

**CIVIL AVIATION TRIBUNAL**

BETWEEN:

**Minister of Transport, Applicant**

- and -

**Ron Stewart, Respondent**

**LEGISLATION:**

*Air Regulations, C.R.C. 1978, c. 2, s. 555(1)(a)*

**Takeoff below minimum visibility**

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**Review Determination**  
**John J. Eberhard, Q.C.**

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**Decision: February 14, 1991**

**Heard:** North York, Ontario, December 13, 1990

*That Captain Stewart was in violation of Air Regulation 555(1)(a).*

*The assessed penalty of \$200 shall be made payable to the Receiver General for Canada and mailed to the Civil Aviation Tribunal, 4711 Yonge Street, Suite 702, North York, Ontario M2N 6K8, on or before March 28, 1991.*

The Review Hearing convened at 10:00 hours at the Civil Aviation Tribunal office, 4771 Yonge Street, Suite 702, 7th Floor, in the city of North York, Ontario, on December 13, 1990, and reconvened for continuation on January 10, 1991, at the same place and time.

This hearing arises from a Notice of Assessment of Monetary Penalty issued by Transport Canada pursuant to section 7.7 of the *Aeronautics Act*. The Minister of Transport assessed the penalty on the grounds that Captain Ron Stewart contravened paragraph 555(1)(a) of the *Air Regulations* in that:

... on August 28, 1989, at approximately 12:21 Z, you, the pilot-in-command, departed London, Ontario, in aircraft registered C-GONW (Air Ontario Flight No. 200) when the reported take-off

visibility was less than the take-off visibility specified in the operations specifications for Air Ontario.

Having failed to respond to the demand for the assessed penalty, this hearing was convened in the usual way and evidence was heard on December 13, 1990, and January 10, 1991. At the outset, may I express my gratitude to Ms. Lila Stermer and Mr. Howard Carter, who provided well-organized presentations of both evidence and submissions, all of which has assisted this member in reaching his determination.

Section 555(1) and (2) of the *Air Regulations* reads, in part, as follows:

555. (1) No pilot-in-command of an aircraft shall permit the aircraft to take off from a runway if the take-off visibility for the runway, as determined in accordance with subsection (2), is below the minimum visibility for the runway specified in

(a) the operations specifications for the operator of the aircraft where the operator is an air carrier;

(2) For the purposes of subsection (1), the take-off visibility for a runway is

(a) the RVR of the runway, unless the RVR is

(iii) not reported by an air traffic control unit or a flight service station;

(b) the ground visibility of the aerodrome for the runway, if

(i) the RVR is as described in subparagraph (a)(i), (ii) or (iii); and

(ii) the ground visibility of the aerodrome is reported as set out in the definition "ground visibility"; or

(c) the visibility for the runway as observed by the pilot-in-command, if

(i) the RVR is as described in subparagraph (a)(i), (ii) or (iii), and

(ii) the ground visibility of the aerodrome is not reported as described in subparagraph (b)(ii).

The *Air Regulations* also define "ground visibility", in respect of an aerodrome, to mean

the visibility at that aerodrome as contained in a weather observation reported by

(a) an air traffic control unit,

(b) a flight service station,

...

(e) a radio station that is ground based and operated by an air carrier;

## **THE FACTS**

The facts, while important to the determination, are not really in dispute and where any finding of fact is required, the application of the relevant statutory provision is not dependent upon a resolving of any issue of credibility.

The Respondent, Captain Ronald Stewart, testified that he had worked for Air Ontario and its predecessors since 1979 and has been a pilot since 1963. Having spent part of his vocation as a safety officer for the company and accident investigator for Transport Canada, it is apparent that he is a pilot of some considerable experience and my impression was that he is a responsible and conscientious safety-minded employee of Air Ontario.

He was the captain of Flight No. 200, which was scheduled to leave London at 11:00Z on August 28, 1989. He taxied his aircraft, registered C-GONW, as pilot-in-command from the gate at 11:17 Z. He noted that it was a very foggy morning, although he was aware that an earlier Air Ontario aircraft had departed runway 09 at 10:59Z (prior to the opening of operations of the air traffic control tower). He said he left the gate on the basis of his knowledge of the departure of the earlier flight, notwithstanding that as a result of the visibility from his vantage point on the gate, there appeared to be no immediate chance for departure.

