



FLIGHT **PS752**

THE LONG ROAD TO

TRANSPARENCY,

ACCOUNTABILITY

AND JUSTICE

REPORT OF
THE SPECIAL ADVISOR
TO THE PRIME MINISTER

Gouvernement

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DEDICATED TO THE MEMORY OF THOSE WHO LOST THEIR LIVES ON **PS752**



FLIGHT PS752

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PREFACE



THE HONOURABLE RALPH GOODALE

December 2020

The families matter most

Together with a great many Canadians, I shared strong feelings of shock, grief and outrage as news unfolded last January of the horrible aviation disaster in Iran in which a Ukrainian commercial passenger jet (Flight PS752) had been destroyed by Iranian missiles, taking 176 innocent lives, including 138 with ties to Canada. I had no idea then that Prime Minister Trudeau would ask me to assist the Government of Canada in its ongoing response to this very Canadian tragedy. It has proven to be one of the toughest, most moving assignments I have ever undertaken.

At the centre of it all are the families of the victims. I have had the privilege of meeting with different groups of them several

times—virtually, for the most part, because of the COVID-19 pandemic. Nonetheless, each encounter is profoundly emotional because the families' grief and anguish are so real and ongoing. They tell their personal stories. They describe their loved ones, now gone. They mourn the rich human potential so cruelly destroyed. They ask questions. They yearn for the truth. All of that is powerful motivation for Canadians to remain dogged and unrelenting in our search for the transparency, accountability and justice the families need and deserve.

As we do that, we also remember with respect and affection the families of the victims of other international air disasters, especially Air India Flight 182, which was destroyed by an act of terrorism in 1985, claiming 280 Canadian lives—our biggest loss ever; and Ethiopian Airlines Flight 302, which crashed in 2019 because of catastrophic MAX 8 safety failures, killing 18 Canadians—our most recent air tragedy before PS752. In my discussions with some of the families of those who perished in these earlier Canadian disasters, it is clear they are mourning still. Their pain remains visceral. Each life was so precious. Each family has been forever wounded. As a country, we must acknowledge shortcomings in our responses to these previous tragedies and ensure vital lessons are taken to heart, especially in how we respond to the needs of victims' families.

With respect to PS752, Iranian officials initially denied any wrongdoing. But once confronted with irrefutable evidence, they belatedly admitted Iran's responsibility for this deadly travesty and committed to a proper investigation in accordance with international standards and to paying compensation regardless of the nationality of the victims. That is a significant start. But still, given how events have unfolded over the past 11 months, and taking into account other instances where civilian aircraft have been shot down worldwide (see Annex A), getting a decent outcome for the families will demand ongoing determination and perseverance. Canada must never be deterred.

There are several reasons why the PS752 case is complex and difficult. First and foremost, the death toll was staggering. Beyond Iran, the victims came from 5 other countries: Canada, Ukraine, Sweden, Afghanistan and the United Kingdom. Those with a connection to Canada included Canadian citizens (some of whom were also citizens of Iran), plus permanent residents, students and visitors, all on their way to Canada. Each personal story is different. Each family circumstance is unique. The common element for all is the trauma and heartbreak of losing precious loved ones in such a senseless and tragic manner at the hands of the Iranian military.

Secondly, the human needs of the families of the victims of PS752 necessitated wideranging and complex responses from the Government of Canada and others, engaging the expertise and authority of not just one or two but more than a dozen federal departments and agencies, as well as elements of provincial and local community coordination across the country, private sector participants (such as banks and insurance companies), academics and auxiliary agencies like the Red Cross. The required collaboration was and is intricate, and it has to be sustained.

Third, the international nature of this disaster means that several countries with varying interests, perspectives and legal systems have a stake in how it is ultimately resolved, and multilateral decision-making is never simple. The applicable legal framework is set through longstanding international conventions (see Annex B), to which all the affected countries are signatories, as well as general principles of customary international law and the domestic laws of the affected countries. That complex framework does not lend itself easily to expeditious outcomes. In particular, frustrations arise when the cause of an air disaster is military activity on the part of the country in which that disaster occurs. Because of the sovereignty and equality of states, the perpetrator ends up in charge of the investigation. If that country does not have an independent civil aviation investigative authority and a transparent judicial system, there will be inevitable doubts about impartiality, objectivity and legitimacy.

Other concerns flow from the length of time it took to arrange the readout of PS752's flight recorders. Recommended procedures call for this to happen "without delay," and there were 9 weeks available to get it done before travel became restricted by the COVID-19 pandemic. In the end, it took more than 6 months, fueling anxiety and harming credibility. In addition, Iran would not grant Canada the opportunity to appoint an accredited representative to the investigation, which would have provided us more first-hand knowledge. Instead, despite suffering the greatest loss of life, Canada's official role in the safety investigation was limited to that of an observer.

Fourth, Canada has had no embassy or ambassador in Tehran since 2012, so diplomatic relations are limited. Our Western, democratic approach to human rights, the rule of law, investigative and judicial independence, due process, transparency and accountability is antithetical to Iran's. Iran is identified in Canadian law as a state supporter of terrorism. The Quds Force of Iran's Islamic Revolutionary Guard Corps (IRGC) and several other surrogates are listed under our Criminal Code as terrorist entities. So engagement is fraught.

But all that notwithstanding, the Prime Minister of Canada has been clear: **The families matter most.** And Canada will not rest until we get the answers and actions those families need and deserve.

To that end, my assignment as Special Advisor began on March 31, with 3 goals:

- 1. to support the Prime Minister, various Ministers, Parliamentary Secretaries and the Public Service in meeting the needs and expectations of the grieving families, including the pursuit of both justice and compensation;
- 2. to identify best practices and the most effective operational framework for coping with international civilian aviation disasters affecting Canada, so future governments will have some guidance to follow in the event of similar crises recurring; and
- 3. to offer advice on how such disasters can be prevented—advancing Canada's **Safer Skies Strategy**, launched by the Prime Minister last February, and building on work done by the Netherlands following the 2014 shooting down of Flight MH17 operated by Malaysia Airlines.

From the outset, I found a solid foundation had been put in place to underpin a whole-of-government effort for Canada's response to PS752. A full-time task force within Global Affairs Canada, interconnecting with all other relevant departments and agencies, had been stood up. It carries forward the government-wide coordination role initially played by the Privy Council Office and proactively communicates with the families about their individual issues, common concerns and Canada's overall progress on the 3 essentials: transparency, accountability and justice. That vital work is continuing. So is Canada's global outreach through an International Coordination and Response Group (Coordination Group) of the 5 affected countries, which started to work together, at Canada's suggestion, immediately after the disaster. Believing the facts are strongly on our side, the collective goal of the Coordination Group countries is to utilize international law and the rules-based international system to ensure that Iran is held accountable and that justice is achieved. We will spare no effort in that regard.

Especially at the beginning, but also throughout my assignment, I have benefited from detailed expert briefings and ongoing information supplied by the Privy Council Office; the National Security and Intelligence Advisor to the Prime Minister; Global Affairs Canada; Transport Canada; the Transportation Safety Board of Canada; Immigration, Refugees and Citizenship Canada; Justice Canada; the Department of National Defence; the Canadian Armed Forces; the Communications Security Establishment; Public Safety Canada; the Royal Canadian Mounted Police; the Canadian Security Intelligence Service; the Canada Border Services Agency; and Canadian Heritage. I am grateful to all of them.

Ministers Champagne, Garneau, Mendicino, Blair and others, and Parliamentary Secretaries Alghabra and Oliphant, have been consistently strong and helpful. Hundreds of dedicated public servants have performed their duties—and well beyond—with great skill and empathy. In addition, Members of Parliament have shown their support for the families—across all party lines—in unanimous parliamentary resolutions (see Annex C).

I also want to acknowledge the input and guidance of many other individuals who have been generous with their time and advice, including Payam Akhavan, distinguished international lawyer; Thomas Juneau, observer and analyst of Iran; Craig Forcese, professor of national security law; Bob Rae and Irwin Cotler, former parliamentary colleagues and wise counsellors; Ted Zarzeczny, retired Saskatchewan justice; Senator Stan Kutcher (Nova Scotia), an expert in dealing with grief and trauma; Barbara Hall, in conjunction with the Canada Strong Campaign; Heidi Illingworth, Federal Ombudsman for Victims of Crime; Ambassador Larisa Galadza, Canada's envoy to Ukraine; Roman Waschuk, Canada's former ambassador in Ukraine; Andriy Shevchenko, Ukraine's ambassador to Canada (and to the International Civil Aviation Organization in Montréal); and a team of Dutch officials with valuable experience in dealing with the MH17 disaster.

The families themselves are also crucial sources of advice and information, which Canada is carefully collecting and assessing as part of its commitments to seek the truth. Many of the families are skeptical about Iran's explanations thus far. As they see it, Iran initially denied any state or military involvement. They quickly obliterated the crash site. Downloading the onboard black boxes could have been done "without delay" in January or February or early March, but it was not. There has been no full disclosure yet of all relevant evidence. The identities of any accused individuals and the process for dealing with them are entirely secret. Family members in both Canada and Iran have been threatened and harassed. Vital questions about the exact chain of events and decision-making remain unanswered, as do inquiries about how that dangerous airspace could possibly have been left open to civilian traffic.

To achieve greater clarity, Canada is active on 3 investigative fronts:

- the independent Transportation Safety Board of Canada will review and comment on the final safety investigation report of its Iranian counterparts when it becomes available, pointing out any deficiencies as necessary;
- the RCMP will continue to support their counterparts in Ukraine to assist in criminal investigations with respect to PS752 in that country; they will also continue investigating harassment, intimidation and foreign interference in Canada; and
- a Canadian Forensic Examination and Assessment Team is collecting and analyzing every available piece of information, evidence and intelligence to allow Canada to determine, as best we can, the true course of events and responsibilities that brought down the aircraft.

Canada will also continue to work vigorously with the International Coordination and Response Group to hold Iran accountable for the downing of PS752 and find some measure of justice by pursuing full reparations from Iran for the victims, their grieving families and the affected states. Canada is also committed to expressing its concerns about what happened to PS752 in all appropriate international forums to reflect the angst of the families and help prevent conditions and behaviours such as those that rendered the skies over Tehran that fateful morning so very dangerous.

With respect to the preparation of this report, I want to express my personal appreciation to a strong team of very supportive and helpful public servants including, in particular, those at the Privy Council Office and Global Affairs Canada: Vincent Rigby, Mike MacDonald, Michelle Cameron, Jeff Yaworski, Beth Champoux, Katie Fry, Rebeka Tekle and Megan Bujold, with special thanks to Greg Dempsey for his skill, judgment and hard work.

Honourable Ralph Goodale, P.C.

Special Advisor to the Prime Minister

Regina, Saskatchewan

Som white

Ralph Goodale served as a federal Member of Parliament elected from Saskatchewan for more than 31 years. With experience in both government and opposition, his Cabinet responsibilities included Agriculture, Natural Resources, Government House Leader, Public Works, Finance and Public Safety.

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CHAPTER 1

WHAT HAPPENED TO PS752? A PAINFUL CANADIAN TRAGEDY

Canada continues to grieve the devastating loss of human life, suffered on the morning of January 8, 2020, when Ukraine International Airlines Flight 752 (PS752) was tragically shot from the skies over the city of Tehran.¹

Contrary to international legal obligations,² Iranian surface-to-air missiles brought down this normally behaving³ civilian airliner, a Boeing 737-800, killing all 176 people on board, including 55 Canadian citizens, 30 permanent residents of Canada and 53 others who were on their way to Canada, via Kyiv, that fateful day. Other victims were from Iran, Ukraine, Sweden, Afghanistan and the United Kingdom.

As the enormity of this disaster became evident—the worst loss of Canadian lives in an international air disaster since Air India Flight 182 in 1985⁴—the Prime Minister of

Canada's response to Ukraine International Airlines Flight

Canada expressed the condolences of an entire nation to the bereaved families⁵ and began a comprehensive whole-of-government effort to provide the human support those families would need. He also demanded a thorough and credible investigation into how such a tragedy could possibly happen, pledging that Canada would not rest until vital questions were answered and transparency, accountability and justice for the families were achieved.⁶

This thirst to know what happened to PS752 is shared around the globe. On Canada's initiative, 5 countries (Canada, Ukraine, Sweden, Afghanistan and the United Kingdom) are working closely together in an International Coordination and Response Group (Coordination Group).⁷ They have pressed Iran for a thorough and transparent investigation. They will also pursue reparations, including compensation, as well as answers to many vital questions. For example, what was the sequence of events and decisions that resulted in deadly missiles being fired at a civilian aircraft that had received clearance to take off into dangerous airspace,8 which remained open while and after Iran launched missiles against American targets in Iraq?

