DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A51EU
Revision 18
DAHER
(SOCATA)
TB 9
TB 10
TB 20
TB 21
TB 200
August 30, 2021

TYPE CERTIFICATE DATA SHEET A51EU

This data sheet which is part of Type Certificate No. A51EU prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder.	DAHER AEROSPACE 23 route de TOURS 41400 SAINT JULIEN DE CHEDON FRANCE
Type Certificate Holder Record	SOCATA name dropped by owner DAHER in 2015 65921 - TARBES Cedex 9 France S O C A T A - Groupe AEROSPATIALE transferred to SOCATA on February 16, 2011

I. Model TB 20, 4 PCLM (Normal Category), approved January 27, 1984.

Engine.	LYCOMING IO-540-C4D5D
Fuel.	100 minimum octane aviation gasoline
Engine Limits.	For all operations, 2575 r.p.m. (250 H.P.)
Propeller & Propeller Limits.	HARTZELL Constant Speed HC-C2YK-1BF/F8477-4 Diameter: not over 80 in., not under 78 in. Pitch setting at 30 in., sta.: Low 15° High 31° Spinner SOCATA TB 10.58.018.100, TB 10.58.018.104 or TB 10.58.026.001 OR HARTZELL Constant Speed HC-C3YR-1RF/F7693F or HC-C3YR-1RF/F7693FB Diameter: not over 78 in., not under 76 in. Pitch setting at 30 in., sta.: Low 13° High 31° Spinner HARTZELL A-2295-3(P) WOODWARD hydraulic governor: -E210681 for aircraft from S/N 1 to 730 -M210681 for aircraft from S/N 1 to 878 (except S/N 823 to 849 and 888).

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-C210761 or F210 761 for aircraft from S/N 1

Airspeed Limits (I.A.S.)

Normal Category.

a) Aircraft up to S/N 587 where modification N° 50 has not been applied.
Maximum take-off and landing weight: 2943 lbs.

Never exceed	189 knots - 217 m.p.h.
Maximum structural cruising	151 knots - 174 m.p.h.
Maneuvering	127 knots - 146 m.p.h.
Flaps extended	100 knots - 115 m.p.h.
Gear extended	140 knots - 162 m.p.h.
Gear operating	130 knots - 149 m.p.h.

b) Aircraft from S/N 588 up to S/N 878 except S/N 823 to 849 and those where modification N° 50 has been applied.
Maximum take-off weight: 3086 lbs;
Maximum landing weight: 2943 lbs.

Never exceed	187 knots - 216 m.p.h.
Maximum structural cruising	150 knots - 173 m.p.h.
Maneuvering	129 knots - 149 m.p.h.
Flaps extended	103 knots - 119 m.p.h.
Gear extended	139 knots - 160 m.p.h.
Gear operating	129 knots - 149 m.p.h.

c) Aircraft from S/N 879 and S/N 823 to 849.
Maximum take-off and landing weight: 3086 lbs

Never exceed	187 knots - 216 m.p.h.
Maximum structural cruising	150 knots - 173 m.p.h.
Maneuvering	129 knots - 149 m.p.h.
Flaps extended take-off position	129 knots - 149 m.p.h.
Flaps extended landing position	103 knots - 119 m.p.h.
Gear extended	139 knots - 160 m.p.h.
Gear operating	129 knots - 149 m.p.h.

C.G. Range.

Normal Category.

a) Aircraft up to S/N 587 and where modification N° 50 has not been applied.
Take-off and landing maximum weight: 2943 lbs

(+ 36.9) to (+ 47.4) at 2000 lbs or less
(+ 37.9) to (+ 47.4) at 2645 lbs
(+ 42.6) to (+ 47.4) at 2943 lbs
Straight line between points given.

b) Aircraft where modification N° 50 has been applied for S/N 1 to 587.
(+ 36.9) to (+ 47.4) at 2000 lbs or less
(+ 37.9) to (+ 47.4) at 2645 lbs
(+ 42.6) to (+ 47.4) at 2943 lbs
(+ 42.6) to (+ 47.4) at 3086 lbs
Straight line between points given.

c) Aircraft from S/N 588 included
(+ 35.9) to (+ 47.4) at 2205 lbs or less
(+ 37.4) to (+ 47.4) at 2756 lbs
(+ 42.2) to (+ 47.4) at 3086 lbs
Straight line between points given.

Empty Weight C.G. Range.

None.

Maximum Weight.

Normal Category

a) Aircraft where modification N° 50 has not been applied.
- Maximum take-off and landing weight: 2943 lbs

b) Aircraft from S/N 588 and those where modification N° 50 has been applied, up to S/N 878, except for S/N 823 to 849.
- Maximum take-off: 3086 lbs
- Maximum landing: 2943 lbs

c) Aircraft from S/N 879 and S/N 823 to 849.
- Maximum take-off weight: 3086 lbs
- Maximum landing weight: 3086 lbs

Number of seats. 4 (2 at + 45.5, 2 at + 80.1) - See Note 5 for additional rear seat.

Maximum Baggage. 110 lb at (+ 102) or 143 lb at (+ 102) if modification No. 40 is applied.

Fuel Capacity. 88.8 gal. (two 44.4 gal. at + 42.7: 86.2 gal. usable)
See Note 1 for weight and unusable fuel

Oil Capacity. 13.3 qt at (-23.6) (3.9 qt unusable)
See Note 1 for weight

Control Surface Movements. Stabilator (Angles references: upper fuselage spar)
Leading edge down: $16^{o} \pm 1^{o}$
Leading edge up: $3^{o} \pm 1^{o}$

Stabilator tab (Angles reference: stabilator chord)
with stabilator leading edge full down.

a) Aircraft where modification N° 50 has not been applied.