Upon reaching the threshold of runway 09, it was evident to him that he could not depart because of the very poor visibility. While admitting that it was most unusual to be postured for a takeoff for a lengthy period of time with commercial passengers on board, he waited for approximately one hour before finally departing at 12:47 Z. In the interim, the aircraft simply waited at the end of the runway and, on one occasion, taxied the whole length of runway 09/27 for the purpose of determining the visibility throughout the full length of the runway and to ensure that there were no obstructions on the runway. He testified that this procedure was done when the weather appeared to be improving.

Upon takeoff, he satisfied himself that he had an estimated 1/2-mile visibility. He did this in several ways. Firstly, he testified that, from his departure commencement point, he could see the visual approach slope indicator lights (VASI), which he estimated to be approximately halfway down the runway from the threshold. The runway length is 6,300 feet. The uncontroverted evidence is that the VASI lights were approximately one half the distance from the threshold of 09. There are dual VASI lights within 1,000 feet of the 27 end of the runway, and he could observe the nearer one to the 09 end from the threshold from which he was departing.

The first officer of the Dash 8, Air Ontario Flight 200, at the time of takeoff was Brian Jacobsen. Mr. Jacobsen testified that he recalled counting runway lights, which he estimated to be 200 feet apart from the position of the aircraft at the threshold of runway 09. He recalls counting eight or nine of these lights, which would give him a visibility of 1,600 feet, or 1/4 mile. He said he was concerned about the legality of the takeoff because of the obvious delay in the flight and therefore was testifying "to the best of my recollection". He confirmed that the aircraft taxied out from the ramp some 20 minutes late and, at the time, he did not think there was sufficient

visibility and accordingly waited for approximately one hour. He confirmed that the aircraft taxied up and down the runway once or twice to check out the visibility and confirms that there was a minimum of 1/4 mile visibility when the captain made the determination, based on his own judgment of actual visibility, to take off.

On the basis of the testimony of the Respondent and his first officer, I am satisfied that a judgment was made on the basis of the observations of the crew of the actual weather on runway 09 at the time of takeoff.

Graham King has been an air traffic controller for some 18 years and employed at the London tower at the time of this occurrence. He has had pilot training up to the level of his commercial ticket and passed examinations qualifying him as a "weather observer" for London Airport.

King submitted an exhibit (M-1) entitled "aircraft occurrence report". This is a document which is filed by ATC personnel for furtherance to Transport Canada to determine if violation initiatives should be taken. He confirmed that at 12:21 on August 28, 1989, the ground visibility for the airport was "officially" zero and fog (0/F).

The witness testified that there were a number of aircraft waiting on the ramp for a period from the time of the opening of the control tower until 12:21. He testified that there was constant chatter on the ground control frequencies and that many planes and operation centres were making telephone enquiries as to current weather and expectation for the lifting of the fog. King referred to the weather sequence for CYXU (London) for August 28, 1989, for the period between 11:00 Z through 14:00 Z. The relevant portions of this, for the time period indicated, were as follows:

YXU - SA 11:00 - X290 - SCT 0/F

YXU - SA 12:00 - XE290 - BKN 0/F

YXU - SP 12:48 - X150 - BKN 1/4/F

I accept the fact that at 12:00, the reported weather was 0/F and at 12:48, the reported weather was 1/4 mile in fog. The time of the takeoff (12:21) obviously falls between these two reported sightings. It is interesting to note that the 12:48 weather was SP or "special", indicating that a change in the weather between the reporting hours (12:00 and 13:00) gave rise to a special report relating to visibility. King acknowledged that the dew point/temperature reading also shown on the reported weather was 14/14, indicating a dense fog. He agreed that fog, however, is not an "even phenomenon" but that when there is no wind and the temperature/dew point are the same, the fog is generally uniform.

King confirmed that a "special" weather report would be issued by Environment Canada when any noticeable change in the weather had taken place that would have significance for aircraft operation. He indicated that a "special" might be issued at the request of the tower, if the weather office did not see any weather change for whatever reason. He confirmed that the flight service station also serves the same function by issuing weather observations when the weather office is

not open. He also confirmed that both the temperature and dew point would have been broadcasting on the ATIS.

