

2002

The Transition to Safety Management Systems (SMS) in Aviation: Is Canada Deregulating Flight Safety?

Renè David-Cooper
Federal Court of Appeal of Canada

Follow this and additional works at: <https://scholar.smu.edu/jalc>

Recommended Citation

Renè David-Cooper, *The Transition to Safety Management Systems (SMS) in Aviation: Is Canada Deregulating Flight Safety?*, 81 J. Air L. & Com. 33 (2002)
<https://scholar.smu.edu/jalc/vol81/iss1/3>

This Article is brought to you for free and open access by the Law Journals at SMU Scholar. It has been accepted for inclusion in Journal of Air Law and Commerce by an authorized administrator of SMU Scholar. For more information, please visit <http://digitalrepository.smu.edu>.

**THE TRANSITION TO SAFETY MANAGEMENT SYSTEMS
(SMS) IN AVIATION: IS CANADA DEREGULATING
FLIGHT SAFETY?**

RENÉ DAVID-COOPER*

ABSTRACT

In 2013, the International Civil Aviation Organization (ICAO) adopted Annex 19 to the Chicago Convention to implement Safety Management Systems (SMS) for airlines around the world. While most ICAO Member States worldwide are still in the early stages of introducing SMS, Canada became the first and only ICAO country in 2008 to fully implement SMS for all Canadian-registered airlines.

This article will highlight the documented shortcomings of SMS in Canada during the implementation of the first ever SMS framework in civil aviation. While air carriers struggled to understand and introduce SMS into their operations, this article will illustrate how Transport Canada (TC) did not have the knowledge or the necessary resources to properly guide airline operators during this transition, how SMS was improperly tailored for smaller air carriers, and how the Canadian government canceled safety inspections around the country, leaving many air carriers partially unregulated.

This article will argue that TC has effectively deregulated flight safety in certain areas of its aviation industry under SMS. Drawing on recent safety statistics and accident investigation reports, this article will illustrate how TC's inadequate safety oversight during the adoption of SMS resulted in several accidents, putting the traveling public at risk. To support these findings,

* René David-Cooper graduated with a Master of Laws (LL.M.) at the Institute of Air and Space Law at McGill University. He holds a Licentiate in Civil Law (LL.L.) and a Juris Doctor (J.D.) from the University of Ottawa, and he will be clerking at the Federal Court of Appeal of Canada in 2016–2017. He also holds a Commercial Pilot's License (CPL) and has more than ten years of flying experience.



five Canadian air carriers were interviewed to provide their exclusive perspective into the chaotic implementation of SMS in Canada and how the safety levels for Canadian carriers have been compromised. This article will conclude by presenting political, economic, and legal solutions to rectify the deregulation of flight safety in Canada.

I. INTRODUCTION

SINCE THE INCEPTION of air transportation at the dawn of the twentieth century, aviation safety has been a dynamic variable both positively and negatively affected by human activities.¹ If safety is not proactively regulated by the state, it is axiomatic that the “invisible-hand” of safety will tolerate negative externalities caused by the driving business imperatives of the commercial aviation industry. Organizational decisions by airlines are shaped by economic, political, and operational impediments, all of which may directly or indirectly impact the overall safety of flight operations.² Safety, therefore, behaves as a cyclical, socio-politico-economic variable, as demonstrated throughout the history of government safety regulation. Therefore, it is not surprising to observe that airline deregulation, which first landed in Canada under the National Transportation Act of 1987,³ had adverse consequences on aviation safety.

Destructive competition, unleashed by the sudden liberalization of the market, forced many air carriers into financial distress and self-destructive practices to remain profitable.⁴ In fact, many carriers suffering from anemic profitability had no choice but to curtail safety costs, such as aircraft maintenance, fleet and equipment upgrades, aircrew training, salaries, etc.⁵ While eco-

¹ KATHLEEN M. SUTCLIFFE & KARL E. WEICK, *MANAGING THE UNEXPECTED* 40 (2001); Georgios Leloudas, *Legal Aspects of Aviation Risk Management* (Aug. 2003) (unpublished LL.M. thesis, McGill University) (on file with the McGill Library, McGill University).

² James Reason, *Understanding Adverse Events: Human Factors*, 4 *INT’L J. QUALITY IN HEALTH CARE* 80 (1995).

³ JOHN CHRISTOPHER & JOSEPH P. DION, *TRANSP. CAN., THE CANADIAN AIRLINE INDUSTRY* (2002), <http://publications.gc.ca/Collection-R/LoPBdP/CIR/892-e.htm> [<http://perma.cc/UBL6-SCJH>]. The National Transportation Act of 1987 has since been repealed and replaced by the Canada Transportation Act, S.C. 1996, c 10.

⁴ PAUL STEPHEN DEMPSEY & LAURENCE E. GESELL, *AIRLINE MANAGEMENT STRATEGIES FOR THE 21ST CENTURY 193–97* (3d ed. 2012) [hereinafter *AIRLINE MANAGEMENT STRATEGIES*].

⁵ PAUL STEPHEN DEMPSEY & ANDREW R. GOETZ, *AIRLINE DEREGULATION AND LAISSEZ-FAIRE MYTHOLOGY* 298 (1992).

conomic deregulation did not intend to deregulate aviation safety *per se*,⁶ the industry's debilitated financial health⁷ inevitably contributed to a series of deadly accidents in the 1980s and early-1990s. Since aviation safety cannot be divorced from the financial health of a carrier,⁸ many airlines struggled to adequately balance profitability and their passengers' safety.⁹ As such, the "economic strains created by the intensive pricing competition unleashed by deregulation . . . had a deleterious effect on carrier safety."¹⁰

In response to the deadly crash of Air Ontario Flight 1363 in Dryden (Ontario, Canada),¹¹ the Canadian government launched the Commission of Inquiry into the crash, lead by Justice Virgil P. Moshansky (also referred to as "The Moshansky Commission").¹² The objective of this public inquiry was to determine how organizational factors may have contributed to the accident and, more importantly, to determine how the industry's unhealthy economics and poor safety culture were becoming a serious threat to the traveling public. Justice Moshansky submitted 191 aviation safety recommendations for the entire

⁶ AIRLINE MANAGEMENT STRATEGIES, *supra* note 4, at 300.

⁷ DEMPSEY & GOETZ, *supra* note 5, at 225 ("[D]eregulation has brought about cutthroat pricing, a miserable level of industry profitability, insufficient capital to reequip aging fleets, and a deterioration of service. Since deregulation began, the airline industry has suffered the worst economic losses in its history.").

⁸ *Id.* at 304.

⁹ Paul Stephen Dempsey, *The Rise and Fall of the Civil Aeronautics Board—Opening Wide the Floodgates of Entry*, 11 TRANSP. LAW J. 91, 167 (1980).

¹⁰ DEMPSEY & GOETZ, *supra* note 5, at 305.

¹¹ René David-Cooper, *Landing Safety Management Systems (SMS) in Aviation: The Implementation of Annex 19 for Commercial Air Carriers in Canada*, 40 ANNALS AIR & SPACE L. 445, 451 (2015). The accident happened on "March 10th, 1989, when Air Ontario Flight 1363 crashed shortly after takeoff in Dryden, Ontario, killing twenty-four people onboard. The pilots had taken off without proper de-icing of the aircraft's wings. Wing contamination significantly reduced aerodynamic lift and did not allow the Fokker F-28-1000 Fellowship to remain airborne after departure. Earlier that day, Flight 1363 had landed in Dryden during a snowstorm to refuel with a full load of passengers. The pilots could not shut down their engines because the company, as a cost-saving measure, had not fixed the aircraft's Auxiliary Power Unit (APU) to restart its turbine engines and did not provide any ground start facilities at the Dryden Regional Airport (CYHD). With a company policy forbidding de-icing while the aircraft's engines were running, the Captain ignored the risks as he attempted takeoff . . . to avoid stranding the entire flight crew and passengers at the company's great expense. As a result, organizational decisions by Air Ontario condemned Flight 1363 to a tragic fate." *Id.*

¹² HON. JUSTICE VIRGIL P. MOSHANSKY, COMMISSION OF INQUIRY INTO THE AIR ONTARIO CRASH AT DRYDEN ONTARIO-FINAL REPORT (1992) (Can.).

aviation industry after a twenty-four-month investigation and concluded for the first time in the history of aviation accident investigations that *organizational* factors contributed to the accident. This report paved the way for the adoption of Safety Management Systems (SMS) for airlines in Canada and around the world, as there was an evident need to manage the impact of organizational decisions on safety levels in the commercial air transportation industry.

The International Civil Aviation Organization (ICAO) defines SMS as a “systematic approach to managing safety, including the necessary organizational structures, accountabilities, policies[,] and procedures.”¹³ When Canada announced in 2005 that SMS would become a regulatory requirement for all Canadian-registered air service providers,¹⁴ it became the first and only ICAO Member State to announce implementation of SMS.¹⁵ Since ICAO did not adopt Annex 19 to the Chicago Convention¹⁶ until 2013 to address Standards and Recommended Practices (SARPs)¹⁷ for SMS, Canada led the international aviation com-

¹³ Int’l Civil Aviation Org. [ICAO], *Safety Management Manual (SMM)*, at 1–2, ICAO Doc. 9859 (3d ed. 2013).

¹⁴ TRANSPORT CANADA’S ENFORCEMENT OF AIR SAFETY REGULATIONS AND IMPLEMENTATION OF SAFETY MANAGEMENT SYSTEMS (2009) (Can.) [hereinafter TC’S ENFORCEMENT OF AIR SAFETY REGULATIONS]; OFFICE OF THE AUDITOR GEN. OF CAN., REPORT OF THE AUDITOR GENERAL OF CANADA TO THE HOUSE OF COMMONS: OVERSIGHT OF CIVIL AVIATION—TRANSPORT CANADA 8 (2012) [hereinafter OVERSIGHT OF CIVIL AVIATION REPORT]; TRANSP. CAN., SAFETY MANAGEMENT SYSTEMS FOR SMALL AVIATION OPERATIONS: A PRACTICAL GUIDE TO IMPLEMENTATION 1 (2004) [hereinafter SAFETY MANAGEMENT SYSTEMS GUIDE]; Canadian Aviation Regulations, SOR/1996-433 § 107.01. Under SMS, the term “service provider” refers to air carriers, flight training units, air traffic control services, airports, and aircraft maintenance organizations conducting maintenance for air operators subject to SMS regulations.

¹⁵ *An Act to Amend the Aeronautics Act and to Make Consequential Amendments to Other Acts: Hearing on Bill C-6 Before the Standing Comm. on Transp., Infrastructure & Cmty., 39th Parl., 40th Meeting* (2007) (Can.) [hereinafter *Hearing on Bill C-6, 40th Meeting*]; René David-Cooper, *Implementing Safety Management Systems (SMS) in Canada: Is Flight Safety on a Collision Course with the Forced Disclosure of SMS Data?*, 15 ISSUES AVIAT. L. & POL’Y 77, 78 (2015).

