

CANADA LABOUR CODE
PART II
OCCUPATIONAL SAFETY AND HEALTH

Review under section 146 of the Canada Labour Code,
Part II, of a direction issued by a safety officer

Applicant: Air Satellite
Baie-Comeau Airport
Baie-Comeau, Quebec
Represented by: Edith Fournier
Director of Operations

Mis-en-cause: Jean-Pierre Bourget
Safety Officer
Transport Canada
and
Jean-Marc Juteau
Safety Officer
Human Resources Development Canada

Before: Serge Cadieux
Regional Safety Officer
Human Resources Development Canada

On June 29, safety officer Jean-Pierre Bourget issued a direction (see the Appendix) under subsection 145(1) of the Canada Labour Code, Part II to Air Satellite inc. an aviation company. On July 16, 1997, further to an application for review of this direction by Air Satellite, a hearing was held in St-Jean-sur-Richelieu. I then visited a Cessna 310R aircraft and inspected the equipment installed by Dynamair which was the subject of the contested direction.

Investigation by the safety officer

The safety officer's investigation report was entered in the record.

Note: At the hearing in this case, the safety officer was allowed to intervene in the debate to defend the contested directions because no union representative or member of a safety and health committee, or occupational safety and health representative, was present.

Mr. Bourget explained that this case began on June 27, 1997 when an employee and pilot of Aéro Québec exercised his right to refuse to work. The reason for this refusal was that wearing his safety belt constituted a danger to his safety. Following the investigation that he conducted jointly with safety officer Jean-Marc Juteau, he decided that working in such conditions in fact constituted

a danger to the employee. The circumstances of the refusal stem from the fact that the safety belt of his pilot's seat was difficult to buckle and especially difficult to unbuckle because of the installation of a new console between the two front seats. This pilot feared for his safety should he have to exit the aircraft in an emergency. A direction was issued to Aéro Québec under paragraphs 145(2)(a) and (b) of the Code.

The safety officer was informed at the time that other aircraft had been modified by the addition of the console. He then contacted SOPFEU (Société de Protection des forêts contre le feu), with whom various aviation companies had a forest fire surveillance contract, to obtain the names of the other companies whose aircraft had undergone this modification. These consoles were owned by SOPFEU, and the companies who were under contract with it supplied it with Cessna 310R aircraft, one of whose functions was spotting¹, with a flight crew, for a specified period. Installation of the console was one of the terms of the contract with SOPFEU and could not be removed.

The safety officer inspected the said aircraft at various airports. The first aircraft inspected belonged to Aéropro and was piloted by Mr. Vaillancourt. A test, consisting in buckling and unbuckling the pilot's safety belt, was conducted by Mr. Vaillancourt in his aircraft. The safety officer reported that he observed some restriction during the unbuckling of the safety belt owing to the presence of the console. This situation, according to the safety officer, posed a hazard, but not a danger, because Mr. Vaillancourt had more freedom of movement, even with the restriction, to unbuckle the safety belt. A direction was issued under subsection 145(1) of the Code to Aéropro concerning this "hazard".

The second aircraft inspected belonged to Air Satellite and was piloted by Mr. Mathys. The safety officer asked Mr. Mathys to perform the same safety belt buckling and unbuckling manoeuvres in his aircraft. The same observation was made by the safety officer, i.e., that Mr. Mathys had some difficulty unbuckling his safety belt. A direction (see the Appendix) was issued under subsection 145(1) of the Code to this company concerning this same "hazard".

Two other aircraft of Aéro Québec were inspected at Val D'Or. Two separate directions were issued to this company, one under subsection 145(1) of the Code owing to the presence of a hazard and the other under paragraph 145(2)(a) of the Code owing to the presence of a danger. These directions are not covered by the application before me and will not therefore be discussed further.