² Article 3bis of the Convention on International Civil Aviation (also known as the Chicago Convention), to which both Canada and Iran are state parties, sets out an international legal obligation to refrain from resorting to the use of weapons against civil aircraft in flight and that, in case of interception, the lives of persons on board and the safety of aircraft must not be endangered. To note that this provision shall not be interpreted as modifying in any way the rights and obligations of states set forth in the Charter of the United Nations.

³ Radar data and Iran's own preliminary safety report confirm that Flight PS752 was on its flight route at the planned altitude and trajectory. See Annex D for Iran's official documentation relating to the downing of PS752.

⁴ Lessons to Be Learned: The report of the Honourable Bob Rae, Independent Advisor to the Minister of Public Safety and Emergency Preparedness, on outstanding questions with respect to the bombing of Air India Flight 182

^{5 &}lt;u>Statement by the Prime Minister on the fatal plane crash in Iran</u>

Prime Minister's remarks updating Canadians on the fatal plane crash in Iran

⁷ Canada announces formation of International Coordination and Response Group for families of victims of PS752

⁸ U.S. Federal Aviation Administration, Twitter, January 7, 2020



Many of the key details of this horrific event remain unknown to Canada, to the other Coordination Group nations and to the families. Iran bears responsibility for that because at least thus far-it has not conducted its investigations (safety, criminal or otherwise) in a truly independent, objective and transparent manner; and answers to critical questions have not been forthcoming.9 At the same time, in the aftermath of this disaster and for the purpose of preventing others, the world community can take this opportunity to reflect on the efficacy of international procedures and standards that, among other things, assign lead investigative functions to countries that may well be the perpetrators of the conditions that cause disasters while granting only limited participation to those who may have suffered the greatest losses.10

Information gaps and impediments notwithstanding, this report attempts to summarize what we believe we know so far.

As 2019 came to an end, escalating tensions and cycles of violence continued to afflict the region encompassing Iraq and Syria. On December 27, for example, Iran-backed militias fired rockets into positions where U.S. forces were located near Kirkuk in Iraq, killing an American contractor who worked as a translator for the U.S. military. Two days later, the Americans retaliated with attacks against 5 suspected militia positions. On New Year's Eve, a pro-Iran demonstration in Baghdad evolved into an assault on the U.S. embassy. Then, on January 3, an American drone attack near Baghdad airport killed a powerful and prominent Iranian General, Qassem Soleimani, the head of the **Quds Force of the Islamic Revolutionary Guard** Corps (IRGC), who was reputed to be directing the militia activity against the United States and others. His death was significant for Iran, prompting a period of official mourning and promises of retribution. The world was on alert for that response.

It started around 2 o'clock in the morning (local time) on Wednesday, January 8. Over a span of about 2 hours, several volleys of Iranian missiles were fired at 2 air bases in Iraq, one

⁹ Iran released a Factual Report in July 2020, though the report did not provide answers to any of the questions that are noted below. Canada also cannot independently verify many of the facts presented in that report. See Annex D for Iran's official documentation relating to the downing of PS752.

Pursuant to Article 26 of the *Chicago Convention*, it is the state in which an air disaster occurs (in this case Iran) that will institute an inquiry into the circumstances of the crash, in accordance, so far as its laws permit, with the procedure which may be recommended by the International Civil Aviation Organization. The state in which the aircraft is registered (in this case Ukraine) shall be given the opportunity to appoint an accredited representative to be present at the inquiry. For more information, see Iransportation Safety Board of Canada, "Backgrounder: Foreign air occurrence investigations".

west of Baghdad and the other near Erbil, where American forces were housed. Iranian Foreign Minister Mohammed Javad Zarif described these strikes as "...proportionate measures in self-defence under Article 51 of the UN Charter...".¹¹

Reacting to the reality of a shooting war in the region, the U.S. Federal Aviation Administration (FAA) issued an official notice (NOTAM12) ordering American civilian aircraft to avoid an area roughly from the Mediterranean Sea to the Gulf of Oman, including all of Iran.¹³ Commercial airlines from other countries-Canada, Australia and Singapore, for example—also steered clear.14 Ready for the Americans to shoot back, Iran had placed its air defence system on high alert. Its military assumed greater procedural control over civil flight operations. Advance preparations included locating mobile surface-to-air missile units at temporary positions around Tehran.¹⁵ Iran did not, however, close its airspace to civilian traffic.

Only a couple of hours after Iran finished firing on those American positions in Iraq, and a few hundred kilometres to the east, Flight PS752 was getting ready to depart from Tehran's Iman Khomeini International Airport (IKA) for Kyiv. It was cleared for takeoff by both civilian and military authorities, and became airborne at about 6:12 am local time. The departure was nearly an hour late, but the plane's takeoff, ascent to the northwest, speed, altitude and trajectory occurred normally as expected. If Suddenly, at 6:15 am, PS752's transponder ceased to function at 2,400 metres. And at 6:18 am the aircraft crashed into a playground on the outskirts of the city.

Half a world away, in mid-winter Ottawa, it was still Tuesday evening, January 7.

11 Javad Zarif on Twitter, January 7, 2020

The departments of Global Affairs Canada and National Defence, the Privy Council Office, the Prime Minister's Office (PMO) and Canadian intelligence agencies had been carefully monitoring the deteriorating circumstances in the Middle East with growing concern. The Prime Minister was being regularly briefed and consulted. Transport Canada was keeping a close eye on any implications for civil aviation, especially Air Canada.

Through the previous days and hours, the Prime Minister had been working the phones to help find some means of de-escalation in the region in consultation with other leaders, such as Germany's chancellor, Angela Merkel, the Secretary-General of NATO, the President of the European Council and the King of Jordan. On that Tuesday evening, officials were huddled in the Prime Minister's Office across the street from Parliament Hill, drafting a formal statement to condemn the Iranian missile attack that had just taken place on U.S. positions in Iraq. Among other things, Canada was worried about the safety of several hundred Canadians in the area who, under the auspices of NATO, were training Iraqi security forces.¹⁷

It was well after 10 pm (local time) Tuesday when Transport Canada's Aviation Operations Centre in downtown Ottawa determined that a civilian airliner had crashed near Tehran ... more details to follow. As those details arrived through that awful night, an enormous Canadian tragedy emerged. Our troops were safe, but a great many of the lives lost on that airliner had significant links to Canada—as citizens and permanent residents, as well as many people travelling on student and visitor visas—138 in all. Canadians would want the most accurate information, and anguished families were going to need help in coping with the painful aftermath.

The first requirement was to cut through the fog of disaster and get the facts. Transport Canada, National Defence, Global Affairs Canada and the Communications Security Establishment worked through that night in Ottawa, and well into Wednesday, to cobble together all available

Notice to Airmen, a notice filed with an aviation authority to alert aircraft pilots of potential hazards along a flight route or at a location that could affect the safety of the flight.

¹³ The FAA on Twitter, January 7, 2020

¹⁴ CNBC, "Airlines avoid Iranian airspace, cancel flights as Middle East tensions spike," January 7, 2020

¹⁵ This information comes from Iran's preliminary safety report into the downing of Flight PS752. The Government of Canada has no ability to independently corroborate the information in the report, but basic facts from the report are cited here where we do not possess information to contradict them. See Annex D for Iran's official documentation relating to the downing of PS752

¹⁶ As noted above, radar data and Iran's own preliminary safety report confirm that Flight PS752 was on its flight route at the planned altitude and trajectory. See Annex D.

¹⁷ Operation IMPACT



early details, including information from airline passenger manifests, flight data from both ground and satellite systems that monitor civilian air traffic worldwide, domestic and foreign intelligence reports, military information, and public and social media. Contact was made with our allies in Ukraine and with the Italian government, which acts as Canada's "protecting power" in Iran (in the absence of a Canadian embassy). 18 Prime Minister Trudeau reached out personally to French President Emmanuel Macron, Prime Minister Boris Johnson in the U.K., President Donald Trump in Washington and Australian Prime Minister Scott Morrison. Initial contact was also made with Iran to arrange an urgent conversation between Foreign Ministers - the first such direct contact since the closure of Canada's embassy in Iran more than 7 years earlier.

Also on that Wednesday, the Transportation Safety Board of Canada (TSB) received official notification of the PS752 disaster from Iran's Aircraft Accident Investigation Board (AAIB), and the TSB thus began its work under the terms of Annex 13 to the *Chicago Convention*.¹⁹

On Wednesday as well, at the Prime Minister's direction, the Privy Council Office began to form a whole-of-government emergency task force on PS752 to provide top-level coordination among a dozen relevant federal departments and agencies. And Global Affairs Canada began arranging for consular services²⁰ to be delivered to the bereaved families, including those who had gone, unknowingly, to Pearson International Airport in Toronto to meet relatives who were expected to be coming from Tehran that day on a flight through Kyiv. There were 138 empty seats.

With senior ministers and officials, and as much hard information as could then be gathered, the Prime Minister provided a media briefing that Wednesday afternoon (January 8). He emphasized the need for a thorough and credible investigation to determine the exact cause of this huge Canadian tragedy, and noted it was too early at that point to speculate about what had gone so terribly wrong. Transport Minister Marc Garneau observed that all available data suggested a normal takeoff, but then the data suddenly stopped, indicating "something very unusual happened."

Through the rest of that day and the night to follow, Canadian officials continued to piece together everything that could then be known about PS752, including photos and videos in the public domain, as well as intelligence reports from both Canadian and allied sources.

¹⁸ Following the closure of the Canadian embassy in Iran in 2012, Canada requested that Italy serve as Canada's Protecting Power in Iran. In this role, Italy agreed to be Canada's diplomatic liaison in Iran and to represent Canada's interests in the country. See <u>Canada-Iran Relations</u>.

¹⁹ TSB statement on the January 8, 2020 accident involving Ukrainian International Airlines flight 752 in Tehran, Iran

²⁰ See Annex E

The truth was getting grimmer. While Iranian news outlets were reporting various theories of what had transpired, a common thread in their stories was a denial of any responsibility on the part of their government—it must have been some kind of engine or mechanical failure, they surmised.²¹ But Canada soon knew that was not the case. Details were provided to Prime Minister Trudeau in the latter part of the morning on Thursday, January 9.

Shortly thereafter, at his second media briefing in as many days, the Prime Minister announced that, based on reliable intelligence from multiple sources and other evidence analyzed since Wednesday, the Canadian government had concluded that PS752 had, in fact, been shot down by Iranian surface-to-air missiles. The need for a thorough, credible, in-depth investigation was now even more compelling. The Prime Minister also confirmed that Foreign Minister François-Philippe Champagne had made contact with his Iranian counterpart (late the night before) to register Canada's outrage and to insist on immediate Canadian access to Iran to deliver consular services to victims' families, assist in identifying the deceased and participate in an investigation.

The Prime Minister's outreach to world leaders was continuing. That Thursday he spoke with President Volodymyr Zelenskyy of Ukraine, Prime Minister Stefan Löfven of Sweden, Prime Minister Mark Rutte of the Netherlands and (for a second time) French President Macron. As home base for the airline company and a country with whom Canada has a staunch friendship, Ukraine would be a vital partner in any PS752 investigations. Sweden, as one of the nations who lost citizens in the crash, was grieving alongside Canada. France was providing tactical assistance. And the Netherlands, another great friend, had important expertise to impart due to its widely acclaimed safety investigation into the shooting down of Malaysia Airlines Flight 17 over eastern Europe in 2014.

It was getting close to midnight on January 10 when word arrived in Ottawa that Iran had finally admitted that PS752 had not been brought down by an engine fire or mechanical failure as they had been suggesting. Instead, Iran's President, Hassan Rouhani, tweeted that "...regrettably missiles fired due to human error caused the horrific crash of the Ukrainian plane & death of 176 innocent people." ²³ He described this as a "great tragedy and unforgiveable mistake," and pledged further investigations and prosecutions. There was no explanation for why this information had been suppressed for 3 days, since it would have been known instantly to the IRGC commanders in charge of Tehran's airspace on the morning of the disaster.