¹⁶ ICAO, Convention on International Civil Aviation, Annex 19 Safety Management Standards and Recommended Practices (Nov. 14, 2013) [hereinafter Annex 19].

¹⁷ ICAO, Assembly Res. 36-13, *Consolidated Statement of Continuing ICAO Policies and Associated Practices Related Specifically to Air Navigation*, ICAO Doc. 9902 (2007) [hereinafter Assembly Res. 36-13]. Under Annex 19, Standards are compulsory and Recommended Practices are merely a desired level of performance established as a common State endeavor. SARPs can be considered as “soft law” since they are not, per se, part of the Chicago Convention.

munity in the deployment of the first ever SMS in civil aviation.¹⁸ Without the benefit of other countries' experiences, it was expected that some difficulties would be encountered during this innovative transition.¹⁹ This article will scrutinize the implementation of SMS throughout Canadian commercial aviation. Although the theoretical benefits of SMS are not contested, there is strong evidence that Canada has struggled and continues to struggle with the implementation of SMS in aviation. Secondly, Transport Canada (TC) has seemingly failed to fully uphold its oversight responsibilities under this new safety regime. As such, it will be argued that Canada's implementation of SMS has effectively *deregulated* flight safety in certain areas of its aviation industry. While this article will exclusively focus on Canada, it will offer invaluable insight to other ICAO Member States who wish to avoid similar transitional problems during the upcoming rollout of SMS worldwide. For the purpose of this article, five informants employed by different Canadian operators who participated in the transition to SMS were interviewed in 2014 to obtain a practical assessment of this new safety regime:

- *Informant #1* manages a certified airport and a flight training unit (FTU). Informant #1 is also a TC flight examiner.
- *Informant #2* previously worked as a safety officer for an airline operating in northern Canada.
- *Informant #3* is a TC flight examiner. Informant #3 also manages a certified airport and is a part-time captain for a charter flight company operating in Canada and in the United States.
- *Informant #4* is a safety officer for an airline operating in northern Canada.
- *Informant #5* works for a Canadian airline operating internationally.

To preserve anonymity and confidentiality, these operators will be referred to as "informants" throughout this article.

¹⁸ TRANSP. CAN., REPORT Z 5000-7-1 U, AVIATION SAFETY PROGRAM MANUAL FOR THE CIVIL AVIATION DIRECTORATE 6 (2012), http://www.coscap-na.com/sites/default/files/aviation-safetymanual-issue2_0.pdf [<http://perma.cc/7A4B-SCPG>].

¹⁹ OVERSIGHT OF CIVIL AVIATION REPORT, *supra* note 14, at 28.

II. BACKGROUND—THE CHAOTIC IMPLEMENTATION OF SMS IN CANADA

A. THE REGULATORY SCOPE OF SMS: IS THE TRAVELING PUBLIC AT RISK?

Before examining how Canadian operators implemented SMS, it is necessary to explain the structure of the Canadian aviation industry. Currently, Canadian commercial air carriers transporting passengers are divided into three main categories:

- *Air Taxi Operators (703 carriers)* are small carriers that can carry up to nine passengers inclusively in an aircraft with a MTOW²⁰ of 19,000 pounds or less.²¹
- *Commuter Operators (704 carriers)* are carriers that can carry between ten and nineteen passengers inclusively²² in a multi-engine aircraft with a MTOW of 19,000 pounds or less, or a turbo-jet-powered airplane that has a maximum zero fuel weight of 50,000 pounds.²³
- *Airline Operators (705 carriers)* are carriers authorized to operate aircraft with a MTOW of more than 19,000 pounds *or* that can carry twenty or more passengers.²⁴ These include large airlines, such as Air Canada, First Air, Porter Airlines, WestJet, Sunwing Airlines, Air Transat, etc.

In Canada, SMS was progressively introduced and implementation deadlines varied depending on the carrier's type of operation. The then existing 705 carriers were required to have SMS by 2008,²⁵ and new airlines applying for a 705 operator's certifi-

²⁰ MTOW is the maximum takeoff weight of an aircraft when fully loaded with fuel, cargo, and passengers.

²¹ Canadian Aviation Regulations, SOR/1996-433 § 107.01.

²² *Id.*

²³ *Id.* § 704.01.

²⁴ *Id.* § 705.01.

²⁵ *Hearing on Bill C-6*, 40th Meeting, *supra* note 15, at 1540 (statement of Daniel Maurino, Coordinator, Flight Safety and Human Factors, ICAO: "Transport Canada is leading the world aviation community in the deployment of SMS in civil aviation."); *Study: Transport Canada's Enforcement of Air Safety Regulations and Implementation of Safety Management Systems for the Aviation Industry, Before the Standing Comm. on Transp., Infrastructure & Cmty.*, 40th Parl., 39th Meeting (2009); OVERSIGHT OF CIVIL AVIATION REPORT, *supra* note 14, ch. 5 at 7 ("Canada was the first country in the world to regulate the implementation of SMS in the aviation industry. Since 2008, Transport Canada has required air operators whose aircraft carry [twenty] passengers or more and their maintenance organizations (referred to as large civil aviation companies) to use SMS in managing their safety risks."); OFFICE OF AUDITOR GEN. OF CAN., REPORT TO THE HOUSE OF COMMONS: OVERSIGHT OF AIR TRANSPORTATION SAFETY, ch. 3 at 10 (2008).

cate were obliged to have SMS starting in 2005.²⁶ As such, SMS was fully operational for every large airline as of 2008. Large airports,²⁷ Approved Maintenance Organizations (AMOs) conducting maintenance for carriers subject to SMS regulations,²⁸ and Canada's air traffic provider,²⁹ NavCanada, were also required to have SMS by 2008.³⁰ The smaller 703 and 704 operators (referred to in the industry as "small carriers," "bush flying operators," or "small operators")³¹ were initially scheduled to initiate the implementation of SMS in 2008, but it was postponed indefinitely due to the significant implementation problems encountered with 705 carriers at the time of this writing.³² Despite this, a minority of 703 and 704 carriers have started adopting SMS on a voluntary basis.

Including five large carriers that account for 60% of revenue-generating passenger miles traveled,³³ thirty-nine 705 carriers operate in Canada³⁴ and carry 95% of the entire market of traveling passengers.³⁵ The remainder of the industry is composed of 538 air taxi operators and eighty-nine commuter carriers.³⁶ Considering that Canadian air carriers transport close to 79 million domestic passengers every year,³⁷ the current scope of SMS

²⁶ SAFETY MANAGEMENT SYSTEMS GUIDE, *supra* note 14, at 2. Starting in 2005, new 705 carriers applying for an operator's certificate were obliged to implement SMS as a necessary condition to obtain their certificate. This applied to Porter Airlines, which began operating in 2006, for example, whereas existing airlines were granted an exemption until 2008.

²⁷ Canadian Aviation Regulations, SOR/1996-433 §§ 107.01, 302.01, 302.500.

²⁸ *Id.* §§ 573.01, 573.32.

²⁹ *Id.* §§ 804.01, 805.05.

³⁰ TC'S ENFORCEMENT OF AIR SAFETY REGULATIONS, *supra* note 14.

³¹ SAFETY MANAGEMENT SYSTEMS GUIDE, *supra* note 14, at 1.

³² Allison Padova, *Les systèmes de gestion de la sécurité: une meilleure approche pour les transports?*, REPORT 2013-77-F BIBLIOTHÈQUE DU PARLEMENT. SERVICE D'INFORMATION ET DE RECHERCHE PARLEMENTAIRES, <http://www.parl.gc.ca/content/lop/ResearchPublications/2013-77-f.pdf> [<http://perma.cc/99U7-VT7Z>]; Transp. Safety Bd. of Can., *Air Safety Management Systems*, GOV'T OF CAN. (2013), <http://www.bst-tsb.gc.ca/eng/medias-media/videos/surveillance-watchlist/aviation/aviation-video-04.asp> [<http://perma.cc/6LA7-BULT>].

³³ OVERSIGHT OF CIVIL AVIATION REPORT, *supra* note 14, at 15.

³⁴ TRANSP. CAN., TRANSPORTATION IN CANADA—COMPREHENSIVE REVIEW 47 (2011), https://www.tc.gc.ca/media/documents/policy/Transportation_in_Canada_2011.pdf [<http://perma.cc/V2QF-96ST>].

³⁵ TC'S ENFORCEMENT OF AIR SAFETY REGULATIONS, *supra* note 14.

³⁶ SAFETY MANAGEMENT SYSTEMS GUIDE, *supra* note 14, at 47.

³⁷ Statistics Canada, *Table 401-0044—Air Passenger Traffic and Flights (Annual Numbers)*, GOV'T OF CAN. (2015), <http://www5.statcan.gc.ca/cansim/a05?lang=eng&id=4010044&pattern=4010044&searchTypeByValue=1&p2=35> [<http://perma.cc/R77J-X2F4>].

does not protect 5% of passengers traveling on 703 and 704 carriers. This leaves approximately 3.9 million domestic passengers at risk annually every time they board a small carrier that is not required to have SMS.³⁸ All of the informants expressed concern about the continued exemption of smaller air taxis and commuter operators from the scope of SMS. These operators are the ones that probably require SMS the most. As the Transportation Safety Board of Canada (TSB) has noted, “91% of all air accidents and 93% of all fatalities can be attributed to the commuters and air taxi operators.”³⁹ To explain these disturbing statistics, the TSB observed that:

Small operators typically face some interesting challenges. They’re flying into more remote areas that may have little or no infrastructure. They often use aircraft that are a little older, that may not have sophisticated navigational or warning systems. The crews will likely be on the lower end of the experience scale.⁴⁰

In 2013, air taxis and commuter operators accounted for nineteen and five fatalities respectively, whereas Canadian airlines did not suffer any casualties.⁴¹ Air taxi operations have accounted for 175 deaths in the last ten years, which is equivalent to 65% of all commercial aviation fatalities.⁴² Given that small operators represent the greatest risk to aviation safety,⁴³ why are they not yet required to implement SMS?

³⁸ TCS ENFORCEMENT OF AIR SAFETY REGULATIONS, *supra* note 14.

³⁹ *Air Safety Management Systems*, *supra* note 32.

⁴⁰ *Id.*

⁴¹ TRANSP. SAFETY BD. OF CAN., STATISTICAL SUMMARY, AVIATION OCCURRENCES 2013 (Jan. 24, 2014), <http://www.bst-tsb.gc.ca/eng/stats/aviation/2013/ssea-sao-2013.asp> [<http://perma.cc/9GX7-NLRA>]. Airlines suffered six accidents, whereas commuter operators and air taxis accounted for three and eighteen accidents respectively. Airlines suffered no fatal accidents, whereas air taxis and commuters had five and one fatal accidents respectively.