When asked to comment on the nature of the hazard, the safety officer explained that the safety belt was buckled horizontally. In moving his hand from right to left horizontally, the pilot touched the console. Thus, when the pilot used his right hand to buckle the safety belt, this required more freedom of movement, which made the buckling manoeuvre more difficult. To facilitate this manoeuvre, the pilot therefore had to use his left hand to initiate the action of buckling the safety belt. Mr. Bourget concluded that the horizontal movement was restricted by the presence of the

¹ During actual fires, Cessna 310R and Beech-90 aircraft fly over the fire sites at an altitude of approximately 1000 feet and guide the ground crews and the CL215 and CL415 crews in extinguishing the fires.

console. Moreover, the safety officer confirmed that the safety belt unbuckling manoeuvre was timed, and that specifically in the case of Aéropro and Air Satellite, it took 2 to 4 seconds, whereas in the other cases, it took longer.

The safety officer also mentioned that the direction was issued for a contravention of paragraph 125(p) of the Code:

125. Without restricting the generality of section 124, every employer shall, in respect of every work place controlled by the employer:

(p) ensure, in the manner prescribed, that employees have safe entry to, exit from and occupancy of the work place;

The critical point of the direction was that the employees did not have safe exit from their aircraft. In the safety officer's opinion, their having to take ten to fifteen seconds to unbuckle their safety belts was not safe. Moreover, paragraph 6.3(b) of the Aviation Occupational Safety and Health Regulations (hereinafter the Aviation Regulations) provided as follows:

6.3 All protection equipment referred to in section 6.2:

- (a) shall be designed to protect the person from the hazard for which it is provided; and*
- b) shall not in itself create a hazard.*

The safety officer considered that the safety belt in itself created a hazard because the pilot had difficulty unbuckling it. The time required to unbuckle it, was, in his opinion, unacceptable. To fulfil its role, the safety belt must unbuckle easily to enable the pilot to exit the aircraft safely.

Submission of the employer

Mrs. Fournier disagreed with the safety officer. She wondered whether there was a particular technique that must be used in buckling or unbuckling a safety belt. She pointed out that she had never been told that belt did not buckle or did not unbuckle. Had this been the case, she would have agreed that this situation posed a definite hazard to the pilot. However, she questioned the fact that the safety officer had concluded that there was a hazard simply because the safety belt was buckled or unbuckled with either the right or the left hand.

Mr. Paillard, representing Aéropro, argued that the safety belt served the purpose for which it was designed and there was therefore no reason to suspect that it posed a hazard. Moreover, there was no standard dictating the amount of time necessary to unbuckle a safety belt.

Expert witness

The expert witness for Air Satellite and Aéropro was Mrs. Marie-Hélène Simard, Dynamair Aviation, Maintenance Manager. Mrs. Simard listed her credentials, to which no objection was raised. This company installed the radio console and the modification was explained in detail.

The modification was designed in consultation with Mr. Peter Ayre, the engineer who was designated to perform this work and who approved the modification on behalf of Transport Canada. Mrs. Simard told us that before making a modification of this kind, the company did an ergonomic analysis of the aircraft to locate the equipment requested by the customer in order to meet the very strict standards in terms of the criteria for aircraft approval. Mrs. Simard explained the long process to be followed when a modification was made to an aircraft. It involved, among other things, checking all the criteria for certification of the aircraft to ensure that the modifications met these criteria.

She also explained in detail the operation of the console in relation to the management of fires. Mrs. Simard explained that the arm rests of the seats, which were longer than the console, were removed from the seats to permit installation of the console. She explained that the criteria for certification of this aircraft required that, when the pilot was sitting in his seat, he be strapped in to restrain him in case of turbulence. Once seated, the pilot must move his seat forward in order to have firm control of all the controls and all the instruments, and to be able to touch with his hands all the controls that were essential in an emergency.

The safety belts aboard these aircraft were equipped with release buckles that did not really resemble those in automobiles because automobile safety belts had push buttons. On Cessnas, the safety belts had a clasp that could be raised almost perpendicular and that released a hook inside the buckle. The mechanism was therefore purely manual. The lap belt was adjustable for each pilot, as was the shoulder harness. Mrs. Simard acknowledged that, with the console in the aircraft, access to the buckle was more restricted than usual. However, the belt continued to be adjustable, which met the criteria for certification. Moreover, the belt fastened and remained firmly fastened. The safety belt could not come undone in flight. Finally, Mrs. Simard explained that, at the conclusion of a flight, the safety belt unbuckled easily. She pointed out that the speed with which a safety belt could be unbuckled was not a factor because there was no standard, no criterion for approval that specified a minimum amount of time for unbuckling the buckle. The certification criterion for safety belts referred to their buckling and their unbuckling, but not to the notion of the speed of buckling or unbuckling.