Tab trailing edge minimum up $2.5^{o} \pm 0.5^{o}$
Tab trailing edge maximum up $17.5^{o} \pm 1.5^{o}$

b) Aircraft from S/N 588 and those where modification N° 50 has been applied.

Tab trailing edge minimum up $0^{o} \pm 0.5^{o}$
Tab trailing edge maximum up $15^{o} \pm 1.5^{o}$

Ailerons (Reference: wing chord)
up $15^{o} \pm 1.5^{o}$
down $15^{o} \pm 1.5^{o}$

Rudder (Reference: fin chord)
Right and left $25^{o} \pm 2^{o}$

Rudder tab (Reference: rudder chord)
Left turn $10^{o} \pm 2^{o}$
Right turn $25^{o} \pm 2^{o}$

Flaps (Reference: wing chord) $+ 0.5^{o}$
Full flaps 40^{o} $- 1^{o}$

II. Model TB 10, 4 PCLM (Normal and Utility Category) approved November 27, 1985
Similar to the TB 20 but with fixed gear.

Engine. LYCOMING O-360-A1AD

Fuel. 100 minimum octane aviation gasoline

Engine Limits. For all operations, 2700 r.p.m. (180 HP)

Propeller & Propeller Limits.

HARTZELL constant speed
HC-C2YK-1BF/F-7666 A-2
Diameter: not over 74 in., not under 72 in.
Pitch setting at 30 in., sta.: Low $13^{o}30$
High 31^{o}

Spinner SOCATA TB 10.58.018.100, TB 10.58.018.104 or TB 10.58.026.001
HARTZELL Hydraulic governor F4-26 or F4-4A or F4-4AZ or F4-18

Airspeed Limits (IAS).

Normal and Utility Category.

Never exceed	165 knots - 190 m.p.h.
Maneuvering	122 knots - 142 m.p.h.
Flaps extended	95 knots - 109 m.p.h.

C.G. Range.

Normal Category.
(+ 37.3) to (+ 47.4) at 2138 lbs or less
(+ 39.8) to (+ 47.4) at 2359 lbs
(+ 45.0) to (+ 47.4) at 2535 lbs (Aircraft up to S/N 947)
(+ 42.6) to (+ 47.4) at 2535 lbs (Aircraft from S/N 948 included)
Straight line variation between points given.

Utility Category.
(+ 37.3) to (+ 47.4) at 2138 lb or less
(+ 38.3) to (+ 47.4) at 2249 lb
(+ 40.7) to (+ 47.4) at 2359 lb
Straight line variation between points given.

Empty weight C.G. Range.

None

Maximum Weight.

Normal Category.

a) Aircraft up to S/N 822, except S/N 804, 807, 808, and 816 to 819.
- Maximum take-off weight: 2535 lbs
- Maximum landing weight : 2407 lbs

b) Aircraft from S/N 823, and S/N 804, 807, 808 and 816 to 819.
- Maximum take-off weight: 2535 lbs
- Maximum landing weight : 2535 lbs

Utility Category.
Maximum take-off and landing weight: 2359 lbs

Number of seats.

4 (2 at + 45.9, 2 at + 82.4) See Note 5 for rear seat occupancy.

Maximum Baggage.

22 lbs at (+ 116.7) and 66 lbs at (+ 99) for aircraft up to S/N 399 and
143 lbs at (+ 102.3) from aircraft S/N 400

Fuel Capacity.

55.4 gal. (two 27.7 gal. at + 42.3 ; 53.8 gal. usable)
See Note 1 for weight and unusable fuel.

Oil Capacity.

8.45 qt at (-23.8)(-2.64 qt unusable)
See Note 1 for weight.

Control Surface Movements.

Stabilator (Angles reference: upper fuselage spar)

Leading edge down	$17^{o} \pm 1^{o}$
Leading edge up	$2^{o} \pm 1^{o}$

Stabilator tab (Angles reference: stabilizer chord) with stabilator leading edge full down

Tab trailing edge minimum up $2.5^{o} \pm 0.5^{o}$

Tab trailing edge maximum up $17^{o} \pm 1.5^{o}$

Control Surface Movements, Continued

Ailerons (Reference: wing chord) up $15^{o} \pm 1.5$
down $15^{o} \pm 1.5^{o}$

Rudder (Reference: fin chord)
Right and left $25^{o} \pm 2^{o}$

Flaps (Reference: wing chord) $+ 0.5^{o}$
Full flaps 25.5^{o}
$- 1^{o}$

III. Model TB 21, 4 PCLM (Normal Category) approved March 5, 1986
Similar to the TB 20 but with a turbocharged engine.

Engine. LYCOMING TIO-540-AB1AD

Fuel. 100 minimum octane aviation gasoline

Engine Limits. For all operations, 2575 r.p.m. (250 HP)

Propeller and Propeller Limits.

HARTZELL Constant Speed
HC-C2YK-1BF/F 8477-4

Diameter: not over 80 in., not under 78 in.
Pitch setting at 30 in., sta.: Low 15^{o}
High 31^{o}

Spinner SOCATA TB 10.58.018.100 or TB 10.58.018.104

OR

HARTZELL Constant Speed
HC-C3YR-1RF/F7693F or HC-C3YR-1RF/F7693FB
Diameter: not over 78 in., not under 76 in.
Pitch setting at 30 in., sta.: Low 13^{o}
High 31^{o}

Spinner HARTZELL A-2295-3(P)

WOODWARD hydraulic governor:
-E210681 or M210681 or C210761 for aircraft from S/N 1 to 730
-C210761 or F210761 for aircraft from S/N 1

Airspeed Limits (I.A.S.)