⁴² News Release, Transp. Safety Bd. of Can., TSB to Study Risks Associated with Air Taxi Operations (Nov. 19, 2014), <http://www.bst-tsb.gc.ca/eng/mediasmedia/communiqués/aviation/2014/20141119.asp> [<http://perma.cc/SN99-QZWZ>]; *Air Taxis Prompt Ottawa Probe After 175 Crash Deaths*, CBC NEWS (Nov. 19, 2014), <http://www.cbc.ca/news/business/air-taxis-prompt-ottawa-probe-after-175-crash-deaths-1.2840659> [<http://perma.cc/H9NS-HSSE>].

⁴³ Bruce Champion-Smith, *Safety Cuts Risk Air Disaster: Judge*, TORONTO STAR (Mar. 1, 2007), http://www.thestar.com/news/2007/03/01/safety_cuts_risk_air_disaster_judge.html [<http://perma.cc/B3K3-ADWE>].

B. BUSINESS VS. COMPLIANCE: DOES SAFETY HAVE A PRICE?

Although the TSB has recommended that SMS should apply to every operator regardless of its size,⁴⁴ we must ask ourselves if such a regime is even appropriate for marginal short-line operators, such as 703 and 704 carriers,⁴⁵ which have minimal organizational structures.⁴⁶ These smaller carriers are an essential component of Canada's transportation network because they serve many isolated communities in northern Canada that cannot be reached by roads or marine transportation.⁴⁷ Many of these operations are relatively small in size; some carriers are operated by families utilizing very informal processes; others are one-person operations where a single individual is responsible for everything from management to ticket sales and from piloting to servicing the aircraft.

Even if the complexity of implementing SMS were commensurate with the size and complexity of each operator,⁴⁸ some of the informants⁴⁹ concluded that 703 and 704 operators might not have the resources or the expertise and knowledge to handle the workload of SMS.⁵⁰ While large airlines can accommodate large safety expenses, small carriers operating just a few, or even one aircraft have a very slim profit margin and can struggle at times to make safe business decisions. Justice Virgil P. Moshansky, who led the Commission of Inquiry into the Air Ontario Crash at Dryden,⁵¹ stated that it would be a difficult task for small "cash-strapped" carriers to monitor their own safety levels as part of SMS.⁵² We can conclude that without profit, there can be no safety in the long run.⁵³ The Dryden experience shows

⁴⁴ TRANSP. SAFETY BD. OF CAN., WATCHLIST FACT SHEET—MULTI-MODAL: SAFETY MANAGEMENT AND OVERSIGHT (Nov. 26, 2014), <http://www.tsb.gc.ca/eng/surveillance-watchlist/multi-modal/2014/multimodal.asp> [<http://perma.cc/2WCH-DJFF>] [hereinafter WATCHLIST FACT SHEET—MULTI-MODAL].

⁴⁵ Mark Winfield, *Lac-Megantic: The Case for a Judicial Inquiry*, MONTREAL GAZETTE (Jan. 1, 2014), <http://marksw.blog.yorku.ca/2013/12/29/lac-megantic-the-case-for-a-judicial-inquiry-2/> [<http://perma.cc/C4VU-UMLH>].

⁴⁶ Padova, *supra* note 32.

⁴⁷ Sarah Schmidt, *Danger Overhead: Why Transport Canada Cuts are a Red Flag for Small Commercial Aviation Safety*, OCANADA.COM (Mar. 31, 2013), <http://o.canada.com/news/national/danger-overhead-why-transport-canada-cuts-are-a-red-flag-for-small-commercial-aviation-safety> [<http://perma.cc/6BZG-PX4R>].

⁴⁸ Canadian Aviation Regulations, SOR/1996-433 § 107.04.

⁴⁹ Informants #1, #2, #3 and #4.

⁵⁰ Schmidt, *supra* note 47.

⁵¹ MOSHANSKY, *supra* note 12.

⁵² Champion-Smith, *supra* note 43.

⁵³ DEMPSEY & GOETZ, *supra* note 5, at 274.

that when a State delegates the regulatory costs of safety to the aviation industry, there is “an air of Greek tragedy about the interaction of the de-regulatory *zeitgeist* with the desperate scramble for corporate profitability.”⁵⁴ Given that even large 705 carriers struggle to operate SMS, one must wonder if it is even feasible to safely impose sophisticated safety management systems on every small operator. The complexity of SMS could in fact exacerbate the tragic statistics associated with these carriers. Moreover, most flight schools across the country do not even teach SMS principles to their student pilots, which creates a problem later on as the majority of active commercial pilots do not understand how to operate under SMS.⁵⁵ Small carriers might “expend significant resources trying to make sense of diverse legal requirements, and might find it more difficult to behave virtuously.”⁵⁶ Hence, Canadian authorities will need to tailor SMS to the needs and operational capabilities of smaller carriers.

Even if risk management would ultimately save money for Canadian carriers with a progressive reduction of accidents over time,⁵⁷ most informants agreed that the implementation of SMS has a considerable initial start-up cost and requires expensive ongoing resources to remain operational, such as additional employees to monitor SMS databases and ensure that documentation is in order.⁵⁸ Not every carrier will have the same resources or capabilities to maintain compliance with SMS. For instance, Informant #1 was required to remove himself/herself from flying duties and sacrifice much of his/her managerial role simply to understand, implement, and operate SMS. Instead of physically inspecting the airport premises and monitoring the actual safety of the company, he/she had to spend much of his/her day in an office filling out cumbersome paperwork and ensuring that the company’s documentation was compliant with SMS regulations. Informant #3 even stated that SMS might be economically unfeasible for the average 703 and 704 operator. In

⁵⁴ Robert G. Evans et al., *High Reliability Versus High Autonomy: Dryden, Murphy and Patient Safety*, 1 HEALTHC. POLICY 12, 15 (2006).

⁵⁵ Informant #1.

⁵⁶ Richard Johnstone, *Putting the Regulated Back into Regulation*, 26 J. L. & SOC’Y 378, 385 (1999).

⁵⁷ CIVIL AVIATION AUTHORITY OF NEW ZEALAND, AVIATION SAFETY MANAGEMENT SYSTEM TRAINING REQUIREMENT 14 (2013), <http://www.caa.co.za/SMS%20Documents/SMS%20Training.pdf> [<http://perma.cc/NP5G-J38T>].

⁵⁸ *Id.* at 15.

difficult financial times, it is hard to imagine a small carrier investing money into SMS instead of spending it on the execution of lucrative flying contracts. In reality, the smaller carrier's priority is to maximize its revenues and not invest in costly safety expenses.⁵⁹

While large airlines can afford to create an entire safety department monitoring SMS, smaller operators might not have the resources to do so. During a difficult financial year, Informant #1 was forced to lay off the company's safety officer to remain in business, leaving it difficult to imagine how small carriers would be able to handle the financial burden of SMS. Informant #1 concluded that while you cannot put a price on safety, you can definitely put one on SMS. TC has stated that operators will have the freedom to utilize the most cost-effective SMS methods.⁶⁰ In light of Informant #1's experience, does that mean that safety will become an expendable commodity for small carriers? Recall that SMS was developed for large-scale industries characterized as "High-Reliability Organizations" (HROs)⁶¹ such as space exploration, nuclear plants, chemical manufacturers, deepwater oil drilling, etc.⁶² While major airlines may have a similar organizational structure to such industries, small carriers do not have such a structure and will struggle to implement the current SMS framework. Informant #3 concluded that SMS could lead to the demise of air taxis and commuter operators, which would have considerable consequences for remote communities in Canada who depend on these operators for transportation and essential supplies.

Another problem is that "[s]ome smaller operators may not commit to the cultural change that is necessary to successfully integrate safety risk management principles and processes into their business operations."⁶³ Informant #3 stated that carriers will likely prioritize their resources toward running their opera-

⁵⁹ Wayne Benedict, *Canada's Railway Safety Regulatory Regime: Past, Present & Future*, 34 *TRANSP. L. J.* 147, 164 (2007).

⁶⁰ Valance Jones, *A Serious Incident is Looming, Pilot Warns*, OTTAWA COMMUNITY NEWS (June 17, 2006), <http://www.ottawacommunitynews.com/news-story/2234772-a-serious-incident-is-looming-pilot-warns/> [<http://perma.cc/5M2L-YHW4>].

⁶¹ Kathleen Fox, *How Has the Implementation of Safety Management Systems (SMS) in the Transportation Industry Impacted on Risk-Management and Decision-Making?* (June 2009). (unpublished Master's thesis, Lund University) (on file with author).

⁶² JAMES G. MARCH, *A PRIMER ON DECISION MAKING: HOW DECISIONS HAPPEN* 48 (1994); Fox, *supra* note 61, at 7.

⁶³ CIVIL AVIATION AUTHORITY OF NEW ZEALAND, *supra* note 57, at 15.

tions instead of spend their time filling out hazard identification reports. A perfect example is the 2007 crash of a Transwest Air Beech King Air in Saskatchewan, which killed the pilot and injured three other individuals onboard.⁶⁴ Even though Transwest Air had implemented SMS and identified on several occasions unsafe practices by its pilots, it failed to use its SMS adequately and utilize effective corrective actions to prevent such an accident.⁶⁵ This illustrates how smaller airlines manage the pressures of operating a fast-paced business in small markets.⁶⁶ Ultimately, flying duties have a priority over paperwork.

Indeed some operators view SMS as a superficial paper-pushing exercise that interferes with actual operations.⁶⁷ To counter this cynical approach, the Federal Aviation Administration (FAA) has recommended that small carriers should utilize straightforward systems with quick and effective methods, striking a balance between formal (documented) and informal systems.⁶⁸ Therefore, TC will need to invest considerable efforts to provide practical, cost-effective guidance and convince the industry that SMS will provide carriers with a downstream gain for their business.

C. IS SMS A “SERIOUSLY MISGUIDED SYSTEM”?

All informants stated that the transition to SMS was chaotic and lacked proper guidance from TC.⁶⁹ Informant #1 asserted that his/her experience with SMS equates to a “*Seriously Misguided System.*” A phased implementation with four stages was introduced⁷⁰ to progressively adopt all ICAO standards, but the assistance provided by authorities to Canadian carriers was said

⁶⁴ TRANSP. SAFETY BD. OF CAN., AVIATION INVESTIGATION REPORT A007C0001: COLLISION WITH TERRAIN, TRANSWEST AIR, BEECH A100 KING AIR C-GFFN, SANDY BAY, SASKATCHEWAN, 07 JANUARY 2007 (2013) [hereinafter REPORT A007C0001].

⁶⁵ *Id.*

⁶⁶ *Id.*

⁶⁷ Neil Gunningham & Darren Sinclair, *Organizational Trust and the Limits of Management-Based Regulation*, 43 L. & SOC'Y REV. 865, 880 (2009).

