

STANDARD AIRWORTHINESS CERTIFICATE

1 NATIONALITY AND REGISTRATION MARKS N1909S	2 MANUFACTURER AND MODEL SOCATA TB 20	3 AIRCRAFT SERIAL NUMBER 1909	4 CATEGORY Normal
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5. AUTHORITY AND BASIS FOR ISSUANCE

This airworthiness certificate is issued pursuant to the Federal Aviation Act of 1958 and certifies that, as of the date of issuance, the aircraft to which issued has been inspected and found to conform to the type certificate therefor, to be in condition for safe operation, and has been shown to meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation, except as noted herein.

Exceptions:

None

6. TERMS AND CONDITIONS

Unless sooner surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator, this airworthiness certificate is effective as long as the maintenance, preventative maintenance, and alterations are performed in accordance with Parts 21, 43, and 91 of the Federal Aviation Regulations, as appropriate, and the aircraft is registered in the United States.

DATE OF ISSUANCE AUGUST 25, 1999	FAA REPRESENTATIVE  MICHAEL B. FRADETTE	DESIGNATION NUMBER AEU-100
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Any alteration, reproduction, or misuse of this certificate may be punishable by a fine not exceeding \$1,000, or imprisonment not exceeding 3 years, or both. THIS CERTIFICATE MUST BE DISPLAYED IN THE AIRCRAFT IN ACCORDANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS.

FAA Form 8100-2 (8-82)

GPO 892-804

UNITED STATES OF AMERICA
 DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
 CERTIFICATE OF AIRCRAFT REGISTRATION

This certificate must be in the aircraft when operated.

NATIONALITY AND REGISTRATION MARKS **N** 1909S

AIRCRAFT SERIAL NO.
 1909

MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT

SOCATA TB-20 TRINIDAD
 ICAO Aircraft Address Code: 50265717

UNIVERSITY OF DUBUQUE
 2000 UNIVERSITY AVE
 DUBUQUE IA 52001-5050

This certificate is issued for registration purposes only and is not a certificate of title. The Federal Aviation Administration does not determine rights of ownership as between private persons.

CORPORATION

is certified that the above described aircraft has been entered on the register of the Federal Aviation Administration, United States of America, in accordance with the Convention on International Civil Aviation dated December 7, 1944, and with Title 49, United States Code, and regulations issued thereunder.



U.S. Department of Transportation

DATE OF ISSUE

October 29, 2008

[Signature]

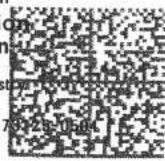
ACTING ADMINISTRATOR

Federal Aviation Administration

AC Form 8050-3 (5/2008) Supersedes previous editions

U.S. Department of Transportation
 Federal Aviation Administration

Civil Aviation Registry
 P.O. Box 25504
 Oklahoma City, OK 73125-0504



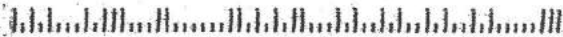
02 1M
 0004234213
 MAILED FROM

Official Business
 Penalty for Private Use \$300

AC Form 8050-3 (5/2008) Supersedes previous editions

TO: UNIVERSITY OF DUBUQUE
 2000 UNIVERSITY AVE
 DUBUQUE IA 52001-5050

aviation



University of Dubuque
2000 University Ave, Dubuque, IA 52001-5099

Weight and Balance Change

and
Equipment List Revision

A/C Registration Number: **N1909S**
A/C Serial Number: 1909
A/C Make: Socata
A/C Model: TB-20
A/C Year: 1999
WB Date: 4-Sep-09

Previous data taken from document dated: 3-Apr-09

Description of work: W/B modified to reflect Max Ramp weight in place of Max Take Off Weight

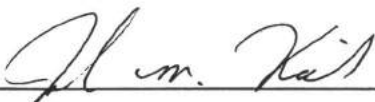
		WEIGHT	ARM	MOMENT
Previous data:	3-Apr-09	2008.34	36.64	73580.84
Items removed:				
Items installed:				

