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## Book Cover

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Transports  
Canada

## TCCA Supplement to:

Thornton Aircraft Company, LLC

Repair Station Number: T2CR294J



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THORNTON AIRCRAFT COMPANY, LLC  
DBA "Thornton Aircraft Company" and  
"Thornton Aviation Company"

# TRANSPORT CANADA CIVIL AVIATION (TCCA) SUPPLEMENT to FAA 14 CFR Part 145

## Repair Station Manual / Quality Control Manual



7520 Hayvenhurst Avenue  
Van Nuys, CA 91406 U.S.A.

**And the Additional Fixed Location at:**

2930 N. Clybourn Avenue  
Burbank, CA 91505 U.S.A.

**FAA Repair Station Number T2CR294J**

Revision A  
28 June 2024

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## Abbreviations / Acronyms

<b>AA</b>	Aviation Authority	<b>QCM</b>	Quality Control Manual
<b>AAMPP</b>	Antidrug & Alcohol Misuse Prevention Program	<b>QM</b>	Quality Monitoring
<b>AC</b>	Advisory Circular	<b>QSM</b>	Quality System Manual
<b>AD</b>	Airworthiness Directive	<b>RSM</b>	Repair Station Manual
<b>AMM</b>	Aircraft Maintenance Manual	<b>RSTP</b>	Repair Station Training Program
<b>ANSI</b>	American National Standards Institute	<b>SB</b>	Service Bulletin
<b>AOG</b>	Aircraft On Ground	<b>SFAR</b>	Special Federal Aviation Regulation
<b>AME</b>	Aircraft Maintenance Engineer	<b>STC</b>	Supplemental Type Certificate
<b>AMO</b>	Approved Maintenance Organization	<b>TAC</b>	Thornton Aircraft Company
<b>ASI</b>	Aviation Safety Inspector	<b>TC</b>	Type Certificate
<b>BASA</b>	Bilateral Aviation Safety Agreement	<b>TCCA</b>	Transport Canada Civil Aviation
<b>CA</b>	Corrective Action	<b>TIP</b>	Technical Implementation Procedures
<b>CAA</b>	Civil Aviation Authority	<b>TOC</b>	Table of Content
<b>CAMP</b>	Continuous Airworthiness Maintenance Program	<b>UK</b>	United Kingdom
<b>CAR</b>	Canadian Aviation Regulations		
<b>CFR</b>	Code of Federal Regulations		
<b>CHDO</b>	Certificate Holding District Office		
<b>CMM</b>	Components Maintenance Manual		
<b>CPAR</b>	Corrective/Preventive Action Request		
<b>CSR</b>	Customer Service Representatives		
<b>DAR</b>	Designated Airworthiness Representative		
<b>DER</b>	Designated Engineering Representative		
<b>DOA</b>	Design Organization Approval		
<b>DOT</b>	Department of Transportation		
<b>DRS</b>	Dynamic Regulatory System		
<b>EASA</b>	European Aviation Safety Agency		
<b>EMM</b>	Engine Maintenance Manual		
<b>ERP</b>	Enterprise Resource Planning		
<b>ESD</b>	Electrostatic Discharge		
<b>EU</b>	European Union		
<b>FAA</b>	Federal Aviation Administration		
<b>FM</b>	Forms Manual		
<b>FSDO</b>	Flight Standards District Office		
<b>GMM</b>	General Maintenance Manual		
<b>HAZMAT</b>	Hazardous Material		
<b>ICA</b>	Instructions for Continued Airworthiness		
<b>LEP</b>	List of Effective Pages		
<b>MAG</b>	Maintenance Annex Guidance		
<b>MPM</b>	Maintenance Policy Manual		
<b>N/A</b>	Not Applicable		
<b>ODA</b>	Organization Designation Authorization		
<b>OEM</b>	Original Equipment Manufacturer		
<b>OJT</b>	On the Job Training		
<b>OpSpecs</b>	Operations Specifications		
<b>PAH</b>	Production Approval Holder		
<b>PC</b>	Production Certificate		
<b>PDF</b>	Portable Document Format		
<b>PI</b>	Principal Inspector		
<b>PMA</b>	Parts Manufacturer Approval		
<b>QA</b>	Quality Assurance		
<b>QAS</b>	Quality Assurance System		
<b>QC</b>	Quality Control		

