ALBERTA

Report to the Minister of Justice and Solicitor General
Public Fatality Inquiry

Fatality Inquiries Act

WHEREAS a Public Inquiry was held at the Provincial Court of Alberta

for the City (City, Town or Village) of Calgary (Name of City, Town, Village), in the Province of Alberta,

on the 24 and 25th day of November, 2020 (year)

before M.V. De Souza, a Provincial Court Judge,

into the death of Jing Zhang, aged 53 years old (Name in Full) (Age)

of Ontario (Residence) and the following findings were made:

Date and Time of Death: September 21, 2016

Place: CASTLE MOUNTAIN LOOKOUT, BANFF NATIONAL PARK

Medical Cause of Death:
("cause of death" means the medical cause of death according to the International Statistical Classification of Diseases, Injuries and Causes of Death as last revised by the International Conference assembled for that purpose and published by the World Health Organization – *The Fatality Inquiries Act*, Section 1(d)).

Multiple blunt force injuries

Manner of Death:
("manner of death" means the mode or method of death whether natural, homicidal, suicidal, accidental, unclassifiable or undeterminable – *The Fatality Inquiries Act*, Section 1(h)).

Accidental

Introduction and Circumstances under which Death occurred

Under s. 53(1) of the Fatality Inquiries Act, R.S.A 200, Ch. F-9, the following findings and recommendations were made to help prevent deaths occurring in a similar manner.

Circumstances under which Death occurred

On September 21, 2016, at Banff National Park, Ms. Jing Zhang (53) and her husband, De Qiang Wang (53) were passengers on a tour bus with 17 other passengers.

The bus was a 2012 Chevrolet Cutaway, a 24-passenger bus. Mr. Jian Bo Song was the driver. Mr. Song possessed the required Class 4 driver's licence. This was the first time he was driving a 24-passenger bus.

It was day-three of a four-day tour (Calgary/Banff/Jasper). Mr. Song made an unscheduled stop at Castle Mountain lookout, parallel to Highway 1. The road conditions were dry; the temperature was approximately six degrees. The bus was stopped at a 300-meter parking lot. The road was flat; the North edge bordered a sloped edged curb, asphalt walkway and grassy boulevard facing a valley. Several meters North of the curb, there was an embankment sloping toward the Bow River. The height of the road to the river was approximately 10-20 meters.

Ms. Zhang and Mr. Wang, along with other passengers, disembarked the bus to observe the view. Ms. Zhang stood on the sidewalk in front of the bus, with her back towards the bus. The bus was still in gear, "D" (drive position); the keys were in the ignition; the emergency brake was engaged (depressed); Mr. Song, the driver had disembarked.

The bus began to roll forward, striking Ms. Zhang and her husband, Mr. Wang. The bus pushed Ms. Zhang down the embankment; she suffered blunt force trauma; she died at the scene.

Mr. Wang was standing close to Ms. Zhang; he was also hit by the bus and suffered brain injury, fractured cervical vertebrae and other broken bones. He was unconscious in hospital for approximately one month. He suffers long term or permanent physical, psychological and emotional problems, requiring long term or permanent day-to-day care. As a result, Mr. Wang, is unable to work for the rest of his life.

Issues

1) Did the tour bus operator have the necessary experience to conduct tours in the Rocky Mountains?

2) Did the tour bus driver have enough experience and training to conduct tours in the Rocky Mountains?

3) What preventative measures could be taken to avoid similar deaths?

Witness Testimony and Evidence

Witnesses at the Inquiry: RCMP Constable, Jonathan Cook; Mr. Jonathan Cote, Manager of Investigations for Compliance and Oversight, Alberta Transportation Services; and Mr. Xian Feng Zhou, director of the Amazing Travel Inc.

Mr. Jian Bo Song

Mr. Jian Bo Song was the driver of the bus; he was subpoenaed for the Inquiry; however, he was in China and not expected to return until early 2021.