On Saturday, January 11, with Iran's aboutface on the record, Prime Minister Trudeau spoke directly to President Rouhani to express Canada's profound grief and anger at the horrific loss of life caused by Iran, and to state our high expectations for credible investigations resulting in transparency, accountability and justice for the families, together with reparations as required by international law. That same day, the Minister of Foreign Affairs convened another call with the Coordination Group.

In the meantime, beginning on January 10 and continuing through the following weekend, TSB investigators and members of Canada's Standing Rapid Deployment Team (SRDT)

Also on that Thursday, January 9, the Royal Canadian Mounted Police (RCMP) began the difficult and delicate process of formally notifying next of kin about the loss of their loved ones, working with local police services across the country. And inside Global Affairs Canada, Minister Champagne began pulling together his counterparts from Ukraine, Sweden, Afghanistan and the United Kingdom to create the International Coordination and Response Group, which was officially announced in the 5 capitals the next day—Friday, January 10.²²

²¹ BBC News, "Iran plane crash: Tehran rebuffs claims it shot down Ukrainian jet," January 10, 2020

^{22 &}lt;u>Canada announces formation of International Coordination</u> and Response Group for families of victims of PS752

^{23 &}lt;u>Hassan Rouhani on Twitter</u>, January 10, 2020



Meeting of the SRDT in Iran at 3:20 am on January 14

made their way to Turkey, en route to Iran, to begin investigative work and the delivery of consular services, with support from the Canadian embassy in Ankara and the Italian embassy in Tehran. After some border delays, they all got to Tehran by January 13.

The TSB team spent 6 days in Tehran, where they had several meetings with officials from Iran's AAIB, visited the crash site (but only after it had been significantly dismantled), and examined the wreckage in a separate venue to which it had been relocated.²⁴ Media reports immediately following the disaster showed dozens of emergency vehicles and personnel, together with military officers and apparently random civilians, attending the site. Effective security measures were not evident. Unverified but compelling media photos indicated that bulldozers were in use on the site as early as January 10.25 Iran reported that the plane's black boxes—i.e., its cockpit voice recorder and flight data recorder—were recovered quickly. That was good news, but despite the obligation under ICAO Annex 13 to download and analyze the recorders "without delay," that did not occur for more than 6 months.²⁶

After its work in Tehran, the TSB team moved on to Kyiv for 2 days of joint meetings with the AAIB and the National Bureau of Air Accident Investigations of Ukraine (NBAAI). Meanwhile, and separately, the RCMP had arrived in Ukraine on January 14 to work with the Canadian embassy in Kyiv and Ukrainian counterparts to scope collaborative efforts with respect to a criminal investigation. On the same day, a Transport Canada accident investigation expert also arrived at the Canadian embassy in Kyiv to provide technical expertise to Ukrainian civil aviation authorities and Ukraine International Airlines. The Transport Canada deployment concluded at the end of January. The RCMP deployment was temporarily suspended on March 13 due to COVID-19 issues, but the RCMP's work with the Prosecutor General of Ukraine is on-going to help get the truth about PS752.

In support of the grieving families, and in the interests of safe and secure civil aviation worldwide, Canada has consistently called for the complete and credible investigation of both technical safety matters and criminal responsibilities in the PS752 disaster.²⁷

International rules contemplate a safety investigation by experts conducted through the relevant equivalents of our TSB, with the lead role and effective control assigned to the country in which the disaster took place,

²⁴ Status and next steps in the PS752 safety investigation

²⁵ Global News, "Confusion reigns on whether Iran has bulldozed Flight 752 crash site," January 10, 2020

²⁶ Statement from International Coordination and Response Group for the victims of Flight PS752 on Iran delivering flight recorders. It should be noted that there was ample time for the downloading to take place (at least 9 weeks) from January 8 until worldwide travel was affected by the COVID-19 pandemic in March.

²⁷ Prime Minister Justin Trudeau updates Canadians about the flight PS752 tragedy

namely Iran.²⁸ Such a safety investigation is focused on technical causes (including human and organizational factors), and is not intended to address the question of responsibility or blame.²⁹ Criminal matters are left to be pursued under each country's domestic laws. Since Iran controls the site, most of the evidence and the witnesses, and the practical ability to identify and interview suspects, Iran is also in full control of any first-hand criminal investigation and subsequent prosecution. The world has been informed that as many as 6 Iranian individuals have been charged with certain offences in connection with the destruction of PS752 and its 176 fatalities, but no information has been made available about who these people are, what they are alleged to have done, their degree or level of responsibility, the evidence being used against them, the substance of their defence, and the exact judicial process by which their guilt or innocence is being or will be determined.

This state of affairs raises obvious concerns about credibility, conflicts of interest, and a lack of transparency and accountability, especially in light of Iran's admission that its own military—specifically the IRGC—fired the missiles that downed this innocent commercial airliner, which had been fully cleared for takeoff by Iran's military and civilian authorities. The party responsible for the situation is investigating itself, largely in secret. That does not inspire confidence or trust.

Concern is heightened by the quick disruption and contamination of the crash site, the long delay in downloading the black boxes, and instances of harassment and intimidation directed toward some of the victims' families—including interventions at funerals, the withholding of personal effects, disturbing communications, stalking, detentions and interrogations. In the same vein, an audio recording³⁰ has been obtained by Canadian

media of a telephone call from a senior Iranian official to a Canada-based family member in which that official criticizes the family member for social media posts critical of Iran. Some of that conversation could be interpreted as threatening. The official also suggested Iran's airspace remained open throughout the relevant period to avoid disrupting scheduled traffic or tipping off the Americans about Iranian military activity.

In addition to the TSB's independent safety investigation work under the *Chicago Convention* and the RCMP's support for Ukraine's criminal investigation, Canada has also established a dedicated Forensic Examination and Assessment Team to catalogue and review all accessible information, intelligence and evidence pertaining to PS752 for the purpose of providing expert assessments and advice to the Government of Canada about the probative value of that material, its meaning and credibility, and the integrity of the process by which it was derived.³¹

With respect to the safety investigation being led by Iran's AAIB, Canada is awaiting that organization's final report. To date, the AAIB has produced its original notification of the disaster and 4 subsequent interim reports.³² Without citing specific evidence yet to support their conclusions, these reports have suggested that a lengthy chain of human errors and other deficiencies resulted in the mistaken firing of Iranian missiles at PS752 on the morning of January 8. It is to be hoped that the AAIB's final report will be more forthcoming with details and evidence.

In broad terms, the description of events to date by Iran is along these lines:

 As part of Iran's air defence system being placed on high alert, the IRGC moved a number of mobile missile units into temporary positions around Tehran;

²⁸ Pursuant to Article 26 of the Chicago Convention

²⁹ See Backgrounder: Foreign air occurrence investigations

³⁰ CBC News, "Iran dumps Flight 752 investigator after he suggests Tehran kept airspace open to conceal 'imminent' attack," July 3, 2020

Forensic team to support Canada's ongoing response to Ukraine International Airlines Flight PS752 tragedy

³² See Annex D for Iran's official documentation relating to the downing of PS752.



PS752 crash site

- One of these mobile air defence units was located in some proximity to IKA airport, where its operator failed to align it properly, making an enormous directional error of 107 degrees off north;
- During the entire time that this unit was in this location, neither the operator nor his command centre apparently detected that the unit was misaligned by what amounted to nearly one-third of the compass;
- Whatever night vision, video, radar or other identification systems may or may not have been available or functional, the operator was apparently unable to distinguish friend from foe in the skies over the nation's capital;
- There was a communications failure between the operator and his command centre for some period of time, including when PS752 became airborne;
- The operator mistook a 40-metre long commercial passenger jet taking off and ascending from east to west for some sort of threatening aircraft or missile coming in from west to east;

- The operator alone decided to fire 2 surface-to-air missiles at PS752 in direct violation of applicable procedures not to fire at all without the authorization of his command centre;
- While these errors and defects, together, resulted in the destruction of PS752, a significant number of other commercial passenger jets took off and landed at IKA airport, both before and after PS752, without being attacked.³³

Given the extraordinary nature of this description of events, it is understandable that the victims' families find Iran's explanations difficult to accept—at least so far. To remove doubt and relieve anxiety, Iran bears a heavy burden of responsibility to be completely comprehensive and transparent in substantiating its explanations with credible, compelling evidence, which has not yet been forthcoming.

It is similarly understandable that the international civil aviation community might be concerned about, among other things, the functionality of Iran's military air defence system, its fail-safe mechanisms, the

³³ See Annex F for a list, determined by Transport Canada, of aircraft that took off from IKA international airport on January 8, 2020.

training and competence of its operators and commanders, the risk of aberrant behaviour, a defective interface between Iran's military and civilian air operations, the procedures (if any) to inform air defence operators of the identities of commercial aircraft, the procedures (if any) to warn commercial aircraft owners and operators of relevant military activities, and the quality of decision-making in relation to keeping Iran's airspace open during, immediately after and in anticipation of further military hostilities. In the circumstances of this case, as known thus far, there are indications of incompetence, recklessness and wanton disregard for innocent human life. It is incumbent upon Iran to respond to these concerns in candid and compelling terms, or risk the loss of international confidence in its ability to maintain a safe airspace.

If the international community is not fully informed and satisfied about what exactly happened on the morning of January 8 in the skies over Tehran, why it happened, and how it has been corrected so it cannot happen again, there will be lingering worry about air safety in the region and ongoing doubts about those in charge.

Following are some of the major questions to which the world needs complete and truthful answers

Airspace management and decisionmaking on January 8, 2020

• In planning its missile attack on U.S. locations in Iraq to take place in the early hours of January 8, did Iran take into account major commercial air traffic corridors that would be crossed by the planned path for those missiles, and what steps were taken to provide advance warning to commercial aircraft owners and operators worldwide?

- From the time Iran began its missile attacks against U.S. positions in Iraq on the morning of January 8, what is the complete and exact sequence of events and decisions—both civilian and military (including the IRGC)—that affected Flight PS752? How did civilian and military authorities communicate with each other through all these events, were there any conflicts or communications failures, which one of them made the final decision to clear PS752 for takeoff, and what factors were taken into account?
- Given that tensions had been steadily rising in the region, hostilities were increasingly frequent, Iran had just fired missiles at U.S. bases in Iraq and Iranian air defences were on high alert for American retaliation, what steps did Iran take to assess the full range of risks to civilian aircraft operating in its airspace? What is the process for determining whether to close or keep open that airspace? Who was involved in that process? Did anyone request or propose its closure? Who made the final decision? What was the rationale for leaving Iranian airspace open, despite the risks?
- Having decided to keep its airspace open, despite the risks, what system did Iranian authorities have in place to inform the owners and operators of civilian aircraft about potential hazards in the region that would allow those owners/operators to make their own determinations about the safety of flying into, out of or over Iran? What specific information was provided to the owners/operators of PS752 and other incoming or outgoing flights? Was any mention made that IKA airport was under surveillance by mobile air defence units (ADU) with the capability of firing surface-to-air missiles?



Memorial at the PS752 crash site

- What system did Iranian authorities have in place to inform the operators of mobile ADUs about the identities of specific civilian aircraft either landing at or taking off from IKA airport, to ensure those aircraft were not misidentified by ADU operators as hostile targets?
- How were the civilian and military command structures and control mechanisms de-conflicted so complete and accurate information was passed on to the owners and operators of all civilian aircraft, as well as to ADU operators? Are those same de-confliction processes in place today or have they been changed?

ADU missile system and operator proficiency

• What technical and human fail-safe mechanisms were in place related to the ADU missile system to ensure each mobile unit's proper movement, positioning, alignment and set-up and to prevent the misidentification of targets or mistaken engagement with civilian aircraft? Are those same fail-safe mechanisms in place today or have they been changed?

- What type of training is provided and what procedures are in place to ensure ADU operators—including specifically the one who fired at PS752—have the skills and levels of proficiency necessary to function safely and not cause harm to civilian aircraft?
- What was it exactly about PS752 that convinced the ADU operator that it was a hostile incoming threat, which had to be destroyed?
- Given the busy skies over Tehran on the morning of January 8, did the ADU operator who fired the missiles that destroyed PS752, or any other ADU operator, mistakenly misidentify any other commercial aircraft as a hostile threat? If so, what was done to correct that situation?
- Who was the ADU operator who fired the missiles that destroyed PS752? What is his age, training, experience, rank, level of competence and current status? Were there others working with this operator within the ADU? Who are they?