Weight
2008.34

Moment
73580.84

Aircraft max ramp weight: 3097 (Max Take Off Weight 3086)
New A/C empty weight: 2008.34
New A/C empty weight CG: **36.64**
New A/C useful load: 1088.66

AP:



Joshua M. Kieler AP 2774600

Weight / Balance & Equipment List Revision**FLITE ELECTRONICS, INC. - DG2R767K**

4786 AIRPORT PARKWAY

ADDISON, TX 75001-3363 Tel: 972-239-3791

A/C Tail # : N1909S
 Register Name : ANDREW KNOTT
 Name 2 :
 Address 1 : 14925 OAKS NORTH DR
 Address 2 :
 City, State, PC : DALLAS, TX 75240-7631

A/C Make : SOCATA
 A/C Model : TB-20
 A/C Serial # : 1909
 WO Ref # :
 WB Date : Apr-03-2008
 WB ID # : 547

Previous data taken from document dated Jan-21-2005 Previous useful load = 1072.14

Model #	Description	(LB / IN) Weight	CG/Arm	Moment
	Previous data ->	2013.86	36.59	73679.00
REMOVED ITEMS -----				
KX-165 28V WGS	NAV/COM 28V W GS 069-1025-25	-5.65	19.00	-107.35
KLN-90B	GPS 066-04031-1123	-6.30	18.50	-116.55
KA-92	GPS ANTENNA 071-01553-0200	-0.27	48.00	-12.96
REMOVED SUB TOTAL	3 Items @	-12.22	19.38	-236.86
INSTALLED ITEMS -----				
GNS-430W Unit & rack	GPS/NAV/COM	6.20	18.50	114.70
GA-35	GPS ANTENNA WAAS 013-00235-00	0.50	48.00	24.00
INSTALLED SUB TOTAL	2 Items @	6.70	20.70	138.70
NEW DATA >>	NEW USEFUL LOAD = 1077.66	2008.34	36.64	73580.84

This weight and balance document modifies past existing weight and balance data contained in the aircraft records. This facility cannot verify that the existing weight and balance data contained in the aircraft records reflect the correct weight and balance of this aircraft. Any inaccuracies in past data will be mathematically carried forward with this document. This facility cannot verify the accuracy of past data and is not responsible for any past weight and balance data or computations. It is the responsibility of the airplane owner and/or pilot to ensure that the aircraft is loaded properly for flight.

Mark Pledger 4-3-08

Authorized Individual : DG2R767K MARK PLEDGER for Flite Electronics



MODERN AVIONICS

10000 FLYING CLOUD DRIVE
EDEN PRAIRIE, MN 55347
952-941-2783

Weight And Balance

Reg. Number: N1909S
Make/Model: SOCATA TB20
Year:
Serial Number: 1909

Date: 01-21-2005
Tach: 816.3
Max Weight: 3086.00
Work Order: M1061

New A/C Empty Weight: 2013.86
New A/C Empty C.G.: 36.59
New A/C Useful Load: 1072.14

Landing C.G. Range:
Gear Extended C.G. Range:
Empty Weight C.G. Range:

Description	Serial Number	Weight	Arm	Moment	Installed	Removed
Previous Aircraft Empty	1909	2006.37	36.73	73694.0	n/a	n/a
Removed						
Installed STBY VAC/PRESSURE SYS		7.49	-2.00	-15.0	X	
New Aircraft Values		2013.86	36.59	73679.0		

WEIGHT & BALANCE
SUPERCEDED
DATE 3-4-08, → 3 April 2008

Robert Diercks
ROBERT DIERCKS, QI2R110L



MODERN AERO, INC

14801 PIONEER TRAIL-EDEN PRAIRIE, MN. 55347
PHONE: (612) 941-2595

FAA APPROVED REPAIR STATION
MZER 198L

SUPPLEMENTAL WEIGHT AND BALANCE DATA AND EQUIPMENT

MAKE SOCATA SERIAL NUMBER 1909
MODEL TB 20 REGISTRATION N1909S
PREPARED BY WES B. DATE 10/4/02

ITEM DESCRIPTION	WEIGHT	ARM	MOMENT
PREVIOUS DATA	2003.28	36.79	73704.49
INSTALLED:			
EGT 701 TEMPERATURE INDICATOR	0.9	25.59	23.03
6 EGT PROBES	0.75	-25.59	-19.19
6 CHT PROBES	0.56	-25.59	-14.33
WIRE HARNESS	0.88	0	0
TOTALS	30.9		73694