⁶⁸ 1 AIRPORT COOP. RESEARCH PROGRAM, SAFETY MANAGEMENT SYSTEMS FOR AIRPORTS 6–7 (2007), http://onlinepubs.trb.org/onlinepubs/acrp/acrp_rpt_001a.pdf [<http://perma.cc/Z4RK-7MZ9>].

⁶⁹ Padova, *supra* note 32, at 6.

⁷⁰ TRANSP. CAN., TP 14343E IMPLEMENTATION PROCEDURES GUIDE FOR AIR OPERATORS AND APPROVED MAINTENANCE ORGANIZATIONS 3–4 (2005), <https://www.tc.gc.ca/eng/civilaviation/publications/tp14343-guide-3084.htm> [<http://perma.cc/C9SX-DVRE>].

to be insufficient and unclear.⁷¹ TC struggled to keep up with the industry's implementation of SMS and postponed implementation deadlines again and again, thus seriously damaging its credibility. The TSB has concluded that safety can be compromised if there are unclear implementation deadlines and improper milestones for safety audit inspections;⁷² these characteristics define Canada's experience with SMS implementation. Although the Staff Instruction (SI) No. SUR-001⁷³ provided TC inspectors with instructions on how to oversee the implementation of SMS, the Auditor General of Canada (AGC) concluded that these instructions insufficiently stated the minimum standards and documentation required for SMS compliance.⁷⁴ This is because SI No. SUR-001 establishes a vague policy with subjective guidelines and does not provide TC or carriers with clear and objective legal standards.⁷⁵ SMS policies were amended numerous times and consequently lacked clarity and consistency. Every informant stated that standards varied enormously across the country. Informant #1 stated that while one carrier would find its 300-page SMS manual being rejected without any feedback, another carrier's 10-page manual would be approved, even though both carriers had a similar operational structure.⁷⁶

The AGC also concluded that most TC inspectors did not fully understand the SMS methodology and, therefore, did not conduct their duties according to the recommended surveillance methodology.⁷⁷ It was further found that inspectors did not have adequate training or sufficient experience, or both, with SMS to actually provide accurate advice to carriers across the country.⁷⁸ In fact, only 40% of inspectors had received SMS training by

⁷¹ ICAO, *Report of the Seventeenth Meeting of the AFI Planning and Implementation Regional Group*, ICAO Doc. APIRG/17 (2010).

⁷² News Release, Transp. Safety Bd. of Can., Effective Oversight Vital to Aviation Safety, Says the TSB (Nov. 10, 2009), http://www.tsb.gc.ca/eng/medias-media/communiqués/aviation/2009/comm_a07a0134.asp [<http://perma.cc/4Q9N-8DNQ>].

⁷³ TRANSP. CAN., STAFF INSTRUCTION NO. SUR-001, SURVEILLANCE PROCEDURES (2010) [hereinafter SURVEILLANCE PROCEDURES].

⁷⁴ OVERSIGHT OF CIVIL AVIATION REPORT, *supra* note 14, at 19, 29.

⁷⁵ SURVEILLANCE PROCEDURES, *supra* note 73. The instruction orders TC inspectors not to make subjective statements, suggestions, or recommendations in the audit reports for the SMS of carriers.

⁷⁶ Informant #1.

⁷⁷ OVERSIGHT OF CIVIL AVIATION REPORT, *supra* note 14, at 21.

⁷⁸ *Id.*

2011.⁷⁹ These criticisms were evident in the interviews with informants. For example, Informant #2 was told by an inspector to consult *Wikipedia* to learn about SMS. While carriers were struggling to understand how to implement SMS, it was clear for some informants that even TC itself did not understand SMS or how it should be adapted to aviation. Informants noted that TC was learning about SMS at the same time the airlines were trying to implement it, which caused significant implementation disparities across the industry. Coupled with a lack of proper investigative methodology, TC inspectors were struggling to provide carriers with official documents stating the minimum standards for obtaining the approval of their SMS.⁸⁰ Consequently, TC was not able to provide constructive feedback to assist carriers in introducing SMS into their operations. Overall, informants found it difficult to afford SMS any credibility because of TC's confusion throughout the implementation process. How can the industry buy into such regulation if the regulator does not seem to understand what it is doing? SMS was not sold well to the industry. It was prematurely launched and inadequately supported. As a result, the industry has struggled to invest any trust into this new regime.

III. TRANSPORT CANADA'S DEREGULATION OF FLIGHT SAFETY: A DANGEROUS FLIGHT PATH

A. TRANSPORT CANADA'S FAILURE TO UPHOLD ITS OVERSIGHT RESPONSIBILITIES

Paul Dempsey has eloquently stated: "Law without compliance and enforcement is like poetry—it is pleasing to the ear, but has little to do with the practical world in which we live."⁸¹ He further asserted that ubiquitous surveillance of the industry serves the public interest by ensuring safe and dependable air services.⁸² The Moshansky Inquiry insisted that enforcement is a key element of an effective governmental safety program.⁸³ In

⁷⁹ *Id.* at 23.

⁸⁰ *Id.* at 22.

⁸¹ Paul Stephen Dempsey, *Compliance & Enforcement in International Law: Achieving Global Uniformity in Aviation Safety*, 30 N.C. J. INT'L L. & COM. REG. 1, 2 (2004).

⁸² PAUL STEPHEN DEMPSEY & LAURENCE E. GESELL, PUBLIC POLICY AND THE REGULATION OF COMMERCIAL AVIATION 98 (2013) [hereinafter PUBLIC POLICY].

⁸³ The Honorable Virgil P. Moshansky & Donald L. Van Dyke, *The Role of the Judiciary in Aviation Safety: The Inside Story and Legacy of Dryden* (Oct. 16, 2007) (presented at the International Civil Aviation Organization), <http://www.system->

accordance with articles 12 and 37 of the Chicago Convention,⁸⁴ States have the obligation to ensure the safety oversight of international transportation conducted within its airspace.⁸⁵ Jiefang Huang argued that State oversight is an essential component of the *erga omnes* nature of safety as an international law obligation.⁸⁶ Since “the safety oversight function of one State will have impact upon another State,”⁸⁷ there exists a natural relationship between effective oversight and humanitarian considerations.

Under Annex 19, Canada must develop a framework for a State Safety Programme (SSP),⁸⁸ which complements existing oversight duties. Similar to an air carrier’s SMS requirements, it must develop a legislative framework, a safety policy for the industry, industry risk management measures, safety assurance programs and a State safety promotion program. In other words, an SSP is a government’s internal safety management system overseeing the entire industry’s safety. One of the fundamental objectives of an SSP is that it must provide appropriate State oversight,⁸⁹ ensuring continued compliance with national regulations established in accordance with ICAO SARPs. It must provide surveillance activities and safety monitoring through 1) paperwork audits and 2) physical inspections.⁹⁰

Despite the fact that SMS was intended to introduce an *additional* layer of safety to existing oversight duties,⁹¹ Canada canceled its National Audit Program (NAP) in 2006,⁹² which previously provided for operational and physical inspections of

safety.org/chapters/sites/canada/meetings/presentations/RAeSLecture_JudicialRolesE.pdf [http://perma.cc/Y6CW-TTYU].

⁸⁴ ICAO, Convention on International Civil Aviation (Chicago Convention) art. 12, 37, Dec. 7, 1944, 15 U.N.T.S. 295 [hereinafter Chicago Convention].

⁸⁵ *Id.*; ICAO, *Safety Oversight Manual—Part A: The Establishment & Management of a State’s Safety Oversight System*, ICAO Doc. 9734-AN/959 (2d ed. 2006).

⁸⁶ Jiefang Huang, *Aviation Safety, ICAO and Obligations Erga Omnes*, 8 CHIN. J. INT. L. 63, 63–79 (2009); Mikołaj Ratajczyk, *Regulatory Framework for a “Performance-Based” Approach to Air Safety Management in the European Union*, 36 AIR SPACE L. 401, 402 (2011).

⁸⁷ Huang, *supra* note 86, at 73; JIEFANG HUANG, AVIATION SAFETY THROUGH THE RULE OF LAW: ICAO’S MECHANISMS AND PRACTICES 5 (2009).

⁸⁸ Annex 19, *supra* note 16.

⁸⁹ IMPLEMENTING SAFETY MANAGEMENT SYSTEMS IN AVIATION 261 (Alan J. Stolzer et al., eds., 2011).

⁹⁰ Assembly Res. 36-13, *supra* note 17, at 4–7.

⁹¹ *Hearing on Aviation Safety & Security Before the Standing Comm. on Transp., Infrastructure & Cmty.*, 40th Parl., 7th Meeting (2010) (Can.) [hereinafter *Hearing on Safety & Security*].

⁹² TRANSP. CAN., CIVIL AVIATION DIRECTIVE (CAD) NO. 39, AVIATION ENFORCEMENT—SAFETY MANAGEMENT SYSTEMS (2005).

airlines, including airplane maintenance inspections, pilot check-rides, unannounced ramp checks, etc. Subsequently, TC ordered its inspectors to cancel all enforcement actions and terminate any ongoing investigations concerning SMS certificate holders.⁹³ Instead, pre-announced paperwork assessments and program validation inspections (PVIs) focusing on the airline's SMS are now the primary oversight tools utilized by TC.⁹⁴ As part of SMS, TC has openly stated that "the responsibility for regulatory oversight will now rest with the aviation industry and that [TC] will conduct audits based on risk factors."⁹⁵ A Safety Management Advisor at ICAO stated before the Parliament of Canada that replacing hands-on inspections with paperwork audits would diminish the industry's overall safety, since this would not respect ICAO's requirement to continue providing scheduled and random safety inspections.⁹⁶ Several informants were convinced that the level of safety in Canada had been drastically reduced since the inception of SMS as traditional inspections in the past ensured carriers were conforming to safety regulations.⁹⁷ Based on the cancellation of the NAP, it would seem that since TC inspectors have begun conducting paperwork SMS audits instead of physically inspecting airplanes, the regulator has not been providing effective responses to actual industry hazards.

Under TC's current safety regime, the Canadian Federal Pilots Association (CFPA) stated that the shift toward paper-based oversight duties has left the traveling public vulnerable to a major aviation accident.⁹⁸ Safety is essential to ensuring that aviation remains a sustainable and efficient mode of

⁹³ Moshansky & Van Dyke, *supra* note 83.

⁹⁴ Sarah Schmidt, *Are Big Jets as Safe as We Think? Some Canadian Experts Say No*, OCANADA.COM (Apr. 1, 2013), <http://o.canada.com/uncategorized/are-big-jets-as-safe-as-we-think-some-canadian-experts-say-no> [<http://perma.cc/YZJ5-6EHQ>].

