type Certification Date: | Product accepted in EU prior 28 Sept. 2003 | |
| 9. The EASA Type Certificate replaces DGAC-France Type Certificate No.181 | | |
| 10. Eligible S/N: | 1 to 125 | |

AII. Certification Basis

- | | |
|---|--|
| 1. Reference Date for determining the applicable requirements: | 31-Oct-1986 |
| 2. Airworthiness Requirements: | FAR-23, Amendment 34, dated 01-Jan-1988
and FAR-23, Amendment 36, dated 14-Sep-1988
Sections 23.783, 23.807 and 23.811 |
| 3. Special Conditions: | None |
| 4. Exemptions: | None |
| 5. Deviations: | None |
| 6. EASA Equivalent Safety Findings: | None |
| 7. Requirements elected to comply: | None |
| 8. Environmental Standards (refer to TCDSN A.010 for noise limitations):
TBM700 A variant: | ICAO Annex 16, Volume 1, 2 nd edition, Amdt 3, Chapter X, App 6
FAR 36 Appendix G Amdt 17 |
| 9. Operational Suitability Data (OSD): | MMEL: JAR-MMEL/MEL Amendment 1 dated 1 August 2005 – Refer to AIII paragraph 4 |



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AIII. Technical Characteristics and Operational Limitations

1. Type Design Definition: List of main drawings: T700 N°65/90 Ed.1 and up.
2. Description: Single-turbo-propeller engine, six to seven seats, low-wing airplane, aluminium and steel construction.
3. Equipment: Equipment list: see POH Sec 6.5
4. Operational Suitability Data (OSD):
The Operational Suitability Data elements listed below are approved by the European Aviation Safety Agency under the EASA Type Certificate EASA.A.010:
TBM700 A, B, C, N Master Minimum Equipment List (MMEL) at Revision 02 approved on March 28, 2017 or later EASA approved revision
5. Dimensions:

Span	12.680 m (41.6 ft)
Length	10.645 m (34.9 ft)
Height	4.355 m (14.3 ft)
Wing Area	18.00 m ² (193.7 ft ²)
6. Engine:
 - 6.1. Model: Turbo generator Pratt & Whitney type PT6A-64
 - 6.2. Type certificates: Transport Canada Type Certificate No. E-21 dated 16/08/2005
EASA Type Certificate EASA.IM.E.008, dated 22/11/2005
Certification basis: FAR 33 Amendments 10
 - 6.3. Limitations: Gas generator rotation speed: 39000 RPM (104.1%)
Propeller rotation speed: 2000 RPM
Maximum take-off and continuous power: 700 shp

For power-plant limitations refer to POH, Section 2.3
7. Load factors:

Flaps up:	- 1.5 ≤ n ≤ + 3.8 g
Flaps down:	- 0 ≤ n ≤ + 2.0 g
8. Propeller:
 - 8.1. Model: Hartzell Propeller Inc. Type HC-E4N-3/E9083 S(K)
 - 8.2. Type Certificate: FAA Type Certificate P10NE dated 2 august 2002
 - 8.3. Number of Blades: 4
 - 8.4. Diameter: Maximum Diameter: 2311 mm / 91 in
Minimum Diameter: 2286 mm / 90 in
 - 8.5. Sense of rotation: Propeller rotates Clockwise in view of flight direction
 - 8.6. Pitch: Low Pitch: 21°
Feather: 86°
Reverse: -11°



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9. Fluids:
- 9.1. Fuel: Jet A, Jet A1, Jet B, JP4, JP5, JP8, anti-ice additive according to the specification MIL-I-27686 in the following proportions :
 Minimum content: 0.06% by volume
 Maximum content: 0.15% by volume
- 9.2. Oil: Refer to POH, Section 2.3
- 9.3. Coolant: Not Applicable
10. Fluid capacities:
- 10.1. Fuel: Two structural wing tanks
 Total capacity 1100 liters / 290.6 gal
 Total usable capacity 1066 liters / 281.6 gal
 Unusable quantity 34 liters / 9 gal
- 10.2. Oil: Maximum: 12 liters / 12.7 qt
 Minimum: 5.7 liters / 6 qt
11. Air Speeds:
- | | |
|---|----------|
| V_{MO} (Maximum operating speed) | 270 KCAS |
| V_A (Manoeuvring speed) | 160 KCAS |
| V_{FE} (Maximum flaps extended speed) | |
| Landing configuration | 120 KCAS |
| Take off configuration | 180 KCAS |
| V_{LO} (Maximum landing gear operating speed) | |
| Retraction | 130 KCAS |
| Extension | 180 KCAS |
| V_{LE} (Maximum landing gear extended speed) | 180 KCAS |
12. Maximum Operating Altitude:
- a. Airplane not equipped with OPT70-01-026: 30000 ft
- a. Airplane equipped with OPT70-01-026: 31000 ft
13. Operational Capability: Day & night VFR and day & night IFR operations when appropriate equipment is installed and operating correctly
 Refer to approved POH, Section 2.6
14. Maximum Weights:
- | | |
|----------|--------------------|
| Take-Off | 2984 kg (6579 lbs) |
| Landing | 2835 kg (6250 lbs) |
| Ramp | 3000 kg (6614 lbs) |



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15. Centre of Gravity Range:

From	To	Weight
4604 mm (181.3 in) 14% of MAC	4951 mm (194.9 in) 37 % of MAC	2000 kg (4409 lbs) or less
4664 mm (183.6 in) 18% of MAC	4951 mm (194.9 in) 37% of MAC	2835 kg (6250 lbs) or less
4694 mm (184.8 in) 20% of MAC	4936 mm (194.3 in) 36% of MAC	2984 kg (6579 lbs) or less

Straight line between points given
MAC: Mean Aerodynamic Chord

16. Datum: 3000 mm (118.11 in.) ahead of front firewall face

17. Control surface deflections: Elevator (Angles references: stabilator chord)

Nose-up attitude: $30^{\circ} \pm 1.5^{\circ}$
Nose-down attitude: $10^{\circ} \pm 1^{\circ}$

Stabilator tab (elevator at 0°)

Nose-up attitude: $15^{\circ} \pm 1^{\circ}$
Nose-down attitude: $20^{\circ} \pm 1^{\circ}$

Roll

- Ailerons (Reference: wing chord)

up $15^{\circ} \pm 1^{\circ}$
down $20^{\circ} \pm 1^{\circ}$

- Spoiler (Reference: wing upper surface)

up $58^{\circ} + 2^{\circ} / - 3^{\circ}$
down $20.5^{\circ} + 1^{\circ} / - 5^{\circ}$

- Tab

up $14^{\circ} \pm 1^{\circ}$
down $14^{\circ} \pm 1^{\circ}$

Yaw control

Rudder (Reference: fin chord)

left turn $26^{\circ} \pm 1^{\circ}$
right turn $35^{\circ} \pm 1.5^{\circ}$

Rudder tab (Reference: rudder chord)

left turn $13.5^{\circ} \pm 1^{\circ}$
right turn $9.5^{\circ} \pm 1^{\circ}$

18. Levelling Means: Cabin floor mounting rails

19. Minimum Flight Crew: 1 (Pilot)

20. Maximum Passenger Seating Capacity:

- Standard version: 5
- 7 places accommodation (optional modification OPT70-25-002): 6

21. Baggage / Cargo Compartment

Front baggage (not pressurized) 50 kg (110 lbs) at 3250 mm (128.0 in)

- Airplanes from S/N 1 to 23, 25, 28, 33 and 35, except airplanes equipped as a retrofit with modification MOD70-019-25 "improved upholstery":

Rear baggage (in cabin) 100 kg (220 lbs) at 7560 mm (297.6 in)



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- b. Airplanes S/N 24, 26, 27, 29 to 32, 34, 36 to 9999, plus airplanes equipped as a retrofit with modification MOD70-019-25 “improved upholstery”:
- | | | |
|-------------------------|------------------|---------------------|
| Rear baggage (in cabin) | 100 kg (220 lbs) | at 7695 mm (303 in) |
|-------------------------|------------------|---------------------|

22. Wheels and Tires

22.1. Nose landing gear		
Wheel base	2910 mm (115 in)	
Tire	5.00 x 5-6 PR	
22.2. Main landing gear		
Track	3880 mm (153 in)	
Tire	18 x 5.5-8 PR	

AIV . Operating and Service Instructions

1. DGAC/EASA approved Pilot Operating Handbook (POH):
 - For TBM700 A variant, Pilot’s Operating Handbook P/N ZOO.DMAFM00EE0RXEN must be utilised
 - For TBM700 A (from Serial number 14) and TBM700 B variants equipped with MOD70-0276-00 and MOD70-0158-28B (Fuel gauging amplifier), the Pilot’s Operating Handbook P/N ZOO.DMAFM00EE1R0EN edition 1 at revision 0 or later revision is required.
 - For airplanes with optional modification MOD70-0226-00 “Synthetic Vision System in GARMIN Integrated Flight Deck” (SVS) installed, Pilot’s Operating Handbook Supplement 50 P/N ZOO.DMNF50EE0R0EN at revision 0 or later revision must be utilised.

2. Maintenance manuals:
 - For TBM700 A variant, TBM700 Maintenance Manual (P/N ZOO.DMAMMPXEE0RXX) with revision 31 of November 2005, and following revisions (including Airworthiness Limitations) must be utilised.
 - For TBM700 A and TBM700 B variants from s/n 14 to 243, except s/n 205 and 240, equipped with MOD70-276-00 and MOD70-0158-28B, TBM700 Maintenance Manual (P/N ZOO.DMAMMPXEE0RXX) with revision 31 of November 2005 and TBM700 Maintenance Manual Supplement S02 (P/N ZOO.DMAMMS02PEE0RX) with revision 0 of October 2010, and following revisions (including Airworthiness Limitations) must be utilised.

AV. Notes

1. SOCATA modification MOD70-276-00 “G1000 Integrated Flight Deck – Retrofit program”:
It is a modification applicable to s/n 14 to 243, except to s/n 205 and 240. Airplanes to be retrofitted within the above range of serial numbers must install also SOCATA modification MOD70-158-28B (Fuel gauging amplifier).

2. SOCATA modification MOD70-0226-00 “Synthetic Vision System in GARMIN Integrated Flight Deck” (SVS):
It is a modification applicable to s/n 14 to 243, except s/n 205 and 240, that is to say for TBM700 A and B airplanes equipped with SOCATA modification MOD70-0276-00.

3. Refer to Section F for general data.



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SECTION B: TBM700 B**BI. General**

- | | | |
|---|--|--------------------|
| 1. Data Sheet No.: EASA.A.010 | Issue: 01 | Date: 14 July 2004 |
| 2. a) Type: | TBM700 | |
| b) Variant: | B | |
| 3. Airworthiness Category: | FAR-23 Normal Category | |
| 4. Type Certificate Holder: | Socata
65921 TARBES Cedex 9
FRANCE | |
| 5. Manufacturer: | Socata
65921 TARBES Cedex 9
FRANCE | |
| 6. DGAC Certification Application Date: | 16-June-1998 | |
| 7. DGAC Type Certification Date: | 13-November-1998 | |
| 8. EASA Type Certification Date: | Product accepted in EU prior 28 Sept. 2003 | |
| 9. The EASA Type Certificate replaces DGAC-France Type Certificate No.181 | | |
| 10. Eligible S/N: | 126 to 243, except 205 and 240 | |

BII. Certification Basis

- | | |
|---|---|
| 1. Reference Date for determining the applicable requirements: | 31-Oct-1986 |
| 2. Airworthiness Requirements: | FAR-23, Amendment 34, dated 01-Jan-1988 and Sections 23.783, 23.807 and 23.811 of Amendment 36, dated 14-Sep-1988 |
| 3. Special Conditions: | None |
| 4. Exemptions: | None |
| 5. Deviations: | None |
| 6. EASA Equivalent Safety Findings: | None |
| 7. Requirements elected to comply: | None |
| 8. Environmental Standards (refer to TCDSN A.010 for noise limitations):
TBM700 B variant: | ICAO Annex 16, Volume 1, 2 nd edition, Amdt 3, Chapter X, App 6
FAR 36 Appendix G Amdt 17 |
| 9. Operational Suitability Data (OSD): | MMEL: JAR-MMEL/MEL Amendment 1 dated 1 August 2005 – Refer to BIII paragraph 4 |



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BIII. Technical Characteristics and Operational Limitations

1. Type Design Definition: List of main drawings: T700 N°65/90 Ed.1 and up.
2. Description: Single-turbo-propeller engine, six to seven seats, low-wing airplane, aluminium and steel construction.
3. Equipment: Equipment list: see POH Sec 6.5
4. Operational Suitability Data (OSD):
The Operational Suitability Data elements listed below are approved by the European Aviation Safety Agency under the EASA Type Certificate EASA.A.010:
TBM700 A, B, C, N Master Minimum Equipment List (MMEL) at Revision 02 approved on March 28, 2017 or later EASA approved revision
5. Dimensions:

Span	12.680 m (41.6 ft)
Length	10.645 m (34.9 ft)
Height	4.355 m (14.3 ft)
Wing Area	18.00 m ² (193.7 ft ²)
6. Engine:
 - 6.1. Model: Turbo generator Pratt & Whitney type PT6A-64
 - 6.2. Type certificates: Transport Canada Type Certificate No. E-21 dated 16/08/2005
EASA Type Certificate EASA.IM.E.008, dated 22/11/2005
Certification basis: FAR 33 Amendments 10
 - 6.3. Limitations: Gas generator rotation speed: 39000 RPM (104.1%)
Propeller rotation speed: 2000 RPM
Maximum take-off and continuous power: 700 shp

For power-plant limitations refer to POH, Section 2.3
7. Load factors:

Flaps up:	- 1.5 ≤ n ≤ + 3.8 g
Flaps down:	- 0 ≤ n ≤ + 2.0 g
8. Propeller:
 - 8.1. Model: Hartzell Propeller Inc. Type HC-E4N-3/E9083 S(K)
 - 8.2. Type Certificate: FAA Type Certificate P10NE dated 2 august 2002
 - 8.3. Number of Blades: 4
 - 8.4. Diameter: Maximum Diameter: 2311 mm / 91 in
Minimum Diameter: 2286 mm / 90 in
 - 8.5. Sense of rotation: Propeller rotates Clockwise in view of flight direction
 - 8.6. Pitch: Low Pitch: 21°
Feather: 86°
Reverse: -11°