## Definitions

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- a. ACA.** Aircraft Certification Authority issued by an Approved Maintenance Organization (AMO) under Canadian Aviation Regulations (CAR) 573.
- b. Administrator.** The Administrator of the Federal Aviation Administration (FAA).
- c. Alteration or Modification.** Making a change to the construction, configuration, performance, environmental characteristics, or operating limitations of the affected civil aeronautical product.
- d. Canada.** In a geographical sense (1) the Provinces and Territories, including the territorial waters, and (2) the airspace of those areas.
- e. CAR.** Canadian Aviation Regulations.
- f. CFR.** Code of Federal Regulations. Title 14 of the Code of Federal Regulations (14 CFR), parts 1 through 199.
- g. Civil Aeronautical Product.** Any civil aircraft, aircraft engine, or propeller or subassembly, appliance, material, part, or component installed thereon.
- h. Compliance with 14 CFR Part 43.** Compliance with the latest issue of CAR 571 and the FAA Special Conditions as set forth in the Maintenance Implementation Procedures (MIP) and associated Transport Canada Civil Aviation (TCCA) guidance material, as applicable.
- i. Compliance with 14 CFR Part 145.** In the case of an AMO, compliance with the latest issue of CAR 573 and the FAA Special Conditions as set forth in the MIP and associated TCCA guidance material as applicable when performing maintenance, preventive maintenance, or alterations in Canada.
- j. Compliance with CAR 571.** Compliance with the latest issue of part 43, Maintenance, Preventive Maintenance, Rebuilding, and Alteration, and the TCCA Special Conditions as set forth in the MIP recognizing that ACs provide additional guidance in this area.
- k. Compliance with CAR 573.** In the case of a part 145 repair station, compliance with the latest issue of part 145 and the TCCA Special Conditions as set forth in the MIP when performing maintenance, preventive maintenance, or modifications in the United States recognizing that ACs provide additional guidance in this area.
- l. Data Approved by the FAA.** Data approved by the Administrator or the Administrator's designated representative in accordance with the Bilateral Aviation Safety Agreement (BASA)/Implementation Procedures for Airworthiness (IPA).
- m. Data Approved by the TCCA.** Data approved by the Canadian Minister of Transport, Infrastructure and Communities (Minister) or a delegate of the Minister.
- n. FAA-Certificated Airman.** An individual issued a mechanic certificate or repairman certificate by the FAA under 14 CFR part 65, Certification: Airmen Other Than Flight Crewmembers.

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**o. FAA Acceptable Data.** Data that is acceptable to the Administrator, such as service information recommended by a type certificate (TC) holder or industry standard data that supports eligibility of installation of standards parts (such as bolts and nuts) conforming to established industry or U.S. specifications.

**p. Maintenance.** The performance of inspection, overhaul, repair, preservation, and the replacement of parts, materials, appliances, or components of a civil aeronautical product to ensure the continued airworthiness of that product, excluding alterations or modifications.

**q. MPM.** Maintenance Policy Manual approved by TCCA for an AMO.

**r. Preventive Maintenance.** Simple or minor preservation operations, and the replacement of small standards parts not involving complex assembly operations.

**s. Restricted Certification Authority (RCA).** TCCA-issued authority under CAR 571.11, Persons Who May Sign a Maintenance Release.

**t. Required Inspection Items (RII).** The items of maintenance and alterations requiring inspection by a person other than the one who performed the work. These items include at least those where incorrect performance or improper parts or materials use could result in a failure, malfunction, or defect endangering the safe operation of the aircraft.

**u. Shop Certification Authority (SCA).** AMO-issued authority under CAR 573.

**v. Special Conditions.** Paragraph 13 and Appendix 3 describe these Special Conditions. FAA Special Conditions are those requirements in 14 CFR parts 43, 121, and 145 that the FAA has determined are not contained in CAR 571 and 573. TCCA Special Conditions are those requirements in CAR 571 that the TCCA has determined are not contained in part 43 or 145.

**w. United States.** In a geographical sense, (1) the States, the District of Columbia, Puerto Rico, and the possessions including the territorial waters, and (2) the airspace of those areas.

## **Applicable Documents**

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### **FAA Publications**

1. [AC 43-10](#) United States—Canadian Bilateral Aviation Safety Agreement Maintenance Implementation Procedures.
2. [Maintenance Implementation Procedure](#) (MIP) between the FAA and TCCA.
3. [AC 21-29](#) Detecting and Reporting Suspected Unapproved Parts.
4. [FAA Order 8110.53](#), Reciprocal Acceptance of Repair Design Data Approvals Between FAA and TCCA.

### **Canadian Publications**

1. [CAR Part IV](#) - Personnel Licensing and Training
2. [CAR Part V](#) - Airworthiness
3. [CAR Part VII](#) - Commercial Air Services
4. [Standard 571](#) of the CAR - Maintenance
5. [Standard 573](#) of the CAR - Approved Maintenance Organizations
6. [AC 571-002](#) Canada and United States.

### **Thornton Aviation Company (TAC)**

1. Repair Station Manual Quality Control Manual
2. Repair Station Training Manual
3. Repair Station Roster
4. Training Needs Assessment
5. Training Effectiveness Measurement

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## Revision Summary

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### REVISION A

This is the original issuance of this document; future revisions will be documented here.