Command and control issues

- What were the explicit command and control procedures for the ADU operator to identify, authenticate and gain approval to fire at a target? What were the exact roles and authorities of each participant in the chain of command? What were their communications systems? How, in detail, did each of these fail, and why? Have any of these factors been changed?
- Were there or are there any inducements or incentives, expressed or implied, that could influence an ADU operator to violate applicable procedures and fire before receiving proper authority?
- Who in the military chain of command carries ultimate responsibility for this disaster? Who were the commanding officers responsible for the ADU operator who fired on PS752? What are their ages, training, experience, ranks, levels of competence and current status, and to whom do they report?

Iran's responsibility and investigative response

- The government of Iran has described this "horrific crash" as a "great tragedy" and an "unforgiveable mistake." In light of that, who in the Government of Iran assumes political responsibility for the destruction of PS752 and the deaths of 176 innocent people?
- Given the certainty that PS752 was shot down by Iran's own military, why was the decision taken to conduct the necessary safety and criminal investigations entirely internally by Iranian authorities, as opposed to delegating those responsibilities to impartial external third parties, as has been done in other similar circumstances?

- When did the mobile ADU that fired on PS752 take up its position in proximity to IKA airport? Where exactly was that location? When was it removed from that location? Where is it now? Has it been kept secure as material evidence? What has Iran done to examine this ADU?
- Why was the departure of PS752 at about 6:12 am (local time) delayed from its scheduled departure time of 5:15 am? When did the boarding of passengers begin and end? Did any passengers or crew members disembark once they had boarded the aircraft? Did any confirmed passengers fail to present themselves for boarding?
- Given the massive prevalence of cellphone technology to communicate in urgent situations and take photos and videos, what steps have been taken to determine if any passengers or crew members attempted to communicate with anyone on the ground, or took photos or videos, in those desperate moments between the first missile strike and the ultimate crash? Were any cellphones, cameras or video recorders recovered at the crash site? Where are they now?
- What engineering analysis was done on the wreckage of the aircraft to determine whether it was damaged by 1 missile or 2? If 2, the extent of the damage done by each and where; and the extent of further damage done when the aircraft hit the ground?
- How and why was the decision taken to delay for 3 days the releasing of information that PS752 had been shot down by the Iranian military?

While Canada awaits definitive answers to these essential questions (and others)— together with the hard evidence upon which those answers are based—to ensure that Iran has been as transparent and thorough as possible in its investigation of the PS752 disaster, Canada's response to the victims' families also includes concerted action on several other fronts.

In every case in which family members report being threatened or harassed, either in person, by telephone or online, Canadian police and national security agencies must investigate and follow up. The Government of Canada takes a very dim view of such abusive activity in this country. Depending on the facts, harassment, intimidation, uttering threats, hate speech, terrorism and foreign interference are specific offences under the Criminal Code and other statutes, and should be prosecuted to the full extent of the law. RCMP and CSIS collaboration with Iranian-Canadian communities and organizations across Canada is important to help build local and national resilience to help prevent this abusive behaviour directed against the grieving families.

In the days and weeks immediately following the disaster, it was necessary to accommodate emergency travel for family members between Canada and Iran. Help was provided by Global Affairs Canada, Immigration, Refugees and Citizenship Canada, and the Canada Border Services Agency. In the months since, a number of immigration and visa issues have been successfully resolved. The government has taken a facilitative stance to offer support and direction as the families have navigated their travel requirements. Issues continue to be addressed. Work is ongoing.

Through the International Coordination and Response Group, Canada is working with all our aggrieved partners on reparations negotiations in accordance with international law. Iran has committed an internationally wrongful act. It is obligated to make full reparations to the injured parties, including the victims' next of kin, and the affected countries. Reparations include more than just compensation. The Coordination Group countries will also be seeking a full and candid accounting of what exactly happened, assurances that it won't happen again (including concrete preventative measures), and a formal apology.

Canada goes into this process with eyes wide open and ready for any eventuality, and is keeping all its options open. Should negotiations fail, Canada will continue to pursue transparency, accountability and justice though all relevant international forums, including the United Nations, ICAO, the International Court of Justice, and others. Doing so is not only in the interests of the grieving families and aggrieved nations: it is also essential to the pursuit of safe and secure international civil aviation.

Finally, as the first anniversary of this horrible disaster approaches, the Government of Canada needs to ensure that the lives of those lost aboard PS752 are properly commemorated. We must also honour the precious lives lost in other international air disasters, such as Air India Flight 182 and Ethiopian Airlines Flight 302. They were and are all deeply loved by their families. They represented enormous human potential for Canada, and indeed the world. They will be forever remembered.

CHAPTER 2:

THE GOVERNMENT OF CANADA RESPONDS ... IN ITS OWN WORDS

Over the past several months, working on the government's response to the tragic loss of PS752, I have had many opportunities to take a close look at how both elected officials and public servants have dealt with this large, painful and ongoing crisis. Three things are evident:

- From the outset, the PS752 disaster has had the government's full attention at the highest levels
- A whole-of-government approach has helped to ensure comprehensiveness, coherence and efficacy
- The needs and expectations of the families of the victims were and are the driving focus for the government's work

While the Prime Minister, Ministers and Parliamentary Secretaries have been intensely and personally engaged from the outset—making decisions and providing direction—they have been ably supported by a strong team of public servants. In speaking with this team, I have heard compelling descriptions of how they were impacted by the enormity of the situation, the anguish it caused and the human needs it exposed. And they rose to the challenge.

One way to capture what they did is to use their own words—to offer a glimpse into what was happening in those fateful hours and days immediately after the disaster, and how events have unfolded since. Their narrative provides an overview of the key issues that had to be addressed and the can-do mentality required to get the job done. This may offer some practical guidance for future governments when confronted with similar disasters.

The prelude

David Morrison, Foreign and Defence Policy Advisor to the Prime Minister, was acting as National Security and Intelligence Advisor to the Prime Minister in December 2019. Morrison recounts the fateful days leading up to the downing of PS752:

"For me, this timeline starts in late December 2019 with the events that led to the tragedy. On the 27th, we heard that an Iraqi air base in Kirkuk province was attacked with rockets, some U.S. troops were injured, and there was loss of life."



Marta Morgan, Deputy Minister of Foreign Affairs, and her team were also focused on the events in the region well before the fateful day of January 8:

"Over the holiday period we were occupied with the situation in Iran and Iraq, especially after the killing of General Soleimani on January 3. We were very closely watching what was going on, trying to understand the implications for the world and for our people on the ground."

On January 7, Ottawa had seen unseasonably warm weather, with the temperature nearly climbing above zero, with a light dusting of snow that began falling after sunset.

Michael Keenan, Deputy Minister of Transport, had just left his office on Sparks Street as the snow began to fall and was at the gym when he received an urgent phone call. Keenan recounts that discussion as follows:

"The phone rings and it's the safety and security folks with the news that Iran had launched a missile strike and that there is the possibility of further military action. Our team had spoken to the United States'

Federal Aviation Administration and learned that they were in the process of issuing a NOTAM—a notice to their airlines that they should not be flying into the airspace of Iran or Iraq. Under the international conventions, each individual country is responsible for their own airspace, so it would generally be up to Iran to notify if they're in the process of issuing a NOTAM, but they had not done so."

Transport Canada officials then reached out to Air Canada, the only Canadian airline that operates in the region, and Air Canada officials confirmed that they were already taking action to divert their flights away from the danger zone. Although the FAA's NOTAMs are only legally binding on U.S. carriers, Air Canada, WestJet and other Canadian carriers regularly follow FAA NOTAMs regarding foreign airspace. Keenan notes:

"I briefed Minister [of Transport] Garneau on these developments, and it was agreed that the public needed to be made aware of the circumstances as soon as possible, and that was done by 11:55 pm in Ottawa."

That night:

"A very Canadian tragedy"

David Morrison recalls that evening:

"We were in the Prime Minister's Office piecing together what had happened in Iraq and discussing a possible statement on the Iranian strike. It was getting really late when we saw a news alert of a plane crash in the region, but at that time there was no sense of a Canadian nexus. I left the office at around 2 am, and only a few hours later I was woken up to the news that we were dealing with a very Canadian tragedy."

¹ Transport Canada on Twitter, January 7, 2020

Deputy Minister Keenan also began receiving the first reports of PS752:

"At about 11 pm that night I received the first reports that a plane had crashed in Iran. Because we knew this was a conflict zone, I asked my team to immediately begin working to acquire the commercial satellite navigation information and have an initial report by the next morning. Navigation systems can give you some really important information like the flight's altitude, direction and speed in the moments before a crash. We wanted to gather as much information as quickly as possible."

Adam Foulkes of Global Affairs Canada's Emergency Watch and Response Centre (EWRC) was working that evening:

"It was just after midnight that we began to pick up word that a Ukrainian airliner coming from Iran had crashed soon after takeoff. I got on the phone immediately and was able to speak with our embassies in Ankara and Kyiv to ask for information on the plane's manifest. It wasn't more than 2 hours later, probably about 2:30 am, that Kyiv called me back. I'll never forget the shock as they told me that the manifest indicated there were dozens of Canadians on the flight. It felt like only a few moments later that the first calls from families started coming in."

That morning:

"So many incredible people"

Deputy Minister Morgan describes how she first heard of the tragedy:

"I got word in the late evening [of January 7] that a civilian airliner had crashed, but it was only the next morning that we fully came to understand that this plane, going from Tehran to Kyiv, was actually full of people coming to Canada—citizens, permanent residents, students and so many incredible people with connections to Canada."

Brent Robson, Director of Emergency Operations at Global Affairs Canada, speaks of the difficulties of this particular crash:

"I knew that first morning that we would be facing some unique challenges. The initial manifest that was made available was missing critical information, information that would normally come from the country of incident (Iran in this case). We instead had to reconfirm the passenger list from the airline through our embassy in Kyiv, which they fortunately got to us pretty quickly. Once we got the list, we worked with IRCC [Immigration, Refugees and Citizenship Canada], CBSA [Canada Border Services Agency], and the RCMP to validate who exactly had been on the plane and to establish the status of the victims with connections to Canada."

Deputy Minister Keenan's team at Transport Canada had also worked through the night to gather data, and they had an initial picture by early the next morning:

"We were able to look at the satellite feed that morning and we saw that with PS752 everything was normal until it got to an altitude of 8,000 feet (2,400 metres), when it suddenly stopped broadcasting its coordinates. It was like a switch and the satellite system stopped receiving information. We began to turn our minds to 3 possible reasons: a shoot-down, a bomb or a mishap with cargo that caused an explosion."

Keenan immediately briefed Minister Garneau and key colleagues on these initial assessments.

The first day: "The enormity of the tragedy really sinking in"

As calls and information started streaming into Global Affairs Canada in the early morning hours of January 8, the department's teams responsible for Ukraine and Iran were also realizing the gravity of the incident.



Minister Champagne honouring the victims of PS752 at Canada House in London, U.K., on January 16, 2020

Alison Grant, director of the division responsible for Ukraine relations:

"We needed to talk to the Ukrainians that first day to get as much information about the plane and the immediate response as possible. Already that morning we arranged calls with both the foreign minister and prime minister. I remember clearly the moment that it seemed likely that many of the passengers included young people returning to school in Canada. You could instantly feel the enormity of the tragedy really sinking in."

Deputy Minister Morgan recalls her discussions with Minister Champagne the morning of January 8:

"We were focused on being aligned with the other countries who were victims of this crash. Minister Champagne was on the phone right away with Sweden, the U.K., and repeatedly with Ukraine. Those high-level political contacts continue to benefit our response to this day."

Individual calls quickly evolved into the need for a discussion amongst all countries. Grant continues:

"On the second day [January 9], the Minister asked to set up a call with all the other foreign ministers of the grieving nations all together. That first joint call allowed us to discuss what we would say publicly, our requests of Iran and our approach in support of the families of the victims."

That phone call was the genesis for the International Coordination and Response Group (Coordination Group) to support families of victims of PS752.

The first days: "Our focus on the victims' families"

Catherine Blewett, Deputy Clerk of the Privy Council, coordinated the Government of Canada's response to the PS752 tragedy in the crucial days immediately after the crash:

"My role was to ensure we were convening the right people, and that Canada was leaning-in in a way that our citizens would expect. Global Affairs was fully engaged, Immigration was pulled in to help with visas, Health was pulled in to make sure we had mental health and community support built in to our work, Transport Canada was doing analysis and working with ICAO, TSB was sending investigators to Iran, CBSA was facilitating arrival processes for families, Justice Canada was working on additional financial and legal supports, Public Safety was working on matching public donations— really, everyone was contributing."