At the conclusion of a flight, the pilot moved his seat backward in order to exit the aircraft. In all aircraft, the exit manoeuvre was quite restrictive. Since the buckle was on the right side, all pilots were advised to make the adjustment before buckling their safety belt. The console was positioned in such a manner that it in no way obstructed the unbuckling of the belt. In an emergency, a pilot was trained not to move his seat in order to unbuckle his safety belt, but to manage his emergency. In precarious situations, a pilot would attempt to land his aircraft with the seat in its flight position. According to Mrs. Simard, where impact on landing could not be avoided, the aircraft was designed to separate “cohesively” so as to afford the cockpit maximum protection. Mrs. Simard also stated that experts agreed that what mattered in such a situation was that the seat remain intact and not move.

However, concluded Mrs. Simard, it must be acknowledged that there was a hazard inherent in being seated in an aircraft pilot’s seat, especially in the case of small aircraft like the Cessna 310R.

Reasons for Decision

The question to be answered in this case is the following: did the aviation company Air Satellite contravene paragraph 125(p) of the Code and paragraph 6.3(b) of the Aviation Regulations, as specified in the direction? A safety officer can issue a direction under subsection 145(1) of the Code only “*where [he] is of the opinion that any provision of this Part is being contravened...*”

Paragraph 125(p) of the Code provides that

125. Without restricting the generality of section 124, every employer shall, in respect of every work place controlled by the employer:

p) ensure, in the manner prescribed, that employees have safe entry to, exit from and occupancy of the work place;

Consequently, the employer’s responsibility to ensure that its employees can exit (as argued by the safety officer) their work place safely depends on the manner prescribed. I am therefore obliged to refer to the Aviation Regulations to determine the extent of the employer’s responsibility with regard to the application of paragraph 6.3(b) of the Aviation Regulations. This paragraph provides as follows:

6.3 All protection equipment referred to in section 6.2:

- a) shall be designed to protect the person from the hazard for which it is provided;
and
- b) shall not in itself create a hazard.

The safety officer relied on this provision to ensure that the safety belt, which he considers to be protection equipment aboard the aircraft, was operating safely. In my opinion, the safety belt is protection equipment that is found in all motorized vehicles. However, for the purposes of Part VI (Safety materials, equipment, devices and clothing) of the Aviation Regulations, I must determine whether a safety belt is in fact “...protection equipment referred to in section 6.2” as specified in section 6.3 above.

The provisions of interest not mentioned above are the following:

6.1 In this Part,

“safety restraining device” means a safety harness, seat, belt, rope, strap, chain or lifeline designed to be used by a person to protect him from falling and includes every fitting, fastening or accessory attached thereto. (dispositif protecteur de soutien)

6.2 Where

- a) it is not reasonably practicable to eliminate or control a safety or health hazard within safe limits on an aircraft, and*

*b) the use of protection equipment may prevent or reduce injury from that hazard,
every person granted access to the aircraft who is exposed to that hazard shall use the protection equipment prescribed by this Part.*

Thus, the protection equipment prescribed by section 6.2 above is the “protection equipment prescribed by this Part”, i.e., Part VI of the Regulations. This part specifies what are the different types of protection equipment prescribed. They are, according to the provisions:

6.5 Protective Headwear

6.6 Protective Footwear

6.7 Eye and Face Protection

6.8 Respiratory Protection

6.10 Skin Protection

6.11 Safety Restraining Devices

- (1) Where a person, other than a person who is exiting from an aircraft, is near to an open aircraft door or hatch on an aircraft, the employer shall provide the person with a safety restraining device.*
- (2) Every safety restraining device used on an aircraft shall be secured to the primary structure of the aircraft in a manner that prevents a person using the device from falling out of the aircraft.*

6.12 Loose Clothing

According to these provisions, the safety belt which is used to restrain the pilot in his seat is not protection equipment prescribed by Part VI of the Aviation Regulations. In the case of section 6.11 of the Aviation Regulations, the reference to a safety restraining device may cause confusion if we refer to the definition of this expression in section 6.1 because the latter refers to a “belt”. However, it quickly becomes apparent, on reading section 6.11 of the Aviation Regulations, that the belt in question does not refer to the safety belt of the pilot’s seat but rather to the belt used by “a person, other than a person who is exiting from an aircraft, [who] is near to an open aircraft door or the hatch on an aircraft” and that “prevents the person using the device from falling out of the aircraft”.