⁹⁵ Kelly McParland, *Transport Canada Fears Ending Regular Airline Safety Audits Could be Risky*, NAT'L POST (Oct. 1, 2011), <http://www.nationalpost.com/news/story.html?id=1a70a2e3-8401-4cc6-850e-ff973d9b0739&k=83029> [<http://perma.cc/UM7E-QBF8>].

⁹⁶ *Hearing on Bill C-6*, 40th Meeting, *supra* note 15.

⁹⁷ Jones, *supra* note 60.

⁹⁸ *Aviation Inspectors Condemn Transport Canada's Safety System Warn of Impending Major Accident*, UNION OF CANADIAN TRANSP. EMPs. (Apr. 24, 2014), <http://www.ucte.ca/?p=2479> [<http://perma.cc/CJ6C-U7AZ>]; Kathryn Blaze Carlson, *Survey Finds Gaps in Aviation Safety Procedures*, GLOBE & MAIL (Apr. 24, 2014), <http://www.theglobeandmail.com/news/politics/survey-finds-gaps-in-aviation-safety-procedures/article18136511/> [<http://perma.cc/Z62R-3RJK>].

transportation.⁹⁹ Removing regulatory oversight threatens the viability of the entire safety regime. In addition, since adequate oversight is an overriding priority for ICAO,¹⁰⁰ Canada is in clear contravention of Annex 19's recommendation to continue providing traditional safety inspections in addition to the new SMS paperwork audits.¹⁰¹ Greg Holbrook, the National Chair of the CFPA, stated that TC has dismantled the traditional regulatory oversight role responsible for Canada's relatively low accident rate, in exchange for system evaluations, thus shifting the focus from actual operations to paper and policy.¹⁰² For example, because cumbersome paperwork prevented Informant #1 from effectively tackling safety concerns in his/her daily work activities, his/her operation saw its near-perfect safety record erode away with a substantial increase in the number of accidents during what this informant described as a "precarious" implementation process. In a similar vein, Air Canada observed: "We are concerned that this approach (SMS) has lost its way and is engendering a culture of 'paper safety' at the expense of real safety."¹⁰³

This is a dangerous strategy as SMS safety audits can rapidly degenerate into a meaningless "tick-a-box" exercise.¹⁰⁴ Most informants agreed that it is possible to reap the benefits of SMS only if the previous oversight regime is reinstated in combination with these new SMS audits. Under a different SI, government inspectors only have to evaluate the effectiveness of an airline's SMS and have become system evaluators instead of effectively monitoring the actual operational safety levels of Canadian airlines.¹⁰⁵ Informant #3 argued that, in effect, TC has illegally abdicated its safety responsibilities and has failed to uphold its statutory oversight obligations under the Aeronautics

⁹⁹ Mark Kinzie, *Aviation: the Rule for Admissibility: Building a Balance Between the Interests of Air Safety and the Interests of Aviation Litigation*, 41 OKLA. L. REV. 265, 265 (1988).

¹⁰⁰ Michael Milde, *Enforcement of Aviation Safety Standards—Problems of Safety Oversight*, 45 Z. LUFT-UN WELTRAUMRECHT 2, 2 (1996); Dempsey, *supra* note 81, at 30.

¹⁰¹ Annex 19, *supra* note 16.

¹⁰² *An Act to Amend the Aeronautics Act and to Make Consequential Amendments to Other Acts: Hearing on Bill C-6 Before the Standing Comm. on Transp., Infrastructure & Cmty., 39th Parl., 37th Meeting (2007) (Can.)* [hereinafter *Hearing on Bill C-6, 37th Meeting*].

¹⁰³ Schmidt, *supra* note 94.

¹⁰⁴ Andrew Hopkins, *Beyond Compliance Monitoring: New Strategies for Safety Regulators*, 29 L. & POL'Y 210, 213 (2007).

¹⁰⁵ SURVEILLANCE PROCEDURES, *supra* note 73.

Act.¹⁰⁶ For Informant #4, it is apparent that safety oversight duties have been delegated to the industry itself.¹⁰⁷ Members of Parliament even stated that:

Our concern is having the airlines establish regulations and govern themselves. We just don't think in this competitive, commercial environment of the airline industry anywhere in the world that this is a good way to go right now. Maybe later on, when we can have that safety culture established, but right now we don't have a safety culture.¹⁰⁸

A strong oversight system is a necessary prerequisite for SMS and without a healthy and mature regulatory surveillance program already established, States will struggle to harvest any benefits from SMS.¹⁰⁹ This is because States must become a dynamic factor in the industry's overall safety culture and demonstrate a strong commitment toward safety with their continued presence in the surveillance of aviation. Evidently, Canada has embarked on a completely different path, which is endangering the traveling public.

B. THE CANADIAN PERSPECTIVE: DEREGULATION OR SELF-REGULATION?

Despite the fact that SMS was meant to further regulate civil aviation, there is an overwhelming paradox as we realize how TC's implementation of SMS has, in practice, effectively deregulated flight safety in several aspects. Although Canada is not the only country struggling with adequate oversight,¹¹⁰ it has forfeited optimal safety by eliminating TC's regulatory safety inspections. Indeed, TC abandoned its inspection program even before SMS implementation had been completed for 705 carri-

¹⁰⁶ Aeronautics Act, R.S.C. 1985, c. A-2 4.2 (Can.); Canwest News Serv., *Transport Investigator Calls of Aviation Safety Inquiry*, OCANADA.COM (Feb. 28, 2007), <http://www.canada.com/story.html?id=56bc4176-49a8-4292-b09e-decf5b17c5bd> [<http://perma.cc/ZD9L-M4LB>].

¹⁰⁷ *Air Safety Regulation on "The Current"*, CBC RADIO (May 13, 2014), http://www.safeskies.ca/news/current_air_safety [<http://perma.cc/5BHF-A44K>].

¹⁰⁸ *Hearing on Bill C-6*, 37th Meeting, *supra* note 102.

¹⁰⁹ Ratajcyk, *supra* note 86, at 406.

¹¹⁰ John Saba, *Aviation Safety in Crisis: The Option of The International Financial Facility for Aviation Safety (IFFAS)*, 1 TRANSP. L. J. 1 (2002); John Saba, *Worldwide Safe Flight: Will the International Financial Facility for Aviation Safety Help it Happen?*, 68 J. AIR L. & COM. 537, 542 (2003); CIVIL AVIATION SAFETY AUTH., SAFETY MANAGEMENT SYSTEMS: WHAT'S IN IT FOR YOU? 13 (2002) (Austl.), <http://www.caa.lv/upload/userfiles/files/SMS/CASA/CASA%20Whats%20in%20it%20for%20you%20sms1.pdf> [<http://perma.cc/UK3W-JJR8>].

ers, which temporarily left the industry with minimal safeguards. In 2014, the CFPa conducted a survey of TC's aviation inspectors regarding Canada's SMS safety regime. The survey revealed the following concerns regarding the risks created by SMS to the traveling public:

- Effective oversight, other than in an administrative manner, is practically non-existent.
- “Nine-in-ten aviation inspectors report that [TC's] SMS *prevents* the correction of safety problems in a timely fashion
- 84% of aviation inspectors expect a major aviation accident or incident in the near future after working in an SMS environment for the past seven years, up from 74% who held this view in 2007.
- Two-thirds (67%) believe [TC's] SMS will actually increase the chances of a major aviation accident or incident, up slightly from 2007 when 61% held this view.
- 85% of respondents believe air travellers have been exposed to higher risk as a result of [TC's] aviation SMS, up significantly from 2007 when 67% forecast this outcome.”¹¹¹

Given that some airlines can now go uninspected with a PVI for up to five years under the new SMS regime,¹¹² many prominent aviation experts, including Justice Moshansky, have argued that the SMS approach adopted by TC might constitute *self-regulation*,¹¹³ and reflects what has been described as a neoliberal

¹¹¹ *Aviation Inspectors Condemn Transport Canada's Safety System*, *supra* note 98; Press Release, Canadian Fed. Pilots Assoc. (CFPA), Aviation Inspectors Condemn Transport Canada's Safety System Warn of Impending Major Accident (Apr. 24, 2014), http://www.cfpa-apfc.ca/wp-content/uploads/2015/en/Abacus_release.pdf [<http://perma.cc/Z43N-24QX>].

¹¹² *Aviation Inspectors Condemn Transport Canada's Safety System*, *supra* note 98; *Aviation Inspectors Raise “Red Flag” over Airline Safety*, CBC NEWS (Apr. 24, 2014, 12:57 PM), <http://www.cbc.ca/news/business/aviation-inspectors-raise-red-flag-over-airline-safety-1.2620472> [<http://perma.cc/Q8F6-KKAA>].

¹¹³ David McKie, *Critics Slam Changes to Aircraft Safety Inspection System*, CBC NEWS (Sept. 2, 2008, 5:10 AM), <http://www.cbc.ca/news/critics-slam-changes-to-aircraft-safety-inspection-system-1.698546> [<http://perma.cc/47KV-K4AB>]; *An Act to Amend the Aeronautics Act and to Make Consequential Amendments to Other Acts: Hearing on Bill C-6 Before the Standing Comm. on Transp., Infrastructure & Cmty.*, 39th Parl., 39th Meeting (2007) (Can.) [hereinafter *Hearing on Bill C-6*, 39th Meeting].

approach to safety oversight.¹¹⁴ Although Alfred Kahn asserted that authorities never deregulated safety during the economic deregulation of the airline market in the late 1980s,¹¹⁵ many believe that those operating with SMS are left policing safety themselves.¹¹⁶ TC stated “that this assessment is common but not accurate, given that the SMS requirements are themselves regulations and that no regulations have been removed since SMS was introduced.”¹¹⁷ But if one reads TC’s actual policy statement regarding SMS, it is difficult to see how SMS does not constitute self-regulation:

[TC] agrees to promote *voluntary compliance* with regulatory requirements, *without necessarily resorting to punitive action*, by providing certificate holders governed by an SMS, the opportunity to determine, *by themselves*, proposed corrective measures to prevent recurrence of a contravention, as well as the best course of action to help foster future compliance.¹¹⁸

Even if SMS does not constitute safety deregulation in theory,¹¹⁹ informants #3 and #5 both concluded that it has that effect in practice. Some members of Parliament have agreed that TC promotes a “hands-off” policy, which forces inspectors to rely on the good graces of airlines to police their own operations and voluntarily report non-compliance.¹²⁰ Justice Moshansky has even asserted that he does not believe “that SMS, without effective regulatory oversight, would have prevented the accident at Dryden.”¹²¹ Informant #2 argued that TC’s policy is similar to telling an automobile driver that police officers will not monitor

¹¹⁴ Bertrand Schepper, *Les effets de la déréglementation sur la tragédie de Lac-Mégantic* (Oct. 22, 2013), <http://iris-recherche.qc.ca/blogue/les-effets-de-la-deregulation-sur-la-tragedie-de-lac-megantic> [<http://perma.cc/4LQM-NBHP>].

