US Department of Transportation
Federal Aviation Administration

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

OMB No. 2120-0020
Exp: 01/31/2023

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: NXXXXXXX

Serial No.:

Make: Cessna

Model: 182E

Series: SKYLANE

2. Owner

Name *(As shown on registration certificate)*: XXXXXXXXXXXXXXXXXXXXXXXXX

Address *(As shown on registration certificate)*

Address:

City: State:

Zip: Country: USA

3. For FAA Use Only

The data identified herein complies with the applicable airworthiness requirements and is approved for the above described aircraft, subject to conformity inspection by a person authorized in section 43.7.

Digitally signed by Jxxxxx X. Xxxx
Date: 2021.03.16 13:03:01 -07'00'

4. Type / **5. Unit Identification**

Repair	Alteration	Unit	Make	Model	Serial No.
☐	☒	AIRFRAME	Cessna	*(As described in Item 1 above)*	XXXXXXX
☐	☐	POWERPLANT			
☐	☐	PROPELLER			
☐	☐	APPLIANCE	Type / Manufacturer		

6. Conformity Statement

A. Agency's Name and Address

Name:

Address:

City: State:

Zip: Country: USA

B. Kind of Agency

- ☐ U. S. Certificated Mechanic
- ☐ Manufacturer
- ☐ Foreign Certificated Mechanic
- ☒ Certificated Repair Station
- ☐ Certificated Maintenance Organization

C. Certificate No.: XXXXXXX

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 ☐

Signature/Date of Authorized Individual

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

BY								
	☐	FAA Flt. Standards Inspector	☐	Manufacturer	☐	Maintenance Organization	☐	Persons Approved by Canadian Department of Transport
	☐	FAA Designee	☒	Repair Station	☐	Inspection Authorization		Other *(Specify)*

Certificate or Designation No.:

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

CESSNA 182E	XXXXXX
N12345	03/15/2021
Nationality and Registration Mark	Date

1. EXISTING INSTRUMENT PANEL(S)

The existing instrument panel actually consists of three (3) individual panels: Pilot, Co-Pilot, and Pilot-side sub-panel (panels). The Pilot panel is shock-mounted to protect installed gyro instruments and is attached to the two (2) upper shock mounts and attached directly to the lower structure. The Co-Pilot and Pilot sub-panels are not shock-mounted and merely attached to the sub-structure. Covering both Pilot and Co-Pilot panels are plastic overlays attached using Velcro to the underlying aluminum panels. The center structure between the Pilot and Co-Pilot panels accommodate the installation of radio and associated avionics equipment. (See photographs)

Inspection of the three (3) panels reveals they are 2024T3 Alclad aluminum .063 thick with an anodic protective coating. The panels are further described the Cessna C182E Illustrated Parts Catalog (IPC), Figure 53.

2. PROPOSED INSTRUMENT PANEL REVISION

A. Remove all existing overlays, instruments, and radio/avionics equipment.

B. Remove all three (3) existing panels exposing the underlying frame structure. (See photographs)

C. Overlay Plexiglas sheets over the Pilot and Co-Pilot underlying structure to indicate where instrument positions are available without any underlying interference. (See photographs)

D. Obtain 2024T3 Alclad .063 thick sheet aluminum to specification QQ-A-250/5 with appropriate material certifications. (Ref. Cessna Structural Repair Manual (SRM) ATA 51-30-00, section 2.

E. Using the completed Plexiglas overlays, fabricate each of the three (3) panels from the material in D.

F. The completed three (3) panels to be powder-coated using Tiger Drylac Polyester TGIC, #38/30033, Boysenberry color with a matte finish, compliant with AAMA 2604. (Ref. https//www.tiger-coatings.com/us/products-specifications/tiger-drylacr-products#/show/38-30033)

G. Reattach the three (3) panels back onto the existing frame structure as were the original panels, except the Pilot panel to use AN515B8R20 brass screws in the shock mounts per the IPC, Figure 53, item 44, and reinstall the instruments, radios and avionics as required per the Cessna C182E Service Manual, any revised equipment to be added through the Supplemental Type Certificate (STC) process, and any other components considered Minor as defined in Federal Aviation Regulations (FAR) Part 1 and Part 21.93, and Part 43, Appendix A.