Blewett speaks to the moment when she began to see Canada's efforts taking shape:

"I recall it so vividly; it was late Thursday night [January 9]. I was with the Clerk [Ian Shugart, Clerk of the Privy Council], and it was just the 2 of us in the Clerk's office. We walked through what the crash of PS752 meant for Canada, what kind of response Canada should make, how to ensure that it is credible and thorough."

The Deputy Clerk recalls the government's priority from the start:

"I think our focus on the victims' families brought out the best in colleagues. It started with the Prime Minister's connection to the families, his genuine sympathy, the work of Parliamentary Secretary Alghabra as the families' liaison person. And from my perspective, the response from all levels of government was impressive. I remember that Pro Bono Ontario really stepped up, municipalities contributed, provinces, and communities' support was critical in those gathering places. It really was Canada as a federation that came together."

According to Blewett, one aspect of the response to PS752 that benefited from previous experience was the government's communications. Blewett continues:

"Frankly, we had learned lessons about communicating with families and we knew that it was incumbent upon us to stand up our communications immediately. That the crash happened in Iran made it much more challenging, particularly as we thought about how to support families living inside Iran. Our first priority was setting up a way to link with families."

Consular officers describe how that link worked in practice:

"We called upon our Farsi-speaking colleagues from across GAC to take calls and help translate documents for the families. By the next day, we had dozens of volunteers calling over 24-hour shifts, with sometimes as many as 15 calls going at once."

Their support was invaluable. An EWRC employee put it this way:

"What really stuck with me was seeing some of our Farsi-speaking colleagues openly crying on the phone with families. It felt so striking and sad at the same time. We deal with all kinds of incidents and our officers are trained to always maintain a professional tone. But there was something about the magnitude of this tragedy, and the cultural significance of this open sort of grief for our Farsi-speakers, that really shifted our approach to respond to the needs of the families."

The response affected so many employees that the team working for Deputy Minister of Health Stephen Lucas had the Privy Council Office circulate a message on the resources available to public servants working on the crisis response—to assist them in managing the scope of the tragedy.

IRCC also quickly stood up exclusive channels for families of victims to address immigration issues they were facing. Catrina Tapley, Deputy Minister of Immigration, Refugees and Citizenship Canada, describes this process:

"Our team was able to stand up, in less than 48 hours, an exclusive phone and email for families of victims staffed 7 days a week, in English, French and Farsi. The availability of a dedicated, international phone number was an unprecedented step for IRCC and was mirrored in the work of the department's Operational Readiness & Crisis Management Team, which worked to share information, support negotiations with other states, and develop a public policy to support the families of the victims.

"I'm so proud of the people who were on our call line and the service channels. We mined our department for Farsi-speakers and we used our Settlement Network where we could offer particular support to groups in Canada. We even had a couple people in our Settlement Network who had lost loved ones on PS752, and that made it become even more personal. This meant that we were able to listen to people, listen to their hurt and anger, to be able to hear that grief and do what we could for them."

Another important innovation created as part of the PS752 response was a password-protected Family Web Portal for the victims' families. The portal was designed to facilitate the sharing of relevant information and services offered by all federal departments and agencies as soon as they became available for families to access when needed, and help ensure families' privacy at the same time. A consular officer spoke about the creation of the portal:

"It became clear pretty quickly that some of the families' grieving process was intensely personal and those families did not want to be receiving lots of calls and emails. The portal allowed families to get the information only when they were ready to process it."

The shooting down: "They should stop denying the truth"

It was later on January 8 that officials began receiving information to indicate that the plane crash was not due to regular mechanical or human error. As David Morrison recalls:

"Transport Canada had the radar data, and they described the way the plane suddenly went off the screen. It suggested some kind of catastrophic event that was incompatible with mechanical failure."

This led Minister Garneau to note at the Prime Minister's media availability on January 8 that the data suggested that "something very unusual happened" with Flight PS752.

Global Affairs Canada's assessment unit was also closely monitoring the situation throughout the day of January 8:

"That first day, we began to hear speculation that there was something suspicious about the crash of PS752. We started to receive a lot of open source information, including the plane's flight path and some videos posted to social media that showed an explosion in the vicinity of the airplane."

The assessment team made the decision that a couple of them would work through that night to continue monitoring the situation and gather further information from all possible sources to update senior management at the opening of business:

"I think it was at about 4 am [January 9] when we had gathered enough reliable information to assess that a missile had likely caused the crash. We drafted a report and I think our analysis was done at about 6:30 am. I remember looking back at the office and there were scribbles all over the team's whiteboard, my computer had about 75 tabs open on it, and the entire floor was covered with confetti from punching so many holes in briefing books. I don't think I'll ever forget that moment when we realized what had actually happened."

The unit's report was disseminated to the highest levels of the department and government.

In Morrison's words, "The shoot-down of the airplane completely changed the story."

"In relatively short order, the Prime Minister started to light up the phone lines to our allies, especially calling [Dutch Prime Minister] Rutte to learn about their response to the MH-17 tragedy. This turned out to be instrumental in shaping Prime Minister Trudeau's thinking. Rutte had mentioned how difficult the uncertainty had been for the MH-17 families, and so the Prime Minister was focused on trying to avoid a long period of uncertainty for the PS752 families.

The Prime Minister decided to work through diplomatic channels to get a message to Iran saying that, in the interests of the grieving families, they should stop denying the truth."

Morrison recalls that the Prime Minister's attention then turned to how he would inform the Canadian public:

"I think from there the Prime Minister went right into media prep. I don't think it was much more than 2 or 3 hours from the time the Prime Minister received the information about Iran until his press conference where he informed Canadians."

After the news conference on January 9, David Morrison recalls that things moved quickly:

"A bit more than 24 hours later we found out that Iran was having a press conference of its own. I think it was Friday evening that we heard that an Iranian announcement was in the works, and then soon after that the uncertainty was over because they had admitted to the shoot-down."

Deputy Clerk Blewett recalls:

"If there was one turning point that stood out for me, it would be when the Prime Minister confirmed that this plane was shot down. That's a pretty surreal point, because it very much changed our response. In one moment we were responding to a plane crash, we were doing what a country would do in that type of situation while also being mindful of that part of the world and the tensions that existed. And all the while Iran was denying responsibility. But when the Prime Minister confirmed that the plane was likely shot down, our response all of a sudden needed to be calibrated very differently. That's when you saw our international focus shift to a need for transparency and accountability from Iran, something we remain focused on."

Standing Rapid Deployment Team to Iran: "Into the unknown?"

Deputy Minister Morgan speaks to the inherent difficulties in responding to this incident in Iran:

"We knew our response was going to be really challenging because we had no diplomatic relations with Iran and so we didn't have anyone on the ground to provide consular services. Not having diplomatic relations in a country makes it very hard to deal with issues that arise and that impact your citizens, and especially so when an emergency arises and Canadians are impacted."

Canada closed its embassy in Iran and expelled Iranian diplomats from Ottawa in 2012. Following the closure of the embassy, Canada had requested that Italy serve as Canada's "Protecting Power" in Iran. In this role, Italy agreed to be Canada's diplomatic liaison in Iran and to represent Canada's interests in the country. Morgan describes the calls that went out that first day:

"Almost immediately, Minister Champagne reached out to his Italian counterpart and I reached out to mine, because we knew



Presentation of flowers and condolences to Canada outside the Italian embassy in Tehran

we would need their assistance. We owe a huge thank you to the Italians because they then worked night and day to ensure that we could provide services to people on the ground in Iran."

Since Canada did not have an embassy to provide services, the decision was taken to send Global Affairs Canada's Standing Rapid Deployment Team (SRDT), first to Turkey and then to Iran (with 2 Transportation Safety Board investigators traveling to the same locations at the same time). Securing visas for these Canadian diplomats to enter Iran was challenging; their initial short-term visas were a matter of negotiation, as was each visa extension. Many members of the team boarded planes bound for Turkey before even knowing if they would be able to actually get into Iran.

Ryan Fortner, a member of the team, describes the experience of traveling to Iran:

"We proceeded to passport control and the Iranian officials had a conversation in a back room between agents. We stood there for what felt like a really long time before we were finally let through. The Italians, who were excellent, had offered to arrange a driver to pick us up at the airport. When we first exited into the arrivals hall, the driver was nowhere to be found. Here we were,

these 3 Canadians in Tehran, and we started thinking, would we just have to hop in a cab and proceed into the unknown? Luckily for us, just as we had built up the resolve, the driver appeared."

On the ground: "A moment I will never forget"

The SRDT ensured ongoing communications with the families of the victims on the ground (those residing in Iran as well as those visiting from Canada), met with family members and assisted them with official meetings (e.g. coroner's office), coordinated facilitation letters with the Italian embassy, and obtained death certificates and export documentation for remains. When family members decided to travel to Iran, consular officials often provided travel assistance to return to Canada while CBSA was working hard behind the scenes to facilitate and expedite arrival procedures.

François Shank flew into Iran as part of the team. Here he speaks of his initial meeting with families:

"My first meeting with a family made the tragedy all the more real. I just kept thinking that they showed such incredible strength and resiliency, even though I can't imagine how hard it must have been."

Andrew Turner, who led the team, also remembers his feelings while speaking with family members:

"We felt so privileged to receive so many messages from family members to express their graciousness in these worst of circumstances. It felt important that we were able to provide a small amount of comfort by helping to solve some of the immediate issues that the families were facing."

The team was initially encouraged by the apparent cooperation provided by Iran, but soon faced their first substantive obstacle. Turner continues:

"Iran stated that from their perspective there had been only 4 Canadians on the flight.² One way or another we were there to provide assistance to the families of the Canadians and permanent residents, so our approach was to let them know that we weren't going to disagree openly about questions of citizenship, but that we were there to provide services to those with connections to Canada. I think that approach allowed us to get the cooperation that we needed from the Iranian authorities."

The team also had an opportunity to see the site of the crash for themselves. Here is Turner describing that feeling:

"It was really difficult for some of us because we visited the site of the crash and saw the damage that the plane had caused. It gave us such a visceral sense of the tragedy for the families."

Shank also speaks to the scene that was the crash site:

"It was incredibly somber. You could see that the plane had crashed in a schoolyard maybe 50 yards from 2 densely populated areas. It made you think of just how senseless this tragedy was."

² As a matter of its own domestic law, Iran does not recognize dual citizenship.

Support in Canada: "I don't think I had ever met nicer people"

In the wake of the PS752 tragedy, Global Affairs Canada also deployed members of the SRDT in cities across Canada for the first time. These officers were sent to Vancouver, Edmonton, Winnipeg, Toronto and Montréal to provide in-person support to families. Brent Robson, Director, Emergency Operations, describes the briefing with Minister Champagne where the SRDT took on this new assignment:

"I remember meeting Minister Champagne to discuss the SRDT's deployment to Iran. Well, the Minister asked if we could deploy our people in Canada as well, to provide direct support to the families. We explained that the SRDT team had only ever responded to crises in international settings, but he was insistent. And I think within 12 hours, folks were on planes to the cities around Canada."

The officers sent to cities in Canada coordinated with funeral homes (both in Canada and Iran) and worked with CBSA, the RCMP and airport authorities to facilitate the repatriation of remains to Canada. Consular officials were present at the airport to assist with each of the 13 repatriations to Canada, and to ensure privacy for the families.



As preparations were being made to support the families in Canada, CBSA had a key role in the repatriation of the remains of the victims following the crash. CBSA officers were also often the first point of contact for family members arriving in Canada to help with final arrangements. Mohsan Bokhari, Chief of Operations for CBSA at Toronto's Pearson International Airport, speaks of his colleagues' efforts:

"I am very proud of the work we did [CBSA, warehouse operators, ground crew and Global Affairs Canada] on a professional level, but more importantly, to each family member affected. What I didn't realize was what my team and I were going to experience on a personal level throughout. The emotions were evolving all the time. For me, although each arriving flight never got easier, one of the most impactful moments was when we facilitated the repatriation of a young child's remains to his family. As a parent myself, I will never forget this reunification."

