



TRANSPORTATION APPEAL TRIBUNAL OF CANADA

Citation: *Horia Sucuturdean and Shuang Li v. Canada (Minister of Transport)*,
2022 TATCE 56 (Review)

TATC File No.: Q-4652-33 and Q-4653-33

Sector: Aviation

BETWEEN:

Horia Sucuturdean and Shuang Li, Applicants

- and -

Canada (Minister of Transport), Respondent

[Official English translation]

Heard by: Videoconference on May 17, 2022

Before: Franco Pietracupa, Member

Rendered: November 7, 2022

REVIEW DETERMINATION AND REASONS

Held: The Minister of Transport did not prove, on a balance of probabilities, that the applicants contravened subsection 605.94(1) of the *Canadian Aviation Regulations*. Consequently, the monetary penalties imposed on the applicants by the Minister are cancelled.

I. BACKGROUND

[1] This review relates to file nos. Q-4652-33 (Horia Sucuturdean) and Q-4653-33 (Shuang Li). At the request of the parties, the Transportation Appeal Tribunal of Canada (Tribunal) heard both files together at the review hearing, as events and issues were chronologically linked and related to the alleged contraventions. However, the Tribunal will analyze each case separately and render separate determinations for each file because the alleged contraventions for each applicant are different.

[2] On August 21, 2020, the Minister of Transport (Minister) issued a Notice of Assessment of Monetary Penalty (Notice) in the amount of \$750 to Mr. Li, pursuant to section 7.7 of the *Aeronautics Act (Act)*. Schedule A of the Notice sent to Mr. Li stated:

On or about September 1, 2019, near the Baie-Comeau airport (CYBC), as the pilot-in-command of a Cessna 172N aircraft, bearing registration marks C-GIXH, you failed to record in the aircraft's journey log, in accordance with Schedule I of Part VI of the *Canadian Aviation Regulations (CARs)*, particulars of a defect that became apparent during flight operations; specifically, you failed to record the engine problem that became apparent during a flight from Charlevoix (CYML) to Baie-Comeau (CYBC) as soon as practicable, at the latest before the next flight, thus contravening subsection 605.94 (1) of the CARs.

[3] On August 21, 2020, the Minister issued a Notice in the amount of \$750 to Mr. Sucuturdean, pursuant to section 7.7 of the *Aeronautics Act*. Schedule A of the Notice sent to Mr. Sucuturdean stated:

On or about September 1, 2019, as pilot-in-command of a Cessna 172N aircraft, registration C-GIXH, you failed to record in the aircraft's journey the details of an engine defect that became apparent after take-off from Baie-Comeau Airport (CYBC) and, having made an emergency landing near Pointe-aux-Outardes; you also failed to record the details of the aircraft "run-up" done in consultation with maintenance personnel prior to that flight, thus contravening subsection 605.94 (1) of the *Canadian Aviation Regulations*.

II. PRELIMINARY ISSUE

[4] On May 16, 2022, the applicants' representative filed a motion to the Tribunal requesting to cancel the notices of assessment of monetary penalty for both applicants. In summary, the applicants' representative highlighted concerns with the notices being inaccurate and lacking details as to what specific engine defect was being raised by the Minister, in the case of Mr. Li. The applicants' representative also questioned the Minister's position in regard to who was actually pilot-in-command during the engine failure and thus who would have been responsible for making the journey log entries, in the case of Mr. Sucuturdean.

[5] The Minister's representative responded by submitting subsection 605.94(1) and the Schedule to paragraph 604.127(i) of the *Canadian Aviation Regulations (CARs)* in both French and English to argue that the notices were accurate and reflected the contraventions for both applicants as per the requirements under subsection 7.7(2) of the *Aeronautics Act*.

[6] After reviewing the submissions for the preliminary motion, I have decided to reject the applicants' motion to dismiss. The Minister's notices of assessment of monetary penalty issued

to the applicants meet the standard set forth under paragraphs 7.7(2)(a) and (b) of the *Aeronautics Act*.

III. ANALYSIS

A. Legal framework

[7] Pursuant to subsection 7.7(1) of the *Aeronautics Act*:

7.7 (1) If the Minister believes on reasonable grounds that a person has contravened a designated provision, the Minister may decide to assess a monetary penalty in respect of the alleged contravention, in which case the Minister shall, by personal service or by registered or certified mail sent to the person at their latest known address, notify the person of his or her decision.