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9. Fluids:
- 9.1. Fuel: Jet A, Jet A1, Jet B, JP4, JP5, JP8, anti-ice additive according to the specification MIL-I-27686 in the following proportions :
 Minimum content: 0.06% by volume
 Maximum content: 0.15% by volume
- 9.2. Oil: Refer to POH, Section 2.3
- 9.3. Coolant: Not Applicable
10. Fluid capacities:
- 10.1. Fuel: Two structural wing tanks
 Total capacity 1100 liters / 290.6 gal
 Total usable capacity 1066 liters / 281.6 gal
 Unusable quantity 34 liters / 9 gal
- 10.2. Oil: Maximum: 12 liters / 12.7 qt
 Minimum: 5.7 liters / 6 qt
11. Air Speeds:
- | | |
|---|----------|
| V_{MO} (Maximum operating speed) | 270 KCAS |
| V_A (Manoeuvring speed) | 160 KCAS |
| V_{FE} (Maximum flaps extended speed) | |
| Landing configuration | 120 KCAS |
| Take off configuration | 180 KCAS |
| V_{LO} (Maximum landing gear operating speed) | |
| Retraction | 130 KCAS |
| Extension | 180 KCAS |
| V_{LE} (Maximum landing gear extended speed) | 180 KCAS |
12. Maximum Operating Altitude:
- a. Airplane not equipped with OPT70-01-026: 30000 ft
- b. Airplane equipped with OPT70-01-026: 31000 ft
13. Operational Capability: Day & night VFR and day & night IFR operations when appropriate equipment is installed and operating correctly
 Refer to approved POH, Section 2.6
14. Maximum Weights:
- | | |
|----------|--------------------|
| Take-Off | 2984 kg (6579 lbs) |
| Landing | 2835 kg (6250 lbs) |
| Ramp | 3000 kg (6614 lbs) |



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15. Centre of Gravity Range:

From	To	Weight
4604 mm (181.3 in) 14% of MAC	4951 mm (194.9 in) 37 % of MAC	2000 kg (4409 lbs) or less
4664 mm (183.6 in) 18% of MAC	4951 mm (194.9 in) 37% of MAC	2835 kg (6250 lbs) or less
4694 mm (184.8 in) 20% of MAC	4936 mm (194.3 in) 36% of MAC	2984 kg (6579 lbs) or less

Straight line between points given
MAC: Mean Aerodynamic Chord

16. Datum: 3000 mm (118.11 in.) ahead of front firewall face

17. Control surface deflections: Elevator (Angles references: stabilator chord)

Nose-up attitude: $30^{\circ} \pm 1.5^{\circ}$

Nose-down attitude: $10^{\circ} \pm 1^{\circ}$

Stabilator tab (elevator at 0°)

Nose-up attitude: $15^{\circ} \pm 1^{\circ}$

Nose-down attitude: $20^{\circ} \pm 1^{\circ}$

Roll

- Ailerons (Reference: wing chord)

up $15^{\circ} \pm 1^{\circ}$

down $20^{\circ} \pm 1^{\circ}$

- Spoiler (Reference: wing upper surface)

up $58^{\circ} + 2^{\circ} / - 3^{\circ}$

down $20.5^{\circ} + 1^{\circ} / - 5^{\circ}$

- Tab

up $14^{\circ} \pm 1^{\circ}$

down $14^{\circ} \pm 1^{\circ}$

Yaw control

Rudder (Reference: fin chord)

left turn $26^{\circ} \pm 1^{\circ}$

right turn $35^{\circ} \pm 1.5^{\circ}$

Rudder tab (Reference: rudder chord)

left turn $13.5^{\circ} \pm 1^{\circ}$

right turn $9.5^{\circ} \pm 1^{\circ}$

18. Levelling Means: Cabin floor mounting rails

19. Minimum Flight Crew: 1 (Pilot)

20. Maximum Passenger Seating Capacity:

a. Standard version: 5

b. 7 places accommodation (optional modification OPT70-25-002): 6

21. Baggage / Cargo Compartment

Front baggage (not pressurized) 50 kg (110 lbs) at 3250 mm (128.0 in)

a. Airplanes from S/N 1 to 23, 25, 28, 33 and 35, except airplanes equipped as a retrofit with modification MOD70-019-25 "improved upholstery":



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- | | |
|--|--|
| Rear baggage (in cabin) | 100 kg (220 lbs) at 7560 mm (297.6 in) |
| b. Airplanes S/N 24, 26, 27, 29 to 32, 34, 36 to 9999, plus airplanes equipped as a retrofit with modification MOD70-019-25 “improved upholstery”: | |
| Rear baggage (in cabin) | 100 kg (220 lbs) at 7695 mm (303 in) |
22. Wheels and Tires
- | | |
|-------------------------|------------------|
| 22.1. Nose landing gear | |
| Wheel base | 2910 mm (115 in) |
| Tire | 5.00 x 5-6 PR |
| 22.2. Main landing gear | |
| Track | 3880 mm (153 in) |
| Tire | 18 x 5.5-8 PR |

BIV. Operating and Service Instructions

1. DGAC/EASA approved Pilot Operating Handbook (POH):
 - For TBM700 B variant, Pilot’s Operating Handbook P/N ZOO.DMAFM00EE0RXEN must be utilised
 - For airplanes with optional modification OPT70-25-027 “Cargo Transportation Capability” installed, Pilot’s Operating Handbook Supplement 30 P/N ZOO.DMBFM30EE0RXEN at revision 2 or later revision must be utilised.
 - For TBM700 A (from Serial number 14) and TBM700 B variants equipped with MOD70-0276-00 and MOD70-0158-28B (Fuel gauging amplifier), the Pilot’s Operating Handbook P/N ZOO.DMAFM00EE1R0EN edition 1 at revision 0 or later revision is required.
 - For airplanes with optional modification MOD70-0226-00 “Synthetic Vision System in GARMIN Integrated Flight Deck” (SVS) installed, Pilot’s Operating Handbook Supplement 50 P/N ZOO.DMNFM50EE0R0EN at revision 0 or later revision must be utilised.
2. Maintenance manuals:
 - For TBM700 B variant, TBM700 Maintenance Manual (P/N ZOO.DMAMMPXEE0RXX) with revision 31 of November 2005, and following revisions (including Airworthiness Limitations) must be utilised.
 - For TBM700 A and TBM700 B variants from s/n 14 to 243, except s/n 205 and 240, equipped with MOD70-276-00 and MOD70-0158-28B, TBM700 Maintenance Manual (P/N ZOO.DMAMMPXEE0RXX) with revision 31 of November 2005 and TBM700 Maintenance Manual Supplement S02 (P/N ZOO.DMAMMS02PEE0RX) with revision 0 of October 2010 and following revisions (including Airworthiness Limitations) must be utilised.

BV. Notes

1. SOCATA modification MOD70-276-00 “G1000 Integrated Flight Deck – Retrofit program”:
It is a modification applicable to s/n 14 to 243, except to s/n 205 and 240. Airplanes to be retrofitted within the above range of serial numbers must install also SOCATA modification MOD70-158-28B (Fuel gauging amplifier).
2. SOCATA modification MOD70-0226-00 “Synthetic Vision System in GARMIN Integrated Flight Deck” (SVS):
It is a modification applicable to s/n 14 to 243, except s/n 205 and 240, that is to say for TBM700 A and B airplanes equipped with SOCATA modification MOD70-0276-00.
3. Refer to Section F for general data.



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SECTION C: TBM700 C1**CI. General**

- | | | |
|---|--|--------------------|
| 1. Data Sheet No.: EASA.A.010 | Issue: 01 | Date: 14 July 2004 |
| 2. a) Type: | TBM700 | |
| b) Variant: | C1 | |
| 3. Airworthiness Category: | FAR-23 Normal Category | |
| 4. Type Certificate Holder: | Socata
65921 TARBES Cedex 9
FRANCE | |
| 5. Manufacturer: | Socata
65921 TARBES Cedex 9
FRANCE | |
| 6. DGAC Certification Application Date: | 24-September-2002 | |
| 7. DGAC Type Certification Date: | 3-December-2002 | |
| 8. EASA Type Certification Date: | Product accepted in EU prior 28 Sept. 2003 | |
| 9. The EASA Type Certificate replaces DGAC-France Type Certificate No.181 | | |
| 10. Eligible S/N: | 244 to 345, plus 205 and 240 | |

CII. Certification Basis

- | | |
|--|---|
| 1. Reference Date for determining the applicable requirements: | 31-Oct-1986 |
| 2. Airworthiness Requirements: | FAR-23, Amendment 34, dated 01-Jan-1988 and Sections 23.783, 23.807 and 23.811 of Amendment 36, dated 14-Sep-1988 |
| 3. Special Conditions: | None |
| 4. Exemptions: | None |
| 5. Deviations: | None |
| 6. EASA Equivalent Safety Findings: | None |
| 7. Requirements elected to comply: | None |
| 8. Environmental Standards (refer to TCDSN A.010 for noise limitations):
TBM700 C1 variant: | ICAO Annex 16, Volume 1, 2 nd edition, Amdt 3, Chapter X, App 6
FAR 36 Appendix G Amdt 17 |
| 9. Operational Suitability Data (OSD): | MMEL: JAR-MMEL/MEL Amendment 1 dated 1 August 2005 – Refer to CIII paragraph 4 |



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CIIL. Technical Characteristics and Operational Limitations

1. Type Design Definition: List of main drawings: T700 N°65/90 Ed.1 and up.
2. Description: Single-turbo-propeller engine, six to seven seats, low-wing airplane, aluminium and steel construction.

SOCATA modification MOD70-140-00 "Evolution TBM700 B to TBM700 C1" defines TBM700 C1 variant and integrates various modifications such as rear unpressurised cargo compartment, reinforced structure, new air conditioning system...
3. Equipment: Equipment list: see POH Sec 6.5
4. Operational Suitability Data (OSD):
The Operational Suitability Data elements listed below are approved by the European Aviation Safety Agency under the EASA Type Certificate EASA.A.010:
TBM700 A, B, C, N Master Minimum Equipment List (MMEL) at Revision 02 approved on March 28, 2017 or later EASA approved revision
5. Dimensions:

Span	12.680 m (41.6 ft)
Length	10.645 m (34.9 ft)
Height	4.355 m (14.3 ft)
Wing Area	18.00 m ² (193.7 ft ²)
6. Engine:
 - 6.1. Model: Turbo generator Pratt & Whitney type PT6A-64
 - 6.2. Type certificates: Transport Canada Type Certificate No. E-21 dated 16/08/2005
EASA Type Certificate EASA.IM.E.008, dated 22/11/2005
Certification basis: FAR 33 Amendments 10
 - 6.3. Limitations: Gas generator rotation speed: 39000 RPM (104.1%)
Propeller rotation speed: 2000 RPM
Maximum take-off and continuous power: 700 shp

For power-plant limitations refer to POH, Section 2.3
7. Load factors:

Flaps up:	- 1.5 ≤ n ≤ + 3.8 g
Flaps down:	- 0 ≤ n ≤ + 2.0 g
8. Propeller:
 - 8.1. Model: Hartzell Propeller Inc. Type HC-E4N-3/E9083 S(K)
 - 8.2. Type Certificate: FAA Type Certificate P10NE dated 2 august 2002
 - 8.3. Number of Blades: 4
 - 8.4. Diameter: Maximum Diameter: 2311 mm / 91 in
Minimum Diameter: 2286 mm / 90 in



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- 8.5. Sense of rotation: Propeller rotates Clockwise in view of flight direction
- 8.6. Pitch: Low Pitch: 21°
Feather: 86°
Reverse: -11°
9. Fluids:
- 9.1. Fuel: Jet A, Jet A1, Jet B, JP4, JP5, JP8, anti-ice additive according to the specification MIL-I-27686 in the following proportions :
Minimum content: 0.06% by volume
Maximum content: 0.15% by volume
- 9.2. Oil: Refer to POH, Section 2.3
- 9.3. Coolant: Not Applicable
10. Fluid capacities:
- 10.1. Fuel: Two structural wing tanks
Total capacity 1100 liters / 290.6 gal
Total usable capacity 1066 liters / 281.6 gal
Unusable quantity 34 liters / 9 gal
- 10.2. Oil: Maximum: 12 liters / 12.7 qt
Minimum: 5.7 liters / 6 qt
11. Air Speeds:
- | | |
|--|----------|
| V _{MO} (Maximum operating speed) | 270 KCAS |
| V _A (Manoeuvring speed) | 160 KCAS |
| V _{FE} (Maximum flaps extended speed) | |
| Landing configuration | 120 KCAS |
| Take off configuration | 180 KCAS |
| V _{LO} (Maximum landing gear operating speed) | |
| Retraction | 130 KCAS |
| Extension | 180 KCAS |
| V _{LE} (Maximum landing gear extended speed) | 180 KCAS |
12. Maximum Operating Altitude: 31000 ft
13. Operational Capability: Day & night VFR and day & night IFR operations when appropriate equipment is installed and operating correctly
Refer to approved POH, Section 2.6
14. Maximum Weights:
- | | |
|----------|--------------------|
| Take-Off | 2984 kg (6579 lbs) |
| Landing | 2835 kg (6250 lbs) |
| Ramp | 3000 kg (6614 lbs) |



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15. Centre of Gravity Range:

From	To	Weight
4604 mm (181.3 in) 14% of MAC	4951 mm (194.9 in) 37 % of MAC	2000 kg (4409 lbs) or less
4664 mm (183.6 in) 18% of MAC	4951 mm (194.9 in) 37% of MAC	2835 kg (6250 lbs) or less
4694 mm (184.8 in) 20% of MAC	4936 mm (194.3 in) 36% of MAC	2984 kg (6579 lbs) or less

Straight line between points given
MAC: Mean Aerodynamic Chord

16. Datum: 3000 mm (118.11 in.) ahead of front firewall face

17. Control surface deflections: Elevator (Angles references: stabilator chord)
Nose-up attitude: $30^{\circ} \pm 1.5^{\circ}$
Nose-down attitude: $10^{\circ} \pm 1^{\circ}$

Stabilator tab (elevator at 0°)
Nose-up attitude: $15^{\circ} \pm 1^{\circ}$
Nose-down attitude: $20^{\circ} \pm 1^{\circ}$

Roll

- Ailerons (Reference: wing chord)
up $15^{\circ} \pm 1^{\circ}$
down $20^{\circ} \pm 1^{\circ}$
- Spoiler (Reference: wing upper surface)
up $58^{\circ} + 2^{\circ} / - 3^{\circ}$
down $20.5^{\circ} + 1^{\circ} / - 5^{\circ}$
- Tab
up $14^{\circ} \pm 1^{\circ}$
down $14^{\circ} \pm 1^{\circ}$

Yaw control

Rudder (Reference: fin chord)
left turn $26^{\circ} \pm 1^{\circ}$
right turn $35^{\circ} \pm 1.5^{\circ}$

Rudder tab (Reference: rudder chord)
left turn $13.5^{\circ} \pm 1^{\circ}$
right turn $9.5^{\circ} \pm 1^{\circ}$

18. Levelling Means: Cabin floor mounting rails

19. Minimum Flight Crew: 1 (Pilot)

20. Maximum Passenger Seating Capacity: 5

21. Baggage / Cargo Compartment
Rear baggage (in cabin) 100 kg (220 lbs) at 7695 mm (303 in)
Rear compartment 35 kg (77 lbs) at 8366 mm (329.4 in)



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- | | |
|-------------------------|---|
| 22. Wheels and Tires | |
| 22.1. Nose landing gear | |
| Wheel base | 2910 mm (115 in) |
| Tire | 5.00 x 5-6 PR |
| 22.2. Main landing gear | |
| Track | 3880 mm (153 in) |
| Tire | 18 x 5.5-8 PR: Airplane <u>not</u> equipped with optional modification OPT70-01-029 "Provision for TBM700 C2" |
| | 18 x 5.5-10 PR: TBM700C2 and N variants and airplane equipped with optional modification OPT70-01-029 "Provision for TBM700 C2" |

CIV. Operating and Service Instructions

1. DGAC/EASA approved Pilot Operating Handbook (POH):
 - For TBM700 C1 variant, the Pilot's Operating Handbook P/N ZOO.DMCFM00EE0RXEN at revision 2 or later revision is required.
 - For airplanes with optional modification OPT70-25-027 "Cargo Transportation Capability" installed, Pilot's Operating Handbook Supplement 30 P/N ZOO.DMAFM30EE0RXEN at revision 2 or later revision must be utilised.
2. Maintenance manuals:
 - For TBM700 C variant, TBM700 Maintenance Manual (P/N ZOO.DMAMMPXEE0RXX) with revision 31 of November 2005, and following revisions (including Airworthiness Limitations) must be utilised.