Cathy Rego was part of the SRDT team that traveled to Toronto to assist with the response:

"I heard that I'd be leaving the next morning. We weren't entirely sure what our role would be until we arrived, except to facilitate everything we could for the families."

David Lachance, Deputy Director, Protective Services, went to Winnipeg to assist the families in Manitoba:

"I didn't have much information when I got the call, only that we were leaving the next day, that we would set up an office and figure out how we could help as we went along."

Both Rego and Lachance vividly recall their interactions with family members. Here is Rego:

"I just remember how kind and generous these families were, even as they were dealing with unimaginable loss. It was such a heavy experience, and yet I don't think I had ever met nicer people than these amazing families."

Meeting with Iran: "It felt so dramatic and secretive"

In addition to being closely aligned with the other grieving nations, Canada initiated dialogue with Iran at senior levels to stress the necessity of a transparent investigation of the incident, to communicate and advocate the families' wishes, and to request consular access. These discussions were soon elevated to a potential meeting with the Iranian foreign minister.

Canada and Iran agreed that the meeting location would be Muscat, Oman. Here is Peter MacDougall, Assistant Deputy Minister at Global Affairs Canada, who travelled with Minister Champagne to the meeting:

"I spent a few days before the trip discussing the logistics of the meeting with an Iranian official almost informally over WhatsApp. These conversations felt incredibly dramatic and secretive in the lead-up, which it likely had to be given that it was our first face-toface meeting with Iran in many years.

"We had already agreed to meet with the Iranians before we left for the Coordination Group in London, and we flew from there to Oman. Oman helped us a lot and did a good deal of the organization. We went over to look at the location for the meeting, which only heightened the sense of secrecy since it was in a secluded building located in a private section of the airport."

MacDougall describes that meeting as follows:

"Once the meeting started it was striking to see the different approaches of the 2 ministers. Minister Champagne, having just come from a vigil for the victims in London, was clearly motivated by the needs of the families and deeply engaged in the details."

Safer skies: "Progress that will actually make the world safer"

In the days following the incident, Deputy Minister Keenan and the Transport Canada team turned their minds to the other flights in the air over Iran that day:

"We were surprised that Iran had not closed the airspace. It seemed like there were about a half a dozen planes that took off after the Iranian missile launch [against bases in Iraq] and the downing of PS752."

This realization began a process that would later evolve into the Safer Skies Strategy, designed to bring willing partners together to establish a common set of practices to better protect passengers from the risk of flying in or near foreign conflict zones.³



A depiction of some of the commercial aircraft over northern Iran at about the time PS752 was destroyed

³ Building a more secure and prosperous future: Prime Minister attends Munich Security Conference

Keenan continues:

"When we looked at the flight radar from that day and seeing the skies over Iran and Iraq filled with civilian airplanes, we realized that leaving the closure of airspace over conflict zones to the implicated countries almost never works the way it's supposed to."

The government concluded early on that something should be done to try and fix this. By mid-February the Prime Minister was in a position to announce Canada's Safer Skies Strategy at the Munich Security Conference—aiming to prevent any more tragedies like PS752 and MH17 (see Chapter 5).

Ongoing support: "Prepared us for our very next challenge"

On January 17, Prime Minister Trudeau announced the creation of a financial assistance program for the families. Samuel Moyer, Deputy Director, Consular Policy and Programs, coordinated the creation of this program at Global Affairs Canada and worked alongside other government departments to deliver an ex-gratia payment to the families of each Canadian and permanent resident victim:

"We had looked at comparisons between Ethiopian Airlines and Ukrainian Airlines and found that the PS752 families were receiving significantly less support from the airline. And we didn't have an embassy in Iran to provide consular assistance on the ground. So we got our marching orders to consider a support program through the Deputy Minister on Friday the 10th. At that time we were basically creating the program from scratch."

What resulted was a monetary contribution of \$25,000 for each victim in response to the specific circumstances of the incident to alleviate the families' immediate burden in the aftermath of the tragedy. Moyer continues:

"We worked over the weekend on the first draft of the program and sent the final version to our Deputy Minister on Tuesday the 14th. This crisis created such levels of urgency that we were producing instructions on the fly, running into offices to discuss versions of documents as soon as they were written, because everybody recognized the need to get the families this support as soon as possible."

A committee was immediately struck to evaluate claims from families. Sarah Filotas, Deputy Director, Consular Issues and International Consular Engagement, speaks to the efficacy of the committee's work:

"They met every day to go over requests and to make sure that they had the correct beneficiary. The committee wanted to ensure there was as little time as possible between when the applications were received and payments being made."

Deputy Minister Morgan speaks highly of how this program had a lasting impact on Global Affairs Canada:

"The criteria for the funding program formed the basis for some of the responses that we undertook with respect to COVID-19, so in some sense the terrible tragedy of PS752 prepared us for our very next challenge."

Ordinary Canadians responded too. Shortly after the disaster, Toronto businessperson Mohamad Fakih launched a fundraising campaign called Canada Strong to help the families of the victims. The Government of Canada agreed to match private contributions up to a maximum of \$1.5 million. The government's offer was fully subscribed. Approximately \$3 million in total was distributed to the families though the Toronto Foundation under the direction of Barbara Hall.



Conclusion: "The will of Canadians to do everything they possibly could"

Morgan sums up her department's response to the tragic downing of Flight PS752:

"Global Affairs as a department has a long history of dealing with emergencies, and we have really good systems in place. But PS752 was something extraordinary. There was a huge sense of loss, but right away the entire department rolled up its sleeves and got to work to support these amazing families."

When asked if a particular moment stood out for her in the response, Catrina Tapley mentions the memorials held across Canada:

"I remember the memorial service in Alberta and how special it was. And it wasn't that we were mourning the loss of foreigners, or that we were mourning the loss of people overseas, it was that we were mourning the loss of Canadians. Those services were powerful because they spoke about how every single person who chose to live in Canada contributed to our communities, our universities and our country. It was a really powerful moment and spoke to how fortunate we are that some of the best and brightest people from around the world choose to come to Canada."

Catherine Blewett also speaks about what the tragedy meant to many of the public servants involved in the response:

"I wish people could see behind the scenes; you know, we had some very difficult and sad conversations talking about the families, the difficult reality of the situation, and what had happened. Our response showed the tremendous professionalism of the Public Service in response to situations such as this, turning those difficult moments into determination and a can-do attitude. The system, our deputy ministers, and everyone else was burning the midnight oil with their teams. It really demonstrated the will of Canadians to do everything they possibly could for the families."

CHAPTER 3:

A CHRONOLOGY OF EVENTS AND ACTION

The following is a summary of key developments in the Government of Canada's response to the PS752 disaster rather than an exhaustive list of every detail available thus far. All times ET. (Please note: Ottawa time is 5 hours earlier than UTC, while Tehran time is 3.5 hours later than UTC. Accordingly, there is an 8.5-hour time difference between Ottawa and Tehran.)

JANUARY

2

 due to increasing risks in the region, including air strikes in Iraq, Transport Canada begins monitoring air safety conditions over Iraq and Iran

3

- Transport Canada begins regularly sharing information on tensions in the region with Air Canada—Canada's only carrier active in the region
- Prime Minister Trudeau is briefed on tensions in Iran and Iraq

5

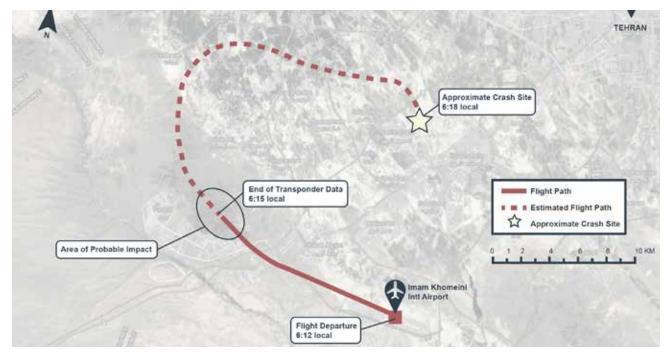
 Transport Canada and Air Canada discuss contingency routes for flights that overfly Iraq

6

- the Prime Minister is briefed on tensions in Iran and Iraq
- the Prime Minister discusses the situation in Iran and Iraq with NATO Secretary General Jens Stoltenberg and President of the European Council Charles Michel

'/

- the Prime Minister discusses the situation in Iran and Iraq with King Abdullah II of Jordan and Chancellor Angela Merkel of Germany
- 17:30 (approx.) Iran begins missile attacks on U.S. positions in Iraq
- Transport Canada is in contact with Air Canada; from this point on, all Air Canada flights in and out of Dubai are rerouted to avoid flying over Iraq
- **21:42** Flight PS752 departs Tehran's Iman Khomeini International Airport



A depiction of the likely 6-minute flight path of PS752 from IKA airport, south and west of Tehran

- 21:44 Iran fires first of 2 missiles, causing the destruction of Flight PS752
- 22:51 Transport Canada officer on duty receives an alert on PS752
- 22:54 Transport Canada transmits information on PS752 within the department and to other departments
- 22:56 Privy Council Office (PCO), Global Affairs Canada (GAC) and Public Safety Canada are advised of the crash
- 23:55 Transport Canada issues a statement noting that it is monitoring the situation in the Middle East and is in close contact with the U.S. Federal Aviation Administration (FAA)
- Transport Canada notifies Air Canada corporate security of the crash

8 (overnight)

- PCO asks Canada's security agencies to provide an assessment of the crash
- GAC's Emergency Watch and Response Centre (EWRC) begins coordinating with Canada's embassies in Kyiv and Ankara to obtain the PS752 flight manifest

- EWRC informs PCO upon receiving the flight manifest
- EWRC begins receiving calls from PS752 family members

8 (morning)

- Transport Canada receives and analyzes flight data for PS752
- Transport Canada issues a statement related to PS752 and is again in contact with Air Canada
- the Deputy Clerk of the Privy Council convenes deputy ministers and high-level officials to coordinate Canada's response; this group will continue to meet regularly throughout the following weeks
- the Prime Minister and Ministers are briefed
- GAC coordinates with Immigration,
 Refugees and Citizenship Canada (IRCC),
 Canada Border Services Agency (CBSA),
 and the RCMP to validate the manifest
 and establish the status of the victims with
 connections to Canada
- EWRC and the Canadian embassies in Ankara and Kyiv start offering emergency consular services to families in Canada, Iran and Ukraine



A depiction of where PS752 was headed from Tehran to Kyiv on January 8, 2020.

- CBSA officers and airport authorities meet and inform family members waiting at airports in Canada of the tragedy
- the Transportation Safety Board of Canada (TSB) receives official notice of the PS752 crash from the Aircraft Accident Investigation Board of the Islamic Republic of Iran (AAIB) and informs the AAIB of its intention to appoint an expert to the safety investigation

8 (afternoon and evening)

- the Prime Minister discusses PS752 with U.K. Prime Minister Boris Johnson, U.S.
 President Donald Trump, French President Emmanuel Macron and Australian Prime Minister Scott Morrison
- Prime Minister Trudeau hosts a media availability to announce that initial reports indicate as many as 63 Canadians were on board PS752; he extends the nation's condolences and calls for a full and proper investigation
- the Prime Minister issues a statement related to PS752
- GAC issues a statement related to PS752
- Transport Canada Civil Aviation sends a letter to the civil aviation authority of Ukraine offering technical assistance

- TSB offers to provide assistance to Iranian and Ukrainian investigative bodies
- security agencies and GAC's assessment unit begin receiving information indicating that PS752 may have been downed by Iranian missiles; reporting is drafted for the Prime Minister and Ministers

9 (morning)

- in the very early hours, Minister of Foreign Affairs François-Philippe Champagne contacts Foreign Affairs Minister of Iran Mohammad Javad Zarif to discuss Canada's profound concerns, including the need for Canadian officials to be granted quick access to Iran
- the Prime Minister and Ministers are briefed; the Prime Minister is informed that Canada has both domestic and allied intelligence to indicate that PS752 was shot down by an Iranian surface-to-air missile
- the Prime Minister discusses PS752
 with Prime Minister Mark Rutte of the
 Netherlands, President Volodymyr Zelenskyy
 of Ukraine, and (again) with President
 Macron of France
- the RCMP begins coordinating next-of-kin notifications with local police of jurisdiction

 GAC continues providing consular services to the families of the victims on a 24-hour basis; services are also provided to families of permanent residents of Canada

9 (afternoon and evening)