[8] Subsection 605.94(1) of the *CARs* reads as follows:

Journey Log Requirements

605.94 (1) The particulars set out in column I of an item in Schedule I to this Division shall be recorded in the journey log at the time set out in column II of the item and by the person responsible for making entries set out in column III of that item.

B. Issues

[9] The Tribunal must determine whether the Minister was justified in assessing a monetary penalty to Mr. Li for contravening subsection 605.94(1) of the *CARs*.

[10] The Tribunal must also determine whether the Minister was justified in assessing a monetary penalty to Mr. Sucuturdean for contravening subsection 605.94(1) of the *CARs*.

C. Summary of events

[11] It is clear from the evidence adduced by the Minister that the flights on September 1, 2019, were conducted legally by licensed pilots, albeit each flying particular legs of the flights in particular roles (see the table below at para. 16).

[12] There were two **designated** licensed pilots in the airplane. Mr. Li flew the first three legs and Mr. Junyi Wang flew the last leg. Both were the pilot-in-command for their respective flight legs.

[13] In the case of Mr. Sucuturdean, the Minister alludes to Mr. Sucuturdean being the pilot-in-command. However, the person who had to make the entry in the journey log during the last leg is Mr. Wang, since he was the one who was actually pilot-in-command.

[14] Mr. Li and Mr. Wang were building hours of flight time for their respective commercial licenses, legally acting as pilots-in-command, and Mr. Sucuturdean was acting as a supervising instructor for each pilot-in-command.

[15] The Minister presented testimony from Mr. Patrick Trépanier, Inspector for Transport Canada (TC). It is important to note that the basis of much of the allegations for both applicants

is centred on the audio recording of a telephone call from Mr. Trépanier to Mr. Sucuturdean (Exhibit 15) and information supplied to TC via Cargair-Max Aviation Ltd (including but not limited to Exhibits 4, 5, 12 and 13). From the evidence provided by the Minister, both Mr. Wang and Mr. Li were not interviewed or questioned at any time during the investigation.

[16] It would be beneficial to map out the itinerary and events leading to the engine problem, all extrapolated from the journey log and evidence (Exhibits 4 and 14), and clarify the roles of the three passengers onboard C-GIXH, the Cessna 172N aircraft, on September 1, 2019. The following table summarizes this information:

Leg #	Route	Roles	Flight time ¹	Engine-related events
1	CYHU – CYQB Saint-Hubert – Québec City	Pilot-in-command: Shuang Li Supervising instructor (Cargair): Horia Sucuturdean Passenger: Junyi Wang	1.4 hrs	None logged.
2	CYQB – CYML Québec City – Charlevoix	Pilot-in-command: Shuang Li Supervising instructor (Cargair): Horia Sucuturdean Passenger: Junyi Wang	1.0 hrs	None logged.
3	CYML – CYBC Charlevoix – Baie- Comeau	Pilot-in-command: Shuang Li Supervising instructor (Cargair): Horia Sucuturdean Passenger: Junyi Wang	1.3 hrs	None logged. Unstable RPM as per Exhibit 15.
4	CYBC – --- Baie-Comeau – ---	Pilot-in-command: Junyi Wang Supervising instructor (Cargair): Horia Sucuturdean Passenger: Shuang Li	0.3 hrs	Engine failure logged by Junyi Wang

D. Shuang Li (file no. Q-4653-33)

[17] The issue before the Tribunal is whether the Minister was justified in assessing a monetary penalty in this case pursuant to subsection 7.7(1) of the *Aeronautics Act*, and more specifically, whether the Minister has proved, on a balance of probabilities, that Mr. Li contravened subsection 605.94(1) of the *CARs* when he failed to record in the journey log of the Cessna 172N aircraft, registration C-GIXH, details of an engine defect that became apparent during the flight; specifically, that Mr. Li failed to record the engine problem that became

¹ Note: 0.1 of an hour is six minutes

apparent during the flight from Charlevoix to Baie-Comeau as soon as possible, at the latest on the next flight.