CV. Notes

None
Refer to Section F for general data.



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SECTION D: TBM700 C2**DI. General**

- | | | |
|---|--|--------------------|
| 1. Data Sheet No.: EASA.A.010 | Issue: 01 | Date: 14 July 2004 |
| 2. a) Type: | TBM700 | |
| b) Variant: | C2 | |
| 3. Airworthiness Category: | FAR-23 Normal Category | |
| 4. Type Certificate Holder: | Socata
65921 TARBES Cedex 9
FRANCE | |
| 5. Manufacturer: | Socata
65921 TARBES Cedex 9
FRANCE | |
| 6. EASA Certification Application Date: | 05-Jan-2004 | |
| 7. EASA Type Certification Date: | 14-July-2004 | |
| 8. The EASA Type Certificate replaces DGAC-France Type Certificate No.181 | | |
| 9. Eligible S/N: | 244 to 345, plus 205 and 240 | |

DII. Certification Basis

- | | |
|--|---|
| 1. Reference Date for determining the applicable requirements: | 05-Jan-2004 |
| 2. Airworthiness Requirements: | As defined in CRI A-1, Issue 2:
FAR-23, Amendment 34, dated 01-Jan-1988
FAR-23, Amendment 36, dated 14-Sep-1988 Sections 23.783, 23.807 and 23.811
FAR-23, Amendment 44, dated 18-Aug-1993 Sections 23.49, 23.561, 23.562 and 23.785 |
| 3. Special Conditions: | CRI B-1, Stalling speed exceeding 61 kts |
| 4. Exemptions: | None |
| 5. Deviations: | None |
| 6. EASA Equivalent Safety Findings: | None |
| 7. Requirements elected to comply: | None |
| 8. Environmental Standards (refer to TCDSN A.010 for noise limitations):
TBM700 C2 variant: | ICAO Annex 16, Volume 1, 3rd edition, Amdt 6 Chapter X, App 6 (elected to comply to 3rd edition, Amdt 7)
FAR 36 Appendix G Amdt 22
FAR 34 Amdt 3, dated 03-Feb-1999 |
| 9. Operational Suitability Data (OSD): | |



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MMEL: JAR-MMEL/MEL Amendment 1 dated 1 August 2005 – Refer to DIII paragraph 4

DIII. Technical Characteristics and Operational Limitations

1. Type Design Definition: List of main drawings: T700 N°65/90 Ed.1 and up.
2. Description: Single-turbo-propeller engine, six to seven seats, low-wing airplane, aluminium and steel construction.

SOCATA modification MOD70-139-00 “Increased of TBM700 maximum take-off weight” defines TBM700 C2 variant and allows an extended MTOW compared to TBM700 C1 variant:
The retrofit is possible only for airplanes already equipped with SOCATA modification MOD70-140-00.
3. Equipment: Equipment list: see POH Sec 6.5
4. Operational Suitability Data (OSD):
The Operational Suitability Data elements listed below are approved by the European Aviation Safety Agency under the EASA Type Certificate EASA.A.010:
TBM700 A, B, C, N Master Minimum Equipment List (MMEL) at Revision 02 approved on March 28, 2017 or later EASA approved revision
5. Dimensions:

Span	12.680 m (41.6 ft)
Length	10.645 m (34.9 ft)
Height	4.355 m (14.3 ft)
Wing Area	18.00 m ² (193.7 ft ²)
6. Engine:
 - 6.1. Model: Turbo generator Pratt & Whitney type PT6A-64
 - 6.2. Type certificates: Transport Canada Type Certificate No. E-21 dated 16/08/2005

EASA Type Certificate EASA.IM.E.008, dated 22/11/2005
Certification basis: FAR 33 Amendments 10
 - 6.3. Limitations: Gas generator rotation speed: 39000 RPM (104.1%)
Propeller rotation speed: 2000 RPM
Maximum take-off and continuous power: 700 shp

For power-plant limitations refer to POH, Section 2.3
7. Load factors:

Flaps up:	$- 1.5 \leq n \leq + 3.8 g$
Flaps down:	$- 0 \leq n \leq + 2.0 g$
8. Propeller:
 - 8.1. Model: Hartzell Propeller Inc. Type HC-E4N-3/E9083 S(K)
 - 8.2. Type Certificate: FAA Type Certificate P10NE dated 2 august 2002
 - 8.3. Number of Blades: 4



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- 8.4. Diameter: Maximum Diameter: 2311 mm / 91 in
Minimum Diameter: 2286 mm / 90 in
- 8.5. Sense of rotation: Propeller rotates Clockwise in view of flight direction
- 8.6. Pitch: Low Pitch: 21°
Feather: 86°
Reverse: -11°
9. Fluids:
- 9.1. Fuel: Jet A, Jet A1, Jet B, JP4, JP5, JP8, anti-ice additive according to the specification MIL-I-27686 in the following proportions :
Minimum content: 0.06% by volume
Maximum content: 0.15% by volume
- 9.2. Oil: Refer to POH, Section 2.3
- 9.3. Coolant: Not Applicable
10. Fluid capacities:
- 10.1. Fuel: Two structural wing tanks
Total capacity 1100 liters / 290.6 gal
Total usable capacity 1066 liters / 281.6 gal
Unusable quantity 34 liters / 9 gal
- 10.2. Oil: Maximum: 12 liters / 12.7 qt
Minimum: 5.7 liters / 6 qt
11. Air Speeds:
- | | |
|---|----------|
| V_{MO} (Maximum operating speed) | 270 KCAS |
| V_A (Manoeuvring speed) | 160 KCAS |
| V_{FE} (Maximum flaps extended speed) | |
| Landing configuration | 120 KCAS |
| Take off configuration | 180 KCAS |
| V_{LO} (Maximum landing gear operating speed) | |
| Retraction | 130 KCAS |
| Extension | 180 KCAS |
| V_{LE} (Maximum landing gear extended speed) | 180 KCAS |
12. Maximum Operating Altitude: 31000 ft
13. Operational Capability: Day & night VFR and day & night IFR operations when appropriate equipment is installed and operating correctly
Refer to approved POH, Section 2.6
14. Maximum Weights:
- | | |
|----------|--------------------|
| Take-Off | 3354 kg (7394 lbs) |
| Landing | 3186 kg (7024 lbs) |
| Ramp | 3370 kg (7430 lbs) |



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15. Centre of Gravity Range:

From	To	Weight up to
4604 mm (181.3 in) 14% of Mean Aerodynamic Chord	4951 mm (194.9 in) 37 % of MAC	2000 kg (4409 lbs) or less
4664 mm (183.6 in) 18% of MAC	4951 mm (194.9 in) 37% of MAC	2835 kg (6250 lbs)
4707 mm (185.3 in) 20.85% of MAC	4936 mm (194.3 in) 36% of MAC	2984 kg (6579 lbs)
4752 mm (187.1 in) 23.8% of MAC	4936 mm (194.3 in) 36% of MAC	3186 kg (7024 lbs)
4752 mm (187.1 in) 23.8% of MAC	4921 mm (193.74 in) 35% of MAC	3354 kg (7394 lbs)

Straight line between points given
MAC: Mean Aerodynamic Chord

16. Datum: 3000 mm (118.11 in.) ahead of front firewall face

17. Control surface deflections: Elevator (Angles references: stabilator chord)
Nose-up attitude: $30^{\circ} \pm 1.5^{\circ}$
Nose-down attitude: $10^{\circ} \pm 1^{\circ}$

Stabilator tab (elevator at 0°)
Nose-up attitude: $15^{\circ} \pm 1^{\circ}$
Nose-down attitude: $20^{\circ} \pm 1^{\circ}$

Roll

- Ailerons (Reference: wing chord)
up $15^{\circ} \pm 1^{\circ}$
down $20^{\circ} \pm 1^{\circ}$
- Spoiler (Reference: wing upper surface)
up $58^{\circ} + 2^{\circ} / - 3^{\circ}$
down $20.5^{\circ} + 1^{\circ} / - 5^{\circ}$
- Tab
up $14^{\circ} \pm 1^{\circ}$
down $14^{\circ} \pm 1^{\circ}$

Yaw control

Rudder (Reference: fin chord)
left turn $26^{\circ} \pm 1^{\circ}$
right turn $35^{\circ} \pm 1.5^{\circ}$

Rudder tab (Reference: rudder chord)
left turn $13.5^{\circ} \pm 1^{\circ}$
right turn $9.5^{\circ} \pm 1^{\circ}$

18. Levelling Means: Cabin floor mounting rails

19. Minimum Flight Crew: 1 (Pilot)

20. Maximum Passenger Seating Capacity: 5



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21. Baggage / Cargo Compartment

a. Airplanes equipped with partition net OPT70-25-026A:

Rear baggage (in cabin)	45 kg (100 lbs)	at 7695 mm (303 in)
Rear compartment	35 kg (77 lbs)	at 8366 mm (329.4 in)

b. Airplanes equipped with partition net OPT70-25-026B:

Rear baggage (in cabin)	100 kg (220 lbs)	at 7695 mm (303 in)
Rear compartment	35 kg (77 lbs)	at 8366 mm (329.4 in)

22. Wheels and Tires

22.1. Nose landing gear

Wheel base	2910 mm (115 in)
Tire	5.00 x 5-6 PR

22.2. Main landing gear

Track	3880 mm (153 in)
Tire	18 x 5.5-10 PR

DIV. Operating and Service Instructions

1. DGAC/EASA approved Pilot Operating Handbook (POH):

- For TBM700 C2 variant, the Pilot's Operating Handbook P/N ZOO.DMCFM00EE0RXEN at revision 2 or later revision **and** Pilot's Operating Handbook Supplement 41 "TBM 700C2" P/N ZOO.DMCFM41EE0RXEN at revision 2 or later revision must be utilised.

2. Maintenance manuals:

- For TBM700 C variant, TBM700 Maintenance Manual P/N ZOO.DMAMMPXEE0RXX with revision 31 of November 2005, and following revisions (including Airworthiness Limitations) must be utilised.

DV. Notes

None

Refer to Section F for general data.



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SECTION E: TBM700 N**EL. TBM700 N**

Trade name "TBM850"

EL.1 General

- | | | |
|---|--|-----------------------|
| 1. Data Sheet No.: EASA.A.010 | Issue: 04 | Date: 12 January 2006 |
| 2. a) Type: | TBM700 | |
| b) Variant: | N | |
| 3. Airworthiness Category: | FAR-23 Normal Category | |
| 4. Type Certificate Holder: | Socata
65921 TARBES Cedex 9
FRANCE | |
| 5. Manufacturer: | Socata
65921 TARBES Cedex 9
FRANCE | |
| 6. EASA Certification Application Date: | 06-Jul-2004 | |
| 7. EASA Type Certification Date: | 28-November-2005 | |
| 8. Eligible S/N: | 346 to 433 | |

EL.2 Certification Basis

- | | |
|---|--|
| 1. Reference Date for determining the applicable requirements: | 06-Jul-2004 |
| 2. Airworthiness Requirements: | As defined in CRI A-1 (TBM700C2), Issue 2:
FAR-23, Amendment 34, dated 01-Jan-1988
FAR-23, Amendment 36, dated 14-Sep-1988 Sections 23.783, 23.807 and 23.811
FAR-23, Amendment 44, dated 18-Aug-1993 Sections 23.49, 23.561, 23.562 and 23.785 |
| 3. Special Conditions: | CRI B-1 (TBM700 C2), Stalling speed exceeding 61 kts |
| 4. Exemptions: | None |
| 5. Deviations: | None |
| 6. EASA Equivalent Safety Findings: | None |
| 7. Requirements elected to comply: | None |
| 8. Environmental Standards (refer to TCDSN A.010 for noise limitations):
TBM700 N variant: | ICAO Annex 16, Volume 1, 4 st edition, Amdt 8
Chapter X, App 6
FAR 36 Appendix G Amdt 25 |



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ICAO Annex 16, Volume 2, 2nd edition, Amdt 4 Part 2, Chap 2 and FAR 34 Amdt 3, dated 03-Feb-1999

9. Operational Suitability Data (OSD):

MMEL: JAR-MMEL/MEL Amendment 1 dated 1 August 2005 – Refer to EI.3 paragraph 4

EI.3 Technical Characteristics and Operational Limitations

1. Type Design Definition:

List of main drawings: T700 N°65/90 Ed.1 and up.

2. Description:

Single-turbo-propeller engine, six to seven seats, low-wing airplane, aluminium and steel construction.

SOCATA modification MOD70-0188-00 “TBM700 N – Increased of maximum cruise/climb power to 850 shp” defines TBM700 N variant.

It is a modification applicable from s/n 346. This modification allows a maximum continuous power of 850 shp for climb and cruise (flap retracted), and a maximum power of 700 shp identical to TBM700 A, B, C1 and C2 variants when flaps are extended.