☑ Additional Sheets Are Attached

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

A/C Make: Cessna Model: 182 S/N: 182XXXX Reg.#: NXXXXX Revision: O Date: 03/15/2021.

This sixteen-item checklist of Instructions for Continued Airworthiness (ICA), to comply with FAA Handbook Bulletin for Airworthiness (HBAW 98-18 Dated October 7, 1998), are applicable to the aircraft listed above.

1. **Introduction**

Fabricate each of the three (3) cockpit instrument panels to replace the original panels to accommodate the installation of modern radio and avionics equipment.

2. **Description:**

Remove all existing overlays, instruments, and radio/avionics equipment. Remove all three (3) existing panels exposing the underlying frame structure. Inspect the Pilot and Co-Pilot underlying structure to indicate where instrument positions are available without any underlying interference. Use 2024T3 Alclad .063 thick sheet aluminum to specification QQ-A-250/5. (Ref. Cessna Structural Repair Manual ("SRM") ATA 51-30-00, section 2. The completed three (3) panels will be powder-coated after laser hole cutting using Tiger Drylac Polyester TGIC, #38/30033, Boysenberry color with a matte finish, compliant with AAMA 2604. (Ref. https//www.tiger-coatings.com/us/products-specifications/tiger-drylacr-products#/show/38-30033) Using the original fasteners, reattach the three (3) panels back onto the existing frame structure as were the original panels except the Pilot panel to use AN515B8R20 brass screws in the shock mounts per the IPC, Figure 53, item 44, and reinstall the instruments, radios and avionics as required per the Cessna C182E Service Manual D138-1-13, any revised equipment to be added through the Supplemental Type Certificate ("STC") process, and any other components considered "Minor" as defined in Federal Aviation Regulations ("FAR") Part 1 and Part 21.93, and Part 43, Appendix A.

3. **Control:**

No special controls.

4. **Servicing information:**

No special servicing required.

5. **Maintenance Instructions:**

Scratches in the panels may be brush-repaired with Tiger Drylac Polyester TGIC, #38/30033, Boysenberry color with a matte finish, compliant with AAMA 2604

6. **Trouble shooting information:**

No special troubleshooting required.

7. **Removal and replacement information:**

The Cessna C182E Service Manual D138-1-13 of the latest revision, sections 16 and 17.

8. **Diagrams:**

The Cessna C182E Service Manual D138-1-13 of the latest revision, sections 16 and 17.

9. **Special inspection requirements:**

Insure that panel attachments are secure during any required inspection.

10. **Application of protective treatments:**

Scratches in the panels may be brush-repaired with Tiger Drylac Polyester TGIC, #38/30033, Boysenberry color with a matte finish, compliant with AAMA 2604

11. **Data:**

2024T3 Alclad .063 thick sheet aluminum to specification QQ-A-250/5 (Ref. Cessna Structural Repair Manual ("SRM") ATA 51-30-00, section 2. Tiger Drylac Polyester TGIC, #38/30033, Boysenberry color with a matte finish, compliant with AAMA 2604. (Ref. https//www.tiger-coatings.com/us/products-specifications/tiger-drylacr-products#/show/38-30033). AN515B8R20 brass screws in the shock mounts per the IPC, Figure 53, item 44. Refer to specific STC equipment installation data as required. AC 23-27, AC 43-210A, AC 20-62, AC 43-18, (to the current revisions), AC 43.13-1B (par. 4-22 pars a&b), AC 43.13-2B (pars. 106, 113, 114, 201, 202, 203, 1100, 1103).

12. **List of special tools:**

No special tools required.

13. **For commuter category aircraft:**

Not applicable.

14. **Recommended overhaul periods:**

No recommended overhaul periods.

15. **Airworthiness Limitation Section:**

No airworthiness limitations.

16. **Revision:**

A letter will 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 major alteration have been accepted by the FAA, superseding the Instructions for Continued Airworthiness (date_____). " Once the revision has been accepted, a maintenance record entry will be made, identifying the revision, its location, date of the Form 337.