[18] The Minister has argued that Mr. Li, acting as pilot-in-command, contravened subsection 605.94(1) in regard to Schedule 1 of Part VI, for omitting to enter in the journey log of aircraft C-GIXH, details of the engine defects detected during leg #3. The Minister has specifically referred to Schedule 1, columns I, II, III, items 6 and 9 to the following omissions:

	Column I	Column II	Column III
Item	Particulars to be entered	Time of entry	Person responsible for entry
6	Particulars of any abnormal occurrence to which the aircraft has been subjected	As soon as practicable after the abnormal occurrence but, at the latest, before the next flight	The pilot-in-command of the aircraft or, where the abnormal occurrence took place during maintenance, the operator of the aircraft at the time of the occurrence

[...]

9	Particulars of any defect in any part of the aircraft or its equipment that becomes apparent during flight operations	As soon as practicable after the defect is discovered but, at the latest, before the next flight	The pilot-in-command of the aircraft
---	---	--	--------------------------------------

[19] Both the Minister and Mr. Li's representative are in agreement that the date of the event in question is September 1, 2019, and that Mr. Li was the pilot-in-command. The issue that remains for the Tribunal is to determine whether the applicant failed to record the particulars of a defect that became apparent during leg # 3, and this, as soon as practicable in the aircraft journey log, in accordance with Schedule 1 of Part VI.

[20] The Minister called its only witness, Mr. Trépanier, who explained that the particulars of a defect on leg #3 were not entered by the pilot-in-command in the aircraft journey log. In the phone discussion between Mr. Trépanier and Mr. Sucuturdean (Exhibit 15), the issue discussed was an unstable revolution per minute (RPM) detected on the ground at Baie-Comeau Airport.

[21] The issue of when this anomaly of an RPM that was "not stable" (term used by Mr. Sucuturdean) occurred remains difficult to pinpoint as there is conflicting testimony from the Minister's witness. Two scenarios were raised as to the origin of the unstable RPM and they are:

- A. after landing, taxiing and shutdown in Baie-Comeau
- B. after engine start-up and taxiing for take-off in Baie-Comeau

[22] I agree that there was an unstable RPM in Baie-Comeau at some point. If the engine issue appeared during scenario A, then the pilot-in-command would be Mr. Li. If the issue appeared during scenario B, the pilot-in-command differs in that the Minister alleges that Mr. Sucuturdean

is the pilot-in-command and the applicants' representative alleges it is Mr. Wang. I will discuss this issue later in the decision.

[23] In the audio recording of the telephone call between Mr. Trépanier and Mr. Sucuturdean, it would seem that the initial issue with the unstable RPM occurred after landing and I would agree that Mr. Li would be the pilot-in-command.

[24] The main issue to be determined is whether the applicant contravened subsection 605.94(1) of the CARs, that is, whether Mr. Li failed to record the engine defect that became apparent after landing in Baie-Comeau, and then failed to record this defect as soon as practicable.

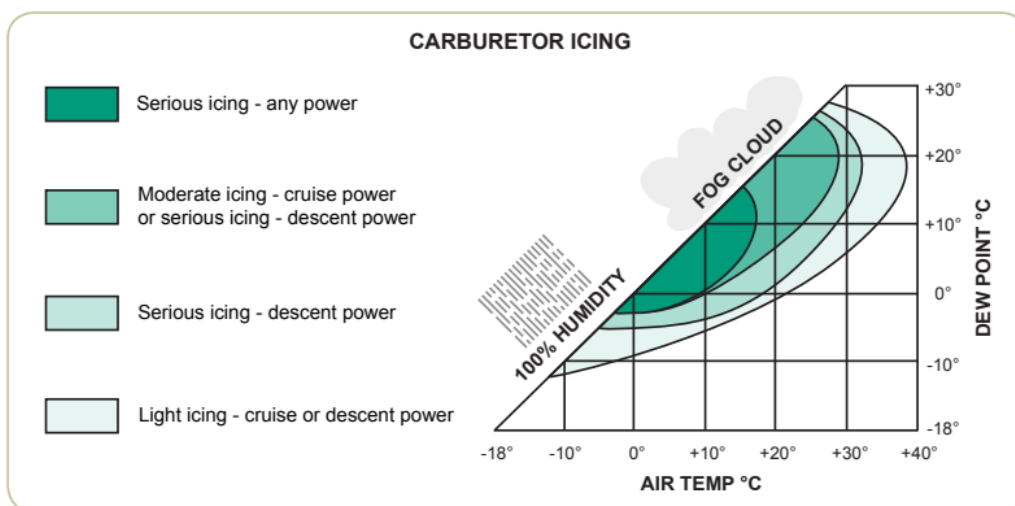
[25] As suggested by Mr. Trépanier, the RPM issue described by Mr. Sucuturdean during the phone discussion would lead most to believe that the probable cause could be carburetor icing. Although not a definitive probable cause, no evidence was submitted by the Minister to counter this assumption. In fact, the Minister's witness, the applicants' witness (Mr. Philippe Ango) and the audio recording entered in evidence all seem to indicate that the "fluctuating RPM" could be related to carburetor icing.