3. Equipment:

Equipment list: see POH Sec 6.5 and report ref. NAV No.34/90-RJ-App1

4. Operational Suitability Data (OSD):

The Operational Suitability Data elements listed below are approved by the European Aviation Safety Agency under the EASA Type Certificate EASA.A.010:

TBM700 A, B, C, N Master Minimum Equipment List (MMEL) at Revision 02 approved on March 28, 2017 or later EASA approved revision

5. Dimensions:

Span	12.680 m (41.6 ft)
Length	10.645 m (34.9 ft)
Height	4.355 m (14.3 ft)
Wing Area	18.00 m ² (193.7 ft ²)

6. Engine:

6.1. Model:

Turbo generator Pratt & Whitney type PT6A-66D

6.2. Type certificates:

Transport Canada Type Certificate No. E-21 dated 16/08/2005

EASA Type Certificate EASA.IM.E.008, dated 22/11/2005

Certification basis: FAR 33 Amendments 10

6.3. Limitations:

Gas generator rotation speed: 39000 RPM (104.1%)

Propeller rotation speed: 2000 RPM

Maximum take-off power: 700 shp

Maximum continuous power: 850 shp

For power-plant limitations refer to POH, Section 2.3

7. Load factors:



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- a. Flaps up:
 Weight below 6579 lbs (2984kg): $- 1.5 \leq n \leq + 3.8$ g
 Weight above 6579 lbs (2984kg): $- 1.5 \leq n \leq + 3.5$ g
- b. Flaps down: $- 0 \leq n \leq + 2.0$ g
8. Propeller:
- 8.1. Model: Hartzell Propeller Inc. Type HC-E4N-3/E9083 S(K)
- 8.2. Type Certificate: FAA Type Certificate P10NE dated 2 august 2002
- 8.3. Number of Blades: 4
- 8.4. Diameter: Maximum Diameter: 2311 mm / 91 in
Minimum Diameter: 2286 mm / 90 in
- 8.5. Sense of rotation: Propeller rotates Clockwise in view of flight direction
- 8.6. Pitch: Low Pitch: 21°
Feather: 86°
Reverse: -11°
9. Fluids:
- 9.1. Fuel: Jet A, Jet A1, Jet B, JP4, JP5, JP8, anti-ice additive according to the specification MIL-I-27686 E in the following proportions :
Minimum content: 0.06% by volume
Maximum content: 0.15% by volume
- 9.2. Oil: Refer to POH, Section 2.3
- 9.3. Coolant: Not Applicable
10. Fluid capacities:
- 10.1. Fuel: Two structural wing tanks
Total capacity 1100 liters / 290.6 gal
Total usable capacity 1066 liters / 281.6 gal
Unusable quantity 34 liters / 9 gal
- 10.2. Oil: Maximum: 12 liters / 12.7 qt
Minimum: 5.7 liters / 6 qt
11. Air Speeds:
- V_{MO} (Maximum operating speed) 270 KCAS
 V_A (Manoeuvring speed) 160 KCAS
 V_{FE} (Maximum flaps extended speed)
 Landing configuration 120 KCAS
 Take off configuration 180 KCAS
 V_{LO} (Maximum landing gear operating speed)
 Retraction 130 KCAS
 Extension 180 KCAS
 V_{LE} (Maximum landing gear extended speed) 180 KCAS
12. Maximum Operating Altitude: 31000 ft



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13. Operational Capability: Day & night VFR and day & night IFR operations when appropriate equipment is installed and operating correctly
Refer to approved POH, Section 2.6

14. Maximum Weights:

Take-Off	3354 kg (7394 lbs)
Landing	3186 kg (7024 lbs)
Ramp	3370 kg (7430 lbs)

15. Centre of Gravity Range:

From	To	Weight up to
4604 mm (181.3 in) 14% of Mean Aerodynamic Chord	4951 mm (194.9 in) 37 % of MAC	2000 kg (4409 lbs) or less
4664 mm (183.6 in) 18% of MAC	4951 mm (194.9 in) 37% of MAC	2835 kg (6250 lbs)
4707 mm (185.3 in) 20.85% of MAC	4936 mm (194.3 in) 36% of MAC	2984 kg (6579 lbs)
4752 mm (187.1 in) 23.8% of MAC	4936 mm (194.3 in) 36% of MAC	3186 kg (7024 lbs)
4752 mm (187.1 in) 23.8% of MAC	4921 mm (193.74 in) 35% of MAC	3354 kg (7394 lbs)

Straight line between points given
MAC: Mean Aerodynamic Chord

16. Datum: 3000 mm (118.11 in.) ahead of front firewall face

17. Control surface deflections: Elevator (Angles references: stabilator chord)
Nose-up attitude: $30^{\circ} \pm 1.5^{\circ}$
Nose-down attitude: $10^{\circ} \pm 1^{\circ}$

Stabilator tab (elevator at 0°)
Nose-up attitude: $15^{\circ} \pm 1^{\circ}$
Nose-down attitude: $20^{\circ} \pm 1^{\circ}$

Roll

- Ailerons (Reference: wing chord)
up $15^{\circ} \pm 1^{\circ}$
down $20^{\circ} \pm 1^{\circ}$
- Spoiler (Reference: wing upper surface)
up $58^{\circ} + 2^{\circ} / - 3^{\circ}$
down $20.5^{\circ} + 1^{\circ} / - 5^{\circ}$
- Tab
up $14^{\circ} \pm 1^{\circ}$
down $14^{\circ} \pm 1^{\circ}$

Yaw control

Rudder (Reference: fin chord)
left turn $26^{\circ} \pm 1^{\circ}$
right turn $35^{\circ} \pm 1.5^{\circ}$

Rudder tab (Reference: rudder chord)
left turn $13.5^{\circ} \pm 1^{\circ}$
right turn $9.5^{\circ} \pm 1^{\circ}$



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18. Levelling Means:	Cabin floor mounting rails
19. Minimum Flight Crew:	1 (Pilot)
20. Maximum Passenger Seating Capacity:	5
21. Baggage / Cargo Compartment	
Rear baggage (in cabin)	100 kg (220 lbs) at 7695 mm (303 in)
Rear compartment	35 kg (77 lbs) at 8366 mm (329.4 in)
22. Wheels and Tires	
22.1. Nose landing gear	
Wheel base	2910 mm (115 in)
Tire	5.00 x 5-6 PR
22.2. Main landing gear	
Track	3880 mm (153 in)
Tire	18 x 5.5-10 PR

EI.4 Operating and Service Instructions

1. DGAC/EASA approved Pilot Operating Handbook (POH):
 - For TBM700 N variant up to S/N 433, the Pilot's Operating Handbook P/N ZOO.DMNFM00EE0RXEN edition 0 at revision 0 or later revision must be utilised.
2. Maintenance manuals:
 - For TBM700 N variant up to S/N 433, TBM700 Maintenance Manual P/N ZOO.DMAMMPXEE0RXX with revision 31 of November 2005, and following revisions (including Airworthiness Limitations) must be utilised

EI.5 Notes

None
Refer to Section F for general data.



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EII. TBM700 N equipped with MOD70-0176-00 and MOD70-0211-57
Trade name "TBM850 G1000"

EII.1 General

- | | | |
|---|--|------------------------|
| 1. Data Sheet No.: EASA.A.010 | Issue: 06 | Date: 21 December 2007 |
| 2. a) Type: | TBM700 | |
| b) Variant: | N | |
| 3. Airworthiness Category: | FAR-23 Normal Category | |
| 4. Type Certificate Holder: | Socata
65921 TARBES Cedex 9
FRANCE | |
| 5. Manufacturer: | Socata
65921 TARBES Cedex 9
FRANCE | |
| 6. EASA Certification Application Date: | 29-May-2006 | |
| 7. EASA Type Certification Date: | 26-September-2007 | |
| 8. Eligible S/N: | 434 to 999, except 687 | |

EII.2 Certification Basis

- | | |
|--|--|
| 1. Reference Date for determining the applicable requirements: | 29-May-2006 |
| 2. Airworthiness Requirements: | FAR-23, Amendment 34, dated 01-Jan-1988
FAR-23, Amendment 36, dated 14-Sep-1988 Sections 23.783, 23.807 and 23.811
FAR-23, Amendment 44, dated 18-Aug-1993 Sections 23.49, 23.561, 23.562 and 23.785
<u>And</u> as defined in CRI A-01 (TBM700N Garmin G1000 Cockpit) Issue 2:
EASA CS-23, Initial issue, dated 14-Nov-2003 Sections 23.1309, 23.1311, 23.1321, 23.1331, 23.1353, 23.1357 and 23.1431 |
| 3. Special Conditions: | CRI B-1 (TBM700 C2), Stalling speed exceeding 61 kts
CRI B-01, Human Factors in Integrated avionics systems, issue 2
CRI F-02, Protection from the IEL strikes, issue 2 |
| 4. Exemptions: | None |
| 5. Deviations: | None |



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6. EASA Equivalent Safety Findings: None
7. Requirements elected to comply: None
8. Environmental Standards (refer to TCDSN A.010 for noise limitations):
TBM700 N variant: ICAO Annex 16, Volume 1, 4th edition, Amdt 8
Chapter X, App 6
FAR 36 Appendix G Amdt 25
ICAO Annex 16, Volume 2, 2nd edition, Amdt 4 Part
2, Chap 2 and FAR 34 Amdt 3, dated 03-Feb-1999
9. Operational Suitability Data (OSD):
MMEL: JAR-MMEL/MEL Amendment 1 dated 1
August 2005 – Refer to EII.3 paragraph 4

EII.3 Technical Characteristics and Operational Limitations

1. Type Design Definition: List of main drawings: T700 N°65/90 Ed.1 and up
2. Description: Single-turbo-propeller engine, six to seven seats, low-wing airplane, aluminium and steel construction.

Introduction of SOCATA modifications MOD70-0176-00 (G1000 Integrated Flight Deck) and MOD70-0211-57 (Fuel Tank Extension) on TBM700 N variant.
3. Equipment: Equipment list: see POH Sec 6.5 and report ref. NAV No.34/90-RJ-App1
4. Operational Suitability Data (OSD):
The Operational Suitability Data elements listed below are approved by the European Aviation Safety Agency under the EASA Type Certificate EASA.A.010:
TBM700 A, B, C, N Master Minimum Equipment List (MMEL) at Revision 02 approved on March 28, 2017 or later EASA approved revision
5. Dimensions:
- | | |
|-----------|---|
| Span | 12.680 m (41.6 ft) |
| Length | 10.645 m (34.9 ft) |
| Height | 4.355 m (14.3 ft) |
| Wing Area | 18.00 m ² (193.7 ft ²) |
6. Engine:
- 6.1. Model: Turbo generator Pratt & Whitney type PT6A-66D
- 6.2. Type certificates: Transport Canada Type Certificate No. E-21 dated 16/08/2005
EASA Type Certificate EASA.IM.E.008, dated 22/11/2005
Certification basis: FAR 33 Amendments 10
- 6.3. Limitations: Gas generator rotation speed: 39000 RPM (104.1%)
Propeller rotation speed: 2000 RPM
Maximum take-off power: 700 shp
Maximum continuous power: 850 shp



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For power-plant limitations refer to POH, Section 2.3

7. Load factors:
- a. Flaps up:
 - Weight below 6579 lbs (2984kg): $-1.5 \leq n \leq +3.8$ g
 - Weight above 6579 lbs (2984kg): $-1.5 \leq n \leq +3.5$ g
 - b. Flaps down: $-0 \leq n \leq +2.0$ g
8. Propeller:
- 8.1. Model: Hartzell Propeller Inc. Type HC-E4N-3/E9083 S(K)
 - 8.2. Type Certificate: FAA Type Certificate P10NE dated 2 august 2002
 - 8.3. Number of Blades: 4
 - 8.4. Diameter:
 - Maximum Diameter: 2311 mm / 91 in
 - Minimum Diameter: 2286 mm / 90 in
 - 8.5. Sense of rotation: Propeller rotates Clockwise in view of flight direction
 - 8.6. Pitch:
 - Low Pitch: 21°
 - Feather: 86°
 - Reverse: -11°
9. Fluids:
- 9.1. Fuel: Jet A, Jet A1, Jet B, JP4, JP5, JP8, anti-ice additive according to the specification MIL-I-27686 E in the following proportions :
 - Minimum content: 0.06% by volume
 - Maximum content: 0.15% by volume
 - 9.2. Oil: Refer to POH, Section 2.3
 - 9.3. Coolant: Not Applicable
10. Fluid capacities:
- 10.1. Fuel:
 - Two structural wing tanks
 - Total capacity 1140 liters / 301 gal
 - Total usable capacity 1106 liters / 292 gal
 - Unusable quantity 34 liters / 9 gal
 - 10.2. Oil:
 - Maximum: 12 liters / 12.7 qt
 - Minimum: 5.7 liters / 6 qt
11. Air Speeds:
- | | |
|---|----------|
| V_{MO} (Maximum operating speed) | 270 KCAS |
| V_A (Manoeuvring speed) | 160 KCAS |
| V_{FE} (Maximum flaps extended speed) | |
| Landing configuration | 120 KCAS |
| Take off configuration | 180 KCAS |
| V_{LO} (Maximum landing gear operating speed) | |
| Retraction | 130 KCAS |
| Extension | 180 KCAS |
| V_{LE} (Maximum landing gear extended speed) | 180 KCAS |



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12. Maximum Operating Altitude: 31000 ft
13. Operational Capability: Day & night VFR and day & night IFR operations when appropriate equipment is installed and operating correctly
Refer to approved POH, Section 2.6
14. Maximum Weights:
- | | |
|----------|--------------------|
| Take-Off | 3354 kg (7394 lbs) |
| Landing | 3186 kg (7024 lbs) |
| Ramp | 3370 kg (7430 lbs) |

15. Centre of Gravity Range:

From	To	Weight up to
4604 mm (181.3 in) 14% of Mean Aerodynamic Chord	4951 mm (194.9 in) 37 % of MAC	2000 kg (4409 lbs) or less
4664 mm (183.6 in) 18% of MAC	4951 mm (194.9 in) 37% of MAC	2835 kg (6250 lbs)
4707 mm (185.3 in) 20.85% of MAC	4936 mm (194.3 in) 36% of MAC	2984 kg (6579 lbs)
4752 mm (187.1 in) 23.8% of MAC	4936 mm (194.3 in) 36% of MAC	3186 kg (7024 lbs)
4752 mm (187.1 in) 23.8% of MAC	4921 mm (193.74 in) 35% of MAC	3354 kg (7394 lbs)