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## 1.0 List of Effective Pages (LEP)

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A list of effective pages and revision status for this supplement is provided below.

Section	Page	Revision	Date
N/A	1	A	2024/06/28
N/A	2	A	2024/06/28
N/A	3	A	2024/06/28
N/A	4	A	2024/06/28
N/A	5	A	2024/06/28
N/A	6	A	2024/06/28
N/A	7	A	2024/06/28
N/A	8	A	2024/06/28
Section 1	9	A	2024/06/28
Section 2	10	A	2024/06/28
Section 2	11	A	2024/06/28
Section 3-4	12	A	2024/06/28
Section 5	13	A	2024/06/28
Section 5	14	A	2024/06/28
Section 5	15	A	2024/06/28
Section 5	16	A	2024/06/28
Section 5	17	A	2024/06/28
Section 5-6	18	A	2024/06/28
Appendix 1	19	A	2024/06/28
Appendix 1	20	A	2024/06/28
Appendix 2	21	A	2024/06/28
Appendix 2	22	A	2024/06/28

Accountable Manager Approval:  Date: 2024/06/28

FAA Acceptance: \_\_\_\_\_

## 2.0 Amendment Procedure

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This Supplement shall be revised as required consistent with current operations and Transport Canada Civil Aviation (TCCA) requirements. The Chief Inspector / Quality Control Manager is responsible for ensuring that the information contained in this Supplement remains current. Any changes to this supplement must be approved by the Quality Control Manager in conjunction with the Accountable Manager of Thornton Aircraft Company, LLC.

Since the revision level is maintained within the header of the document, it will be changed on the entire document once revised; however the **Revision Summary** will provide a brief overview on the changes, and each changed area will be identified with a change bar on the left side of the changed area to ease locating the changes. Existing change bars will be removed at the next revision to the page.

When changes are made to any part of this supplement, the Supplement Cover Page, **Revision Summary** Page, the List of Effective Pages (**Section 1.0**) will reflect the new revision level, and each of those pages effected will be given a revision number and reflect the date of change.

The FAA shall be provided an electronic copy of this supplement in Adobe portable document format (PDF) or any other format acceptable to the FAA. The Chief Inspector / Quality Control Manager is responsible for coordinating all revisions to this Supplement with the FAA, by forwarding a copy of the updated or revised supplement within five (5) days of the issuance for comment.

If comments are received, they will be reviewed and changes made, then resubmitted to the FAA. If the comments affect the airworthiness of any articles already released utilizing the updated supplement, a review for recall will be made. If no comments are received, it is understood that this Supplement is acceptable as presented unless otherwise notified by the FAA. Distribution to the FAA will be by electronic mail (e-mail) unless otherwise directed in writing by the FAA.

If at any time the FAA finds any portion of this Supplement unacceptable due to non-compliance or conflict with a regulation, the Repair Station shall initiate expedited change procedures and review completed or released work and if adversely affected, perform a recall by notifying the customer and prepare and submit a disclosure to the FAA. The FAA initiated change shall be accomplished within 15 days of written notification of the non-compliance in accordance with the procedures in this supplement. A comprehensive review of the acceptability of any maintenance, preventive maintenance or alteration accomplished under the unacceptable portion of the Supplement will be conducted to ensure no released work was adversely affected.

## 2.1 Revision Processing

Supplement revisions will be maintained in electronic format, specifically Portable Document Format (**PDF**). The statement “**Uncontrolled When Printed**” will be on the footer of all pages to indicate printed copies are considered uncontrolled and may not be the current revision. Supplement revisions will be released to the repair station and distributed within 24 hours of any revision. Supplement revisions will be stored in the Thornton Aircraft Company, LLC. document system and accessible by all repair station personnel. The Chief Inspector / Quality Control Manager is responsible for issuing all revisions to the following entities.

An electronic (PDF) copy of this supplement and subsequent revisions, will be submitted to the assigned Principal Inspector(s) (PI) by the FAA, Flight Standards District Office (FSDO) that holds the certificate oversight for this repair station. The PI should respond to the email and acknowledge the receipt of the submitted revision by a simple “**Received**” statement in the response. **These revisions shall not go into effect until "received" by the FSDO.**

Supplement documents are processed by the Chief Inspector / Quality Control Manager and stored in the Thornton Aircraft Company, LLC. document system. Revised documents can only be resubmitted to the system as a formal document revision by the Chief Inspector / Quality Control Manager.

The Chief Inspector / Quality Control Manager is responsible to notify all repair station staff of the new supplement revisions. This notification may be in an electronic format, via email, text, or verbal announcement.