[26] The TC publication TP 14371 – *Aeronautical Information Manual* explains the following regarding carburetor icing:

In most accidents involving carburetor icing, the pilot has not fully understood the carburetor heat system of the aircraft and what occurs when it is selected. Moreover, it is difficult to understand the countermeasures unless the process of ice formation in the carburetor is understood. Detailed descriptions of this process are available in most good aviation reference publications and any AME employed on type can readily explain the carburetor heat system. The latter is especially important because of differences in systems. The pilot must learn to accept a rough-running engine for a minute or so as the heat melts and loosens the ice which is then ingested into the engine.

[27] TC provides more information about carburetor icing in its publication TP 2228-38 – *Take Five: Carburetor Icing*:

The following chart provides the range of temperature and relative humidity which could induce carburetor icing.



[28] Based on the totality of the evidence submitted, as well as testimony from the applicants' lead maintenance technician, Mr. Ango, the probability of the crew being subject to this external environmental phenomenon seems the most probable. No other evidence as to the possible explanation of a fluctuating RPM was put forth by the Minister.

[29] The question then is would this constitute an abnormal occurrence to which the aircraft has been subjected, as per column I of item 6? I find that encountering carburetor icing conditions is part of the flight operational envelopes if certain weather conditions are present. This phenomenon does not constitute an abnormal engine problem.

[30] The next question is would carburetor icing meet the definition of a defect, as per column I of item 9? The Minister's evidence in this case consists primarily of the testimony of Mr. Trépanier. Although credible, I am having difficulty in applying the Minister's interpretation of the term "engine defect."

[31] Carburetor icing is a common and known external environmental flight condition that, as per the graph in paragraph 27, can be encountered in multiple flight envelopes. It is remedied by the application of carburetor heat on the Cessna 172 normal carburetor engines. It is no different than an aircraft encountering icing conditions, turbulence or precipitation during flight operations.

[32] Based on the totality of the evidence presented, this plausible explanation of carburetor icing would not meet the standards or requirements of column I for item 6 or item 9 of Schedule I. Carburetor icing is not an abnormal occurrence and is not an engine defect. This is not considered in the particulars of items 6 or 9 that need to be entered in the journey log as per subsection 605.94(1) of the *CARs*. There was no evidence presented by the Minister of any known defect or abnormal occurrence on C-GIXH other than a carburetor icing issue as suggested by the Minister's witness.

[33] The Minister has the burden of proof to demonstrate that Mr. Li contravened subsection 605.94(1). There is no other evidence presented by the Minister in regard to an engine problem becoming apparent during the flight from Charlevoix to Baie-Comeau other than possible carburetor icing. I would thus conclude respectfully that, on a balance of probabilities, Mr. Li did not contravene subsection 605.94(1) of the *CARs*.

E. Horia Sucuturdean (file no. Q-4652-33)

[34] The issue before the Tribunal is whether the Minister was justified in assessing a monetary penalty in this case pursuant to subsection 7.7(1) of the *Aeronautics Act*. More specifically, whether the Minister has proved, on a balance of probabilities, that Mr. Sucuturdean, as pilot-in-command, contravened subsection 605.94(1) of the *CARs* when he failed to record in the journey log of the Cessna 172N aircraft, registration C-GIXH, details of an engine defect that became apparent after take-off from Baie-Comeau Airport and an emergency landing in the vicinity of Pointe-aux-Outardes and when he failed to record details of the aircraft's run-up in consultation with pre-flight maintenance personnel.