Normal Category.

a) Aircraft up to S/N 878:

Never exceed	187 knots - 216 m.p.h.
Maximum structural cruising	150 knots - 173 m.p.h.
Maneuvering	129 knots - 149 m.p.h.
Flaps extended	103 knots - 119 m.p.h.
Gear extended	139 knots - 160 m.p.h.
Gear operating	129 knots - 149 m.p.h.

Airspeed Limits (I.A.S.) Continued

b) Aircraft from S/N 879:

Never exceed	187 knots - 216 m.p.h.
Maximum structural cruising	150 knots - 173 m.p.h.
Maneuvering	129 knots - 149 m.p.h.
Flaps extended take-off position	129 knots - 149 m.p.h.
Flaps extended landing position	103 knots - 119 m.p.h.
Gear extended	139 knots - 160 m.p.h.
Gear operating	129 knots - 149 m.p.h.

C.G. Range. Normal Category.

(+ 35.9) to (+ 47.4) at 2205 lbs or less
(+ 37.4) to (+ 47.4) at 2756 lbs
(+ 42.2) to (+ 47.4) at 3086 lbs
Straight line between points given.

Empty weight C.G. Range. None

Maximum Weight. Normal Category

a) Aircraft up to S/N 878:
- Maximum take-off weight: 3086 lbs
- Maximum landing weight : 2943 lbs

b) Aircraft from S/N 879:
- Maximum take-off weight: 3086 lbs
- Maximum landing weight : 3086 lbs

Number of Seats. 4(2 at + 45.5, 2 at + 80.1) - See Note 5 for additional rear seat.

Maximum Baggage. 143 lbs at (+ 102)

Fuel Capacity. 88.8 gal. (two 44.4 gal. at + 42.7; 86.2 gal. usable)
See Note 1 for weight and unusable fuel

Oil Capacity. 13.3 qt at (-23.6) (3.9 qt unusable)
See Note 1 for weight

Control Surface Movements. Stabilator (Angles references: upper fuselage spar)

Leading edge down :	$16^o \pm 1^o$
Leading edge up :	$3^o \pm 1^o$

Stabilator tab (Angles reference: stabilator chord) with stabilator leading edge full down.

Tab trailing edge minimum up	$0^o \pm 0.5^o$
Tab trailing edge maximum up	$15^o \pm 1.5^o$

Ailerons (Reference: wing chord)	up $15^o \pm 1.5^o$
	down $15^o \pm 1.5^o$

Rudder (Reference: fin chord)

Right and left	$25^o \pm 2^o$

Rudder tab (Reference: rudder chord)

Left turn	$10^o \pm 2^o$
Right turn	$25^o \pm 2^o$

Flaps (Reference: wing chord)	$+ 0.5^o$
Full flaps	40^o
	$- 1^o$

IV. Model TB9, 4 PCLM (Utility Category) approved July 11, 1988
Similar to the TB10 but with a 160 HP engine.

Engine. LYCOMING O-320-D2A

Fuel. 100 minimum octane aviation gasoline

Engine Limits. For all operations, 2700 r.p.m. (160 HP)

Propeller & Propeller Limits.

Aircraft up to S/N 878 except S/N 765:
SENSENICH fixed pitch
74 DM6 S8 061
Diameter: not over 74 in., not under 72 in.
Spinner SOCATA TB 9.58.013.100 or TB 9.58.013.104

HARTZELL constant speed
HC-C2YL-1BF/F-7663 A-4
Diameter: not over 72 in., not under 70 in.
Pitch setting at 27 in., sta.: Low 11^{o}
High $26^{o}06'$
Spinner SOCATA TB 10.58.018.104 or TB 10.58.026.001
HARTZELL hydraulic governor F4-26 or F4-4A or F4-4AZ or F4-18

Aircraft from S/N 879 and S/N 765:
SENSENICH fixed pitch
74 DM6 SB 054
Diameter: not over 74 in., not under 72 in.
Spinner SOCATA TB9.58.013.100 or TB 9.58.013.104

Aircraft from S/N 1851 and from S/N 948 retrofitted with modification no. 139:
SENSENICH fixed pitch
74 DM6 S8 058
Diameter: not over 74 in., not under 72 in.
Spinner SOCATA TB9.58.013.100 or TB 9.58.013.104

Wheel Fairings.

Wheel fairing equipments are mandatory with propeller:
- SENSENICH 74 DM6 S8 061 and
- HARTZELL HC-C2YL-1BF/F 7663 A-4
- SENSENICH 74 DM6 S8 058

Airspeed Limits (I.A.S.)

Never exceed	165 knots - 190 m.p.h.
Maneuvering	122 knots - 142 m.p.h.
Flaps extended	95 knots - 109 m.p.h.

C.G. Range.

Utility Category.
(+ 38.3) to (+ 47.4) at 2138 lbs or less
(+ 41.3) to (+ 47.4) at 2337 lbs
Straight line variation between points given.

Empty Weight C.G. Range.

None

Maximum Weight.

Maximum take-off weight : 2337 lbs
Maximum landing weight : 2337 lbs

Number of seats.

4 (2 at + 45.9, 2 at + 82.4) See Note 5 for rear seat occupancy

Maximum Baggage.

88 lbs at (+ 102.3) for aircraft up to S/N 399 and 413
143 lbs at (+ 102.3) from aircraft S/N 400

Fuel Capacity.

41.7 gal. (two 20.85 gal. at + 42.3; 40.2 gal. usable)
or
55.4 gal. (two 27.7 gal. at + 42.3; 53.8 gal. usable)

See Note 1 for weight and unusable fuel.

Oil Capacity.

8.45 qt at (-23.8) (2.64 qt unusable)
See Note 1 for weight.

Control Surface Movements.