Superseded 1-21-05

MODERN AVIONICS
10000 FLYING CLOUD DR.
EDEN PRAIRIE, MN 55347

CATEGORY	EMPTY WEIGHT	EMPTY CENTER OF GRAVITY	USEFUL LOAD
NORMAL	2006.37	36.73	1079.63

ELLIOTT AVIATION OF MPLS., INC.

13801 Pioneer Trail
Eden Prairie, MN 55347
Telephone (612) 944-1200

DATE WORK ACCOMPLISHED: 10/4/01
MANUFACTURER: SOCATA
MODEL: TB 20 S/N: 1909
REGISTRATION NO. N1909S
PREPARED BY: TED STEIDL

WEIGHT AND BALANCE REPORT

THIS SHEET SUPERCEDES WEIGHT AND BALANCE DATED: 12-Jun-00

	1976.8	35.63	70435.5
ITEM	WEIGHT	ARM	MOMENT
REMOVED:			
WX-950 STORMSCOPE DISPLAY/PROCESSOR	2.90	21.13	61.28
NY-163 STORMSCOPE ANTENNA	0.84	202.11	169.77
C70-1/A COMM ANTENNA	0.75	57.87	43.40
INSTALLED:			
WX-1000E STORMSCOPE PROCESSOR W. RACK	4.6	142.23	1080.95
WX-1000 STORMSCOPE DISPLAY	2.3	21.5	49.45
WX-1000 STORMSCOPE ANTENNA	1.9	202.11	384
<i>10-4-02</i>			
TRC 497 SKYWATCH PROCESSOR W. RACK	9.82	142.23	1396.7
SKA 497 SKYWATCH ANTENNA	2.6	69.87	181.66
SKYWATCH ANTENNA CABLE SET	3.0	115.7	347.1
C70-1/A COMM ANTENNA	0.75	138.11	103.58
EQUIPMENT SHELF	3	142.23	
<i>SUPERCEDED</i>			
TOTAL:	2003.28	36.79	73704.49

MOMENT 73704.49 : EMPTY WEIGHT 2003.28 EQUALS 36.79 EMPTY WEIGHT CG

GROSS WEIGHT 3086 - EMPTY WEIGHT 2003.28 EQUALS 1082.72 USEFUL LOAD

LOAD AIRCRAFT ACCORDING TO FLIGHT MANUAL

AIRCRAFT WEIGHING FORM

AIRCRAFT MODEL: Socata TB20	SERIAL: 1909	REGISTRATION: N1909S
REGISTERED OWNER:	DATE WEIGHED: 6-12-00	
ADDRESS:	PLACE: North Perry	
TACH: 0165.18 HM:		

WEIGHING POINT	SCALE READING	TARE	NET WEIGHT	ARM	MOMENT
LEFT MAIN WHEEL	928.0	0	928.0	57.48	53,341.44
RIGHT MAIN WHEEL	890.0	0	890.0	57.48	51,157.2
NOSE/TAIL WHEEL	676.0	0	676.0	-17.72	-11,978.72
TOTAL AS WEIGHED	2494.0	0	2494.0	37.1	92,519.92
LESS USABLE FUEL (86.2 GAL)			-517.2	42.7	-22,084.4
LESS USABLE FUEL (GAL)					
NEW AIRCRAFT BASIC TOTALS			1976.8	35.63	70,435.52

NOTES

AIRCRAFT WEIGHED IN LEVEL FLIGHT ATTITUDE INSIDE HANGAR.

