



U.S. Department of
Transportation
Federal Aviation
Administration

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

Form Approved
OMB No. 2120-0020

For FAA Use Only
Office Identification

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 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. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act 1958)

1. Aircraft	Make SOCATA	Model TB20GT
	Serial No. [REDACTED]	Nationality and Registration Mark United States N113AC
2. Owner	Name (As shown on registration certificate)	Address (As shown on registration certificate)
	[REDACTED]	[REDACTED]

3. For FAA Use Only

4. Unit Identification

5. Type

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	~~~~~(As described in item 1 above)~~~~~				X
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address (name & address of A&P/IA)	B. Kind of Agency		C. Certificate No. (IA Cert #)
	<input checked="" type="checkbox"/>	U.S. Certified Mechanic	
	<input type="checkbox"/>	Foreign Certified Mechanic	
	<input type="checkbox"/>	Certified Repair Station	
	<input type="checkbox"/>	Manufacturer	

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 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.

Date	Signature of Authorized Individual
------	------------------------------------

7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is APPROVED REJECTED

BY	<input type="checkbox"/> FAA Fit Standards	<input type="checkbox"/> Manufacturer	<input type="checkbox"/> Inspection Authorization	Other (Specify)
	<input type="checkbox"/> FAA Designee	<input type="checkbox"/> Repair Station	<input type="checkbox"/> Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
-------------------------------	--------------------------------	------------------------------------

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

A. Installed the following equipment and components:

1. Sandel Avionics, Inc., SN3500 Navigation Display, Part Number SN3500-002 (90165) IAW Installation Manual 82005 IM rev K dated 11/30/2010. Referenced to master drawing document No. ST11694LA-A-01 dated 1/30/2008.

B. The Sandel Avionics SN3500 is interfaced to the following equipment:

1. Existing KI-525 HSI connections IAW SN3500 IM schematic 82005-10 dated 12/9/2007 ("KCS-55 Removal (REF)")
2. (Removed existing Honeywell KI-525 HSI.)
3. Honeywell, KLN94, GPS Navigation Receiver (Approved for Enroute, Terminal and Nonprecision Approach).
4. Honeywell, KX155A Communications and Navigation Receiver.
5. Honeywell, KX165A Communications and Navigation Receiver.
6. Honeywell, KN63 DME
7. Honeywell, KMT112 Magnetic Azimuth Transmitter.
8. Honeywell, KG102 Gyro
9. Honeywell, KR87 ADF
10. PS Engineering PMA7000 Intercom/Marker Beacon Receiver

C. The SN3500 receives and processes GPS navigation information for digital and waypoint display from the KLN94.

D. The SN3500 receives and processes VOR, localizer, and glideslope deviation and composite audio for bearing display from the KX155A.

E. The SN3500 receives and processes information from the KN63 DME and the KR87 ADF, for display purposes.

F. The SN3500 receives and processes marker beacon receiver information for illumination from the PMA7000.

G. The SN3500 receives and processes magnetic heading for digital and graphic display from the KG102A and KMT112.

H. Installed in pilot's instrument panel in place of the previous KI-525 HSI.

I. Performed ground test for SN3500 per installation manual.

J. All work was accomplished IAW the above installation manuals and using applicable sections of AC43.13 1B (chap. 7 sec 1-5; chap 11 sec. 3 para 30-33 & 37 sec. 15 & 17, chap. 12 sec. 1-3) and AC 43-13 2A (chap. 2 para 21-27 and chap. 3 para 36-42) as a guide to approved installation practices.

The above was installed with the following deviations:

Aircraft: Socata TB20GT S/N [REDACTED]

K. The aircraft equipment list, and weight and balance were revised and recorded within the aircraft maintenance records.

L. Inserted FAA approved flight manual supplement dated (insert) in pilot's operating handbook. FAA Continued Airworthiness is part of FAA Form 337.

Instructions for Continued Airworthiness for Major Alterations

1. Aircraft Make: Socata Model: TB20GT S/N: [REDACTED]

2. Installed new Sandel SN3500 EHSI with reference to STC SA01815LA and master drawing list ST11694LA-A-01.

3. Control operation information: Refer to Sandel Pilots Guide P/N 82005-PG-F (or later)

4. Servicing information: SN3500 EHSI is "On Condition Only"

5. Maintenance instructions: See current installation manual section 11.5 (or later). SN3500 repair is performed by Sandel Avionics Inc. repair facility only

6. Troubleshooting information: Refer to current installation manual section 7 appendix A. Verify setup and valid labels.

7. Removal and replacement information: if the SN3500 is removed and reinstalled, a simple functional check of the equipment should be conducted using section 7 and 11 of the current installation manual. If a replacement or factory repair is installed in aircraft you will have to update all associated maintenance pages in the SN3500 reference section 7 of current installation manual.

[X] Additional Sheets Are Attached

8. Description of Work Accomplished (continued)

United States [REDACTED] Socata TB20GT S/N [REDACTED]

8. Diagrams: refer to revised installation manual for SN3500.

9. Special inspection requirements: N/A

10. Application of protective treatments: N/A

11. Data: relative to structural fasteners: N/A

12. Specials tools: N/A

13. For commuter category aircraft: N/A

14. Overhaul period: N/A

15. Revision: To revise this ICA, a letter must be submitted to the local FSDO with a copy of the revised FAA Form 337 and revised ICA. The FAA inspector accepts the change by signing Block 3 and including the following statement:

"The attached revised/new instructions for continued airworthiness (date _____) for the above aircraft or component have been accepted by the FAA, superceding the instruction (_____).

_____ end _____

Additional Sheets Are Attached