Stabilator (Angles reference: upper fuselage spar)
Leading edge down $17^{o} \pm 1^{o}$

Leading edge up $2^o \pm 1^o$

Stabilator tab (angles reference: stabilizer chord) with stabilator leading edge full down.
Tab trailing edge minimum up $2.5^o \pm 0.5^o$
Tab trailing edge maximum up $17^o \pm 1.5^o$

Ailerons (Reference: wing chord)
up $15^o \pm 1.5^o$
down $15^o \pm 1.5^o$

Rudder (Reference: fin chord)
Right and left $25^o \pm 2^o$

Flaps (Reference: wing chord)
- Aircraft up to S/N 878 except S/N 765

Full flaps 32^o $+0.5^o$ -1^o

- Aircraft from S/N 879 and S/N 765

Full flaps 25.5^o $+0.5^o$ -1^o

V. Model TB 200, 4 PCLM (Normal Category) approved September 14, 1992. Similar to the TB 20 but with fixed gear.

Engine. LYCOMING IO 360 A1B6

Fuel. 100 minimum octane aviation gasoline

Engine Limits. For all operations, 2700 r.p.m. (200 Hp)

Propeller and Propeller Limits. HARTZELL constant speed
HC-C2YK-1BF/F-7666 A-2
Diameter: not over 74 in., not under 72 in.
Pitch setting at 30 in., sta.: Low 13^o30
High 31^o

Spinner SOCATA TB 10.58.018.100, TB 10.58.018.104 or TB 1058.026.001
WOODWARD governor A210776

Airspeed Limits (IAS).

Never exceed	165 knots - 190 m.p.h.
Maneuvering	122 knots - 142 m.p.h.
Flaps extended	95 knots - 109 m.p.h.

C.G. Range. 42.6 in to (+47.4) at 2535 lbs
39.8 in to (+47.4) at 2359 lbs
37.3 in to (+47.4) at 2138 lbs or less

Empty Weight C.G. Range. None

Maximum Weight. Maximum take-off and landing weight: 2535 lbs

Number of Seats. 4 (2 at +45.9, 2 at 82.4) See Note 5 for rear seat occupancy

Maximum Baggage. 143 lbs at (+102.3)

Fuel Capacity. 55.4 gal. (two 27.7 gal. at 42.3 ; 53.8 gal. usable)
See Note 1 for weight and unusable fuel.

Oil Capacity. 8.45 qt at (-23.8) (2.64 qt unusable)
See Note 1 for weight

Control Surface Movements

Stabilator (Angles reference: upper fuselage spar)
Leading edge down $17^{o} \pm 1^{o}$
Leading edge up $2^{o} \pm 1^{o}$

Stabilator tab (angles reference: stabilizer chord) with stabilator leading edge full down.
Tab trailing edge minimum up $2.5^{o} \pm 0.5^{o}$
Tab trailing edge maximum up $17^{o} \pm 1.5^{o}$

Ailerons (reference: wing chord) Up $15^{o} \pm 1.5$
Down $15^{o} \pm 1.5^{o}$

Rudder (Reference: fin chord)
Right and left $25^{o} \pm 2^{o}$

Flaps (Reference: wing chord) $+ 0.5^{o}$
Full flaps 25.5^{o}
$- 1^{o}$

DATA PERTINENT TO ALL MODELS

Certification Basis.

Type Certification under 14 CFR Section 21-29 including the following requirements:
TB 20
- 14 CFR Part 23 effective February 1, 1965, including amendments 23-1 through 23-16.
- 14 CFR Part 36 effective Dec 1, 1969, including amendments 36-1 through 36-11.
Effective date of certification basis: November 2, 1975
Date of U.S. application: April 5, 1982
Type Certificate issued on January 27, 1984

TB 10
- 14 CFR Part 23 effective February 1, 1965, including amendments 23-1 through 23-16.
- 14 CFR Part 36 effective Dec 1, 1969, including amendments 36-1 through 36-11.
Effective date of certification basis: November 2, 1975
Date of U.S. application: May 3, 1979
Type Certificate issued on November 27, 1985.

TB 21
- 14 CFR Part 23 effective February 1, 1965, including amendments 23-1 through 23-16.
- 14 CFR Part 36 effective Dec 1, 1969, including amendments 36-1 through 36-11.
Effective date of certification basis: November 2, 1975
Date of U.S. application: September 30, 1985
Type Certificate issued on March 5, 1986.

TB 9
- 14 CFR Part 23 effective February 1, 1965, including amendments 23-1 through 23-16.
- 14 CFR Part 36 effective Feb 17, 1987, including amendments 36-1 through 36-13.
Effective date of certification basis: November 2, 1975
Date of U.S. application: August 10, 1987
Type Certificate issued on July 11, 1988.

Certification Basis; (Cont.)

TB 200
- 14 CFR Part 23 effective February 1, 1965, including amendments 23-1 through 23-16.
- 14 CFR Part 36 effective Dec 1, 1969, including amendments 36-1 through 36-11.
Effective date of certification basis: November 2, 1975
Date of U.S. application: April 15, 1992.
Type Certificate issued on September 14, 1992.

The Direction Générale de l'Aviation Civile (DGAC) originally type certificated this aircraft under its type certificate Number 165. The FAA validated this product under U.S. Type Certificate Number A51EU. Effective September 28, 2003, the European Aviation Safety Agency (EASA) began oversight of this product on behalf of France.

Import Requirements.

The FAA can issue a U.S. airworthiness certificate based on an NAA Export Certificate of Airworthiness (Export C of A) signed by a representative of the Direction Générale de l'Aviation Civile (DGAC) on behalf of the European Community. The Export C of A should contain the following statement: 'The aircraft covered by this certificate has been examined, tested, and found to comply with U.S. airworthiness regulations 14 CFR Part 23 approved under U.S. Type Certificate No. A51EU and to be in a condition for safe operation.'