In summary, his evidence concluded that at 12:21, when the subject aircraft departed, the "official weather" was zero visibility and fog. While he cannot recall specifically transmitting this information to Captain Stewart, he confirmed that this would have been the normal procedure.

The controller testified in cross-examination that the threshold of 09 from the control tower where he was located was approximately one mile. He noted that, for unexplained reasons, the radio frequency became very quiet when Flight 200 taxied from the ramp. The controller suggested that other pilots would be paying attention to this aircraft as he prepared for departure to determine whether or not they too might take advantage of a weather break. The controller could not see the aircraft but was aware of it having taxied up and down the runway from its ground transmissions.

The controller issued a "clearance" at the time when the pilot signified that he would be taking off. It is important to note that a clearance does not import any approval, or lack thereof, nor any inferences regarding the current weather.

Pursuant to air traffic control instructions (section 314.2 of their manual), he makes it clear that a controller can only deny clearance in limited circumstances. The relevant paragraph reads as follows (Exhibit M-17):

If an IFR aircraft requests a take-off clearance, and the ground visibility is less than the application minimum, take the following actions:

- (a) issue the RVR and the ground visibility;
- (b) issue clearance if traffic and airport conditions permit; and
- (c) complete the aircraft occurrence report, based on CAP visibility minimum, after the aircraft has taken off.

Paragraph 315.3 of the *Controllers Operation Manual* reads as follows:

Except as permitted in 315.4, do not clear an aircraft to land or take off if there is an obstruction, person or vehicle:

- (a) on the landing area; or
- (b) adjacent to the landing area so as to endanger the safety of the aircraft.

Accordingly, the controller was without authority to forestall a take-off clearance by his own regulations, notwithstanding the current reported weather at the field. The controller prepared his infraction report immediately after departure, as the regulations required. In addition, he wrote a

personal handwritten note which assisted his recollection while testifying as to the statement by Captain Stewart that he "had 1/2-mile visibility on runway 09", and that the aircraft departed runway 09 at 12:21 Z when the official weather from 12:00 Z was reported as zero visibility and fog.

This note (Exhibit M-16) satisfies me that, notwithstanding the report of the pilot approximately one mile away, the controller at the relevant time was satisfied that the reporting official weather was below the *Canada Air Pilot* (CAP) minima for the flight from this airport. The controller, who is not bound to make any comment on the weather to pilots, emphasized that with professionals such as Captain Stewart, "we do not put ourselves into the cockpit, and make judgments on behalf of pilots who know their own limits". Further in cross-examination, he confirmed that he "gave him the weather as an official sequence of zero and fog".

Exhibit M-2 confirms that the airport minima for London is 1/2-mile visibility. However, these minima are subject to modification by the "operation specifications" for individual licensed commercial operators such as Air Ontario. The "minima" specifications could be different for different operators.

It is important to note that the controller would have no knowledge of the individual limits of this particular pilot flying this particular aircraft for this particular company. Controllers are not expected, nor would it be possible for them to have a working knowledge of the individual limits in the operations specifications for different airlines and, accordingly, Mr. King would be unable to determine whether or not Captain Stewart was flying within his limits.

Section 555(1)(a) restricts a pilot-in-command to operations specifications for the operator.

It is germane to now look at the operations specifications and the limitations for take-off minima that affected this particular flight.

Inspector Nash from Transport Canada testified as to the significance of "operations specifications" applicable to the operating certificate for Air Ontario Inc. As an aviation enforcement inspector and the investigator of this incident, Mr. Nash has a working knowledge of the relevant departmental requirements for the conditions applicable to the authorization granted to the crew of the type of flight in question. Exhibit M-6 is an amendment to the operations specifications which are granted from time to time to commercial operators. It is this amendment to the operating certificate for the company which governs the requirement for take-off minima and reported visibility which modifies the *Canada Air Pilot* airport minima specifications. The exhibit reads, in part, as follows:

Authorization: Take-off Minima - Reported visibility – RVR 1,200 feet (1/4 mile)

This amendment issued pursuant to the *Air Carriers Using Large Aeroplanes Order* (ANO, Series VII, No. 2) authorizes the above-noted air carrier to commence flights when the reported visibility is RVR 1,200 feet (1/4 mile) or more, regardless of ceiling, using Cessna 500, Hawker Siddeley 748, DHC-8, Convair 580 and Fokker F-28 type aeroplanes.