- Prime Minister Trudeau hosts a media availability alongside Minister of National Defence Harjit Sajjan to announce that Canada has intelligence indicating that PS752 was shot down by an Iranian surface-to-air missile
- TSB accepts an invitation from AAIB to attend the accident site
- GAC activates its Standing Rapid Deployment Team (SRDT) in preparation for departure to Iran
- Prime Minister Trudeau discusses PS752 with Prime Minister Stefan Löfven of Sweden
- TSB decides to send the appointed TSB expert, and one additional TSB investigator, to Iran and issues a statement to confirm

10

- the Prime Minister and Ministers are briefed
- Minister Champagne discusses PS752 with his counterparts from the United States, the Netherlands, Switzerland and Turkey
- Canada announces the formation of the International Coordination and Response Group (Coordination Group) for families of victims of PS752, consisting of Canada, Ukraine, Sweden, Afghanistan and the United Kingdom
- the Prime Minister discusses PS752 with President Zelenskyy of Ukraine (again) and Prime Minister Shinzo Abe of Japan
- the Prime Minister meets with families of the victims of PS752 in Toronto
- Transport Canada issues a notice to Canadian air operators advising them not to enter the airspaces of Iraq and Iran

- TSB investigators, including the appointed expert, depart Canada destined for Turkey; TSB issues a statement to confirm and notes that it is continuing to pursue increased involvement in the safety investigation of PS752
- SRDT members depart Canada and embassies abroad for Turkey
- SRDT is also deployed in Canada (to Vancouver, Edmonton, Winnipeg, Toronto and Montréal) to provide liaison support for families, other government departments and local contacts
- 23:45 Iran admits that it fired missiles that caused the crash of PS752

-11

- at the request of the Prime Minister and the Clerk of the Privy Council, PCO convenes the first daily meeting of a Deputy Minister Task Force on PS752 to coordinate Canada's response
- IRCC announces special measures to help with travel and access issues facing family members of the victims of Flight PS752 who are foreign nationals
- the Prime Minister discusses the shooting down of PS752, for which Iran has admitted responsibility, directly with President Hassan Rouhani of Iran
- the Prime Minister hosts a media availability after Iran admits responsibility for shooting down PS752
- the first advance members of the Standing Rapid Deployment Team arrive in Iran
- Minister Champagne hosts a call of the 5 Coordination Group countries; they agree that they expect full cooperation from Iranian authorities, including with the issuance of visas, repatriation of the remains of victims, and a full and proper investigation

- the Prime Minister attends a vigil for victims of PS752 in Edmonton
- Transport Canada civil aviation officials host first teleconference with Ukrainian civil aviation officials to discuss the status of the accident and Canadian provision of technical assistance

13

- the Prime Minister speaks again with Prime Minister Löfven of Sweden
- TSB holds a news conference to clarify its role in the safety investigation of PS752
- Minister Champagne meets with families of the victims in Vancouver
- late evening: the remaining SRDT members arrive in Iran, along with TSB investigators

14

- the Prime Minister and Ministers are briefed
- the Prime Minister discusses PS752 again with President Zelenskyy of Ukraine, the Emir of Qatar, Sheikh Tamim bin Hamad Al Thani, and the Prime Minister of Iraq, Adel Abdul-Mahdi
- Minister Champagne meets with families of the victims in Toronto
- TSB officials meet with the AAIB to discuss aspects of the safety investigation and visit the crash site
- representatives from the RCMP's National Security team arrive in Kyiv to work with the Canadian embassy and Ukrainian counterparts on a joint investigation
- Transport Canada civil aviation accident investigation expert arrives at the Canadian embassy in Kyiv to provide technical expertise and liaison service to Ukrainian civil aviation and Ukraine International Airlines officials



 Transport Canada Deputy Minister sends a letter to his Iranian counterpart outlining Canada's expectation for a thorough, transparent and credible investigation

15

- Minister of Transport Marc Garneau and Parliamentary Secretary Omar Alghabra host a media availability to update Canadians on PS752
- IRCC begins expediting visa processes for the families of the victims
- the Prime Minister discusses PS752 with President Mohammad Ashraf Ghani of Afghanistan, King Abdullah II of Jordan (again), Sheikh Mohammed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the Armed Forces of the United Arab Emirates, and UN Secretary-General António Guterres
- TSB investigators examine the wreckage of PS752 in Tehran
- the RCMP begins daily coordination calls to help facilitate victim support, in collaboration with the relevant local police services across Canada
- the RCMP begins providing assistance with the identification of remains

- Minister Champagne hosts the first inperson meeting of the Coordination Group countries at Canada House in London, U.K.; the Group agrees to a framework for dealing with Iran to provide accountability, transparency and justice for the families and loved ones of the victims
- the Coordination Group also strikes various subcommittees to help further coordinate its approach, including a subcommittee on international law and compensation
- IRCC announces further special measures to help family members of the victims, including assistance to those who need to travel to Iran, who need travel documents on an urgent basis, and who need to remain in Canada temporarily
- Minister of Immigration, Refugees and Citizenship Marco Mendicino approves a public policy to waive fees for families who need to travel to Canada for funerals or to handle personal affairs
- IRCC sets up a dedicated phone line and a dedicated email address to provide assistance to families

17

- the Prime Minister and Ministers are briefed
- the Prime Minister hosts a media availability to provide an update on PS752
- recognizing the extraordinary financial pressures being faced by many of the victims' families, the Prime Minister announces that Canada will provide a cash payment of \$25,000 per victim to families who are Canadian citizens or permanent residents to assist with their immediate outof-pocket expenses
- the Prime Minister also discusses a number of additional supports made available to families, including from the private sector and through the generosity of Canadians

- to help families navigate legal issues, Justice Canada provides funding to Pro Bono Ontario to offer basic legal guidance to family members of Canadian citizens or permanent residents who lost their lives on Flight PS752
- Health Canada creates a 24/7 free and confidential crisis and counselling support line for families, impacted individuals and affected communities
- Minister Champagne meets with Iranian Foreign Minister Zarif in Muscat, Oman, to discuss PS752, the need for a thorough and transparent investigation, and Iran's obligations to the grieving families

18

- the Government of Canada sets up a 24/7 password-protected portal for PS752 families that offers complete access to all information, including how to obtain facilitation letters, bereavement counselling, information on travelling from Canada to Iran or from Iran to Canada, visas and passports, and more
- Prime Minister Trudeau, Deputy Prime Minister Freeland, Minister Champagne, and Parliamentary Secretary Alghabra meet with families in Winnipeg
- a crisis webpage is set up to centralize all public information

19

- Minister Champagne hosts a call of the Coordination Group countries to update each other on the work they have been undertaking since their meeting the previous week
- TSB issues a statement to note work carried out by TSB investigators during their 6-day stay in Iran, and reiterates its request to obtain the status of accredited representative in the ongoing safety investigation

- Parliamentary Secretary Alghabra announces the Government of Canada will match private sector donations made to the "Canada Strong" campaign to help the families of victims of PS752, up to a maximum of \$1.5 million; the campaign was launched by Toronto businessperson Mohamad Fakih, and funds will be managed through the Toronto Foundation, under the leadership of Barbara Hall
- the Prime Minister discusses PS752 with Turkish President Recep Tayyip Erdoğan
- TSB investigators participate in a joint meeting in Ukraine with counterparts from Ukraine, Iran and France

23

■ TSB issues a statement to summarize investigation activities completed to date, explain its role under International Civil Aviation Organization (ICAO) Annex 13, and outline next steps

25

TSB investigators travel back to Canada; communications with Iran's AAIB and the other involved international safety agencies continue regularly throughout the following months

27

- the Prime Minister and Ministers are briefed
- Minister Champagne presents a motion on PS752 to the House of Commons, which passes by unanimous consent (see Annex C)
- Pro Bono Ontario begins staffing a toll-free number to allow families to speak with a triage lawyer, free of charge, who will assess their legal needs, provide summary legal advice and legal drafting assistance, and make referrals to pro bono lawyers across Canada as appropriate

28

 Minister Champagne discusses PS752 with the president of Ukraine International Airlines, including the status of investigations, the reading of flight recorders and the urgency of compensation for families

29

- all repatriations of remains to Canada are complete
- Global Affairs Canada's Legal Adviser chairs the first meeting of the Coordination Group's International Law and Compensation Sub-Committee, set up to facilitate the process of holding Iran accountable through reparations negotiations in accordance with international law; the subcommittee will hold more than a dozen subsequent meetings by November 2020

30

 SRDT members deployed throughout Canada return to their home locations

3

- the last SRDT members deployed to Iran leave for home
- Ministers Garneau and Champagne meet with President of the ICAO Council Salvatore Sciacchitano to encourage ICAO to press Iran to follow ICAO standards



SRDT in hotel lobby immediately before departing Iran

FEBRUARY

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 Transport Canada begins international consultations on the development of a strategy to improve aviation safety over and near conflict zones

3

- Minister Garneau, in a call, discusses PS752
 with Mohammad Eslami, Iran's Minister of Roads and Urban Development, and urges Iran to turn over the flight recorders
- Minister Champagne hosts a call with Coordination Group members to update each other on their respective repatriation processes and agree on the need for continued pressure to secure accountability, transparency and justice for the victims

4

the Prime Minister and Ministers are briefed

5

Minister Champagne discusses PS752
 again with Iranian Foreign Minister Zarif,
 stressing the need for a thorough, credible,
 transparent investigation

14

- the Prime Minister announces, at the Munich Security Conference, Canada's Safer Skies Strategy to improve aviation safety over and near conflict zones and prevent tragedies like PS752 from happening again
- Minister Champagne meets with Iranian Foreign Minister Zarif in Munich to press for accountability, transparency and justice for the victims of this tragedy, including a thorough, credible and transparent investigation

15

 Minister Champagne hosts the second in-person meeting of the Coordination Group on the margins of the Munich Security Conference

20

 the RCMP and Victim Services of York Region organize an evening of support to bring together the PS752 families

26

 GAC launches a full-time task force to coordinate the ongoing international and consular response to the downing of PS752

MARCH

4

Minister Champagne hosts a call of the Coordination Group from Kyiv, Ukraine, including a discussion of the need to have the flight recorders downloaded and analyzed without delay

5

Minister Garneau delivers a speech at the Aviation Summit 2020 in Washington, D.C., to communicate to industry Canada's plan to launch the Safer Skies Strategy as a response to the tragedy of PS752



- Minister Garneau presents Canada's Safer Skies Strategy to the ICAO Council and asks for a concerted effort to further mitigate risks to flights near or over conflict zones; there is strong support
- in a separate statement, Minister Garneau calls on Iran to ensure readout of the flight recorders without delay; Iran commits to having the recorders read within 14 days, but fails to deliver, saying COVID-19 is to blame
- GAC's PS752 task force hosts its first call with the families of the victims

13

the RCMP's deployment to Ukraine is suspended due to the COVID-19 pandemic

30

 Minister Champagne discusses PS752 with Ukraine Foreign Minister Dmytro Kuleba

31

the Prime Minister announces the appointment of the Hon. Ralph Goodale as his Special Advisor for the Government of Canada's ongoing response to the PS752 tragedy

APRIL

٦

 all federal support payments to families have been made

14

 Minister Champagne discusses PS752 with Ukrainian Foreign Minister Kuleba

14-15

 Special Advisor Goodale speaks with the families of the victims of PS752; over the ensuing months, several additional conversations are held with various groups of the families

15

 Minister Champagne hosts a call of the Coordination Group

16

 Minister Champagne and the Coordination Group issue statements marking 100 days since the tragedy

MAY

15

 Minister Champagne discusses PS752 with the Foreign Minister of Afghanistan, Mohammed Haneef Atmar

18

 Minister Champagne discusses PS752 again with Ukrainian Foreign Minister Kuleba

JUNE

10

 Minister Garneau updates the ICAO Council on Canada's Safer Skies Strategy and the PS752 investigation

17

 Minister Garneau presents a motion on PS752 to the House of Commons, which passes by unanimous consent (see Annex C)



A vigil on Parliament Hill

 Minister Champagne discusses PS752 with Iranian Foreign Minister Zarif, calling on Iran to send the PS752 flight recorders to France for analysis without further delay

22-29

Minister Champagne speaks with the families of the victims of PS752

23

- TSB announces that it has been invited by the AAIB to participate in the downloading of the recorders that will finally take place at France's Bureau d'Enquêtes et d'Analyses pour la sécurité de l'aviation civile (BEA) in Paris, during the week of July 20, 2020
- TSB states that it will deploy a team of investigators, including a recorders specialist, to attend this activity