On February 20, 2018, Mr. Song attended sentencing proceedings in the Provincial Court of Alberta. He plead guilty to s.47 (b) of the Use of Highway and Rules of the Road Regulation under the Traffic Safety Act:

> A person shall not permit a vehicle to stand unattended on any grade or slope without … (b) effectively setting the vehicle's parking brake or other mechanism with which the vehicle is equipped that is designed to hold a vehicle in a stationary position while the vehicle is unattended. (Sentencing Proceedings, Exhibit F, 23)

Facts upon which the sentencing submissions were made included: Mr. Song had a valid class 4 driver's licence; (this permitted him to drive a 24-passenger bus). Mr. Song had been on the job with Amazing Tours Inc., approximately four months prior to the accident; it was the first time he drove a 24-passenger bus. He received no particular training from Amazing Travel Inc. or otherwise, above and beyond obtaining a class 4 licence. This incident was his first driving infraction or incident in his driving history.

At the start of the tour, Mr. Song was the tour guide; there was another individual who drove the bus. The tour made an overnight stop in Banff. Mr. Song slept that night. The next morning, the dispatch manager of Amazing Travel Inc. informed Mr. Song that he would be the driver and tour guide for the balance of the tour.

Mr. Song explained that at the time of leaving the bus in "D" (Drive) gear position, with the keys in the ignition, he was distracted by other passengers.

The sentencing proceedings included Witness Impact Statements of Mr. Wang and his son, Tony Wang, outlining the physical and psychological impact of the accident and the death of Ms. Zhang (as a Wife and Mother).

RCMP Cst. Jonathan Cook

Cst. Cook was a constable on general duty at the time of the accident and one of the first responders. The RCMP records (Exhibit D, 16 -18) included a General Occurrence Report (dated September 21, 2016) and Summary report (March 26, 2019) documenting Cst. Cook's observations. Cst. Cook's testimony was consistent with these reports. In particular, he noted the bus was in "D" (Drive) gear position; there was no evidence the bus braked on the sidewalk or grass leading to its final stop. The park brake was depressed, but he could not determine to what extent. The bus was parked perpendicular (not parallel) to the curb; the curb had a sloped edge.

Cst. Cook opined a square curb would have prevented the bus rolling into where the pedestrians were standing. There was a wildlife fence between the road and the river; however, there was no barrier that would prevent a vehicle from entering the sidewalk, pedestrian area, and Bow River.

Investigation Report

RCMP documentation included a report prepared by Mr. Andreas Koschate, dated September 18, 2017 (**Exhibit 19**). Mr. Koschate's qualifications included specialized professional competencies in collision reconstruction, vehicle mechanical performance, and failure analysis. Mr. Koschate did not testify.

The scope and purpose of the report was to determine whether the incident was caused by a safety-related defect of the bus. The report concluded that a vehicle-safety related defect was not a cause of the incident. In other words, the finding was that if the driver had engaged the bus in "Park" gear position, the bus would have remained stationary.

The report stated Canada Motor Vehicle Safety Standard 114 requires a vehicle to be designed such that the transmission must be locked in "Park" gear position before the ignition key can be removed. The standard reduced roll-away events, but such incidents still occur and when they do it is usually with the key is left in the ignition, with the engine running. Mr. Koschate opined these incidents occur across many vehicle and driver types, general or professional. Here, there was a lack of automatic safety cues or alerts that the vehicle was not in "Park", due to the keys being left in the ignition, with the engine running.

Mr. Xian Feng Zhou, director of Amazing Travel Inc.

Amazing Travel Inc. (the Carrier) was a travel agency and tour company, with a National Safety Code Certificate, operating tour buses in the Rocky Mountain area, including Banff and Jasper. The company was set up in 2006, began as a home-based travel agency and due to customer demand, began running tours in the Rocky Mountains, acquiring mini-vans in 2016. The seating capacity was 14-15 passengers. The company later purchased larger buses. The bus involved in the incident was purchased brand new in 2016.

As a result of the fatal accident, the Carrier Services Section of Alberta Transportation audited and suspended the Carrier's fitness safety certificate, pending compliance.

The audit revealed that the Carrier regulation compliance by Amazing Travel Inc., was unacceptable. The following administrative penalties were assessed:

- The Carrier failed to ensure their drivers complied with service hour requirements. Specifically, 248 days of logs showed 8 drivers with 169 days with fatigue-related violations. An administrative penalty of $1,500 was assessed.

- The Carrier failed to maintain a compliance monitoring program for driver hours. An administrative penalty of $500 was assessed.

- The Carrier failed to implement a safety program that fully met regulatory requirements; An administrative penalty of $200 was assessed.

- The Carrier failed to implement a maintenance program that fully met regulatory requirements; an administrative penalty of $200 was assessed.