A supplement revision notification log will be maintained by the Chief Inspector / Quality Control Manager, noting the date and the method of notifications of the intended recipients.

The Chief Inspector / Quality Control Manager is responsible for ensuring that the information contained in this Supplement remains current. Changes to this supplement must be approved by the Chief Inspector / Quality Control Manager in conjunction with the Accountable Manager of Thornton Aircraft Company, LLC.

## 3.0 Introduction

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This supplement is prepared in accordance with the latest revision of FAA Advisory Circular 43-10, (as revised). This supplement shall be referenced at all times when maintenance, preventive maintenance, or alterations are completed on Canadian registered aircraft.

All maintenance completed by the Repair Station on Canadian registered aircraft is completed in accordance with the latest revision of the manufacturer's maintenance manual, other data approved by the FAA, and/or the Special Conditions set forth in this Supplement, as required by the MIP. To be able to perform maintenance, preventive maintenance, and alterations on Canadian aeronautical products, this repair station must meet the applicable requirements contained in CAR 571 and CAR 573.

This supplement contains procedures unique to the Canadian aeronautical products, specific training requirements, and reporting requirements.

This repair stations maintains the standards set forth in the RSM/QCM and requirements of the MIP for Canadian registered aircraft.

## 4.0 Access by TCCA and the FAA

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Thornton Aircraft Company, LLC. confirms that during normal business hours this repair station agrees to provide access to TCCA and FAA to ascertain compliance with 14 CFR Parts 43 and 145, the TCCA Special Conditions, procedures, and standards and to investigate specific problems. Additionally, Thornton Aircraft Company agrees to cooperate with any TCCA-investigation or enforcement action.

The TCCA and the FAA shall be allowed access to Thornton Aircraft Company facilities and documents to verify compliance with procedures and standards and to investigate specific problems.

## 5.0 Special Conditions Applicable to Any Person Required to Comply with this Supplement.

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- A. Only FAA or TCCA-approved or acceptable parts or components as applicable are used to perform maintenance, preventive maintenance, or alterations to United States or Canadian aeronautical products.
- B. Maintenance, preventive maintenance, and alterations must be performed in accordance with current ICA or manufacturers' recommendations that will return the aeronautical product to its original or properly altered condition.
- C. Maintenance and alterations or modifications must be certified by an approval for return to service or a maintenance release that meets the requirements of Title 14 of the Code of Federal Regulations (14 CFR) part 43, §§ 43.9 and 43.11 or [Canadian Aviation Regulation \(CAR\) 571.10](#), as applicable, for aircraft and the use of the FAA Form 8130-3 or TCCA-Authorized Release Certificate for aircraft components, and any other information required by the owner or operator, as appropriate. For the purposes of compliance with this MIP, the requirements of 14 CFR part 43, §§ 43.9, 43.11, and [CAR 571.10](#) are considered equivalent.
- D. Where maintenance or alterations are performed by a maintenance organization, the maintenance organization must hold a valid FAA repair station certificate or Canadian AMO certificate issued in accordance with the most current 14 CFR Part 145 issued as a final rule, or applicable CAR.
- E. Major repairs and alterations on U.S. aeronautical products must be recorded on FAA Form 337 and a copy provided to the owner/operator of the aircraft and a copy sent to the FAA by mail or electronic means within 48 hours of the aircraft's return to service.
- F. Major repairs or alterations performed on a Canadian aeronautical product must be recorded on FAA Form 337 or in accordance with [Standard 571, appendix L](#), and sent to the TCCA within 48 hours by mail or electronic means.
- G. Maintenance, preventive maintenance, or alterations performed on an aeronautical product under the control of a 14 CFR part 121 or 135 air carrier must be performed in accordance with that air carrier's manual.
- H. Any serious defects or unairworthy conditions on civil aeronautical products must be reported to the FAA or TCCA, as applicable.

## 5.1 TCCA Special Conditions Applicable to U.S.-Based Repair Stations and Mechanic Certificate Holders

### 5.1.1 TCCA Agreement

The TCCA agrees that an FAA-certificated repair station or mechanic may perform maintenance, preventive maintenance, and modifications (**with the exception of annual inspections**) on a civil aeronautical product under the regulatory control of the TCCA and approve that product for return to service if the repair station or mechanic certificate holder complies with the following Special Conditions.

- a. All repairs and modifications as defined by TCCA requirements must be accomplished in accordance with data approved by or acceptable to the TCCA.
- b. In the case of work performed by a repair station, the work will not exceed the scope of the ratings and limitations contained in the 14 CFR part 145 certificate and authorized functions listed on the repair station Capabilities List or operations specifications.
- c. In the case of a major repair or major modification performed by a mechanic certificate holder, the mechanic may perform the work. However, a mechanic with inspection authorization must approve the product for return to service.
- d. In the case of maintenance or modifications performed on aircraft operated in commercial air service pursuant to part IV or part VII of the CARs, a repair station that meets the additional requirements specified in paragraphs 5.2 and 5.3 shall perform the work.