Straight line between points given
MAC: Mean Aerodynamic Chord

16. Datum: 3000 mm (118.11 in.) ahead of front firewall face
17. Control surface deflections:
- Elevator (Angles references: stabilator chord)
- | | |
|---------------------|------------|
| Nose-up attitude: | 30° ± 1.5° |
| Nose-down attitude: | 10° ± 1° |
- Stabilator tab (elevator at 0°)
- | | |
|---------------------|----------|
| Nose-up attitude: | 15° ± 1° |
| Nose-down attitude: | 20° ± 1° |
- Roll
- Ailerons (Reference: wing chord)

up	15° ± 1°
down	20° ± 1°
 - Spoiler (Reference: wing upper surface)

up	58° + 2° / - 3°
down	20.5° + 1° / - 5°
 - Tab

up	14° ± 1°
down	14° ± 1°
- Yaw control
- Rudder (Reference: fin chord)
- | | |
|------------|------------|
| left turn | 26° ± 1° |
| right turn | 35° ± 1.5° |



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Rudder tab (Reference: rudder chord)

left turn $13.5^{\circ} \pm 1^{\circ}$ right turn $9.5^{\circ} \pm 1^{\circ}$

18. Levelling Means: Cabin floor mounting rails
19. Minimum Flight Crew: 1 (Pilot)
20. Maximum Passenger Seating Capacity: 5
21. Baggage / Cargo Compartment
- | | | |
|---|------------------|-----------------------|
| Front baggage (not pressurized) | 50 kg (110 lbs) | at 3250 mm (128.0 in) |
| a. Airplanes <u>not</u> equipped with optional modification MOD70-0315-25 or equipped with optional modification MOD70-0315-25 in 6-seat accommodation: | | |
| Rear baggage (in cabin) | 100 kg (220 lbs) | at 7560 mm (297.6 in) |
| b. Airplanes equipped with optional modification MOD70-0315-25 in 4-seat accommodation: | | |
| Rear baggage (in cabin) | 80 kg (176 lbs) | at 6586 mm (259.3 in) |
| | 100 kg (220 lbs) | at 7695 mm (303.0 in) |
22. Wheels and Tires
- 22.1. Nose landing gear
- | | |
|------------|------------------|
| Wheel base | 2910 mm (115 in) |
| Tire | 5.00 x 5-6 PR |
- 22.2. Main landing gear
- | | |
|-------|------------------|
| Track | 3880 mm (153 in) |
| Tire | 18 x 5.5-10 PR |

EII.4 Operating and Service Instructions

1. DGAC/EASA approved Pilot Operating Handbook (POH):
 - For TBM700 N variant from S/N 434 up to S/N 999, except S/N 687, the Pilot's Operating Handbook P/N ZOO.DMNFM00EE1RXEN edition 1 at revision 0 or later revision must be utilised.
 - o For airplanes with optional modification MOD70-0226-00 "Synthetic Vision System in GARMIN Integrated Flight Deck" (SVS) installed, Pilot's Operating Handbook Supplement 50 (P/N ZOO.DMNFM50EE0RXEN) at revision 0 or later revision must be utilised.
 - o For airplanes with optional modification MOD70-0407-00 Version D "Aural alerts evolution and V15 Software for G1000 Integrated Flight Deck on TBM850/900" including ESP/USP option to G1000 system associated to SOCATA modification MOD70-0423-34 "SAFE FLIGHT Lift transducer and AoA computer installation installed, refer to EII.5 paragraph.
 - o For airplanes with optional modification MOD70-0505-25 "Cabinet installation: Lavatory compartment" installed, the Pilot's Operating Handbook Supplement 63 Edition 3 (P/N ZOO.DMNFM63EE3RXEN) at revision 3 or later revision must be utilised.
 - o For airplanes with optional modification MOD70-0510-27 "Stick shaker" installed, the Pilot's Operating Handbook Supplement 64 Edition 0 (P/N ZOO.DMNFM64EE0RXEN) at revision 0 or later revision must be utilised
2. Maintenance manuals:
 - For TBM700 N variant from S/N 434, TBM850 Maintenance Manual (P/N ZOO.DMNMPXEE0RXX) edition 0 with revision 0, EASA approved on 26 September 2007 for MOD70-0176-00 and 6 July 2007 for MOD70-0211-57 and following revisions (including Airworthiness Limitations) must be utilised.

NOTE: From Revision 11 TBM850 Maintenance Manual becomes TBM Maintenance Manual keeping the same reference number.



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EII.5 Notes

1. SOCATA modification MOD70-0226-00 “Synthetic Vision System in GARMIN Integrated Flight Deck” (SVS):
It is a modification applicable to s/n 434-9999, that is to say for TBM700 N airplanes equipped with SOCATA modification MOD70-0176-00.
2. SOCATA optional modification MOD70-0407-00 Version D “Aural alerts evolution and V15 Software for G1000 Integrated Flight Deck on TBM850/900” including ESP/USP option to G1000 system:
It is a modification applicable as a retrofit to s/n 434-684.
For airplanes with optional modification MOD70-0407-00 Version D “Aural alerts evolution and V15 Software for G1000 Integrated Flight Deck on TBM850/900” including ESP/USP option to G1000 system associated to SOCATA modification MOD70-0423-34 “SAFE FLIGHT Lift transducer and AoA computer installation installed:
 - Pilot’s Operating Handbook P/N ZOO.DMNFM00EE1RXEN edition 1 at revision 12 or later revision **and**
 - Pilot’s Operating Handbook Supplement 62 Edition 1 (P/N ZOO.DMNFM62EE1RXEN) at revision 1 or later revisionmust be utilised.
3. SOCATA optional modification MOD70-0505-25 Version C “Cabinet installation: Lavatory compartment”:
It is a modification applicable to s/n 609-9999, for TBM700 N airplanes equipped with SOCATA modification MOD70-0315-25.
4. SOCATA optional modification MOD70-0510-27 “Stick shaker”:
It is a modification applicable as a retrofit to s/n 434-684.
5. Refer to Section F for general data.



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EIII. TBM700 N equipped with MOD70-0176-00, -0211-57, -0234-24, -0322-00, -0323-71, -0324-00, -0325-21 and -0357-71

Trade name "TBM900"

EIII.1 General

- | | | |
|---|--|------------------------|
| 1. Data Sheet No.: EASA.A.010 | Issue: 08 | Date: 27 February 2014 |
| 2. a) Type: | TBM700 | |
| b) Variant: | N | |
| 3. Airworthiness Category: | FAR-23 Normal Category | |
| 4. Type Certificate Holder: | Socata
65921 TARBES Cedex 9
FRANCE | |
| 5. Manufacturer: | Socata
65921 TARBES Cedex 9
FRANCE | |
| 6. EASA Certification Application Date: | 13-May-2011 | |
| 7. EASA Type Certification Date: | 2-December-2013 | |
| 8. Eligible S/N: | From 1000 to 1169, plus 687 | |

EIII.2 Certification Basis

- | | |
|--|---|
| 1. Reference Date for determining the applicable requirements: | 13-May-2011 |
| 2. Airworthiness Requirements: | FAR-23, Amendment 34, dated 01-Jan-1988
FAR-23, Amendment 36, dated 14-Sep-1988 Sections 23.783, 23.807 and 23.811
FAR-23, Amendment 44, dated 18-Aug-1993 Sections 23.49, 23.561, 23.562 and 23.785
And as defined in CRI A-01 (TBM700N Garmin G1000 Cockpit) Issue 2:
EASA CS-23, Initial issue, dated 14-Nov-2003 Sections 23.1309, 23.1311, 23.1321, 23.1331, 23.1353, 23.1357 and 23.1431 |
| 3. Special Conditions: | CRI B-1 (TBM700 C2), Stalling speed exceeding 61 kts
CRIs valid for TBM700N variant equipped with MOD70-0176-00:
CRI B-01, Human Factors in Integrated avionics systems, issue 2
CRI F-02, Protection from the IEL strikes, issue 2
CRIs valid for TBM700N variant equipped with MOD70-0234-24,
CRI F-52, Protection from effects of HIRF, Issue 4
CRIs valid for TBM700N variant equipped with MOD70-0322-00 |



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- CRI C-101, load requirement for justification of winglets structural loads, issue 4
- CRI valid for TBM700N variant equipped with optional MOD70-0407-00 Version C (refer to EIII.5 paragraph)
CRI F-14, Electronic Stability and Protection (ESP) and Underspeed Protection (USP)
4. Exemptions: None
5. Deviations: None
6. EASA Equivalent Safety Findings: ELOS valid for TBM700N equipped with MOD70-0324-00 CRI D-101 – cockpit control location and shape – powerplant control, Issue 4
7. Requirements elected to comply: None
8. Environmental Standards (refer to TCDSN A.010 for noise limitations):
TBM700N variant equipped with modification MOD70-0357-71:
ICAO Annex 16, Volume 1, 4th edition, Amdt 8 Chapter X, App 6
FAR 36 Appendix G Amdt 28
ICAO Annex 16, Volume 2, 2nd edition, Amdt 4 Part 2, Chap 2 and FAR 34 Amdt 3, dated 03-Feb-1999
- CRI valid for TBM700N variant equipped with MOD70-0357-71:
CRI N-01 Noise standard issue 3
CRI valid for TBM700N variant equipped with MOD70-0345-61:
CRI N-01 Noise standard issue 3
9. Operational Suitability Data (OSD):
MMEL: JAR-MMEL/MEL Amendment 1 dated 1 August 2005 – Refer to EIII.3 paragraph 4

EIII.3 Technical Characteristics and Operational Limitations

1. Type Design Definition: List of main drawings: T700 N°65/90 Ed.1 and up
2. Description: Single-turbo-propeller engine, six to seven seats, low-wing airplane, aluminium and steel construction.
- Introduction of SOCATA modifications:
- MOD70-0234-24 (new electrical generation and primary distribution),
 - MOD70-0322-00 (Aerodynamic efficiency Improvement),
 - MOD70-0323-71 (Propulsion efficiency Improvement),
 - MOD70-0324-00 (Human Machine interface improvement),
 - MOD70-0325-21 (Cabin comfort Improvement),



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- MOD70-0357-71 (Take-off and landing operation at 850 SHP)

These modifications are applicable on TBM700 N variant equipped with MOD70-0176-00 (G1000 Integrated Flight Deck) and MOD70-0211-57 (Fuel Tank Extension) from s/n 1000, plus s/n 687.

3. Equipment: Equipment list: see POH Sec 6.4, 6.5 and report ref. NAV No.34/90-RJ-App2 up to s/n 1049 or NAV No.34/90-RJ-App3 from s/n 1050
4. Operational Suitability Data (OSD):
The Operational Suitability Data elements listed below are approved by the European Aviation Safety Agency under the EASA Type Certificate EASA.A.010:
TBM700 A, B, C, N Master Minimum Equipment List (MMEL) at Revision 02 approved on March 28, 2017 or later EASA approved revision
5. Dimensions:
- | | |
|-----------|---|
| Span | 12.833 m (42.1 ft) |
| Length | 10.736 m (35.2 ft) |
| Height | 4.355 m (14.3 ft) |
| Wing Area | 18.00 m ² (193.7 ft ²) |
6. Engine:
- 6.1. Model: Turbo generator Pratt & Whitney type PT6A-66D
- 6.2. Type certificates: Transport Canada Type Certificate No. E-21 dated 16/08/2005
EASA Type Certificate EASA.IM.E.008, dated 22/11/2005
Certification basis: FAR 33 Amendments 10
- 6.3. Limitations: Gas generator rotation speed: 39000 RPM (104.1%)
Propeller rotation speed: 2000 RPM
Maximum take-off and continuous power: 850 shp
- For power-plant limitations refer to POH, Section 2.3
7. Load factors:
- a. Flaps up:
- | | |
|---------------------------------|---------------------|
| Weight below 6579 lbs (2984kg): | - 1.5 ≤ n ≤ + 3.8 g |
| Weight above 6579 lbs (2984kg): | - 1.5 ≤ n ≤ + 3.5 g |
- b. Flaps down: - 0 ≤ n ≤ + 2.0 g
8. Propeller:
- 8.1. Model: Hartzell Propeller Inc. Type HC-E4N-3/E9083 S(K)
or Hartzell Propeller Inc. Type HC-E5N-3C/NC8834 K (if installed according to optional modification MOD70-0345-61 - Refer to paragraph EIII.5 – Note 2)
- 8.2. Type Certificate: FAA Type Certificate P10NE dated 2 august 2002
- 8.3. Number of Blades: 4
- 8.4. Diameter: Maximum Diameter: 2311 mm / 91 in
Minimum Diameter: 2286 mm / 90 in



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- 8.5. Sense of rotation: Propeller rotates Clockwise in view of flight direction
- 8.6. Pitch: Low Pitch: 21°
Feather: 86°
Reverse: -11°
9. Fluids:
- 9.1. Fuel: Jet A, Jet A1, Jet B, JP4, JP5, JP8, anti-ice additive according to the specification MIL-I-27686 in the following proportions:
Minimum content: 0.06% by volume
Maximum content: 0.15% by volume
- 9.2. Oil: Refer to POH, Section 2.3
- 9.3. Coolant: Not Applicable
10. Fluid capacities:
- 10.1. Fuel: Two structural wing tanks
Total capacity 1140 liters / 301 gal
Total usable capacity 1106 liters / 292 gal
Unusable quantity 34 liters / 9 gal
- 10.2. Oil: Maximum: 12 liters / 12.7 qt
Minimum: 5.7 liters / 6 qt
11. Air Speeds:
- | | |
|---|----------|
| V_{MO} (Maximum operating speed) | 270 KCAS |
| V_A (Manoeuvring speed) | 160 KCAS |
| V_{FE} (Maximum flaps extended speed) | |
| Landing configuration | 120 KCAS |
| Take off configuration | 180 KCAS |
| V_{LO} (Maximum landing gear operating speed) | |
| Retraction | 150 KCAS |
| Extension | 180 KCAS |
| V_{LE} (Maximum landing gear extended speed) | 180 KCAS |
12. Maximum Operating Altitude: 31000 ft
13. Operational Capability: Day & night VFR and day & night IFR operations when appropriate equipment is installed and operating correctly
Refer to approved POH, Section 2.6
14. Maximum Weights:
- | | |
|----------|--------------------|
| Take-Off | 3354 kg (7394 lbs) |
| Landing | 3186 kg (7024 lbs) |
| Ramp | 3370 kg (7430 lbs) |



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15. Centre of Gravity Range:

From	To	Weight up to
4604 mm (181.3 in) 14% of Mean Aerodynamic Chord	4928 mm (194 in) 35.5 % of MAC	2000 kg (4409 lbs) or less
4664 mm (183.6 in) 18% of MAC	4928 mm (194 in) 35.5 % of MAC	2835 kg (6250 lbs)
4707 mm (185.3 in) 20,85% of MAC	4928 mm (194 in) 35.5 % of MAC	2984 kg (6579 lbs)
4752 mm (187.1 in) 23.8% of MAC	4927 mm (193.97 in) 35.4 % of MAC	3186 kg (7024 lbs)
4752 mm (187.1 in) 23.8% of MAC	4921 mm (193.74 in) 35% of MAC	3354 kg (7394 lbs)