Weighed full fuel & oil, with 4 seats installed.

Supp checked 10/14/01

SCALES MODEL 3-0101-299C	SERIAL 1239	CALIBRATED ON:	OCTOBER 12, 1999		
NEW AIRCRAFT BASIC WEIGHT	1976.8	LB.	NEW BASIC C.G.	35.63	IN.
AIRCRAFT GROSS WEIGHT	3086.0	LB.	NEW USEFUL LOAD	1109.2	LB.
WEIGHED BY <i>[Signature]</i>	AIRFRAME LICENSE NO. 324627277				

AIRCRAFT WEIGHING CORPORATION
 2500 N.W. 62ND STREET HANGAR B
 FT. LAUDERDALE, FL. 33309
 954-928-1619
 FAX 938-5173

FRANCE

PROCES VERBAL DE PESEE ET DE CENTRAGE

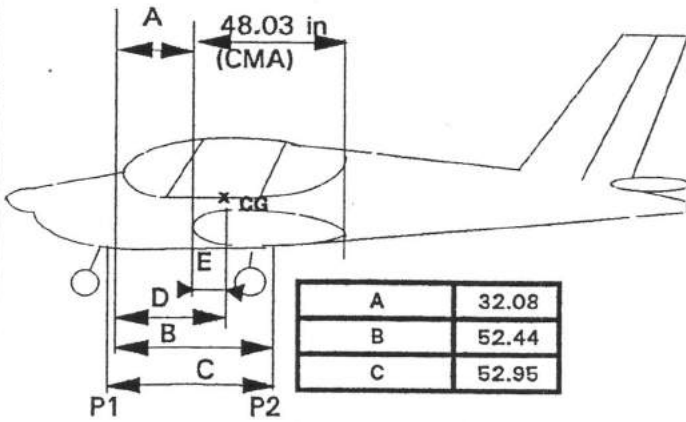
serial number

WEIGHT AND BALANCE REPORT

F:6

Levelling: "Door step" horizontal

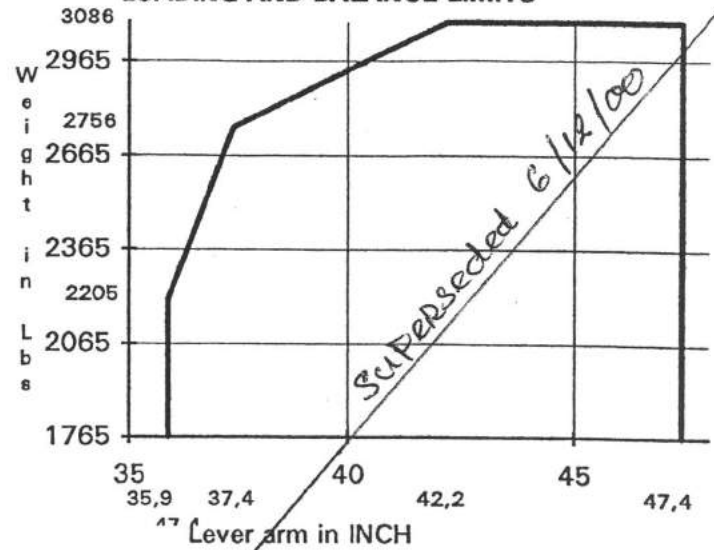
Datum: forward face of fire wall



P1 Front jack point

P2 Left and right jack point

LOADING AND BALANCE LIMITS



WEIGHING EFFECTED ON JACK POINTS

Aircraft painted, with engine oil

	read weight (lb)	tare (lb)	net weight (lb)
Left point	683.24	0	683.24
Right point	749.36	0	749.36
Fore point	504.72	0	504.72
WEIGHT P (lb) =			1937.32