¹¹⁵ PUBLIC POLICY, *supra* note 82, at 961; *The Legacy of Airline Deregulation*, PBS NEWSHOUR (Jan. 9, 2003), http://www.pbs.org/newshour/bb/transportation-jan-june03-airlines_1-9/ [<http://perma.cc/J8WL-L5AJ>].

¹¹⁶ Benedict, *supra* note 59, at 159; Schepper, *supra* note 114.

¹¹⁷ Canada, Parliament, House of Commons, Standing Committee on Transportation, Infrastructure & Communities, *Interim Report on Rail Safety Review*, 41st Parl, 2nd Sess (June 2014) (Chair: Larry Miller) at 13, <http://www.parl.gc.ca/content/hoc/committee/412/tran/reports/rp6669729/tranrp03/tranrp03-e.pdf> [<http://perma.cc/WS6U-GF5J>] [hereinafter *Interim Report on Rail Safety Review*].

¹¹⁸ TRANSP. CAN., CIVIL AVIATION DIRECTIVE (CAD) NO. 107-004, AVIATION ENFORCEMENT— SAFETY MANAGEMENT SYSTEMS (2009) [hereinafter CAD No. 107-004] (emphasis added).

¹¹⁹ Fox, *supra* note 61, at 15; Ruwantissa Abeyratne, *Investing in Air Transport— A Prudent Move?*, 34 TRANSP. L.J. 327, 343 (2007).

¹²⁰ *Hearing on Safety & Security*, *supra* note 91.

¹²¹ *Hearing on Bill C-6*, 40th Meeting, *supra* note 15.

the speed limits anymore, but if he drives over the speed limit, he should turn himself in to receive his speeding ticket.¹²² Even if a carrier voluntarily reports a violation, it may not face any sanction. TC's *Civil Aviation Directive (CAD) No. 107-004*¹²³ states that if a carrier commits a serious violation of the Canadian Aviation Regulations (CARs)¹²⁴ (e.g., a company pilot flying with an expired certification lands an aircraft without clearance), reports it, and provides a corrective action, it will have complied with SMS regulations and preempt any enforcement action by TC.¹²⁵ Consequently, a carrier may not in theory be sanctioned by TC, even for serious violations, as long as there is no evidence of negligence.¹²⁶ By abdicating enforcement strategies, some have even argued that TC is granting airlines a "Get-Out-of-Jail Free Card."¹²⁷ How is that not self-regulation?

This is a preposterous approach since the motivations of airlines to comply with safety requirements include the deterring effect of regulatory surveillance, rather than impartial altruism.¹²⁸ The best way to encourage safety for airlines is to provide them with an incentive to comply with the law (e.g., compliance with proactive SMS reporting) balanced with a disincentive to violate the law, such as regular surveillance activities, to keep carriers on the lookout for safety deviations.¹²⁹ Most informants agreed that we cannot rely entirely on the system's self-regulation. Regulatory inspections should be reinstated since these are more assertive and effective.¹³⁰

¹²² *Flight Policy Change Called a Risky Manoeuvre*, CBC NEWS (Nov. 9, 2011), <http://www.cbc.ca/news/canada/flight-policy-change-called-a-risky-manoeuvre-1.1087729> [<http://perma.cc/4JN4-W474>].

¹²³ CAD No. 107-004, *supra* note 118.

¹²⁴ Canadian Aviation Regulations, SOR/1996-433 § 705.153(1)(a).

¹²⁵ TRANSP. CAN., STAFF INSTRUCTION NO. SUR-006, SAFETY MANAGEMENT SYSTEMS—CIVIL AVIATION NON-COMPLIANCE EVENT REVIEW (2010) [hereinafter SAFETY MANAGEMENT SYSTEMS REVIEW]; CAD No. 107-004, *supra* note 118, at Appendix A.

¹²⁶ SAFETY MANAGEMENT SYSTEMS REVIEW, *supra* note 125.

¹²⁷ *An Act to Amend the Aeronautics Act and to Make Consequential Amendments to Other Acts: Hearing on Bill C-6 Before the Standing Comm. on Transp., Infrastructure & Cmty.*, 39th Parl., 56th Meeting (2007) (Can.).

¹²⁸ See Hopkins, *supra* note 104, at 219; Gunningham & Sinclair, *supra* note 67, at 869.

¹²⁹ See Dennis L. Bryant, *The Maritime Compliance Program: Foghorn Protection for the Shipowner*, 24 TUL. MAR. L. J. 591, 592 (2000).

¹³⁰ Ruwantissa Abeyratne, *Prevention of Controlled Flight into Terrain: Regulatory and Legal Aspects*, 27 TRANSP. L. J. 159, 172 (2000).

All informants agreed that SMS was partly implemented as a cost-saving measure by TC to reduce the number of inspectors in the field. Hence, the financial burden of safety has almost entirely shifted to the airlines.¹³¹ This is a dangerous strategy because in the balance of profitability versus safety, the Dryden accident has demonstrated that cash-strapped airlines will likely prioritize profitability.¹³² Alfred Kahn stated that the intensive competition in the post-deregulation era might have the adverse effect of forcing airlines to cut corners on safety.¹³³ We can conclude that managing economic competition and safety concerns simultaneously can generate a deadly conflict of interest for airlines.¹³⁴ The AGC even concluded that TC “is not adequately managing the risks associated with its civil aviation oversight.”¹³⁵ This is mainly because TC has not established a minimum acceptable level of surveillance, leaving it to each airline to set its own safety standards.¹³⁶

Presently, TC is not even close to having enough safety inspectors to ensure appropriate levels of safety.¹³⁷ TC currently employs around 850 safety inspectors, well short of the 1,400 employed during the Dryden accident and the 1,800 inspectors recommended by the Dryden Inquiry.¹³⁸ The low number of inspectors policing the airlines can be interpreted as another example of self-regulation in practice. Thus, sufficient oversight must start with increasing the number of inspectors available to oversee the industry. Considering that TC is “uniquely placed as one of the potentially most effective [defenses] against [organizational] accident,”¹³⁹ direct interventionism through systematic safety inspections will afford the industry, and more importantly the traveling public, with a critical safety defense. In light of this,

¹³¹ See Moshansky & Van Dyke, *supra* note 83, at 2.3.4.1.

¹³² *Id.*

¹³³ See Alfred Kahn, *Airline Deregulation—A Mixed Bag, but a Clear Success Nevertheless*, 16 *TRANSP. L. J.* 229, 249, 245, 251; *PUBLIC POLICY*, *supra* note 82, at 697.

¹³⁴ See Benedict, *supra* note 59, at 164; P.J. VANDERGEEST ET AL., *NAT’L AEROSPACE LABORATORY NLR, AVIATION SAFETY MANAGEMENT IN SWITZERLAND: RECOVERING FROM THE MYTH OF PERFECTION* 64 (2003), www.nlr-atsi.nl/downloads/aviation-safety-management-in-switzerland.pdf [<http://perma.cc/Q26L-CFRF>].

¹³⁵ See *OVERSIGHT OF CIVIL AVIATION REPORT*, *supra* note 14, at 28.

¹³⁶ See *Hearing on Bill C-6*, 39th Meeting, *supra* note 113, at 3.

¹³⁷ See *OVERSIGHT OF CIVIL AVIATION REPORT*, *supra* note 14, at 25.

¹³⁸ See *An Act to Amend the Aeronautics Act and to Make Consequential Amendments to Other Acts: Hearing on Bill C-6 Before the Standing Comm. on Transp., Infrastructure & Cmty.s.*, 39th Parl., 45th Meeting (2007) (Can.) [hereinafter *Hearing on Bill C-6*, 45th Meeting].

¹³⁹ VANDERGEEST ET AL., *supra* note 134, at 17.

Canada should listen to ICAO's recommendation advising member States to have a high-level political commitment toward oversight and adequate resources to fulfill their aviation safety-related responsibilities.¹⁴⁰

IV. UNCOVERING THE DEADLY CONSEQUENCES OF SAFETY DEREGULATION

A. A DEADLY LEARNING CURVE—BREAKING THE MYTH OF PERFECTION

Several investigation reports have demonstrated that inadequate oversight can be a causal factor to major accidents¹⁴¹—Air Ontario Flight 1363 was a perfect example. While TC continues to boast about Canada's impeccable safety record,¹⁴² its complacency and misconception about the inherent risks associated with aviation has led to a lack of awareness of the industry's actual risks.¹⁴³ Seven recent accident investigation reports from the TSB concerning carriers with SMS processes in place have commented on the industry's challenging and sometimes deadly transition to SMS.¹⁴⁴ In all of these accident reports, SMS

¹⁴⁰ See ICAO, *Safety Oversight Manual*, *supra* note 85, at 1–1.

¹⁴¹ See VANDERGEEST ET AL., *supra* note 134, at 100; Moshansky & Van Dyke, *supra* note 83, at 1.5.1.4.

¹⁴² See *Hearing on Bill C-6*, 45th Meeting, *supra* note 138, at 12.

¹⁴³ See Jacqueline L. Weaver, *Offshore Safety in the Wake of the Macondo Disaster: Business as Usual or Sea Change?*, 36 HOUS. J. INT'L L. 147, 164 (2014).