The amendment goes on to describe the conditions upon which this authority is granted. One of the qualifying conditions reads as follows:

4. The pilot-in-command is satisfied that the required visibility exists before commencing takeoff.

It is the apparent contradiction between the authorization and the judgment which is implicit in the condition no. 4 which gives rise to the issue before the Tribunal.

Inspector Nash testified that it is the understanding of Transport Canada and the position taken by the inspectors that when the "official visibility" is below the minima established in the authorization to the operations specifications, the pilot of the aircraft is prohibited from taking off, notwithstanding that, in his own judgment, the official visibility is wrong. Mr. Nash further testified that all conditions (one through eight) must be met before a pilot can take off. He explained that the purpose of the operations specifications is to allow a lower limit for takeoff for the trained and skilled pilots who would be associated with the major carriers. The expectation is that air transport pilots, such as Mr. Stewart, have the requisite skill, having in mind the safety of flight, to operate the aircraft in a quarter-mile visibility as opposed to the half-mile visibility required by others.

Air Ontario has filed, with Transport Canada, both the operations specifications and operations manual which must be carried in the aircraft at all times. The questions of whether or not the condition no. 4 from the operations specifications might be misinterpreted has been the subject of correspondence and discussion between Transport Canada and the company. The history of the amendments in Air Ontario and its predecessor corporations certainly leaves room for confusion. However, notwithstanding a change in the authorization in amendment no. 8, which was issued by Transport Canada on December 7, 1987, from predecessor operations specifications (such as that issued to the predecessor company in January of 1983) the applicable standard for the flight in question was the more recent. In any event, there was no confusion in the mind of Mr. Nash or the Regional Air Carrier Department of Transport Canada that the authorization requiring a "reported visibility" is the critical determining factor.

In re-examination, Mr. Nash observed that operations manuals are written by the companies and that Transport Canada "accepts" these documents but does not offer an "approval". I am not certain as to what, if any, subtle difference there may be. If this is accurate, it would have been Air Ontario Inc. that produced amendment no. 8 that authorized the commencement of flight when the "reported visibility" is a quarter mile or more. However, in my view, nothing turns on this point. The fact is that amendment no. 8 was in place at the time of this occurrence and the expectation is that all pilots would be expected to know of its existence and other requirements imposed upon them by this authorization document.

In the testimony of Captain Stewart on the issue of the operations specifications, he testified that it was his understanding of the legal obligation that he had the right to make a determination as to whether or not he was observing at least a quarter-mile visibility at the time of departure. He acquired this interpretation because of his history with the predecessor companies of Air Ontario Inc., with whom he was associated upon the wording of condition no. 4. At the time when the

company was known as Great Lakes Airlines, he testified that he was instructed that as captain, he had the authority to take off on the basis of his own determination of visibility and that, at that time, the discretion was articulated in both the operations manual and the operations specifications. He testified that when the authorization was read in conjunction with paragraph 4 of the conditions, that the condition took precedence and, as captain, he had both the authorization and the responsibility to determine visibility. Hence, he was of the view that he could override the authorization which required a "reported visibility" which, from time to time, would be different from his own observations. He testified confidently that, notwithstanding what the tower or any other accredited observer might report, that it was he who had the final judgment.

Indeed, it now appears as if the Tribunal must exercise its judgment to determine this very question.

In order to do so, it is necessary to make a determination as to the "reported visibility" at the time when Captain Stewart departed in Air Ontario Flight No. 200 at 12:21 Z. Captain Stewart "does not recall" the tower reporting this weather at the time of takeoff. However, he also testified that he did not recall asking the tower for the weather at that moment.

He also testified that he was not aware of the wording change in the authorization section of the operations specifications for Air Ontario Inc., amendment no. 8 (Exhibit M-6). However, he indicated that he would interpret the words "reported visibility" as meaning reported by an accredited observer such as Environment Canada personnel.

This testimony was essentially confirmed by Captain Robert Nyman, called by the Respondent. As the check pilot for Air Ontario since 1990, Nyman confirmed that even at the present time, he is instructing pilots pursuant to his interpretation of section 333 of the regulations to rely on a hierarchy of sources in making decisions under the operations specifications. He indicated that the first visibility test would be the runway RVR, the second being reported weather and the last being pilot judgment. He agreed that the inclusion of paragraph 4 as a condition to the operations specifications for Air Ontario does indeed add confusion.