Straight line between points given
MAC: Mean Aerodynamic Chord

16. Datum: 3000 mm (118.11 in.) ahead of front firewall face

17. Control surface deflections: Elevator (Angles references: stabilator chord)
Nose-up attitude: $30^{\circ} \pm 1.5^{\circ}$
Nose-down attitude: $10^{\circ} \pm 1^{\circ}$

Stabilator tab (elevator at 0°)
Nose-up attitude: $15^{\circ} \pm 1^{\circ}$
Nose-down attitude: $20^{\circ} \pm 1^{\circ}$

Roll

- Ailerons (Reference: wing chord)
up $15^{\circ} \pm 1^{\circ}$
down $20^{\circ} \pm 1^{\circ}$
- Spoiler (Reference: wing upper surface)
up $58^{\circ} + 2^{\circ} / - 3^{\circ}$
down $20.5^{\circ} + 1^{\circ} / - 5^{\circ}$
- Tab
up $14^{\circ} \pm 1^{\circ}$
down $14^{\circ} \pm 1^{\circ}$

Yaw control

Rudder (Reference: fin chord)
left turn $26^{\circ} \pm 1^{\circ}$
right turn $35^{\circ} \pm 1.5^{\circ}$

Rudder tab (Reference: rudder chord)
left turn $13.5^{\circ} \pm 1^{\circ}$
right turn $9.5^{\circ} \pm 1^{\circ}$

18. Levelling Means: Cabin floor mounting rails

19. Minimum Flight Crew: 1 (Pilot)

20. Maximum Passenger Seating Capacity: 5



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21. Baggage / Cargo Compartment			
	Front baggage (not pressurized)	50 kg (110 lbs)	at 3250 mm (128.0 in)
a.	6-seat accommodation:		
	Rear baggage (in cabin)	100 kg (220 lbs)	at 7560 mm (297.6 in)
b.	4-seat accommodation:		
	Rear baggage (in cabin)	80 kg (176 lbs)	at 6586 mm (259.3 in)
		100 kg (220 lbs)	at 7695 mm (303.0 in)
22. Wheels and Tires			
22.1. Nose landing gear			
	Wheel base	2910 mm (115 in)	
	Tire	5.00 x 5-6 PR	
22.2. Main landing gear			
	Track	3880 mm (153 in)	
	Tire	18 x 5.5-10 PR	

EIII.4 Operating and Service Instructions

1. DGAC/EASA approved Pilot Operating Handbook (POH):
 - 1.1. For TBM700 N variant from S/N 1000 up to S/N 1049, plus S/N 687., the Pilot's Operating Handbook P/N ZOO.DMHFM00EE0RXEN edition 0 at revision 1 or later revision must be utilised (Refer to paragraph EIII.5 – Note 3) and:
 -
 - For airplanes with optional modification MOD70-0226-00 "Synthetic Vision System in GARMIN Integrated Flight Deck" (SVS) installed, Pilot's Operating Handbook Supplement 50 P/N ZOO.DMHFM50EE1RXEN edition 1 at revision 0 or later revision must be utilised.
 - For airplanes with optional modification MOD70-0345-61 "Installation of a 5-blade propeller" installed, Pilot's Operating Handbook Supplement 58 P/N ZOO.DMHFM58EE0RXEN at revision 0 or later revision must be utilised.
 - For airplanes with optional modification MOD70-0407-00 "Aural alerts evolution and V15 Software for G1000 Integrated Flight Deck on TBM850/900" including ESP/USP option to G1000 system associated to SOCATA modification MOD70-0423-34 "SAFE FLIGHT Lift transducer and AoA computer installation installed, refer to EIII.5 paragraph.
 - For airplanes with optional modification MOD70-0510-27 "Stick shaker" installed, refer to EIII.5 paragraph.
 - 1.2. For TBM700 N variant from S/N 1050, the Pilot's Operating Handbook P/N ZOO.DMHFM00EE1RXEN edition 1 at revision 0 or later revision must be utilised (Refer to paragraph EIII.5 – Note 3) and:
 - For airplanes with optional modification MOD70-0226-00 "Synthetic Vision System in GARMIN Integrated Flight Deck" (SVS) installed, Pilot's Operating Handbook Supplement 50 P/N ZOO.DMHFM50EE1RXEN edition 1 at revision 0 or later revision must be utilised.
 - For airplanes with optional modification MOD70-0407-00 "Aural alerts evolution and V15 Software for G1000 Integrated Flight Deck on TBM850/900" including ESP/USP option to G1000 system associated to SOCATA modification MOD70-0423-34 "SAFE FLIGHT Lift transducer and AoA computer installation" installed, refer to EIII.5 paragraph.
 - For airplanes with optional modification MOD70-0510-27 "Stick shaker" installed, refer to EIII.5 paragraph.
2. Maintenance manuals:
 - For TBM700 N variant from S/N 1000, plus S/N 687, TBM Maintenance Manual (P/N ZOO.DMNMPXEE0RXX) edition 0 at revision 11 and following revisions (including Airworthiness Limitations) must be utilised.

EIII.5 Notes



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1. SOCATA modification MOD70-0226-00 “Synthetic Vision System in GARMIN Integrated Flight Deck” (SVS):
It is a modification applicable to s/n 434-9999, that is to say for TBM700 N airplanes equipped with SOCATA modification MOD70-0176-00.
2. SOCATA optional modification MOD70-0345-61 (Installation of a 5-blade propeller):
It is a modification applicable from s/n 1000, plus to s/n 687.
Characteristics:

Manufacturer:	Hartzell Propeller Inc.
Type Certificate:	FAA Type Certificate P10NE Rev4 dated august 30, 2013
Type:	HC-E5N-3C / NC8834 K
Blades:	5
Diameter:	Not over 91 in., not under 90 in.
Pitch setting at 30 in., sta.:	Low 19.5°
	Feather 85°
	Reverse - 9°
3. SOCATA optional modification MOD70-0407-00 (Aural alerts evolution and V15 Software for G1000 Integrated Flight Deck on TBM850/900) including ESP/USP option to G1000 system associated to SOCATA modification MOD70-0423-34 (SAFE FLIGHT Lift transducer and AoA computer installation):
It is a modification applicable according to installed version:
Version C (series equipment):
 - from S/N 1106, equipped with MOD70-0176-00 (G1000 Integrated Flight Deck),
 - Pilot’s Operating Handbook P/N ZOO.DMHFM00EE1RXEN edition 1 at revision 2 or later revision must be utilised.Version D (optional equipment):
 - as a retrofit from S/N 1000 to S/N 1049, plus S/N 687, equipped with MOD70-0176-00 (G1000 Integrated Flight Deck),
 - Pilot’s Operating Handbook P/N ZOO.DMHFM00EE0RXEN edition 0 at revision 3 or later revision and
 - Pilot’s Operating Handbook Supplement 62 Edition 0 (P/N ZOO.DMHFM62EE0RXEN) at revision 2 or later revision must be utilised.
 - as a retrofit from S/N 1050 to S/N 1105, plus S/N 687, equipped with MOD70-0176-00 (G1000 Integrated Flight Deck),
 - Pilot’s Operating Handbook P/N ZOO.DMHFM00EE1RXEN edition 1 at revision 2 or later revision must be utilised.
4. SOCATA modification MOD70-0439-79 (Oil pressure limits change):
It is a modification applicable from s/n 1000, plus to s/n 687.
Characteristics:
Version A: applicable on airplanes **not** equipped with MOD70-0440-72 (New torque indicating engine piston) up to s/n 1049
Version B: applicable on airplanes equipped with MOD70-0440-72 (New torque indicating engine piston) from s/n 1050
5. SOCATA optional modification MOD70-0505-25 Version C “Cabinet installation: Lavatory compartment”:
It is a modification applicable to s/n 609-9999, for TBM700 N airplanes equipped with SOCATA modification MOD70-0315-25.
6. SOCATA optional modification MOD70-0510-27 “Stick shaker”:
It is a modification applicable:
 - as a retrofit to s/n 1000-1110, plus s/n 687, equipped with MOD70-0176-00 (G1000 Integrated Flight Deck),



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- Pilot's Operating Handbook Supplement 64 Edition 1 (P/N ZOO.DMHFM64EE1RXEN) at revision 0 or later revision must be utilised
- as a series equipment from S/N 1111, equipped with MOD70-0176-00 (G1000 Integrated Flight Deck),
- Pilot's Operating Handbook P/N ZOO.DMHFM00EE1RXEN edition 1 at revision 2 or later revision must be utilised.

7. Refer to Section F for general data.



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EIV. TBM700 N equipped with MOD70-0476-00, -0211-57, -0234-24, -0322-00, -0323-71, -0324-00, -0325-21, -0357-71, -0439-79, -0423-34 and -0462-34

Trade name "TBM930"

EIV.1 General

- | | | |
|---|--|---------------------|
| 1. Data Sheet No.: EASA.A.010 | Issue: 10 | Date: 24 March 2016 |
| 2. a) Type: | TBM700 | |
| b) Variant: | N | |
| 3. Airworthiness Category: | FAR-23 Normal Category | |
| 4. Type Certificate Holder: | Socata
65921 TARBES Cedex 9
FRANCE | |
| 5. Manufacturer: | Socata
65921 TARBES Cedex 9
FRANCE | |
| 6. EASA Certification Application Date: | 24 March 2015 | |
| 7. EASA Type Certification Date: | 18 February 2016 | |
| 8. Eligible S/N: | From 1111 | |

EIV.2 Certification Basis

- | | |
|--|--|
| 1. Reference Date for determining the applicable requirements: | 24 March 2015 |
| 2. Airworthiness Requirements: | FAR-23, Amendment 34, dated 01-Jan-1988
FAR-23, Amendment 36, dated 14-Sep-1988 Sections 23.783, 23.807 and 23.811
FAR-23, Amendment 44, dated 18-Aug-1993 Sections 23.49, 23.561, 23.562 and 23.785
And as defined in CRI A-01 (TBM700N Garmin G1000 Cockpit) Issue 2:
EASA CS-23, Initial issue, dated 14-Nov-2003 Sections 23.1309, 23.1311, 23.1321, 23.1331, 23.1353, 23.1357 and 23.1431
And CS-ACNS Initial issue for communication, navigation, surveillance, TAWS and RVSM functions (TBM700N equipped with MOD70-0476-00) |
| 3. Special Conditions: | CRI B-1 (TBM700 C2), Stalling speed exceeding 61 kts
CRIs valid for TBM700N variant equipped with MOD70-0176-00 or MOD70-0476-00:
CRI B-01, Human Factors in Integrated avionics systems, issue 2
CRI F-02, Protection from the IEL strikes, issue 4
CRI valid for TBM700N variant equipped with MOD70-0234-24, |



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CRI F-52, Protection from effects of HIRF, Issue 4

CRI valid for TBM700N variant equipped with MOD70-0322-00

CRI C-101, load requirement for justification of winglets structural loads, issue 4

CRI valid for TBM700N variant equipped with MOD70-0476-00 Version C

CRI F-14, Electronic Stability and Protection (ESP) and Underspeed Protection (USP)

CRI valid for TBM700N variant equipped with optional MOD70-0388-25 (refer to EIV.5 paragraph)

CRI D-54, Installation of Inflatable Seat Restraints

4. Exemptions: None
5. Deviations: None
6. EASA Equivalent Safety Findings:
ELOS valid for TBM700N equipped with MOD70-0324-00 CRI D-101 – cockpit control location and shape – powerplant control, Issue 4
7. Requirements elected to comply:
Elect to comply with CS 23, Initial issue, dated 14-Nov-2003 Sections 23.201, 23.203 and 23.207 valid for TBM700N equipped with MOD70-0423-34 (Safe Flight: Lift transducer and AOA computer installation)
8. Environmental Standards (refer to TCDSN A.010 for noise limitations):
TBM700N variant equipped with modification MOD70-0357-71:
ICAO Annex 16, Volume 1, 4th edition, Amdt 8 Chapter X, App 6
FAR 36 Appendix G Amdt 28
ICAO Annex 16, Volume 2, 2nd edition, Amdt 4 Part 2, Chap 2 and FAR 34 Amdt 3, dated 03-Feb-1999

CRI valid for TBM700N variant equipped with MOD70-0357-71:
CRI N-01 Noise standard issue 3
CRI valid for TBM700N variant equipped with MOD70-0345-61:
CRI N-01 Noise standard issue 3
9. Operational Suitability Data (OSD):
MMEL: JAR-MMEL/MEL Amendment 1 dated 1 August 2005 – Refer to EIV.3 paragraph 4

EIV.3 Technical Characteristics and Operational Limitations

1. Type Design Definition: List of main drawings: T700 N°65/90 Ed.1 and up
2. Description: Single-turbo-propeller engine, six to seven seats, low-wing airplane, aluminium and steel construction.