Refer to the applicable bilateral agreement to verify eligibility for import into the United States of both new and used aircraft based on the scope of the agreement, to identify any required statements by the exporting authority on the export certificate of airworthiness (or equivalent document), and for procedures for coordinating exceptions to conformity statements on these documents. Refer to FAA Order 8130.2, *Airworthiness Certification of Aircraft*, for requirements for issuance of an *airworthiness certificate* for imported aircraft.

Serial Nos. Eligible.

A certificate of Airworthiness for Export endorsed as noted under "Import Requirements" must be submitted for each individual aircraft for which application for U.S. Certification is made.

Equipment.

The basic required equipment as prescribed in the applicable airworthiness regulations (see certification basis) must be installed in the aircraft for certification. Approved equipment is listed as follows:

TB20:

1) Aircraft up to S/N 947 except S/N 823 to 849 and 888 (14 volt electrical system) SOCATA Equipment List TB 20 BE/EQ N^{O} 91/81, Issue N^{O} 6 dated November 85 or later version.
2) Aircraft from to S/N 948 and S/N 823 to 849 plus S/N 888 (28 volt electrical system)
   SOCATA Equipment List TB 20 NAV N^{O} 92/89, Issue N^{O} 1 dated MAY 89 or later version.

TB10:

1) Aircraft up to S/N 947 (14 volt electrical system) SOCATA Equipment List TB 20 BE/EQ N^{O} 74/79, Issue N^{O} 5 dated November 85 or later version.
2) Aircraft from S/N 948 (28 volt electrical system) SOCATA Equipment List TB 10 NAV N^{O} 232/89, Issue N^{O} 1 dated November 89 or later version.

TB21:

1) Aircraft from S/N 879 to 947 (14 volt electrical system) SOCATA Equipment List TB 21 BE/EQ N^{O} 142/85, Issue N^{O} 3 dated November 85 or later version.
2) Aircraft from S/N 948 (28 volt electrical system) SOCATA Equipment List TB 21 NAV N^{O} 124/89, Issue N^{O} 1 dated August 89 or later version.

TB9:

1) Aircraft up to 947 (14 volt electrical system) SOCATA Equipment List TB 9 NAV N^{O} 102/87, Issue N^{O} 1 dated May 87 or later version.

Equipment (Cont.)

2) Aircraft from S/N 948 (28 volt electrical system) SOCATA Equipment List TB 10 NAV N^{O} 232/89, Issue N^{O} 1 dated November 89 or later version.

TB200:
SOCATA Equipment List to TB 200 NAV No. 410/91 or later version.
In addition, the following items of equipment are required
Model TB 20

(a) French DGAC approved Airplane Flight Manual or Pilot's Operating Handbook
   (1) Aircraft up to S/N 587 A.F.M. DGAC approved on December 14, 1983; edition
   1 of December 1983 to edition 4A of December 1985 or
   (1.1) aircraft up to S/N 587 without kit 9118, P.O.H. DGAC approved on

February 18, 1991; edition 3 of December 31, 1989 or;
(1.2) aircraft up to S/N 587 with kit 9118, P.O.H. DGAC approved on February 18, 1991; edition 4 of January 31, 1990.

(2) Aircraft from S/N 588 up to 730 A.F.M. DGAC approved on January 23, 1986; edition 5 of December 1985 or P.O.H. DGAC approved on February 18, 1991; edition 4 of January 31, 1990.

(3) Aircraft from S/N 731 up to S/N 878 (except S/N 823 to 849) P.O.H. DGAC approved on April 21, 1987; edition 0 of December 31, 1986 or later approved revisions.

(4) Aircraft from S/N 879 up to S/N 947 (except S/N 888) P.O.H. DGAC approved on January 31, 1989; edition 1 of January 31, 1988 or later approved revisions.

(5) Aircraft S/N 823 to S/N 849, plus S/N 888, and from S/N 948 on:
(5.1) P.O.H. DGAC approved on August 23, 1989; edition 2 of June 30, 1988 or later approved revisions.
(5.2) "I.A.F" version - P.O.H. DGAC approved on November 17, 1994; edition 2 of September 30, 1994.

(6) Aircraft equipped with SOCATA option OPT10-61-001 must have Pilot's Operating Handbook Supplement 45, "Three Bladed Propeller."

(b) Stall warning system, SOCATA Reference TB 10-61-017-000.

Model TB 10

(a) French DGAC approved Airplane Flight Manual or Pilot's Operating Handbook

(1) Aircraft up to S/N 730 A.F.M. DGAC approved on November 1985; edition 1 of January 1985 or A.F.M. DGAC approved on March 1986; edition 2 of March 1986 and 3 of May 1986 or P.O.H. DGAC approved on November 4, 1988; edition 0 of January 31, 1988 or later approved revisions.

(2) Aircraft from S/N 731 up to S/N 822 except S/N 804, 807, 808 and S/N 816 up to 819, A.F.M. DGAC approved on March 1986; edition 4 of December 1986 or P.O.H. DGAC approved on November 4, 1988; edition 1 of February 29, 1988 or later approved revisions.

(3) Aircraft from S/N 823 to S/N 947 and S/N 804, 807, 808 and S/N 816 up to 819, P.O.H. DGAC approved on November 4, 1988; edition 2 of March 31, 1988 or later approved revisions.

(4) Aircraft from S/N 948 P.O.H. DGAC approved on December 13, 1989; edition 3 of September 30, 1989.

(b) Stall warning system, SOCATA Reference TB 10-61-017-000

(c) Aileron-Rudder controls interconnection option No. 597

Model TB 21

(a) French DGAC approved Airplane Flight Manual or Pilot's Operating Handbook

(1) Aircraft up to S/N 730, A.F.M. DGAC approved on November 1985; editions 1 of April 1985, to edition 3 of June 1986 or P.O.H. DGAC approved on February 18, 1991; edition 3 of December 31, 1989.