[35] Mr. Sucuturdean, a Cargair employee, was on board the aircraft on September 1, 2019, in the role of a supervising instructor pilot. The applicants' representative and Mr. Sucuturdean, in

the audio recording, argued that the evidence presented has him sitting on the right seat of the Cessna 172 aircraft and ensuring a supervisory role for both pilots who were completing their respective commercial licence hours. Both Mr. Li and Mr. Wang were qualified to act as pilot-in-command on their respective flight legs. All evidence, including the journey log entries, show them in these roles.

[36] Subsection 3(1) of the *Aeronautics Act* states that a pilot-in-command means, in relation to an aircraft, the pilot having responsibility and authority for the operation and safety of the aircraft during flight time. From all the evidence heard, the flight legs flown that day were either flown by Mr. Li or Mr. Wang and it is the Tribunal's position that these two pilots would be acting as pilots-in-command on September 1, 2019.

[37] As such, Mr. Sucuturdean assumed the role of a safety/supervising pilot passenger and was in the right seat. If required, Mr. Li or Mr. Wang would have the responsibility to make any journey log entries onboard C-GIXH. Therefore, Mr. Sucuturdean was not pilot-in-command and was not responsible to enter particulars as per subsection 605.94(1) of the *CARs*.

[38] The Minister's position basically allocates the pilot-in-command role to Mr. Sucuturdean based on the fact that he took control of the aircraft when it became apparent that a major engine failure had occurred. I am not convinced that this suffices. Testimony and evidence provided by both parties (Exhibit 12) has Mr. Li and Mr. Wang properly identified as pilots-in-command on their respective flight legs that day. This would make sense as they are duly licensed to act as such.

[39] The two pilots-in-command were both required to complete hours of flight time to obtain their commercial licenses, and to do this they would need to be flying as pilot-in-command as per *CARs* Standard 421.30(4)(a), which states that an applicant must complete a minimum of 100 hours of pilot-in-command time.

[40] The Cessna 172 aircraft is a single pilot/single engine certification aircraft. Although three pilots were onboard that day, only one, when designated, can act as pilot-in-command. There is no doubt in my mind that Mr. Sucuturdean took control of the aircraft on September 1, 2019, near Pointe-aux-Outardes. As a commercial flight instructor pilot, he would have been the most experienced pilot onboard to handle the engine failure emergency. I would expect no less. But this does not automatically make him pilot-in-command. The pilot-in-command on this leg was Mr. Wang.

Did Mr. Sucuturdean fail to enter the engine defect, the emergency landing and the aircraft run-up in the journey log?

[41] The engine failure was duly entered into the aircraft journey log (Exhibit 4) by the pilot-in-command, Mr. Wang, meeting the requirements under subsection 605.94(1) of the *CARs*.

[42] As suggested by the Minister's witness himself, a fluctuating RPM can be attributed to multiple causes including but not limited to carburetor icing. Mr. Sucuturdean, in the audio recording of his telephone call with Mr. Trépanier, agreed with this possible assumption. He clearly states that the aircraft had difficulty holding 1,000 RPM as per the normal taxi engine regime.

[43] The applicants' representative called as witness Mr. Philippe Ango, Maintenance Director at Cargair. Mr. Ango also explained that momentary fluctuating RPM can be caused by multiple external environmental conditions including but not limited to condensation, water in the fuel system, or some debris passing through the engine.

[44] In the audio recording, Mr. Sucuturdean explained that the issue did lead him to reach out to a company mechanic so that the standard run-up check be done in tandem. Mr. Ango testified that he participated in the run-up check on FaceTime with the applicant.

[45] It is imperative to understand that a run-up is a normal pre-take-off check conducted by pilots to ensure that the aircraft, and in particular the engine, is fully functional.

[46] It is clear from my perspective that not only were there two qualified pilots, Mr. Li and Mr. Wang, on board during the run-up, but that Mr. Sucuturdean, along with Mr. Ango on FaceTime, carried out the full run-up check and found the engine to be in perfect running condition. From this completed checklist, there do not appear to be any engine defects or anomalies that need to be entered in the journey log.