Introduction of SOCATA modifications:



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- MOD70-0462-34 (Standby Altitude module MD302),
- MOD70-0476-00 (G3000 Integrated Flight Deck)

These modifications are applicable on TBM700 N variant equipped with MOD70-0211-57 (Fuel Tank Extension), MOD70-0322-00 (Aerodynamic efficiency Improvement), MOD70-0323-71 (Propulsion Efficiency Improvement), MOD70-0324-00 (Human Machine interface improvement), MOD70-0325-21 (Cabin comfort Improvement), and MOD70-0357-71 (Take-off and landing operation at 850 SHP), MOD70-0439-79 (Oil pressure limits change) and MOD70-0423-34 (Safe Flight: Lift transducer and AOA computer installation)

3. Equipment: Equipment list: see POH Sec 6.4, 6.5 and report ref. NAV No.34/90-RJ-App4
4. Operational Suitability Data (OSD):
The Operational Suitability Data elements listed below are approved by the European Aviation Safety Agency under the EASA Type Certificate EASA.A.010:
TBM700 A, B, C, N Master Minimum Equipment List (MMEL) at Revision 02 approved on March 28, 2017 or later EASA approved revision
5. Dimensions:

Span	12.833 m (42.1 ft)
Length	10.736 m (35.2 ft)
Height	4.355 m (14.3 ft)
Wing Area	18.00 m ² (193.7 ft ²)
6. Engine:
 - 6.1. Model: Turbo generator Pratt & Whitney type PT6A-66D
 - 6.2. Type certificates: Transport Canada Type Certificate No. E-21 dated 16/08/2005
EASA Type Certificate EASA.IM.E.008, dated 22/11/2005
Certification basis: FAR 33 Amendments 10
 - 6.3. Limitations: Gas generator rotation speed: 39000 RPM (104.1%)
Propeller rotation speed: 2000 RPM
Maximum take-off and continuous power: 850 shp

For power-plant limitations refer to POH, Section 2.3

7. Load factors:
 - a. Flaps up:

Weight below 6579 lbs (2984kg):	- 1.5 ≤ n ≤ + 3.8 g
Weight above 6579 lbs (2984kg):	- 1.5 ≤ n ≤ + 3.5 g
 - b. Flaps down: - 0 ≤ n ≤ + 2.0 g
8. Propeller:
 - 8.1. Model: Hartzell Propeller Inc. Type HC-E4N-3/E9083 S(K)



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- or Hartzell Propeller Inc. Type HC-E5N-3C/NC8834 K (if installed according to modification MOD70-0345-61 - Refer to paragraph EIV.5)
- 8.2. Type Certificate: FAA Type Certificate P10NE dated 2 august 2002
or FAA Type Certificate P10NE Rev4 dated august 30, 2013 – with modification MOD70-0345-61 - Refer to paragraph EIV.5
- 8.3. Number of Blades: 4 (HC-E4N-3/E9083 S(K))
or With modification MOD70-0345-61 - Refer to paragraph EIV.5
- 8.4. Diameter: Maximum Diameter: 2311 mm / 91 in
Minimum Diameter: 2286 mm / 90 in
- 8.5. Sense of rotation: Propeller rotates Clockwise in view of flight direction
- 8.6. Pitch: Low Pitch: 21°
Feather: 86°
Reverse: -11°
or With modification MOD70-0345-61 - Refer to paragraph EIV.5
9. Fluids:
- 9.4. Fuel: Jet A, Jet A1, Jet B, JP4, JP5, JP8, anti-ice additive according to the specification MIL-I-27686 in the following proportions:
Minimum content: 0.06% by volume
Maximum content: 0.15% by volume
- 9.5. Oil: Refer to POH, Section 2.3
- 9.6. Coolant: Not Applicable
10. Fluid capacities:
- 10.3. Fuel: Two structural wing tanks
Total capacity 1140 liters / 301 gal
Total usable capacity 1106 liters / 292 gal
Unusable quantity 34 liters / 9 gal
- 10.4. Oil: Maximum: 12 liters / 12.7 qt
Minimum: 5.7 liters / 6 qt
11. Air Speeds:
- | | |
|---|----------|
| V_{MO} (Maximum operating speed) | 270 KCAS |
| V_A (Manoeuvring speed) | 160 KCAS |
| V_{FE} (Maximum flaps extended speed) | |
| Landing configuration | 120 KCAS |
| Take off configuration | 180 KCAS |
| V_{LO} (Maximum landing gear operating speed) | |
| Retraction | 150 KCAS |
| Extension | 180 KCAS |
| V_{LE} (Maximum landing gear extended speed) | 180 KCAS |
12. Maximum Operating Altitude: 31000 ft



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13. Operational Capability: Day & night VFR and day & night IFR operations when appropriate equipment is installed and operating correctly
Refer to approved POH, Section 2.6

14. Maximum Weights:

Take-Off	3354 kg (7394 lbs)
Landing	3186 kg (7024 lbs)
Ramp	3370 kg (7430 lbs)

15. Centre of Gravity Range:

From	To	Weight up to
4604 mm (181.3 in) 14% of Mean Aerodynamic Chord	4928 mm (194 in) 35.5 % of MAC	2000 kg (4409 lbs) or less
4664 mm (183.6 in) 18% of MAC	4928 mm (194 in) 35.5 % of MAC	2835 kg (6250 lbs)
4707 mm (185.3 in) 20,85% of MAC	4928 mm (194 in) 35.5 % of MAC	2984 kg (6579 lbs)
4752 mm (187.1 in) 23.8% of MAC	4927 mm (193.97 in) 35.4 % of MAC	3186 kg (7024 lbs)
4752 mm (187.1 in) 23.8% of MAC	4921 mm (193.74 in) 35% of MAC	3354 kg (7394 lbs)

Straight line between points given
MAC: Mean Aerodynamic Chord

16. Datum: 3000 mm (118.11 in.) ahead of front firewall face

17. Control surface deflections:

Elevator (Angles references: stabilator chord)

Nose-up attitude:	$30^{\circ} \pm 1.5^{\circ}$
Nose-down attitude:	$10^{\circ} \pm 1^{\circ}$

Stabilator tab (elevator at 0°)

Nose-up attitude:	$15^{\circ} \pm 1^{\circ}$
Nose-down attitude:	$20^{\circ} \pm 1^{\circ}$

Roll

- Ailerons (Reference: wing chord)

up	$15^{\circ} \pm 1^{\circ}$
down	$20^{\circ} \pm 1^{\circ}$

- Spoiler (Reference: wing upper surface)

up	$58^{\circ} + 2^{\circ} / - 3^{\circ}$
down	$20.5^{\circ} + 1^{\circ} / - 5^{\circ}$

- Tab

up	$14^{\circ} \pm 1^{\circ}$
down	$14^{\circ} \pm 1^{\circ}$

Yaw control

Rudder (Reference: fin chord)

left turn	$26^{\circ} \pm 1^{\circ}$
right turn	$35^{\circ} \pm 1.5^{\circ}$

Rudder tab (Reference: rudder chord)

left turn	$13.5^{\circ} \pm 1^{\circ}$
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		right turn	9.5° ± 1°
18. Levelling Means:		Cabin floor mounting rails	
19. Minimum Flight Crew:		1 (Pilot)	
20. Maximum Passenger Seating Capacity:		5	
21. Baggage / Cargo Compartment			
Front baggage (not pressurized)	50 kg (110 lbs)		at 3250 mm (128.0 in)
a. 6-seat accommodation:			
Rear baggage (in cabin)	100 kg (220 lbs)		at 7560 mm (297.6 in)
b. 4-seat accommodation:			
Rear baggage (in cabin)	80 kg (176 lbs)		at 6586 mm (259.3 in)
	100 kg (220 lbs)		at 7695 mm (303.0 in)
22. Wheels and Tires			
22.1. Nose landing gear			
Wheel base	2910 mm (115 in)		
Tire	5.00 x 5-6 PR		
22.2. Main landing gear			
Track	3880 mm (153 in)		
Tire	18 x 5.5-10 PR		

EIV.4 Operating and Service Instructions

1. DGAC/EASA approved Pilot Operating Handbook (POH):
 - For TBM700 N variant from S/N 1111, airplanes equipped with modification MOD70-0476-00, the Pilot's Operating Handbook P/N ZOO.DMJFM00EE0RXEN edition 0 at revision 0 or later revision must be utilised.
 - o For airplanes with optional modification MOD70-0226-00 "Synthetic Vision System in GARMIN Integrated Flight Deck" (SVS) installed, Pilot's Operating Handbook Supplement 50 P/N ZOO.DMJFM50EE2RXEN edition 2 at revision 0 or later revision must be utilised.
 - o For airplanes with optional modification MOD70-0505-25 "Cabinet installation: Lavatory compartment" installed, the Pilot's Operating Handbook Supplement 63 Edition 1 (P/N ZOO.DMJFM63EE1RXEN) at revision 1 or later revision must be utilised.
2. Maintenance manuals:
 - For TBM700 N variant from S/N 1111, airplanes equipped with modification MOD70-0476-00, TBM Maintenance Manual (P/N ZOO.DMJMMPXEE0RXX) edition 0 at revision 0 and following revisions (including Airworthiness Limitations) must be utilised.

EIV.5 Notes

1. SOCATA optional modification MOD70-0226-00 "Synthetic Vision System in GARMIN Integrated Flight Deck" (SVS) Version C:
It is a modification applicable to s/n 1111-9999, that is to say for TBM700 N airplanes equipped with SOCATA modification MOD70-0476-00.
2. SOCATA modification MOD70-0345-61 (Installation of a 5-blade propeller):
It is a modification applicable from s/n 1000, plus to s/n 687.
Characteristics:
Manufacturer: Hartzell Propeller Inc.



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Type Certificate: FAA Type Certificate P10NE Rev4 dated august 30, 2013
Type: HC-E5N-3C / NC8834 K
Blades: 5
Diameter: Not over 91 in., not under 90 in.
Pitch setting at 30 in., sta.: Low 19.5°
Feather 85°
Reverse - 9°

3. SOCATA optional modification MOD70-0388-25 “AMSAFE Airbag seat belts”:
It is a modification applicable to s/n 1170-9999.
4. SOCATA optional modification MOD70-0505-25 Version C “Cabinet installation: Lavatory compartment”:
It is a modification applicable to s/n 609-9999, for TBM700 N airplanes equipped with SOCATA modification MOD70-0315-25.
5. SOCATA optional modification MOD70-0510-27 “Stick shaker”:
It is a modification applicable from to s/n 1111-9999.
6. Refer to Section F for general data



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EV. TBM700 N equipped with MOD70-0176-00, -0211-57, -0234-24, -0322-00, -0323-71, -0324-00, -0325-21, -0357-71, -0407-00, -0423-34, -0439-79, -0462-34 and -0539-00
Trade name "TBM910"

EV.1 General

- | | | |
|---|--|----------------------|
| 1. Data Sheet No.: EASA.A.010 | Issue: 11 | Date: XX August 2017 |
| 2. a) Type: | TBM700 | |
| b) Variant: | N | |
| 3. Airworthiness Category: | FAR-23 Normal Category | |
| 4. Type Certificate Holder: | Socata
65921 TARBES Cedex 9
FRANCE | |
| 5. Manufacturer: | Socata
65921 TARBES Cedex 9
FRANCE | |
| 6. EASA Certification Application Date: | 13-September-2016 | |
| 7. EASA Type Certification Date: | 24-March-2017 | |
| 8. Eligible S/N: | From 1170 | |

EV.2 Certification Basis

- | | |
|--|--|
| 1. Reference Date for determining the applicable requirements: | 13-September-2016 |
| 2. Airworthiness Requirements: | FAR-23, Amendment 34, dated 01-Jan-1988
FAR-23, Amendment 36, dated 14-Sep-1988 Sections 23.783, 23.807 and 23.811
FAR-23, Amendment 44, dated 18-Aug-1993 Sections 23.49, 23.561, 23.562 and 23.785
And as defined in CRI A-01 (TBM700N Garmin G1000 Cockpit) Issue 2:
EASA CS-23, Initial issue, dated 14-Nov-2003 Sections 23.1309, 23.1311, 23.1321, 23.1331, 23.1353, 23.1357 and 23.1431
And CS-ACNS Initial issue for communication, navigation, surveillance, TAWS and RVSM functions (TBM700N equipped with MOD70-0539-00) |
| 3. Special Conditions: | CRI B-1 (TBM700 C2), Stalling speed exceeding 61 kts
CRIs valid for TBM700N variant equipped with MOD70-0176-00 and MOD70-0539-00:
CRI B-01, Human Factors in Integrated avionics systems, issue 2
CRI F-02, Protection from the IEL strikes, issue 4
CRIs valid for TBM700N variant equipped with MOD70-0234-24,
CRI F-52, Protection from effects of HIRF, Issue 4 |



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- CRI valid for TBM700N variant equipped with MOD70-0322-00
 CRI C-101, load requirement for justification of winglets structural loads, issue 4
 CRI valid for TBM700N variant equipped with MOD70-0407-00 Version C (refer to EV.5 paragraph)
 CRI F-14, Electronic Stability and Protection (ESP) and Underspeed Protection (USP)
 CRI valid for TBM700N variant equipped with optional MOD70-0388-25 (refer to EV.5 paragraph)
 CRI D-54, Installation of Inflatable Seat Restraints
4. Exemptions: None
5. Deviations: None
6. EASA Equivalent Safety Findings: ELOS valid for TBM700N equipped with MOD70-0324-00 CRI D-101 – cockpit control location and shape – powerplant control, Issue 4
7. Requirements elected to comply: Elect to comply with CS 23, Initial issue, dated 14-Nov-2003 Sections 23.201, 23.203 and 23.207 valid for TBM700N equipped with MOD70-0423-34 (Safe Flight: Lift transducer and AOA computer installation)
8. Environmental Standards (refer to TCDSN A.010 for noise limitations):
 TBM700N variant equipped with modification MOD70-0357-71:
 ICAO Annex 16, Volume 1, 4th edition, Amdt 8 Chapter X, App 6
 FAR 36 Appendix G Amdt 28
 ICAO Annex 16, Volume 2, 2nd edition, Amdt 4 Part 2, Chap 2 and FAR 34 Amdt 3, dated 03-Feb-1999
 CRI valid for TBM700N variant equipped with MOD70-0357-71:
 CRI N-01 Noise standard issue 3
 CRI valid for TBM700N variant equipped with MOD70-0345-61:
 CRI N-01 Noise standard issue 3
9. Operational Suitability Data (OSD):
 MMEL: JAR-MMEL/MEL Amendment 1 dated 1 August 2005 – Refer to EV.3 paragraph 4

EV.3 Technical Characteristics and Operational Limitations

1. Type Design Definition: List of main drawings: T700 N°65/90 Ed.1 and up
2. Description: Single-turbo-propeller engine, six to seven seats, low-wing airplane, aluminium and steel construction.
 Introduction of SOCATA modifications:
 - MOD70-0462-34 (Standby Altitude module MD302),
 - MOD70-0539-00 (G1000 Nxi Integrated Flight Deck)



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These modifications are applicable on TBM700 N variant equipped with MOD70-0176-00 (G1000 Integrated Flight Deck), MOD70-0211-57 (Fuel Tank Extension), MOD70-0322-00 (Aerodynamic efficiency Improvement), MOD70-0323-71 (Propulsion Efficiency Improvement), MOD70-0324-00 (Human Machine interface improvement), MOD70-0325-21 (Cabin comfort Improvement), MOD70-0357-71 (Take-off and landing operation at 850 SHP), MOD70-0439-79 (Oil pressure limits change) and MOD70-0423-34 (Safe Flight: Lift transducer and AOA computer installation) associated to MOD70-0407-00 (Aural Alert Evolution and V15 Software for G1000 Integrated Flight Deck on TBM850/900 including ESP/USP option)