(2) Aircraft from S/N 731 up to S/N 878, P.O.H. DGAC approved on April 21, 1987; edition 0 of December 31, 1986 or later approved revisions.

(3) Aircraft from S/N 879 up to S/N 947, P.O.H. DGAC approved on June 2, 1989; edition 1 of January 31, 1988

(4) Aircraft from S/N 948, P.O.H. DGAC approved on November 21, 1989; edition 2 of May 31, 1989 or later approved revisions.

(5) Aircraft equipped with SOCATA option OPT10-61-001 must have Pilot's Operating Handbook Supplement 45, "Three Bladed Propeller."

(b) Stall warning system, SOCATA Reference TB 10-61-017-000

Model TB 9

(a) French DGAC approved Airplane Flight Manual or Pilot's Operating Handbook

(1) Aircraft from S/N 731 up to S/N 878, A.F.M. DGAC approved on May 16,

1988; edition 1bis of August 1987 or (except S/N 765) P.O.H. DGAC approved on April 6, 1989; edition 1 of February 29, 1988 or later approved revisions.

(2) Aircraft from S/N 879 to 947 and S/N 765, P.O.H. DGAC approved on December 13, 1988; edition 2 of September 30, 1988

(3) Aircraft from S/N 948, P.O.H. DGAC approved on February 02, 1990 edition 3 of September 30, 1989

(4) Aircraft up to S/N 730, P.O.H. DGAC approved on September 5 1989; edition 0 of January 31, 1988, or later approved revisions.

(5) Aircraft from S/N 1851 and from S/N 948 retrofitted with modification no. 139, P.O.H. DGAC approved on February 2001; edition 4 of December 31, 1997, revision 1 of October 31, 2000 or later approved revisions.

(b) Stall warning system, SOCATA Reference TB 10-61-017-000

(c) Aileron-Rudder controls interconnection option No. 597

Model TB 200

(a) French DGAC approved Airplane Flight Manual or Pilot's Operating Handbook.

(b) Stall warning system, SOCATA Reference TB 10-61-017-000.

Datum. Front face of firewall

Leveling Means. Upper fuselage spar horizontal (Maintenance Manual Subchapter 15 of Chapter II)

Service Information. Each of the documents listed below must state that it is approved by the European Aviation Safety Agency (EASA) or – for approvals made before September 28, 2003 – by the Direction Générale de l'Aviation Civile (DGAC).

- Service bulletins,
- Structural repair manuals,
- Vendor manuals,
- Aircraft flight manuals, and
- Overhaul and maintenance manuals.

The FAA accepts such documents and considers them FAA-approved unless one of the following conditions exists:

- The documents change the limitations, performance, or procedures of the FAA approved manuals; or

- The documents make an acoustical or emissions changes to this product's U.S. type certificate as defined in 14 CFR § 21.93.

The FAA uses the post type validation procedures to approve these documents. The FAA may delegate on case-by-case to EASA to approve on behalf of the FAA for the U.S. type certificate. If this is the case it will be noted on the document.

NOTE

Note 1 Current weight and balance report including list of equipment included in certificated empty weight and loading instructions when necessary must be provided for each aircraft at the time of original certification.

Note 1 (Cont.)

Model TB 20

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 15.9 lb at (+ 42.7) and full oil of 24.8 lb at (-23.6).

Model TB 10

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 9.5 lb at (+ 42.3) and full oil of 15.8 lbs at (-23.8).

Model TB 21

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 15.9 lb at (+ 42.7) and full oil of 24.8 lbs at (-23.6).

Model TB 9
The certificated empty weight and corresponding center of gravity location must include unusable fuel of 9.5 lb at (+ 42.3) and full oil of 15.8 lbs at (- 23.8).

Model TB 200
The certificated empty weight and corresponding center of gravity location must include unusable fuel of 9.5 lb at (+42.3) and full oil of 15.8 lb at
(-23.8)

Note 2.

Model TB 20

a) The following placard must be displayed in front and in clear view of the pilot.

1) Aircraft up to S/N 587 and where modification N^{o} 50 has not been applied.

"This aircraft must be operated as a normal category airplane in compliance with the operating limitations stated in the form of placards, markings and manual."

Inverted flight	Prohibited
Acrobatic maneuvers	Prohibited
Intentional spins	Prohibited
Icing Conditions	Prohibited

Maximum weight	2943 lbs
Maneuver speed V_A	127 kt
Never exceed speed V_{NE}	189 kt
Flaps extended speed V_{LE}	100 kt
Landing gear extended maximum speed V_{LE}	140 kt
Landing gear operating maximum speed V_{LO}	130 kt
Design positive load factor (Maximum)	
Flaps retracted	+ 3.8
Flaps extended	+ 2

2) Aircraft from S/N 588 up to 878, except S/N 823 to 849, and those where modification N^{o} 50 has been applied.

"This airplane must be operated as a normal category airplane in compliance with the operating limitations stated in the form of placards, markings and flight manual."

Inverted flight	Prohibited
Acrobatic maneuvers	Prohibited
Intentional spins	Prohibited
Icing Conditions	Prohibited
Maximum take-off weight	3086 lbs
Maximum computation weight and landing	2943 lbs

Note 2 (Cont.)

Maneuver speed V_A	129 kt
Never exceed speed V_{NE}	187 kt
Flaps extended speed V_{FE}	103 kt
Landing gear extended maximum speed V_{LE}	139 kt
Landing gear operating maximum speed V_{LO}	129 kt
Design positive load factor (Maximum)	
Flaps retracted	+ 3.8
Flaps extended	+ 2

3) Aircraft from S/N 879
"This airplane must be operated as a normal category airplane in compliance with the operating limitations stated in the form of placards, markings and flight manual."