¹⁴⁴ TRANSP. SAFETY BD. OF CAN., AVIATION INVESTIGATION REPORT A11A0035: RUNWAY OVERRUN, KELOWNA FLIGHTCRAFT AIR CHARTER LTD., BOEING 727-281, C-GKFJ, ST. JOHN'S, NEWFOUNDLAND AND LABRADOR, 16 JULY 2011, at 28–29 (2013) [hereinafter REPORT A11A0035]; TRANSP. SAFETY BD. OF CAN., AVIATION INVESTIGATION REPORT A11O0031: ERRONEOUS AIR DATA INDICATIONS, SUNWING AIRLINES INC., BOEING 737-8Q8, C-FTAH, TORONTO–LESTER B. PEARSON INTERNATIONAL AIRPORT, TORONTO, ONTARIO, 13 MARCH 2011, at 10–13, 20 (2013) [hereinafter REPORT A11O0031]; TRANSP. SAFETY BD. OF CAN., AVIATION INVESTIGATION REPORT A11F0012: PITCH EXCURSION, AIR CANADA, BOEING, 767-333, C-GHLQ, NORTH ATLANTIC OCEAN, 55°00'N 029°00'W, 14 JANUARY 2011, at 16 (2013) [hereinafter REPORT A11F0012]; TRANSP. SAFETY BD. OF CAN., AVIATION INVESTIGATION REPORT A09A0016: MAIN GEARBOX MALFUNCTION/COLLISION WITH WATER, COUGAR HELICOPTERS INC., SIKORSKY S-92A, C-GZCH, ST. JOHN'S, NEWFOUNDLAND AND LABRADOR, 35 NM E, 12 MARCH 2009, at 50 (2013) [hereinafter REPORT A09A0016]; TRANSP. SAFETY BD. OF CAN., AVIATION INVESTIGATION REPORT A07A0134: TOUCHDOWN SHORT OF RUNWAY, JETPORT INC. BOMBARDIER BD-700-1A11 (GLOBAL 5000), C-GXPR, FOX HARBOUR AERODROME, NOVA SCOTIA, 11 NOVEMBER 2007, at 27–32 (2013) [hereinafter REPORT A07A0134]; REPORT A007C0001, *supra* note 64, at 22, 32; TRANSP. SAFETY BD. OF CAN., AVIATION INVESTIGATION REPORT A11H0002: CONTROLLED FLIGHT INTO TERRAIN, BRADLEY AIR SERVICES LIMITED (FIRST AIR), BOEING 737-210C, C-GNWN RESOLUTE BAY, NUNAVUT, 20 AUGUST 2011, at 50 (2014) [hereinafter REPORT A11H0002].

processes failed partially or systematically, and TC was not able to properly identify these deficiencies with operational inspections.¹⁴⁵ In the deadly crash of First Air Flight 6560,¹⁴⁶ for instance, the airline's inadequate cockpit resource management (CRM) training was not identified by TC due to a lack of on-site inspections to verify compliance with regulatory training requirements.¹⁴⁷ Some of these accidents could have been prevented if TC had eyes in the field monitoring the actual safety performance of these carriers instead of reading over the airline's paperwork. To this effect, the TSB stated in its 2014 Watchlist that:

SMS on its own is not enough That's why we are calling on TC to regularly oversee all safety management systems and processes to ensure they are effective. And when transportation companies are unable to effectively manage safety, TC must intervene in a way that succeeds in changing unsafe operating practices.¹⁴⁸

Evidence demonstrating the insufficient level of safety oversight provided by TC is reflected in several TSB reports. In 2001, the TSB concluded that in certain areas of commercial operations, such as with smaller operators in remote areas of the country, "the safety oversight efforts of TC have been somewhat ineffective" and "there is a deficiency in TC's safety oversight program."¹⁴⁹ TSB concluded in the investigation reports for two fatal crashes that TC's poor level of safety oversight was a *direct contributing factor* to the accidents themselves.¹⁵⁰ In its 2012 Avia-

¹⁴⁵ REPORT A11A0035, *supra* note 144; REPORT A11O0031, *supra* note 144; REPORT A011F0012, *supra* note 144; REPORT A09A0016, *supra* note 144; REPORT A07A0134, *supra* note 144; REPORT A007C001, *supra* note 64; REPORT A11H0002, *supra* note 144.

¹⁴⁶ First Air Flight 6560 crashed while on final approach to land in Resolute Bay, Nunavut, Canada, in 2011, killing twelve people and seriously injuring four other individuals on board. Carlson, *supra* note 98.

¹⁴⁷ See REPORT A11H0002, *supra* note 144.

¹⁴⁸ News Release, Transp. Safety Bd. of Can., TSB's 2014 Watchlist Highlights Eight Significant Transportation Safety Issues (Nov. 26, 2014), <http://tsb.gc.ca/eng/medias-media/communiques/autres-other/2014/20141126.asp> [http://perma.cc/AG88-4ETW].

¹⁴⁹ TRANSP. SAFETY BD. OF CAN., REASSESSMENT OF THE RESPONSES FROM TRANSPORT CANADA TO AVIATION SAFETY RECOMMENDATION A01-01 (REGULATORY SAFETY OVERSIGHT) (2014).

¹⁵⁰ See TRANSP. SAFETY BD. OF CAN., AVIATION INVESTIGATION REPORT A10Q0117: LOSS OF CONTROL AND COLLISION WITH TERRAIN, NORDAIR QUÉBEC 2000 INC., DE HAVILLAND DHC-2 MK. 1 C-FGYK, LA GRANDE-RIVIÈRE AIRPORT, QUÉBEC, 24 JULY 2010, at 12 (2013); TRANSP. SAFETY BD. OF CAN., AVIATION INVESTIGATION REPORT

tion Watchlist, the TSB stated that TC “does not always provide effective oversight of aviation companies transitioning to safety management systems, while some companies are not even required to have one. . . . [TC] must effectively monitor the integration of SMS practices into day-to-day operations.”¹⁵¹

In one instance, TSB concluded that TC’s ineffective surveillance did not ensure regulatory compliance and subsequently allowed unsafe practices to persist.¹⁵² Moreover, TC’s surveillance of business aircraft operating under the Canadian Business Aviation Association (CBAA) was deemed to be inadequate in the investigation of the 2007 crash of a Jetport Inc. Bombardier Global Express in Fox Harbour, Nova Scotia.¹⁵³ Ineffective oversight of SMS does not have exclusive boundaries in the aviation industry and is a cancer that is now spreading to marine and rail transportation, as illustrated by some recent accident reports.¹⁵⁴

B. *Air Mégantic*—An Accident Waiting to Happen

Although SMS has yet to contribute to a tragic meltdown of aviation safety, the TSB’s concerns for the safety of transportation materialized in 2013 when a Montreal, Maine & Atlantic Railway (MMA) train carrying crude oil derailed in the town of Lac-Mégantic and caused a massive explosion, killing 47 people and destroying most of the city’s downtown core.¹⁵⁵ Since 2001, commercial railway operators in Canada have been required to

A10Q0098: ENGINE PROBLEM—COLLISION WITH TERRAIN, AÉROPERO (2550-4330 QUÉBEC INC.), BEECHCRAFT A100 KING AIR C-FGIN, QUÉBEC, QUEBEC, 23 JUNE 2010, at 41 (2014).

¹⁵¹ TRANSP. SAFETY BD. OF CAN., WATCHLIST FACT SHEET—AIR: AIR SAFETY MANAGEMENT SYSTEMS (2012).

¹⁵² See REPORT A07A0134, *supra* note 144, at 57.

¹⁵³ See *id.*

¹⁵⁴ See, e.g., TRANSP. SAFETY BD. OF CAN., MARINE INVESTIGATION REPORT M12C0058: GROUNDING, ROLL-ON/ROLL-OFF PASSENGER VESSEL JIIMAAN, APPROACHING KINGSVILLE HARBOUR, ONTARIO, 11 OCTOBER 2012, at 19–23 (2014); TRANSP. SAFETY BD. OF CAN., RAILWAY INVESTIGATION REPORT R06V0136: RUN-AWAY/DERAILMENT CANADIAN NATIONAL FREIGHT TRAIN L-567-51-29, MILE 184.8, LILLOOET SUBDIVISION NEAR LILLOOET, BRITISH COLUMBIA, 29 JUNE 2006, at 49 (2013); News Release, Transp. Safety Bd. of Can., TSB is Concerned About TC Oversight of New Passenger Safety Regulations as Part of Jiimaan Grounding Investigation (Mar. 10, 2014), <http://www.bst-tsb.gc.ca/eng/medias-media/communiqués/marine/2014/m12c0058-20140310.asp> [<http://perma.cc/6B6Q-XDAU>].

¹⁵⁵ *TIMELINE: Lac-Mégantic Rail Disaster*, CBC NEWS (Oct. 7, 2013), <http://www.cbc.ca/news2/interactives/timeline-lac-megantic/> [<http://perma.cc/VH8J-FENP>].

have a functional SMS in place.¹⁵⁶ In its final investigation report, the TSB concluded that TC had failed to provide adequate oversight of MMA's deficient SMS and that this was a causal factor contributing to the accident for the following reasons:¹⁵⁷

- TC did not follow up on recurring safety deficiencies at MMA and did not ensure that proper risk management measures were put in place to correct serious problems. Consequently, unsafe practices persisted.¹⁵⁸
- SMS systems audits by TC were limited and their scope was inadequate.¹⁵⁹
- TC did not conduct any follow-up actions to ensure that the operator was implementing the recommended corrective actions. Consequently, systemic weaknesses in the SMS were not addressed.¹⁶⁰
- There is a heightened risk that operators will not manage safety effectively without proper and recurrent SMS audits by TC.¹⁶¹
- TC does not sufficiently monitor the overall national safety. TC's regional offices cannot guarantee that the public's safety is protected in every region and ensure that the risks to the public are being properly managed.¹⁶²

We can draw several similarities between the TSB's conclusions in the Lac-Mégantic accident investigation report with the current level of safety in aviation. If these similarities are not urgently corrected in the aviation industry, it is only a matter of time before a carrier's negligent use of SMS processes contributes to a fatal accident.¹⁶³ We should not ask ourselves if we will have our own "*Air Mégantic*" in the aviation industry, but rather

¹⁵⁶ See Railway Safety Management System Regulations, SOR/2001-37, repealed and replaced by Railway Safety Management System Regulations, SOR/2015-26 § 89 (Can.).

¹⁵⁷ TRANSP. SAFETY BD. OF CAN., RAILWAY INVESTIGATION REPORT R13D0054: RUNAWAY AND MAIN-TRACK DERAILMENT, MONTREAL, MAIN & ATLANTIC RAILWAY, FREIGHT TRAIN MMA-002, MILE 0.23, SHERBROOKE SUBDIVISION, LAC-MÉGANTIC, QUEBEC, 06 JULY 2013, at 130–31 (2014).

¹⁵⁸ *Id.*

¹⁵⁹ *Id.*

¹⁶⁰ *Id.*

¹⁶¹ *Id.* at 131.

¹⁶² *Id.*

¹⁶³ Amber Hildebrandt, *Transport Canada's Lax Safety Regime Goes Beyond Rail*, CBC NEWS (Aug. 21, 2014), <http://www.cbc.ca/news/canada/transport-canada-s-lax-safety-regime-goes-beyond-rail-1.2741610> [<http://perma.cc/6DFN-95MW>].

when and where.¹⁶⁴ Will it require a large airliner to crash in a major Canadian city like Montréal or Toronto before the government realizes it should provide regular on-site safety inspections to protect the traveling public?

In the Lac-Mégantic tragedy, it is evident that inadequate surveillance of a rail operator's activities endangered rail safety and ultimately cost the lives of many innocent citizens. Although there are fundamental differences between rail and air transportation, namely the punitive working culture in the rail industry, the Lac-Mégantic tragedy demonstrated how leaving operators with a weak safety culture to manage their own safety can constitute a serious hazard to society.¹⁶⁵ In the past few years, the TSB has repeatedly criticized TC's "failure to identify companies' ineffective processes, and an imbalance between auditing processes versus traditional inspections."¹⁶⁶ Even if companies fill out SMS checklists and have adequate safety manuals, TC must send inspectors out in the field and ensure that the carrier's actual actions and behavior reflect the company's SMS paperwork. TC must be able to intervene when companies are not using their SMS correctly to put an end to any unsafe or unlawful practices.¹⁶⁷

Coupled with the dismantling of effective regulatory oversight by TC and the lack of safety inspectors, Justice Moshansky argued in 2007 that "18 years after Dryden, history is repeating itself, only worse."¹⁶⁸ He further stated before ICAO that: "Pressing economic conditions, diminished regulatory oversight, and inadequate aviation legislation preceded Dryden; these symptomatic precursors seem again to be with us."¹⁶⁹ The Chair of the TSB, Kathy Fox, stated that inadequate oversight is a serious problem.¹⁷⁰ She further concluded that the efficiency of SMS depends on effective oversight and that SMS should not be a

¹⁶⁴ *Aviation Inspectors Condemn Transport Canada's Safety System*, *supra* note 98.