In my own mind, there is no confusion about what the reported visibility was at the time when Captain Stewart departed London. There were a number of sources of these reports. Reports are available from the tower, they are available from flight service stations and environment weather offices. There is no suggestion in the evidence before me that the "reported visibility", which I take to be synonymous with "official weather" referred to by Mr. Nash, was available to Captain Stewart at the time of his departure. The facts, accordingly, are not, as I said at the onset, in dispute. The only issue is to whether or not section 333 of the regulations would permit Captain Stewart to make a judgment on the visibility which would permit him to ignore the "reported visibility".

Section 555 is quite clear. No pilot-in-command of an aircraft shall permit the aircraft to take off from a runway if the take-off visibility is below the operations specifications for the operator of the aircraft (Air Ontario Inc.). It is necessary to look to subsection 2 in a two-step process to determine the actual responsibility.



Section 555(2)(a)(iii) defines the take-off visibility in terms of the RVR for a particular runway. Since this was not being reported for the runway in question, it is necessary to look to the next subsection.

Section 555(2)(b) is the first of the two-step process. For purposes of making the determination on take-off visibility, one looks to the ground visibility of the aerodrome being reported in accordance with the definition of "ground visibility".

Ground visibility is a function of the visibility contained in a weather observation reported by an air traffic control unit, a flight service station or a radio station that is ground based and operated by an air carrier. There is no doubt in my mind that the ground visibility was being reported by one or all of these sources of information as being below the authorization minima for Air Ontario Inc.

The last step is found in paragraph 555(2)(c). This section is to be read disjunctively with section 555(2)(b) as directed by the use of the word "or" between the two subsections. The last subsection permits the visibility for the runway to be observed by the pilot-in-command, on two conditions: Firstly, if the RVR is as described, and (to be read conjunctively) the ground visibility of the aerodrome is not reported. No RVR was reported for runway 09/27.

Here, I am satisfied that the ground visibility was reported and, accordingly, the two conditions upon which section 555(2)(c) required to be satisfied, have not been met and thus the visibility for the runway as observed by the pilot-in-command has no application.

In the Civil Aviation Tribunal decision of *Minister of Transport v. Joseph René Savard* (CAT File no. A-0012-33) released on July 10, 1987, the chairman, Madame Ghislaine Richard, observed on page 5 that the *AIP Canada* provides a reference to the take-off minima and the order of precedence to be given to observations by the pilot-in-command. In that judgment, the Appeal Tribunal stressed that, in absence of a reported RVR or reported ground visibility, the pilot-in-command observed visibility at or above the minimum (page 6). The case deduced:

... the pilot-in-command cannot, on his own, make the assessment that the RVR is fluctuating above and below minimum or less than minimum because of a localized phenomenon. He must be notified. There is no report on the record that the tower overruled the RVR.

Similarly, since the reported RVR of the runway applies, it is not appropriate to fall back on the secondary means of determining take-off visibility, i.e., ground visibility of the aerodrome and, lastly, the visibility for the runway as observed by the pilot-in-command.

In conclusion, that Tribunal found (page 7):

... that the take-off visibility, in the matter under consideration, was the reported RVR and that Captain Savard was not entitled to substitute his own observations of the visibility of the runway for the RVR.

While this is not a case in which there is reliance placed upon an RVR, the second stage required by section 333 would be observations of an official weather observer. This impacts upon the wording of the operations specifications which call for "reported weather". Since there was indeed "official" or "reported" weather, there was no need to rely on the "last resort", being the visibility observation of the pilot-in-command. It follows that I find no contradiction between the authorization found in the operations specifications for Air Ontario and its condition no. 4. The "required visibility" referred to in condition no. 4 is the "reported visibility" referred to in the authorization section of the operations specifications.

Accordingly, upon the strict interpretation of amendment no. 8, being the operations specifications of Air Ontario Inc., as well as a strict interpretation of section 333 of the *Air Regulations*, I have no difficulty in finding that Captain Stewart was in violation, and the assessment by the Minister will be confirmed.

The penalty of \$200 shall be paid on or before March 28, 1991.