Inverted Flight	Prohibited
Acrobatic Maneuvers	Prohibited
Intentional Spins	Prohibited
Icing Conditions	Prohibited
Maximum take-off and landing weight	3086 lbs
Maneuver speed V_A	129 kt
Never exceed speed V_{NE}	187 kt
Flaps extended maximum speed V_{FE}	
- Flaps "take-off"	129 kt
- Flaps "landing"	103 kt
Landing gear extended maximum speed V_{FE}	139 kt
Landing gear operating maximum speed V_{FE}	129 kt
Design positive load factor (maximum)	
- Flaps retracted	+ 3.8
- Flaps extended	+ 2

b) The following placard must be displayed on the baggage door:
- Maximum weight: 110 lb or if modification No. 40 is applied

65 Kg - 143 lbs maximum
For loading instructions see
"Weight and Balance Data" in Flight Manual

c) The following placard must be displayed on the fuel selector:
Left tank 43.1 U.S. gal. usable
OFF
Right tank 43.1 U.S. gal. usable

d) The following placard must be displayed on each tank:

100/130 octane or AVGAS 100 LL
43.1 U.S. gal.

e) The following placard must be displayed on each rear window:
In emergency, kick out here.

Model TB 10
a) The following placard must be displayed in front of and in clear view of the pilot.

1) Aircraft up to S/N 822, except S/N 804, 807, 808, and 816 to 819.

"The airplane must be operated as a normal and utility categories airplane in compliance with the operating limitations stated in the form of placards, markings and manuals."

Note 2 (Cont.)

Inverted flight	Prohibited
Acrobatic maneuvers in normal category	Prohibited
Intentional spins	Prohibited
Icing Conditions	Prohibited
Normal Category	
Maximum take-off weight	2535 lb
Maximum landing weight	2407 lb
Maneuver speed V_A	122 kt
Never exceed speed V_{NE}	165 kt
Flap extended speed V_{FE}	95 kt
Design limit load factor	
Flaps retracted	+ 3.8

Flaps extended	+ 2
Utility Category	
Maximum take-off weight	2359 lb
Maximum landing weight	2359 lb
Maneuver speed V_A	122 kt
Never exceed speed V_{NE}	165 kt
Flap extended speed V_{FE}	95 kt
Design limit load factor	
Flaps retracted	+ 4.4
Flaps extended	+ 2
	Entry Speed
Chandelles	135 kt
Lazy eight	130 kt
Steep turns	108 kt
Stalls	

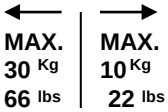
2) Aircraft from S/N 823 and S/N 804, 807, 808 and 816 to 819.
"This airplane must be operated as a normal and utility categories airplane in compliance with the operating limitations stated in the form of placards, markings and manuals."

Inverted flight	Prohibited
Acrobatic maneuvers in normal category	Prohibited
Intentional spins	Prohibited
Icing conditions	Prohibited
Normal Category	
Maximum take-off and landing weight	2535 lbs
Maneuver Speed V_A	122 KIAS
Never exceed speed V_{NE}	165 KIAS
Flap extended speed V_{FE}	95 KIAS
Design limit load factor	
Flaps retracted	+ 3.8
Flaps extended	+ 2
Utility Category	
Maximum take-off weight and landing weight	2359 lbs
Maneuver speed V_A	122 KIAS
Never exceed speed V_{NE}	165 KIAS
Flap extended speed V_{FE}	95 KIAS
Design limit load factor	
Flaps retracted	+ 4.4
Flaps extended	+ 2
	Entry Speed
Chandelles	135 KIAS
Lazy eight	130 KIAS
Steep turn	108 KIAS
Stall	

Note 2 (Cont.)

b) The following placard from the flight manual, (placard 2.12 (3)) must be displayed on the baggage door:

Valid up to S / N 399



Valid from S / N 400

65 kg - 143 lbs MAXIMUM
FOR LOADING INSTRUCTIONS
SEE "WEIGHT AND BALANCE"
DATA IN FLIGHT MANUAL

c) The following placard must be displayed on the fuel selector

Left tank 26.9 U.S. gal. usable
OFF
Right tank 26.9 U.S. gal. usable

d) The following placard must be displayed on each fuel tank

100/130 octane AVGAS 100 LL
26.9 U.S. gal.

e) The following placard must be displayed on each rear window.
In emergency, kick out here.

Model TB 21
a) The following placard must be displayed in front and in clear view of the pilot.

1) Aircraft up to S/N 878.

"This aircraft must be operated as a normal category airplane in compliance with the operating limitations stated in the form of placards, markings and flight manual."

Inverted flight	Prohibited
Acrobatic maneuvers	Prohibited
Intentional spins	Prohibited
Icing conditions	Prohibited
Maximum take-off weight	3086 lbs
Maximum computation weight and landing	2943 lbs
Maneuver speed V_A	129 kt
Never exceed speed V_{NE}	187 kt
Flaps extended speed V_{FE}	103 kt
Landing gear extended maximum speed V_{LE}	139 kt
Landing gear operating maximum speed V_{LO}	129 kt
Design positive load factor (Maximum)	
Flaps retracted	+ 3.8
Flaps extended	+ 2

2) Aircraft from S/N 879

Note 2 (Cont.)

"This airplane must be operated as a normal category airplane in compliance with the operating limitations stated in the form of placards, markings and flight manual."