It is therefore clear that the safety belt used to restrain the pilot or the passengers is not protection equipment prescribed by Part VI of the Regulations. The employer did not therefore contravene the Regulations as specified by the direction because the Code does not provide any specific obligation with respect to the said safety belt. For this reason, I am obliged to rescind the direction.

I wish to point out, however, that my decision in no way limits the safety officer's power to determine that a similar situation constitutes a danger to an employee, because the existence of a danger does not depend on the existence of a regulatory provision.

Moreover, it was not proved to me that the modification made to the aircraft of Air Satellite and Aéropro contravened the employer's general duty to ensure that the safety and health at work of every person employed by the employer is protected (s.124). In fact, the demonstration given by Mr. Vaillancourt on behalf of Aéropro and Mr. Mathys on behalf of Air Satellite was very persuasive. These two pilots demonstrated to me their skill in buckling and unbuckling their safety belt with embarrassing ease.

Decision

Based on the observations that I made during my investigation, the parties' submissions and the points of law explained above, I decide that the direction issued is not justified in the circumstances.

For this reason, **I HEREBY RESCIND** the direction issued pursuant to subsection 145(1) of the Canada Labour Code, Part II, on June 29, 1997 by safety officer Jean-Pierre Bourget to Air Satellite.

Original decision rendered on July 16, 1997.

Serge Cadieux
Regional Safety Officer

IN THE MATTER OF THE CANADA LABOUR CODE
PART II - OCCUPATIONAL SAFETY AND HEALTH

DIRECTION TO THE EMPLOYER UNDER SUBSECTION 145(1)

On June 29, 1997, the undersigned safety officer conducted an investigation concerning the Cessna 310 aircraft registered C-GGTF, operated by Air Satellite Inc., being an employer subject to the Canada Labour Code, Part II, at the Matagami airport, the said work place sometimes being known as Air Satellite.

The said safety officer is of the opinion that the following provision of Part II of the Canada Labour Code has been contravened:

**Paragraph 125(p) of Part II of the Canada Labour Code and paragraph 6.3(b) of the Occupational Safety and Health Regulations (Aviation).
The dimensions of the radio console (Aeropointer Radio Console), which is located between the seats of the pilot and the co-pilot, impede the buckling of the safety belt safely.**

Consequently, you are HEREBY ORDERED, under subsection 145(1) of Part II of the Canada Labour Code, to cease all contraventions by July 16, 1997.

Issued at Val-D'Or, this 29th day of June 1997.

Jean-Pierre Bourget
Safety Officer
No. 3141

TO: Air Satellite
Baie-Comeau Airport
Pointe-Lebel, Quebec
G5C 2S6

SUMMARY OF THE DECISION OF THE REGIONAL SAFETY OFFICER

Applicant: Air Satellite

Respondent: N/A

KEY WORDS

Safety belt, protection equipment, hazard, buckle, unbuckle, prescribed manner.

PROVISIONS

Code: 125(p), 145(1)

Aviation Regulations: 6.1, 6.2, 6.3

SUMMARY

A safety officer issued a direction under subsection 145(1) of the Code to the employer for a contravention of paragraph 6.3(b) of the Aviation Regulations. The officer explained that installation of a console between the pilot's seat and the co-pilot's seat impeded the safe operation of the buckle of the pilot's safety belt. The RSO inspected the aircraft and heard the parties. He concluded that there was no contravention as specified in the direction issued because the safety belt was not protection equipment prescribed by Part VI of the Aviation Regulations. A direction under subsection 145(1) can be issued only where there is a contravention of the Aviation Regulations. Moreover, the RSO concluded that using the safety belt posed no hazard because during the inspection of the aircraft, the pilot demonstrated that he was able to unbuckle the safety belt in question with embarrassing ease. The RSO **RESCINDED** the direction.