## 5.2 Repair Stations Performing Maintenance, Preventive Maintenance, or Modifications on Aircraft Operated in Commercial Air Service Under Part IV or Part VII of the CARs.

### 5.2.1 Additional Requirements

In addition to the other requirements specified in the MIP, this repair station while performing maintenance, preventive maintenance, or modifications on aircraft operating in commercial air service under [part IV](#) or [part VII](#) of the CARs shall comply with the following:

### 5.2.1.a Compliance with Air Operator's Work Order

Thornton Aircraft Company, LLC. repair station work orders and contracts are processed based on the following guidelines. Before work is initiated by the repair station, the Director of Maintenance will assess the scope of work requested by the customer and verify that the repair station has the capability to accomplish the work. To ensure this, the Director of Maintenance will:

- Verify the customer request by interview, if necessary, and ensure that the description of work on the work order is clear and concise.
- Review the repair station ratings and operations specifications to verify that the work required is within the authority of the repair station.
- Verify that required parts and materials are available.
- Verify that all required technical data is available and current.
- Verify that the repair station has all tools and equipment necessary to perform the work.
- Verify that the repair station housing and facilities are adequate.
- Verify that the repair station has qualified personnel to perform the work.
- Review documents and use available resources to determine if any incoming article may have been involved in an accident.
- Review the notified **TCCA Airworthiness Directives** and other notified mandatory instructions contained in TCCA-approved air carriers' manuals are complete and the repair station is able to comply with the instructions.

### 5.2.1.b TCCA Airworthiness Directive Availability

- ❖ Thornton Aircraft Company, LLC. Chief Inspector or his designee is responsible for ensuring Thornton Aircraft Company's QA department will obtain TCCA Airworthiness Directives either from the customer, or the web address link provided below. These are then distributed through the work order system with instructions which are presented to the crew performing the work.
- ❖ Thornton Aircraft Company, LLC. QA department has access to applicable TCCA Web sites.
- ❖ Thornton Aircraft Company, LLC. provides web-based access to the TCCA issued ADs to the quality control personnel, which can be researched at:
  - To review the recent Airworthiness Directives, use the following link:
    - [https://wwwapps.tc.gc.ca/Saf-Sec-Sur/2/cawis-swimn/AD\\_r.aspx?recent=&rgs=](https://wwwapps.tc.gc.ca/Saf-Sec-Sur/2/cawis-swimn/AD_r.aspx?recent=&rgs=)
  - To conduct a quick search using the Canadian Tail Number or the AD number, use the following link:
    - [https://wwwapps.tc.gc.ca/Saf-Sec-Sur/2/cawis-swimn/ad\\_qs1.aspx](https://wwwapps.tc.gc.ca/Saf-Sec-Sur/2/cawis-swimn/ad_qs1.aspx)
  - To perform an advance AD search, use the following link:
    - [https://wwwapps.tc.gc.ca/Saf-Sec-Sur/2/cawis-swimn/AD\\_as.aspx](https://wwwapps.tc.gc.ca/Saf-Sec-Sur/2/cawis-swimn/AD_as.aspx)

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Any applicable AD shall be printed and included in the work order package to ensure that all personnel have access to the applicable ADs. Compliance with any applicable AD will be recorded on Airworthiness Directive Compliance Record Form (see [Appendix 2](#))

#### 5.2.1.c Major Repair and Modification Approved Data

Chief Inspector or his designee will ensure that major repairs and major modifications as defined in CAR I are accomplished in accordance with data approved by the TCCA and meet the requirements of [CAR 571.06](#).

#### 5.2.1.d Major Repairs and Major Alterations on Canadian Aircraft

Chief Inspector or his designee will ensure that all major repairs or major alterations performed on Canadian aircraft are recorded on FAA Form 337 in accordance with Thornton Aircraft Company's RSM/QCM procedures or Canadian Aviation Regulation, [CAR Standard 571, appendix L](#), the report will be completed within 48 hours and a copy provided to the owner/operator of the aircraft. **FAA field approvals are not acceptable on Canadian-registered aircraft and aeronautical products under TCCA regulatory control, including those documented on an FAA Form 8110-3.**

#### 5.2.1.e Reporting Serious Defects or Unairworthy Conditions

Chief Inspector or his designee will ensure to report any serious defects or unairworthy conditions to the TCCA within 3 days on civil aeronautical products by completing the [Transport Canada form 24-0038](#) as revised, the same form should also be used to report SUP, (See sample form, [Appendix 1](#) of this manual) and forward it to TCCA via fax to (613) 996-9178 or mail to:

Transport Canada Continuing Airworthiness - AARDG  
330 Sparks St.  
Ottawa, ON K1A 0N8

#### 5.2.1.f Manuals and Instructions Compliance

Chief Inspector or his designee will ensure compliance with the manufacturer's maintenance manuals or instructions for continued airworthiness, and for handling deviations are accomplished in accordance with the procedures contained within Thornton Aircraft Company's RSM/QCM.