¹⁶⁵ Bruce Cheadle, *Rail-Safety Audit Days Before Fatal Quebec Crash Sound "Significant Weaknesses" in Government Oversight*, FIN. POST (Nov. 26, 2014), <http://business.financialpost.com/news/transportation/rail-safety-audit-days-before-fatal-lac-megantic-crash-found-significant-weaknesses-in-oversight/> [<http://perma.cc/RU8B-92U3>].

¹⁶⁶ WATCHLIST FACT SHEET—MULTI-MODAL, *supra* note 44.

¹⁶⁷ *See id.*

¹⁶⁸ *Campion-Smith*, *supra* note 43.

¹⁶⁹ Moshansky & Van Dyke, *supra* note 83, at 2.3.1.

¹⁷⁰ News Release, *Effective Oversight Vital to Aviation Safety*, *supra* note 72.

replacement for regulation or a substitute for oversight.¹⁷¹ We must, therefore, urge the Canadian government and other ICAO Member States to ensure proper oversight during their transition toward SMS to avoid more deadly accidents. Enhanced margins of safety should be the main priority for ICAO Member States¹⁷² rather than the political rationing of government oversight resources. While lawsuits may compensate and ease the pain for families of victims,¹⁷³ they cannot restore health or human life.¹⁷⁴ On the other hand, adequate regulation can properly ensure the protection of life, and as such, SMS coupled with regulatory safety oversight should benefit the traveling public worldwide with increased or even near-perfect safety levels over time.

V. CONCLUDING REMARKS

History has demonstrated that many sections in the CARS have been written in the aftermath of serious accidents, such as Air Ontario Flight 1363. Unless TC proactively responds by reinstating traditional safety inspection methods, this tragic tendency will perpetuate itself. Canada has the benefit of already knowing the current gaps in its SMS regime, and it should act accordingly before history repeats itself. In summary, the following solutions are forwarded to ensure safety throughout aviation in Canada:

1. The Minister of Transport should reinstate traditional forms of oversight, such as the NAP, combining opera-

¹⁷¹ *Review of Canadian Transportation Safety Regime, Hearing Before the Standing Comm. on Transp., Infrastructure & Cmty. Serv.*, 41st Parl., 19th Meeting, at 4 (2014) (Can.).

¹⁷² DEMPSEY & GOETZ, *supra* note 5, at 349.

¹⁷³ The Canadian Press, *Lac-Mégantic Disaster Class-Action Suit Gets Green Light*, CBC NEWS (May 9, 2015), <http://www.cbc.ca/news/canada/montreal/lac-m%C3%A9gantic-disaster-class-action-suit-gets-green-light-1.3067920> [http://perma.cc/YV8W-QUNQ]; The Canadian Press, *Lac-Mégantic Victims Will Be Compensated in the New Year, Trustee Says*, CBC NEWS (Dec. 13, 2015), <http://www.cbc.ca/news/canada/montreal/lac-megantic-settlement-money-1.3363372> [http://perma.cc/5HYL-3B7L]; The Canadian Press, *Lac-Mégantic Lawsuit: Judge Rejects Canadian Pacific Challenge*, CBC NEWS (July 13, 2015), <http://www.cbc.ca/news/canada/montreal/lac-m%C3%A9gantic-lawsuit-judge-rejects-canadian-pacific-challenge-1.3149986> [http://perma.cc/9F3J-6HXD]. At the time of this writing, a class-action lawsuit had been initiated by the families of the victims, while the provincial government of Québec has facilitated a \$457 million settlement fund. *Lac-Mégantic Victims Will Be Compensated in the New Year, Trustee Says, supra*.

¹⁷⁴ DEMPSEY & GOETZ, *supra* note 5, at 349.

tional safety inspections of all airlines with the new SMS audits;

2. The delegation of regulatory oversight activities to the industry for commercial airlines should be reversed and TC should clearly establish the acceptable levels of safety for SMS;
3. TC should be provided with sufficient resources to oversee the industry properly (e.g., inspectors, training, and monitoring tools) and to develop adequate SMS guidance resources for carriers; and
4. The implementation of SMS for smaller 703 and 704 carriers should be reviewed. The framework should be tailored to enable them to institute and operate SMS in the most cost-effective and simplest manner possible consistent with safety.

Of course, these remedial solutions should be of particular interest to other ICAO Member States nearing the final stages of implementation of SMS. It took the tragic deaths of forty-seven people in Lac-Mégantic for the Canadian Parliament to react and instigate an extensive policy review of the role of SMS in all modes of transportation, including commercial air transportation.¹⁷⁵ Will the aviation industry wait until it is too late and have its own “*Air Mégantic*” tragedy before it reacts in a similar fashion? As stated by Paul Dempsey, “[T]he development of aviation policy has long been a reactive, rather than a proactive, process.”¹⁷⁶ For instance, before the enactment of the Aviation and Transportation Security Act of 2001 (ATSA),¹⁷⁷ security screening in the United States was delegated to struggling airlines until their security deficiencies were exploited on September 11,

¹⁷⁵ See Letter from The Honorable Lisa Raitt, Minister of Transp., to Larry Miller, Chair, Standing Comm. on Transp., Infrastructure & Cmty. (Nov. 18, 2013), http://www.parl.gc.ca/Content/HOC/Committee/412/TRAN/WebDoc/WD6308134/412_TRAN_reldoc_PDF/412_TRAN_reldoc-e.pdf [<http://perma.cc/LTY6-GAMR>]; *Lac-Mégantic: Lisa Raitt Announces Rail Safety Rules Based on Crash Findings*, CBC NEWS (Oct. 29, 2014), <http://www.cbc.ca/news/politics/lac-m%C3%A9gantic-lisa-raitt-announces-rail-safety-rules-based-on-crash-findings-1.2816680> [<http://perma.cc/E4AL-4UFF>]; *Interim Report on Rail Safety Review*, *supra* note 117; Gordon Isfeld, *Ottawa Tightens Railway Safety Measures in Wake of Lac-Mégantic Train Disaster*, FIN. POST (Oct. 29, 2014), <http://business.financialpost.com/2014/10/29/ottawa-tightens-railway-safety-measures-in-wake-of-lac-megantic-train-disaster/> [<http://perma.cc/RBK8-SAB6>].

¹⁷⁶ Paul Stephen Dempsey, *Aviation Security: The Role of Law in the War Against Terrorism*, 41 COLUM. J. TRANSNAT'L L. 649, 658 (2003).

¹⁷⁷ See Aviation and Transp. Security Act, Pub. L. No. 107-71, 115 Stat. 597 (2001).

2001.¹⁷⁸ Canada has approached SMS in a very similar fashion, and until we react to TC's complacent oversight and SMS policies, Canadian carriers might suffer a similar tragic fate.¹⁷⁹ SMS is a brilliant approach to safety in theory, but without a structured and balanced oversight from the government, there is the potential for a serious accident.

Government regulation in aviation has often behaved like a pendulum—with the weight of safety moving away from its center as the opposing weight of economic regulation breaks the equilibrium between safety and market efficiency. When safety margins are over-extended, the opposite weight of safety comes crashing down with a destructive effect on the airline industry.¹⁸⁰ As Paul Dempsey concludes, there is no doubt that victims of the past would “gain little comfort in knowing that Adam Smith's invisible hands vindicated their deaths by strangling the economic life out of the unsafe airline.”¹⁸¹ Alternatively, we must ask ourselves if more economic regulation, balanced with adequate safety enforcement, is the long-term solution to the negative externalities that have persisted since airline deregulation in Canada. While strong airline markets previously enabled airlines to exceed TC regulations, safety standards in Canadian aviation, including SMS, have become the ceiling, rather than the floor, for acceptable operations.¹⁸² Unfortunately, it is now clear that “[t]he financial problems of deregulation are related to the [current] safety problems.”¹⁸³

We must now come to grips with the conclusion that airline deregulation did in fact contribute to the deregulation of certain aspects of flight safety. In response to this, moderate economic re-regulation is the only solution that would enable the airline market to satisfy the public interest by achieving social goals, such as ensuring the traveling public's safety and well-being.¹⁸⁴ Aviation “has too vast a social and economic impact to

¹⁷⁸ See Dempsey, *Aviation Security*, *supra* note 176, at 712.

¹⁷⁹ See PUBLIC POLICY, *supra* note 82, at 798–99.

¹⁸⁰ “Professor Frederick Thayer reminds us that safety always has suffered when airlines were largely unregulated.” DEMPSEY & GOETZ, *supra* note 5, at 301.

¹⁸¹ *Id.* at 306.

¹⁸² *Id.*

¹⁸³ AIRLINE MANAGEMENT STRATEGIES, *supra* note 4, at 372.

¹⁸⁴ DEMPSEY & GOETZ, *supra* note 5, at 341–42. “Nonetheless, the need for government to facilitate the market's ability to accomplish desirable social and economic objectives has long been recognized.” *Id.* “Like economic goals, political and social goals sometimes cannot be achieved through the economic system because they conflict with businesses' goal to maximize profits.” *Id.* at 342.

leave it to the whims of a dwindling club of unconstrained monopolists.”¹⁸⁵ Since safety cannot be separated from the economic health of airlines, the safety benefits of SMS can only be achieved if we pay more attention to the economic health of the aviation industry.¹⁸⁶ If reintroducing economic regulation can temper market imperatives by eliminating the problems of imperfect competition, the industry will likely become more productive and efficient. A healthy industry will in turn make healthy organizational decisions. While the SMS methodology focuses on an airline’s ability to safely manage organizational decisions, even well-intentioned airlines may not be able to function under the onerous requirements of SMS if they remain in financial distress. The government is in a unique position to foster healthier markets by reinstating moderate economic regulation that is more conducive to safety-oriented decisions, rather than the current airlines’ predatory practices that aim to increase profitability at the expense of safety. If the government is able to regulate an airline’s managerial decisions with economic measures, it will create an operational context compatible with SMS to further achieve safety goals and, in turn, protect the lives of the traveling public.

¹⁸⁵ *Id.* at 358.

¹⁸⁶ *Id.* at 350.