Mr. Zhou complied with the audit and took steps to remedy the deficiencies and follow the requirements and recommendations of the audit. Mr. Zhou testified that the deficiency findings were mostly technical; i.e. failing to indicate am or pm when a time log indicated 00:00 hours. He said he tried to appeal the penalties, but no one helped with that process. He said he had documentation to support this. I provided Mr. Zhou an opportunity to provide the same. After the Inquiry and before concluding this report, Mr. Zhou submitted a copy of a letter dated September 24, 2016. The documentation did not dispute the deficiencies. The letter signed by Mr. Zhou stated, "We totally understand the reason Alberta Transportation suspended our SFC and OAC; our objective is to adhere to regulations required …".

Mr. Zhou described the hiring and training of drivers. There was no formalized training program. The Carrier's steps taken to ensure Mr. Song was qualified to drive tours included relying on his class 4 driver's licence and clear driver's abstract, a test drive, and Mr. Zhou verbally sharing his experience of driving in the mountains. Mr. Zhou described drivers were often seasonal employees therefore prior tour bus driving experience was rare. Drivers, newly hired by the Carrier, would shadow experienced drivers; and word of mouth from other drivers would prompt the decision to assign new drivers to tour buses and, in turn, larger buses. No written documentation or reports were provided to substantiate this qualification and development process.

Mr. Zhou testified that since Mr. Song was hired in May of 2016, Mr. Song would have been involved in 30-40 tours; Mr. Zhou acknowledged it was the first time Mr. Song was asked to drive one of the larger 24-passenger capacity buses. Mr. Zhou stated there would ordinarily be only one staff member (the driver, who also acted as tour guide) for tours of 20 passengers or less. He explained that the Carrier or customer would sometimes pay for additional staff, mainly for tours with more than 20 passengers.

Mr. Zhou opined that a Safety Fitness license was extremely easy to obtain in Alberta; the requirements were not as onerous, for example, as other provinces such as British Columbia. He suggested stricter upfront requirements prior to issuing a license, and clearer instructions from ATS to carriers as to what regulation and documentation compliance means, in practical terms.

After the incident, customers stopped using the Carrier for bus tours and this aspect of Mr. Zhou's business was discontinued. He operates a travel ticketing business under a different company name. Amazing Travel Inc. has been struck from corporate records.

<u>Jonathan Cote, Manager of Investigations for Compliance and Oversight</u>
<u>Alberta Transportation Services (ATS)</u>
Mr. Cote was not an employee during the course of ATS's audit and follow up of this

incident; however, he familiarized himself with the file and confirmed that the departments processes are the same as they were in 2016.

Mr. Cote explained that human oversight (employees learning about the accident in the news) triggered the ATS audit and investigation. There was an automated trigger system of ATS alerting employees of the need for an audit or investigation; however, this alert system is based on police investigative reports. Therefore, the audit alert system would not have been triggered ATS to conduct an audit and investigation until these reports were filed, (approximately one month after the accident).

Mr. Cote described there are approximately 24,000 commercial carriers; approximately 340 involve a bus fleet. Mr. Cote explained that ATS has determined that voluntary compliance is the proven method to achieving the end goal of safety. Mr. Cote provided extensive and detailed information as to ATS's monitoring program for every regulated commercial carrier for 3 attributes: collisions, convictions and inspections associated with a carrier's vehicles. It is retrospective in that every event associated with a particular carrier is entered into database; at the beginning of every month the entries for previous months are compared to the prior 12- month prior, compared to fleet size and industry partners.

In 2016, 862 audits were conducted; 28 were for bus carriers. The balance related to commercial transportation of goods. Mr. Cote described a staged system of monitoring. Stage 1 being the lowest level and 4 being the highest. The higher the stage, the closer the monitoring. By stage 3 or 4, a National Safety Code Facility audit is conducted or an investigation or compliance review initiated. In this case, the fatality triggered the audit.

The post-accident audit identified the Carrier did not maintain proper records and had difficulties monitoring driver and vehicle compliance. Compliance in other areas were noted; the overall audit revealed the level of non-compliance was not acceptable, as already stated in this report. Mr. Cote described that in his experience, non-compliance, generally, is typically due to lack of oversight from ownership, management, or leadership. ATS also looks at date of hire for drivers, three years of employment history and driver's abstract. The Carrier did not have these records. Post accident, the Carrier was found not to be capable of training their own drivers and the Carrier was required to hire an independent consultant with respect to driver training and record keeping.