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### 5.2.1.g Personnel Training

Chief Inspector is responsible to ensure each employee assigned to perform maintenance, preventive maintenance, or modifications is capable of performing the assigned task, and that each person who approves an aircraft for return to service following maintenance or modification has been trained on the aircraft type. The Chief Inspector monitors all maintenance personnel to have completed the initial Training Needs Assessment (TNA) and meet the training requirements as outlined in Thornton Aircraft Company's approved Training Program Manual. Accountable Manger is responsible to ensure records of all training are retained for a minimum of 2 years.

Chief Inspector will further ensure that all employees working on aircraft operated per [CAR Part VII](#) have been trained on the TCCA Supplement and the training has been documented in accordance with the Thornton Aircraft Company's approved Training Program.

### 5.2.1.h Parts and Components Installed During Performance of Work

All parts and components installed during the performance of work, other than standard or commercial parts, must be accompanied by the appropriate authorized release certificate. This could be an FAA Authorized Release Certificate - Form 8130-3 (from an FAA-certificated repair station located in the United States or an FAA-certificated repair station located outside of the United States that is accepted in accordance with the MIP) or a TCCA Authorized Release Certificate - Form One, Statement of Conformity, or equivalent as provided for pursuant to an agreement with TCCA. **"Rebuilt" parts are not acceptable for installation.**

### 5.2.1.i Work that Disturbs Engine or Flight Controls

Chief Inspector or his designee is responsible to ensure that work that disturbs engine or flight controls will be subject to an independent check, as required by [CAR 571](#). The system that has been disturbed needs to be inspected by at least two persons for correct assembly and correct locking of any parts disturbed by the maintenance performed, including an operational check for proper sense and range of motion of the engine or flight controls. The technical record will contain the signatures of both persons who performed the check. One of the signatures required by this section may be that of the person who has signed the maintenance release.

## 5.2.2 Repair Stations

In the event of any maintenance or alterations to be performed on aircraft operated in commercial air service under the Part IV or Part VII of the CAR's, the repair station shall meet the additional requirements specified in paragraphs 5.2 and 5.3 of this supplement to perform the work.

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### **5.3 Repair Station Authorization to Maintain Canadian Aircraft Operated in Commercial Air Transport.**

- a. Thornton Aircraft Company will continue to comply with 14 CFR part 145 and these Special Conditions.
- b. Thornton Aircraft Company will allow the TCCA, or the FAA on behalf of the TCCA, to inspect it for continued compliance with 14 CFR part 145 and these Special Conditions and to make its manual and the supplement required by these Special Conditions available for inspection.
- c. Investigations and enforcement by the TCCA may be undertaken in accordance with TCCA rules and directives.
- d. Thornton Aircraft Company will cooperate with any investigation or enforcement action.
- e. Thornton Aircraft Company understands and agrees that if an FAA-certificated repair station that does not cooperate with a TCCA investigation will not continue to be recognized by TCCA under this agreement.

### **5.4 Canadian Air Operator's Safety Management System (SMS) Compliance.**

- a. Director of Maintenance or authorized designee is the point of contact between the repair station and the air operator to communicate all SMS-related information.
- b. All reports will be communicated in writing between the Director of Maintenance or authorized designee and the air operator via email or any other reporting system as agreed by the repair station and the air operator.
- c. All the information related to hazards, incidents, and accidents, the investigation, analysis, and identification of the cause or probable cause, risk management analyses, and issues that may adversely affect safety, which are identified by the repair station, will be reported to the air operator upon identification and verification.
- d. TAC will utilize the FAA Voluntary Disclosure Reporting Program (VDRP) as a non-punitive reporting system and emergency response plan in accordance with the procedures outlined in the RSM/QCM section 6.8, in conjunction with the air operator's requirements and agreement.

## **6.0 Line Station**

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Thornton Aircraft Company, LLC. does not have Operations Specifications D107 at this time.

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# Appendix 1 - Service Difficulty Report



Transport Canada

## SERVICE DIFFICULTY REPORT

Continuing Airworthiness

### INSTRUCTIONS

Service Difficulty Reporting (SDR) requirements are specified in Division IX of Subpart 521 of the *Canadian Aviation Regulations (CAR)*. Detailed completion instructions are contained in the advisory material to those documents.