3. Equipment: Equipment list: see POH Sec 6.4, 6.5 and report ref. NAV No.34/90-RJ-App5 from s/n 1170.
4. Operational Suitability Data (OSD):
The Operational Suitability Data elements listed below are approved by the European Aviation Safety Agency under the EASA Type Certificate EASA.A.010:
TBM700 A, B, C, N Master Minimum Equipment List (MMEL) at Revision 02 approved on March 28, 2017 or later EASA approved revision
5. Dimensions:
- | | |
|-----------|---|
| Span | 12.833 m (42.1 ft) |
| Length | 10.736 m (35.2 ft) |
| Height | 4.355 m (14.3 ft) |
| Wing Area | 18.00 m ² (193.7 ft ²) |
6. Engine:
- 6.1. Model: Turbo generator Pratt & Whitney type PT6A-66D
- 6.2. Type certificates: Transport Canada Type Certificate No. E-21 dated 16/08/2005
EASA Type Certificate EASA.IM.E.008, dated 22/11/2005
Certification basis: FAR 33 Amendments 10
- 6.3. Limitations: Gas generator rotation speed: 39000 RPM (104.1%)
Propeller rotation speed: 2000 RPM
Maximum take-off and continuous power: 850 shp
- For power-plant limitations refer to POH, Section 2.3
7. Load factors:
- a. Flaps up:
- | | |
|---------------------------------|---------------------|
| Weight below 6579 lbs (2984kg): | - 1.5 ≤ n ≤ + 3.8 g |
| Weight above 6579 lbs (2984kg): | - 1.5 ≤ n ≤ + 3.5 g |
- b. Flaps down: - 0 ≤ n ≤ + 2.0 g
8. Propeller:
- 8.1. Model: Hartzell Propeller Inc. Type HC-E4N-3/E9083 S(K)
or Hartzell Propeller Inc. Type HC-E5N-3C/NC8834 K (if installed according to optional modification MOD70-0345-61 - Refer to paragraph EV.5)



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- 8.2. Type Certificate: FAA Type Certificate P10NE dated 2 august 2002
- 8.3. Number of Blades: 4
- 8.4. Diameter: Maximum Diameter: 2311 mm / 91 in
Minimum Diameter: 2286 mm / 90 in
- 8.5. Sense of rotation: Propeller rotates Clockwise in view of flight direction
- 8.6. Pitch: Low Pitch: 21°
Feather: 86°
Reverse: -11°
9. Fluids:
- 9.1. Fuel: Jet A, Jet A1, Jet B, JP4, JP5, JP8, anti-ice additive according to the specification MIL-I-27686 in the following proportions:
Minimum content: 0.06% by volume
Maximum content: 0.15% by volume
- 9.2. Oil: Refer to POH, Section 2.3
- 9.3. Coolant: Not Applicable
10. Fluid capacities:
- 10.1. Fuel: Two structural wing tanks
Total capacity 1140 liters / 301 gal
Total usable capacity 1106 liters / 292 gal
Unusable quantity 34 liters / 9 gal
- 10.2. Oil: Maximum: 12 liters / 12.7 qt
Minimum: 5.7 liters / 6 qt
11. Air Speeds:
- | | |
|--|----------|
| V _{MO} (Maximum operating speed) | 270 KCAS |
| V _A (Manoeuvring speed) | 160 KCAS |
| V _{FE} (Maximum flaps extended speed) | |
| Landing configuration | 120 KCAS |
| Take off configuration | 180 KCAS |
| V _{LO} (Maximum landing gear operating speed) | |
| Retraction | 150 KCAS |
| Extension | 180 KCAS |
| V _{LE} (Maximum landing gear extended speed) | 180 KCAS |
12. Maximum Operating Altitude: 31000 ft
13. Operational Capability: Day & night VFR and day & night IFR operations when appropriate equipment is installed and operating correctly
Refer to approved POH, Section 2.6



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14. Maximum Weights:

Take-Off	3354 kg (7394 lbs)
Landing	3186 kg (7024 lbs)
Ramp	3370 kg (7430 lbs)

15. Centre of Gravity Range:

From	To	Weight up to
4604 mm (181.3 in) 14% of Mean Aerodynamic Chord	4928 mm (194 in) 35.5 % of MAC	2000 kg (4409 lbs) or less
4664 mm (183.6 in) 18% of MAC	4928 mm (194 in) 35.5 % of MAC	2835 kg (6250 lbs)
4707 mm (185.3 in) 20,85% of MAC	4928 mm (194 in) 35.5 % of MAC	2984 kg (6579 lbs)
4752 mm (187.1 in) 23.8% of MAC	4927 mm (193.97 in) 35.4 % of MAC	3186 kg (7024 lbs)
4752 mm (187.1 in) 23.8% of MAC	4921 mm (193.74 in) 35% of MAC	3354 kg (7394 lbs)

Straight line between points given
MAC: Mean Aerodynamic Chord

16. Datum: 3000 mm (118.11 in.) ahead of front firewall face

17. Control surface deflections:

Elevator (Angles references: stabilator chord)

Nose-up attitude:	$30^{\circ} \pm 1.5^{\circ}$
Nose-down attitude:	$10^{\circ} \pm 1^{\circ}$

Stabilator tab (elevator at 0°)

Nose-up attitude:	$15^{\circ} \pm 1^{\circ}$
Nose-down attitude:	$20^{\circ} \pm 1^{\circ}$

Roll

- Ailerons (Reference: wing chord)	
up	$15^{\circ} \pm 1^{\circ}$
down	$20^{\circ} \pm 1^{\circ}$
- Spoiler (Reference: wing upper surface)	
up	$58^{\circ} + 2^{\circ} / - 3^{\circ}$
down	$20.5^{\circ} + 1^{\circ} / - 5^{\circ}$
- Tab	
up	$14^{\circ} \pm 1^{\circ}$
down	$14^{\circ} \pm 1^{\circ}$

Yaw control

Rudder (Reference: fin chord)	
left turn	$26^{\circ} \pm 1^{\circ}$
right turn	$35^{\circ} \pm 1.5^{\circ}$

Rudder tab (Reference: rudder chord)

left turn	$13.5^{\circ} \pm 1^{\circ}$
right turn	$9.5^{\circ} \pm 1^{\circ}$

18. Levelling Means: Cabin floor mounting rails

19. Minimum Flight Crew: 1 (Pilot)



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20. Maximum Passenger Seating Capacity: 5
21. Baggage / Cargo Compartment
- | | | |
|---------------------------------|------------------|-----------------------|
| Front baggage (not pressurized) | 50 kg (110 lbs) | at 3250 mm (128.0 in) |
| c. 6-seat accommodation: | | |
| Rear baggage (in cabin) | 100 kg (220 lbs) | at 7560 mm (297.6 in) |
| d. 4-seat accommodation: | | |
| Rear baggage (in cabin) | 80 kg (176 lbs) | at 6586 mm (259.3 in) |
| | 100 kg (220 lbs) | at 7695 mm (303.0 in) |
22. Wheels and Tires
- 22.1. Nose landing gear
- | | |
|------------|------------------|
| Wheel base | 2910 mm (115 in) |
| Tire | 5.00 x 5-6 PR |
- 22.2. Main landing gear
- | | |
|-------|------------------|
| Track | 3880 mm (153 in) |
| Tire | 18 x 5.5-10 PR |

EV.4 Operating and Service Instructions

1. DGAC/EASA approved Pilot Operating Handbook (POH):
 - For TBM700 N variant from S/N 1170, airplanes equipped with modification MOD70-0539-00, the Pilot's Operating Handbook P/N ZOO.DMDFM00EE0RXEN edition 0 at revision 0 or later revision must be utilised.
 - o For airplanes with optional modification MOD70-0226-00 "Synthetic Vision System in GARMIN Integrated Flight Deck" (SVS) installed, Pilot's Operating Handbook Supplement 50 P/N ZOO.DMHFM50EE2R1EN edition 2 at revision 1 or later revision must be utilised.
 - o For airplanes with optional modification MOD70-0505-25 "Cabinet installation: Lavatory compartment" installed, the Pilot's Operating Handbook Supplement 63 Edition 1 (P/N ZOO.DMJFM63EE1RXEN) at revision 1 or later revision must be utilised.
2. Maintenance manuals:
 - For TBM700 N variant from S/N 1000, plus S/N 687, TBM Maintenance Manual (P/N ZOO.DMNMPXEE0RXX) edition 0 at revision 15 and following revisions (including Airworthiness Limitations) must be utilised.

EV.5 Notes

1. SOCATA modification MOD70-0226-00 "Synthetic Vision System in GARMIN Integrated Flight Deck" (SVS):
It is a modification applicable to S/N 434-9999, that is to say from TBM700 N airplanes equipped with SOCATA modification MOD70-0176-00.
2. SOCATA optional modification MOD70-0345-61 (Installation of a 5-blade propeller):
It is a modification applicable from s/n 1000, plus to s/n 687.
Characteristics:

Manufacturer:	Hartzell Propeller Inc.
Type Certificate:	FAA Type Certificate P10NE Rev4 dated august 30, 2013
Type:	HC-E5N-3C / NC8834 K
Blades:	5
Diameter:	Not over 91 in., not under 90 in.
Pitch setting at 30 in., sta.:	Low 19.5°
	Feather 85°
	Reverse - 9°



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3. SOCATA optional modification MOD70-0388-25 “AMSAFE Airbag seat belts”:
It is a modification applicable to s/n 1170-9999.
4. SOCATA optional modification MOD70-0505-25 Version C “Cabinet installation: Lavatory compartment”:
It is a modification applicable to s/n 609-9999, for TBM700 N airplanes equipped with SOCATA modification MOD70-0315-25.
5. SOCATA modification MOD70-0510-27 “Stick shaker”:
It is a modification applicable from to s/n 1111-9999.
6. Refer to Section F for general data.



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SECTION F: NOTESNotes for all TBM700 variants up to S/N 999:

1. SOCATA modification MOD70-0275-00 “Multi-Mission aircraft”:
It is a modification applicable to s/n 1-999, except s/n 687. TBM700 airplanes must be equipped with SOCATA modification MOD70-010-24 (Increase of on board generators capacitors).
For airplanes with optional modification MOD70-0275-00 “Multi-Mission aircraft” installed:
 - Pilot’s Operating Handbook Supplement 53 at revision 0 or later revision must be utilised.
 - TBM Maintenance Manual Supplement S01 with revision 0 of June 2010, EASA approved on 6 July 2010, and following revisions (including Airworthiness Limitations) must be utilised.

SECTION G: CHANGE RECORD

Issue 1	Initial issue
Issue 2	Editorial changes
Issue 3	Editorial changes
Issue 4	Introduction of TBM700N (TBM850)
Issue 5	Correction to issue number of CRI A-1 in II.4(b) to issue 2 Introduction of Change Record
Issue 6	Introduction of MOD70-176-00 (G1000 Integrated Flight Deck) and MOD70-211-57 (Fuel Tank Extension) on TBM700N variant
Issue 7	Editorial changes due to change of ownership from EADS Socata to SOCATA-Daher. TC Holder name formally reverts to SOCATA
Issue 8	<ul style="list-style-type: none"> - New presentation of the TBM700 Type Certificate Data Sheet to ease the search of data concerning the various TBM700 variants and major changes and to match last TCDS EASA template. - Correction of authorized weight in baggage compartments according to TBM700 variants. - Correction of centre of gravity range table for TBM700C2 and TBM700N variants. - Introduction of MOD70-0226-00 “G1000 Synthetic Vision System (SVS)” for TBM700 N variant equipped with MOD70-0176-00 or TBM700 A and TBM700 B variants (from s/n 14 to 243, except s/n 205 and 240) equipped with MOD70-0276-00. - Introduction of MOD70-0275-00 “Multi-Mission aircraft” for all TBM700 variants equipped with MOD70-010-24 (Increase of on board generators capacitors). - Introduction of MOD70-276-00 (G1000 Integrated Flight Deck – Retrofit program) associated to MOD70-158-28 Version B (Fuel gauging amplifier) for TBM700 A and TBM700 B variants from s/n 14 to 243, except s/n 205 and 240. - Introduction of modifications MOD70-0234-24 (New electrical generation and primary distribution), MOD70-0322-00 (Aerodynamic efficiency Improvement), MOD70-0323-71 (Propulsion efficiency Improvement), MOD70-0324-00 (Human Machine interface improvement), MOD70-0325-21 (Cabin comfort Improvement), MOD70-0357-71 (Take-off and landing operation at 850 SHP) for TBM700 N equipped with MOD70-0176-00 (G1000 Integrated Flight Deck) from s/n 1000, s/n 687. - Introduction of optional modification MOD70-0345-61 (Installation of a 5-blade propeller) for TBM700 N variant from s/n 1000, s/n 687.
Issue 9	Corrected mistake in reference of applicable technical documentation for TBM 700 A and B variants. Correction of mistake in type identification of optional 5-blade propeller for TBM 700 N variant from s/n 1000, plus s/n 687
Issue 10	Adding of Operational Suitability Data (OSD): TBM700 A, B, C, N Master Minimum Equipment List causing a shift in the paragraph numbering all along the document Adding of SOCATA modification MOD70-0439-79 and POH TBM900 Edition 1 Creation of chapter IV in section E for TBM700 N Trade name "TBM 930": <ul style="list-style-type: none"> - Introduction of MOD70-0476-00 (Garmin G3000 Integrated Flight Deck) - Introduction of MOD70-0462-34 (MidContinent Standby Altitude module MD302) - Introduction of MOD70-0423-34 (Safe Flight: Lift transducer and AOA computer installation)



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- Introduction of Version C of MOD70-0226-00 (Synthetic Vision System in GARMIN Integrated Flight Deck) valid only for airplanes equipped with modification MOD70-0476-00
- Correction in Sections A, B, C, D and chapters E1 to EIII of cross-references to paragraph concerning current TBM700 MMEL and updating of MMEL revision.
- Correction of CRI F-02 issue number from Chapter EIV.
- Adding of SOCATA modification MOD70-0407-00 (Aural alerts evolution and V15 Software for G1000 Integrated Flight Deck on TBM850/900), applicable only on airplanes equipped with MOD70-0176-00 (G1000 Integrated Flight Deck) or MOD70-0539-00 (GARMIN G1000 Nxi Software and Hardware, plus LVL function).
- Closing of TBM 900 S/N eligibility.
- Adding of SOCATA optional modification MOD70-0388-25 (AMSAFE Airbag seat belts).
- Adding of SOCATA optional modification MOD70-0505-25 Version C (Cabinet installation: Lavatory compartment) and associated owner technical documentation.
- Adding of SOCATA optional modification MOD70-0510-27 (Stick shaker) and associated owner technical documentation.
- Creation of chapter E.V for TBM700 N Trade name "TBM 910":
- Introduction of SOCATA modification MOD70-0539-00 (GARMIN G1000 Nxi Software and Hardware, plus LVL function) for TBM700 N variant from s/n 1170 equipped with MOD70-0176-00 (G1000 Integrated Flight) and MOD70-0407-00 Version C (Aural alerts evolution and V15 Software for G1000 Integrated Flight Deck on TBM850/900)
- Introduction of MOD70-0462-34 Version B (MidContinent Standby Altitude module MD302)