Inverted flight	Prohibited
Acrobatic maneuvers	Prohibited
Intentional spins	Prohibited
Icing conditions	Prohibited
Maximum take-off and landing weight	3086 lbs
Maneuver speed V_A	129 kt

Never exceed speed V_{NE}	187 kt
Flaps extended speed V_{FE}	
- Flaps "TAKE-OFF"	129 kt
- Flaps "LANDING"	103 kt
Landing gear extended maximum speed VLE	139 kt
Landing gear operating maximum speed VLO	129 kt
Design positive load factor (Maximum)	
Flaps retracted	+ 3.8
Flaps extended	+ 2

b) The following placard must be displayed on the baggage door:

65 Kg - 143 lb maximum

For loading instructions see
"Weight and Balance Data" in Flight Manual

c) The following placard must be displayed on the fuel selector:

Left tank 43.1 U.S. gal. usable
OFF
Right tank 43.1 U.S. gal. usable

d) The following placard must be displayed on each tank:

100/130 octane AVGAS 100 LL
43.1 U.S. gal.

e) The following placard must be displayed on each rear window:
In emergency, kick out here.

Model TB 9

a) The following placard must be displayed in front of and in clear view of the pilot.

"This aircraft must be flown in utility category in accordance with the placards, markings and Flight Manual."

Inverted Flight	Prohibited
Acrobatic Maneuvers	Prohibited (except as noted below)
Intentional Spins	Prohibited
Icing Conditions	Prohibited

Maximum Weight	2337 lbs
Maneuvering speed V_A	122 KIAS
Never Exceed V_{NE}	165 KIAS
Flap Extended Speed V_{FE}	95 KIAS
Design Limit Load Factor :	
Flaps retracted	- 1.8 to + 4.4
Flaps extended	0 to + 2

Note 2 (Cont.) The following acrobatic maneuvers are permitted in utility category.

	Entry Speed
Chandelles	130 KIAS
Lazy Eight	124 KIAS
Steep Turns	108 KIAS
Stalls	

b) The following placard must be displayed on the baggage door:
65 Kg - 143 lb maximum
For loading instructions see

"Weight and Balance Data" in Flight Manual

c) The following placard must be displayed on the fuel selector
Left tank 20.1 U.S. gal. usable
OFF
Right tank 20.1 U.S. gal. usable
or
Left tank 26.9 U.S. gal. usable
OFF
Right tank 26.9 U.S. gal. usable

d) The following placard must be displayed on each fuel tank
100/130 octane AVGAS 100 LL
26.9 U.S. gal.
or
100/130 octane AVGAS 100 LL
20.1 U.S. gal.

e) The following placard must be displayed on each rear window.
In emergency, kick out here.

Model TB 200
a) The following placard must be displayed in front of and in clear view of the pilot.

"This airplane must be operated as a normal and utility categories airplane in compliance with the operating limitations stated in the form of placards, markings and manuals."

Inverted flight	Prohibited
Acrobatic maneuvers	Prohibited
Intentional spins	Prohibited
Icing conditions	Prohibited
Maximum take-off and landing weight	2535 lb
Maneuver speed V_A	122 kt
Never exceed speed V_{NE}	165 kt
Flap extended speed V_{FE}	95 kt
Design limit load factor	
Flap retracted	+ 3.8 and - 1.5
Flap extended	+ 2 and 0

b) The following placard must be displayed on the baggage door:
65 Kg - 143 lb maximum

For loading instructions see
"weight and balance Data" in Flight Manual

c) The following placard must be displayed on the fuel selector
Left tank 26.9 U.S. gal. usable
OFF
Note 2 (Cont.) Right tank 26.9 U.S. gal. usable

d) The following placard must be displayed on each fuel tank
100/130 octane AVGAS 100 LL
26.9 U.S. gal.

e) The following placard must be displayed on each rear window.
In emergency, kick out here.

Note 3. Service Life Limits

Information with respect to service life limited parts is contained in the applicable manufacturer's Maintenance Manual, chapter 4 DGAC approved:

TB10: Maintenance Manual TB10 revision 4 dated April 1995 DGAC approved on June 11, 1996, and later approved revisions.

TB9: Maintenance Manual TB9 revision 4 dated April 1995 DGAC approved on June 11, 1996, and later approved revisions.

TB20: Maintenance Manual TB20 revision 4 dated April 1995 DGAC approved on June 11, 1996, and later approved revisions.

TB21: Maintenance Manual TB21 revision 4 dated April 1995 DGAC approved on March 4, 1996, and later approved revisions.

TB200: Maintenance Manual TB21 revision 4 dated April 1995 DGAC approved on June 11, 1996, and later approved revisions.

Note 4.

Information essential for the proper maintenance of the airplane is contained in the SOCATA Maintenance Manual.

Note 5.

Model TB 20
Rear seat may be fitted out with three seats:
a) The rear seat is equipped with three separate safety belts in accordance SOCATA option No. 502
b) Weight and C.G. position are within limits.
c) 3 seats at + 80.1

Model TB 10
Rear seat may be fitted out with three seats:
a) The rear seat is equipped with three separate safety belts in accordance SOCATA option No. 502
b) The total weight on the rear seats is under 454 lbs
c) Weight and C.G. position are within limits
d) 3 seats at + 80.1

Model TB 21
Rear seat may be fitted out with three seats:
a) The rear seat is equipped with three safety belts in accordance SOCATA option No. 502
b) Weight and C.G. position are within limits
c) 3 seats at + 80.1

Model TB 9
Rear seat may be fitted out with three seats:
a) The rear seat is equipped with three separate safety belts in accordance SOCATA option No. 502
b) The total weight on the rear seats is under 386 lbs
c) Weight and C.G. position are within limits
d) 3 seats at + 80.1

Note 5 (Cont.)

Model TB 200
Rear seat may be fitted out with three seats:
a) The rear seat is equipped with three separate safety belts in accordance SOCATA option No. 502
b) The total weight on the rear seats is under 454 lb
c) Weight and C.G. position are within limits
d) 3 seats at + 80.1

.....END.....