Submitters of mandatory SDRs are requested to provide the appropriate codes in boxes 3 and 7. Note, however, that Transport Canada can generally determine the correct codes if the submitter provides a good description of the service difficulty in box 10. The codes are not required for SDRs submitted voluntarily.

BLOCK	ENTRY
1. REGISTRATION	Aircraft Registration
2. DATE	Date service difficulty occurred. Enter year-month-day.
3. STATUS	Status of this report (see box 3 for codes)
<b>AIRCRAFT INFORMATION</b>	
4. AIRCRAFT	Manufacturer, model and serial number of the aeronautical product to which the problem relates
5. POWERPLANT	
6. PROPELLER	<ul style="list-style-type: none"> <li>- Avoid colloquial names and market titles</li> <li>- Use military designations when appropriate</li> <li>- Use kit plan name for amateur-built aircraft</li> <li>- Powerplant and propeller details not required unless related to the problem</li> </ul>
7. CODES (see box 7(a), 7(b) and 7(c) for codes)	
A. WHEN DISCOVERED	2-letter code best describing when the service difficulty was discovered
B. NATURE	1 to 3 codes best describing the nature of the service difficulty
C. ACTION TAKEN	1 to 4 codes best describing any action taken by the flight crew in response to the service difficulty
8. ASSEMBLY THAT INCLUDES THE SPECIFIC PART	
A. ASSEMBLY NAME	Name, manufacturer, model or part number, and serial number of the next higher assembly containing the defective part, e.g. Identify the cylinder for a defective exhaust valve, or identify the alternator for a defective bearing. If the manufacturer's model number is the same as entered in blocks 4, 5 or 6, enter "SAME" in MANUFACTURER block only.
B. MANUFACTURER	
C. MODEL/PART NO.	
D. SERIAL NUMBER	
9. SPECIFIC PART CAUSING DIFFICULTY	
A. PART NAME	Parts manual description, e.g. skin, rib, shaft, pump, actuator, etc.
B. PART NUMBER	Manufacturer's part identifier
C. PART CONDITION	Specific term best describing condition, e.g. cracked, burned, bent, shorted, etc. Avoid terms like U/S, repairable, etc.
D. LOCATION OF DEFECT ON PART	Specific term locating problem, e.g. LH alternator, audio, RH outboard, range switch, flange radius, outlet port, etc
E. PART CYCLES	For turbine engines and other parts with a cyclic life
F. PART TSN	Part total time since new in whole hours
G. PART TSO	Part time since overhaul in whole hours
10. PROBLEM DESCRIPTION	Describe clearly the details of the service difficulty, including relevant details of the conditions leading up to the problem, weather, significant operating conditions and emergency measures executed in flight. Identify the cause of the malfunction and indicate compliance (or not) with airworthiness directives or service bulletins. Provide any significant facts that may help to reduce or eliminate recurrence of the problem or assist in its investigation.
11. SUBMITTER	Select the appropriate submitter box. Print name, address, telephone and fax numbers and email of individual or company submitting this SDR.

### PARTS

To assist possible further investigation of the service difficulty, affected parts should be retained by the submitter for 21 days after submission of the SDR. If Transport Canada does not request the parts within 21 days, submitters may dispose of the parts as they choose.

MAIL OR FAX COMPLETED REPORT TO:  
(It is suggested that a copy is kept for your records)

Transport Canada  
Continuing Airworthiness - AARDG  
330 Sparks St Ottawa, ON K1A 0N8  
(613) 996-9178

For further information on the SDR program, or any SDR, contact a  
[TC.CAWWEBFEEDBACK.RETROACTIONWEBMDLN.TC@TC.GC.CA](mailto:TC.CAWWEBFEEDBACK.RETROACTIONWEBMDLN.TC@TC.GC.CA)

### CODES

Box 3 – Status			
Code	Status of this SDR (provide one only)		
OC	Original Closed: Initial report - complete, nothing further to follow		
OO	Original Open: Interim report - further report(s) to follow		
SC	Supplemental Closed: Additional information to an earlier report - nothing further to follow		
SO	Supplemental Open: Additional information - further report(s) to follow		

  

Box 7(A) – When Discovered			
Enter 1 (only) code best describing the stage of flight or ground operation the aircraft was engaged in when the service difficulty was discovered			
Code	Stage of Operation When Discovered	Code	Stage of Operation When Discovered
AP	Approach	SI	Special Inspection
CI	Corrosion Inspection	SM	Scheduled Maintenance Procedures
CL	Climb	SO	Special Operations/Other
CR	Cruise	SR	Structural Inspection
DE	Descent	ST	Engine Start
FF	Teardown	SV	Service
GR	Ground Handling	TO	Take-Off
HO	Hovering	TX	Taxi
IN	Inspection	UK	Unknown
LD	Landing	UM	Unscheduled Maintenance Procedure
NR	Not Reported		
OH	Overhaul		