[47] Unless there is an apparent anomaly, this run-up check is not a required journey log entry. No evidence was presented to show that the run-up check was conducted improperly. I will agree that the run-up is not normally done on FaceTime with the company mechanic observing. Requesting that Mr. Ango be able to observe and assist during the check is commendable but in itself not an anomaly or a journey log entry category.

[48] The Minister's evidence and testimony by Mr. Trépanier did make a possible link between the fact that an engine problem was detected on the previous flight leg and the emergency landing that took place after take-off from Baie-Comeau. Based on the findings, the audio recording and the testimony of the applicants' witness, this seems improbable. The run-up is the normal checklist that ensures that the engine is fully operational and that there are no visible, audio or apparent anomalies or defects. None were detected after this run-up.

[49] It is clear to me, based on the evidence submitted, that the fluctuating RPM issue detected by the pilots in Baie-Comeau, and the description and data provided to me of the actual engine failure characteristics and emergency landing in the area of Pointe-aux-Outardes, are not related. Mr. Sucuturdean describes the moments prior to the engine failure as:

- sudden drop in engine power from 2,500 RPM to 1,600 RPM
- violent vibrations
- large resonating sound from engine

[50] Mr. Ango testified that his follow-up investigation found that the failure was attributed to a push rod/rocker arm failure in the engine. Subsequently, a mandatory service bulletin was issued by the engine manufacturer, Lycoming Corporation, in January 2020, in line with a possible engineering defect on specific engines such as the one on the Cessna 172N aircraft, registered C-GIXH. Lycoming specifically requested all affected operators to inspect the rocker arms for possible damage and crack propagation in the push rod/rocker arm.

[51] In the mandatory service bulletin (Exhibit 14), Lycoming Corporation details that until a root cause and corrective action can be determined, the following inspections should be completed at 50-hour intervals and any cracking found should be reported to Lycoming:

Inspection Procedure

1. Remove the rocker arms, push rods, shroud tubes, shroud tube seals, and hydraulic lifters per instructions in the Lycoming “76” Series Engines Overhaul Manual (60294-9). Discard the shroud tube seals and the self-locking nuts.
2. Clean residual oil from the rocker arm.
3. Use a 10X power magnifying glass to inspect the pushrod socket and the outside of the rocker arm.

[52] It is clear to me that this manufacturing defect or flaw which triggered a manufacturer’s mandatory service bulletin and inspection, could not have been detected nor anticipated by the pilots that day. Mr. Ango testified that it would have been impossible for the pilots to know that the rocker arm was damaged. In my view, making a link between a fluctuating RPM on arrival in Baie-Comeau and a push rod/rocker arm failure is highly improbable.

[53] In summary, Schedule A of the Notice clearly defines Mr. Sucuturdean as the pilot-in-command of C-GIXH on September 1, 2019, and goes on to explain that he should have not only been required to enter in the journey log the subsequent engine failure on take-off from Baie-Comeau, but also the details of the run-up conducted prior to this take-off. Based on the evidence provided, I find that Mr. Sucuturdean was not the pilot-in-command of C-GIXH on September 1, 2019, and as such was not required to enter the subsequent engine failure and emergency landing that occurred near Pointe-aux-Outardes on September 1, 2019. It also is clear to me that the pilot-in-command is not required to record the run-up in the journey log, unless there is an anomaly or apparent engine issue.

[54] I would like to join the Minister’s witness, Mr. Trépanier, in commending Mr. Sucuturdean, as he indicated in the audio recording. As the most experienced pilot that day, he did not hesitate to take control during the sudden engine failure and safely land C-GIXH without injury to the other two pilots and with minimal damage to the aircraft. Bravo!

IV. DETERMINATION

[55] The Minister of Transport did not prove, on a balance of probabilities, that the applicants contravened subsection 605.94(1) of the *Canadian Aviation Regulations*. Consequently, the monetary penalties imposed on the applicants by the Minister are cancelled.

November 7, 2022

(Original signed)

Franco Pietracupa

Member

Representations

For the Minister: Michel Tremblay

For the Applicants: Josée Prud'homme