DISTANCE OF C.G. TO C.G LOCATION DATUM

$$d(m) = \frac{B - (C * P1)}{P}$$

$$52,44 - (52,95 * 504,72) / 1937,32 = 38,65$$

CORRECTIONS

	read weight (lb)	arm (in)	moment
Weight P	1937.32	d=38.65	74877.42
Painting	0.00	0.00	0.00
Engine oil	0.00	0.00	0.00
Non usable fuel	15.87	42.72	677.97
EMPTY WEIGHT	1953.19	38.68	75555.38
		= D	

EMPTY C.G POSITION (in % of the CMA)

$$\frac{(D-A) * 100}{48,03} = 13,74 \%$$

EXAMPLES OF LOADING

	Forward C.G location			Rear C.G location		
	read weight (lb)	arm (in)	moment	read weight (lb)	arm (in)	moment
Empty weight	1953.19	38.68	75555.38	1953.19	38.68	75549.39
Fuel	---	42.72	---	55.1	42.72	2353.87
Pilot.Front passenger	169.71	45.47	7716.71	339.42	45.47	15433.43
Rear passengers	---	80.12	---	339.42	80.12	27194.33
Baggage (143 lbs maxi)	---	102.36	---	124.43	102.36	12737.16
RESULTS	2122.90	39.23	83272.09	2811.56	47.40	133268.18

Date and stamp

06.08.99





MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

Form Approved
OMB No. 2120-0020
11/30/2007

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. §44701). Failure to report can result in a civil penalty for each such violation. (49 U. S. C. §46301(a))

1. Aircraft	Nationality and Registration Mark N1909S	Serial No. 1909			
	Make SOCATA	Model TB-20	Series		
2. Owner	Name (As shown on registration certificate) SCHMIDT GUILHERME		Address (As shown on registration certificate) 5920 W 70TH ST EDINA, MN 55439-1700		

3. For FAA Use Only

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	AIRFRAME	_____	(As described in Item 1 above)	_____
<input type="checkbox"/>	<input type="checkbox"/>	POWERPLANT			
<input type="checkbox"/>	<input type="checkbox"/>	PROPELLER			
<input type="checkbox"/>	<input type="checkbox"/>	APPLIANCE	Type		
			Manufacturer		

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency		
FLITE ELECTRONICS, INC. 4786 AIRPORT PKWY ADDISON, TX 75001-3363		U. S. Certified Mechanic	Manufacturer
		Foreign Certified Mechanic	C. Certificate No.
	<input checked="" type="checkbox"/>	Certified Repair Station	RADIO CLASS 1-2-3
		Certified Maintenance Organization	DG2R767K

D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U. S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Extended range fuel per 14 CFR Part 43 App. B <input type="checkbox"/>	Signature/Date of Authorized Individual 	MARK PLEDGER for Flite 03-April-2008
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7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is Approved Rejected

	FAA Flt. Standards Inspector	Manufacturer	Maintenance Organization	Persons Approved by Canadian Department of Transport
BY	FAA Designee	<input checked="" type="checkbox"/> Repair Station	Inspection Authorization	Other (Specify)

Certificate or Designation No. DG2R767K	Signature/Date of Authorized Individual 	MARK PLEDGER for Flite Electronics 03-April-2008
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NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. Description of Work Accomplished

(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

N1909S

Apr-03-2008

Nationality and Registration Mark

Date

Installed Garmin GNS-430W GPS/NAV/COM p/n 011-01060-00.
GNS-430W is interfaced to PS Engineering PMA-7000MS Audio panel, King KI-525A HSI, King KFC-150 Autopilot, TRC-497 Skywatch, WX-1000 Stormscope, King KN-62A DME.
GNS-430W Installation was done as per STC SA01933LA.

Installed GNS-430W Aircraft Flight Manual Supplement p/n 190-00356-03 REV A, FAA approved date 11/20/2007 into the Aircraft Flight Manual.
Revised weight, balance and equipment list.

Continued Airworthiness for this installation should be performed as per attached Instructions for Continued Airworthiness p/n 190-00356-65 REV A.
A copy has been provided the aircraft owner/operator for inclusion into the aircraft maintenance program.

-----END-----

ADDITIONAL SHEETS ARE ATTACHED