  

Box 7(B) – NATURE			
Enter 1 to 3 codes best describing the nature of the condition resulting from the service difficulty. The order is not important.			
Code	Nature of Condition	Code	Nature of Condition
A	Flame (visible fire)	G	Multiple failure of like systems
B1	Smoke / Sparks		
B2	Fumes / Odours	H1	Electrical power loss (greater than 50%)
C	Foreign object impact / Lightning		
D1	In-Flight separation / Loss of Aircraft Part	H2	Electrical/Avionics components malfunction (not JASC 24)
D2	Door open in flight	J1	True warning indication
D3	Noise or sound (bang, etc)	J2	False warning indication
D4	Airframe vibration/buffet	J3	No warning indication
E1	Engine vibration	K	Fluid loss (fuel, oil, gas, etc)
E2	Engine overspeed/surge	L	Malfunction of system being tested or the test circuit itself
E3	Engine partial power loss		
E4	Engine case punctured	M	Over-temp condition (not fire)
E5	Turbine engine flameout	O	Other
E6	Engine stoppage	Q	Quality control problem
E7	Engine controls affected	R	Landing gear collapse / malfunction
E8	Prop controls affected		
F1	Fight controls affected	S	Other JASC systems affected
F2	Flight controls - uncommanded movement	U1	Substandard parts
		U2	Unapproved parts
		V	Human factors
		W	Uncommanded depressurization

  

Box 7(C) – Action Taken			
Enter 1 to 4 codes best describing the action taken by the flight crew in response to the service difficulty. Example: codes EJA would signify that an engine was shut down, fuel was dumped and an unscheduled landing was made			
Code	Action Taken	Code	Action Taken
A	Unscheduled landing	K	None
B	Emergency descent	L	Aborted approach
C	Aborted take-off	M	Evasive action
D	Returned to blocks	N	Abnormal landing configuration
E	Shut down engine or feathered prop	O	Other
F	Activated fire extinguisher	P	Emergency landing gear extension
G	Oxygen mask deployed	Q	Declared emergency (Mayday, PAN, ERS standby)
H	Deactivated system/circuits	R	Autoration
I	Intentional depressurization		
J	Dumped fuel		



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## Service Difficulty Report Form 24-0038



Transport Canada / Transports Canada

Continuing Airworthiness

Control Number	
1. Registration <b>C-</b>	2. Date (yyyy-mm-dd)
3. Status	

### SERVICE DIFFICULTY REPORT

AIRCRAFT INFORMATION	Manufacturer	Model	Serial number
4. Aircraft			
5. Powerplant			
6. Propeller			

7. Codes

(A) When discovered (1)	(B) Nature (3 max.)	(C) Action Taken (4 max.)

8. ASSEMBLY THAT INCLUDES SPECIFIC PART

(A) Assembly name	(B) Manufacturer	(C) Model / Part number	(D) Serial number

9. SPECIFIC PART CAUSING DIFFICULTY

(A) Part name	(B) Part number	
(C) Part condition	(D) Location of defect on part	
(E) Part cycles	(F) Part TSN	(G) Part TSO
	<b>HRS</b>	<b>HRS</b>

10. Problem description

11. SUBMITTER

Select one:  Manufacturer  Air Operator  AMO  Transport Canada  AME  Other

Name

Address

Telephone (e.g. 999-999-9999) | Fax (e.g. 999-999-9999) | Email



## Appendix 2 - Airworthiness Directive Compliance Record

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Complete a TCCA AD Compliance form for each AD that is applicable to aircraft / equipment covered by the OpSpecs. The Chief Inspector or his designee will transmit the completed form to the applicable customer(s) for concurrence.

Instructions for completing AD Compliance Record

Model. Thornton Aircraft Company, LLC. equipment model designation.

Example: Tank Unit

Part Number. Thornton Aircraft Company, LLC. equipment part number.

Example: 0212KTU-03

Serial Number. Thornton Aircraft Company, LLC. equipment serial number.

Example: 123456789

AD Number. TCCA AD number.

Example: 2023-123

Subject. Issue identified by the AD.

Example: Peripheral power transient.

Date of Compliance. Date the AD was addressed for the applicable equipment.

One Time. Completion confirmation for a single correction action process.

Recurring. Completion confirmation for a recurring corrective action process.

Next Due. If a recurring corrective action, the due date for the next confirmation.

Customer Acceptance/Rejection: Confirmation of customer ruling on incorporation or rejection of the applicable AD.

Authorized Signature. The signature/stamp of the repair station chief inspector indicating that the required action was performed in accordance with the AD.