Mr. Cote described more proactive oversight by ATS since the Humbolt accident in 2018. For new carriers, a mini audit is performed within 9-12 months of issuing a licence. It is designed to identify deficiencies, with a view to permitting the Carrier to address them without administrative penalty.

The Mandatory Entry Level Training program was also described. Class 1, 2 and 3 licence holders are required to take 100 hours of classroom and vehicle training. The focus is vehicle characteristics and dangerous goods handling. There is also a membership program where Carriers can obtain a safety rating. This program does not apply to Class 4 licences.

Recommendations for the prevention of similar deaths

The following findings and recommendations are made to mitigate risk and help prevent similar accidents. A constellation of factors contributed to causing this accident.

1. Did the tour bus operator have the necessary experience to conduct tours in the Rocky Mountains?

No. The evidence supported the Carrier did not provide sufficient training for their drivers or keep proper records monitoring the hours of their drivers. The records that were maintained showed their drivers worked longer hours than permitted by regulation.

The day of the accident was the first time the driver operated a 24-passenger bus. In addition, the driver's duties changed, on short notice, mid-tour, from being a tour guide only, to being the driver and tour guide. Performing both roles resulted in the driver being distracted from paying attention to appropriate safety procedures.

Mr. Zhou was sincere in his stated intention of prioritizing passenger safety; however, as with any business owner, he managed competing priorities, i.e. staffing levels and profit margins. He also mentioned the documentation requirements were not made clear.

Recommendations:

i) ATS should consider requiring Carriers to provide safety training and practices for drivers. For example, safety education and risk prevention checklists, i.e. ensuring passengers do not pass in front of a bus at any time. Drivers not to disembark with keys in the ignition. Prevent driver distraction.

ii) ATS could consider more proactive oversight, such as Carriers providing proof of driver safety training, driver supervision, and reporting methods, systems and programs, prior to a Safety Fitness licence being issued. Real risk would be reduced by requiring Carriers to provide information, in advance, rather than retrospectively, post-audit or investigation, or triggered by incidents.

2. Did the tour bus driver have necessary experience to conduct tours in the Rocky Mountains?

No. The driver had the requisite class 4 licence for a 24-passenger tour bus. The accident would not have occurred if the driver had not left the bus in "D" drive gear. However, the evidence showed that the driver had inadequate safety training and experience, likely drove longer shifts than permitted, and was called, on short notice, to perform the tasks of driver and tour guide. The latter role lead to the driver being distracted.

Recommendations:
The recommendations found in #1 apply; although it is recognized all those items could have been in place, and due to driver error, the accident could still have occurred.

3. Other Preventative Measures

The primary goal of ATS is the safety of roads through monitoring collisions, convictions and inspections. The evidence was clear that due to resource capacity, ATS conducts most audits on commercial goods carriers. Most checks and audits are retroactive.

Recommendations:

i) Findings and recommendations in #1 apply. In particular, an efficacy analysis should be conducted to consider expanding proactive safety education and training programs for class 4 licences and possibly to existing carriers who were not subject to the mini-audit program.

ii) Evidence supported that news media triggered ATS's post-accident investigation of the Carrier. The current alert system is not adequate to ensure a timely suspension, pending investigation and audit, to avoid continuation of real and present danger. For example, there could be an onus on Carriers to report accidents to ATS, upon them occurring.

iii) Reference was made to British Columbia having additional prerequisites for the issuance of Safety Fitness Certificates. ATS should take steps to consider whether additional requisites have resulted in reducing risk of infractions, accidents, and fatalities, ensuring best-practices are implemented in Alberta.

iv) Evidence supported that changes to the look-out area could have prevented the fatality. For example: a) a square curb separating the road from the sidewalk; b) a barrier separating the road and pedestrian areas and river; and c) parking requirements to ensure vehicles parked parallel, as opposed to perpendicular, to a steep slope. A study should be conducted in the Rocky Mountain area to identify high-traffic, high risk areas and ensure curbs, barriers and parking zones are adapted to the terrain.

DATED FEBRUARY 26, 2021,

at Calgary, Alberta.

Original Signed

M. V. DE SOUZA
A Judge of the Provincial Court of Alberta