26

Ministers Champagne and Garneau issue a statement on Iran's decision to send PS752 flight recorders to France and reiterate the need for a thorough, credible and transparent investigation that answers all relevant questions

JULY

2

- Minister Champagne hosts a call of the Coordination Group to formalize a common approach to holding Iran accountable
- The Coordination Group countries sign a memorandum of understanding on cooperation regarding negotiations on reparations; they agree to come to an understanding on a common negotiating position, which will pave the way for stateto-state negotiations with Iran to begin

11

■ Iran releases the *PS752 Accident Investigation – Factual Report*; the report does not provide supportive evidence, nor does it address larger issues such as Iran's decision to keep its airspace open

14

the Chair of the Transportation Safety Board sends a letter to the AAIB requesting a more active role in the safety investigation, and highlights the importance of conducting an in-depth investigation that will provide answers to explain why PS752 was shot down, why Iran's airspace remained open, and why commercial airlines continued to operate

16

 TSB hosts a technical briefing for families of the victims of PS752

18-19

 TSB investigators, including a recorders specialist, travel to Paris to attend the download of PS752's flight recorders

- the PS752 flight recorders are delivered and read in Paris at the BEA
- the Coordination Group releases a statement on Iran's delivery of the PS752 flight recorders

23

- preliminary analysis of the retrieved data from the flight recorders is completed by Iran, with accredited representatives and their advisors (Ukraine, United States, France); experts (Canada, Sweden, United Kingdom) are initially briefed and later permitted to participate in some aspects of flight data analysis
- TSB issues a statement confirming completion of the download and preliminary analysis of the flight recorders from PS752 and urges Iran to release factual information from the recorders as soon as possible

30

 Coordination Group representatives meet with a delegation from Iran to discuss modalities of negotiations for reparations owed by Iran to the victims of Flight PS752 and the affected states

31

the TSB Chair sends a letter to the AAIB requesting that the TSB's appointed expert be afforded the opportunity to review and provide input to the draft final safety investigation report, as permitted under ICAO Annex 13, Section 6.3

AUGUST

6

 GAC provides a technical briefing on the international legal framework to family members of PS752 victims

23

- AAIB releases a report on the flight recorder data
- Ministers Champagne and Garneau release a statement concerning the release of PS752's flight recorder readout report
- TSB issues a statement confirming receipt of the flight recorder readout report and highlights again the 3 key questions that ought to be answered by the ongoing safety investigation

SEPTEMBER

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the RCMP reaches out to families to provide information on the past and current status of the RCMP's involvement and to invite family members to provide information in support of investigations

9

the Prime Minister meets with Special Advisor Goodale to discuss PS752, including essential investigative activities, ongoing immigration issues affecting some of the families, initiatives to honour and commemorate the victims, Canada's Safer Skies Strategy and the Special Advisor's expected report

OCTOBER

2

- Minister Champagne begins monthly updates to the families
- Minister Champagne announces the formation of a Canadian Forensic Examination and Assessment Team, as recommended by Special Advisor Goodale and led by Jeff Yaworski, formerly the Deputy Director of Operations at the Canadian Security Intelligence Service; the Team will collect, organize and analyze all available information, evidence and intelligence about the PS752 disaster, and will advise the government on its credibility, meaning and probative value

5

the Association of Families of Flight PS752 Victims hold a public rally on Parliament Hill, connecting with similar events in several other cities across Canada and around the world; Ministers Champagne and Garneau, Special Advisor Goodale and Ukraine's Ambassador to Canada Andriy Shevchenko attend to show their support



7

Minister Mendicino signs a public policy to provide fee waivers to family who travelled to Canada for funerals or to handle personal affairs and are still in Canada, some due to COVID-19 travel restrictions

27

 Minister Champagne hosts a call of the Coordination Group

29

 Member of Parliament Heather McPherson (Edmonton Strathcona) presents a motion on PS752 to the House of Commons, which passes by unanimous consent (see Annex C)

NOVEMBER

6

 Minister Garneau updates the ICAO Council on Canada's Safer Skies Strategy, the upcoming Safer Skies Forum, and Canada's expectations in regard to Iran's investigation report

And the work is ongoing...

CHAPTER 4

LESSONS LEARNED ... RECOMMENDATIONS FOR THE FUTURE

As the first-year anniversary of the tragic loss of PS752 approaches, there is still a long road ahead before we get to the transparency, accountability and justice the families need and deserve. The work is ongoing.

Transport Canada is leading a vigorous initiative at the international level to help keep civilian air traffic away from dangerous conflict zones, and to enhance the credibility of investigations. These efforts are outlined in Chapter 5.

Here at home, a **Canadian Forensic Examination and Assessment Team** is collecting and analyzing every bit of available evidence and intelligence to piece together the most reliable description of what happened and why. Input from the families continues to be an important source of information and guidance.

The **RCMP** is engaged with Ukrainian authorities to support a criminal investigation by Ukraine into the shooting down of Flight PS752, while also combatting harassment and foreign interference in Canada. **The Canadian Security Intelligence Service** (CSIS) will assist through its outreach to Iranian communities across the country to help build cohesion and resilience.

The Transportation Safety Board of Canada is ready, independently, to review and comment on the final PS752 safety investigation report from its Iranian counterparts when that report becomes available through the international process.

A strong team of legal experts, led by Global Affairs Canada (GAC) and supported across every relevant government department, is working intensely with expert colleagues in the International Coordination and Response Group (Coordination Group), made up of Canada, Ukraine, Sweden, Afghanistan and the United Kingdom, to pursue a full suite of reparations from Iran for this tragic air disaster and the horrendous toll it extracted, for which Iran has admitted responsibility.

Canada will also pursue every appropriate avenue under **domestic law** and through **international organizations and agencies** to remind the world of the PS752 tragedy, honour and commemorate the victims, pursue remedies, and make the skies safer for international civil aviation.

We will not rest until these efforts bear meaningful outcomes, and in the meantime the Government of Canada will continue to connect with, listen to and learn from those who mourn their lost loved ones. **The families matter most**.



We need to absorb what the loss of Flight PS752 has taught us—together with all we have learned from Ethiopian Airlines Flight 302 and Air India Flight 182—to compile the best possible advice to those who will have to grapple with future air disasters and other mass-casualty events that take Canadian lives.

Thus far, I would recommend careful attention to the following:

• To combat fear, uncertainty and misinformation, the government's response needs to be quickly organized and proactive. The first step is designating a department and minister to lead the full Government of Canada response (a task the Prime Minister may choose to take on initially), with support from a PCO-led task force of all relevant deputy ministers to ensure complete, highlevel, government-wide engagement and coordination to deliver prompt results. Among others, as appropriate, the task force should include central agencies (to ensure proper resourcing) and the law enforcement and national security communities (to ensure a complete intelligence picture, to maximize outreach to diaspora in Canada and to leverage all opportunities for overseas communications).

- The needs of the families of the victims as those families themselves perceive their needs—must be at the heart of Canada's response. That response should be speedy, comprehensive and generous, and shaped by the realities of the situation (which will be different in every case) and the wishes of the families.
- When Canadian lives are lost in mass casualty disasters overseas, Canada should immediately take ownership of the situation to show that this country intends to stand by our citizens/permanent residents, and we regard the losses to be a Canadian (not foreign) tragedy. The whole approach needs to be nimble, humble, empathetic and trauma-informed.
- All relevant facts need to be gathered urgently—for example, the way in which GAC worked its diplomatic sources to obtain complete passenger manifests for PS752 when they were not readily available; and the way in which Transport Canada secured flight data, collected by satellite, to verify independently PS752's trajectory and behaviour.

- Accurate, reliable information must be shared with the families as quickly as possible and on an ongoing basis. Information vacuums and lingering uncertainty compound the anguish. The Government of Canada needs to speak with one clear, unified voice, and within each family, one lead communications contact should be identified, with a backup. Language skills beyond English and French will be required.
- Early, robust engagement with the families is clearly a best practice. It needs to be sustained and will evolve over time. It must be meaningful and substantive, with a sharp focus on responding to what the families are asking or asserting, as well as what the government believes the families need to know (including information about the country in which the disaster occurred, travel documents and other arrangements that may be required, and the international legal regime that will need to be navigated).
- The government should prepare in advance and constantly update an evergreen emergency situation instruction manual, based on practical past experience, that is ready to go and given at the very beginning to each family member to provide boilerplate information about what to expect as events unfold, the many issues that will have to be addressed, and the services that are available (both government and private) and how they can be accessed. An official publication of that type, delivered immediately to family members, would also send a message that they are not alone and that the Government of Canada will have their backs.



- As soon as possible, following any possible future disaster, the government should set up a dedicated, password-protected family web portal to provide complete access to all ongoing information, services and assistance so families can keep themselves fully informed, ask questions, get answers, and deal with their issues at any time that is most convenient or appropriate for them.
- Mental-health and post-traumatic-stress counselling services will almost certainly be required. The government will need to have standby mechanisms in place to make qualified professionals available quickly, and their services may be necessary over the long term. Where a family member has acquired such services on their own (for example, using their own insurance) and those services expire, the government should consider how to extend that coverage so the family member can continue to work with a counsellor with whom they are familiar.



- The Government of Canada should be prepared to provide "facilitation letters" in lieu of death certificates, and maintain ongoing engagement with domestic stakeholders including provinces, territories, municipalities, insurance companies, banks and others that may require such letters (to ensure the facilitation works).
- On an exceptional basis, the government should give early consideration to the need for fee waivers for government services, up-front emergency financial assistance, support for access to pro bono legal services, the deployment of Standing Rapid Deployment Teams, both overseas and domestically, and the extension of consular services to others in addition to citizens.
- In cases where other countries have suffered losses alongside Canada, it would be prudent to reach out quickly to establish a common front among these like-minded nations to help secure the most appropriate international remedies. There is strength in working together. The International Coordination and Response Group initiated by Global Affairs Canada has emerged as a good model and a best practice.
- Rapid, high-level engagement with the country in which the disaster takes place is also a best practice, even when that country has not been a familiar friend or a trusted partner. Direct contact is desirable—but proceed with eyes wide open. It would also be wise to benefit from the advice of other countries with recent experience in similar disasters, such as the input the Netherlands has so generously provided with respect to the shooting-down of Malaysia Airlines Flight 17 (MH17) in 2014.
- Pro Bono Ontario is continuing to operate a free legal advice hotline for the PS752 families and to coordinate with other pro bono organizations across Canada. This project will end in March of 2021, at which time Pro Bono Ontario will produce a report that will include advice with respect to responses to possible future needs.

- The families of the victims will want to know what exactly caused the disaster, who is responsible and how they will be held accountable. The relevant processes need to be clearly explained at an early stage, including their limitations—for example, the difference between an independent, no-blame safety investigation (under ICAO Annex 13) and other types of civil and criminal investigations. To assist government investigators and lawyers who will tackle these issues, it would be wise to consult families and seek their input to ensure that families are heard and have an opportunity to share any source of possible information to which they may have access, and that they understand the roadmap ahead.
- Where there is concern about the independence, transparency, impartiality or efficacy of investigations being undertaken by other parties in a disaster situation, the government should give prompt consideration to the creation of a Canadian investigative vehicle along the lines of the Forensic Examination and Assessment Team, to ensure that we have capacity to develop our own analysis of what happened—as the families would expect.
- Departments that are likely to have multiple individual issues to address—such as Immigration, Refugees and Citizenship Canada (IRCC) in dealing with many visa, travel, citizenship and other matters from many family members—should bear in mind the model used by IRCC to respond to PS752. The department set up exclusive client support channels, which operated 7 days a week and provided multilingual (English, French and Farsi) services on individual issues. This is a best practice that helps with the consistency and timeliness of results.



• The Canadian Association of Chiefs of Police has proposed the creation of a national centre of expertise to help all levels of government, law enforcement and the private sector develop and coordinate their capacities to prepare in advance for mass casualty events involving Canadians. This is a useful idea that could be pursued by Public Safety Canada in collaboration with all the federal departments and agencies and other partners who have participated in the response to PS752. The RCMP has already taken steps in this direction.

Both the United States and the European Union have consolidated support systems for victims. It would be wise to engage the Federal Ombudsman for Victims of Crime in the discussion. Among other things, a centre of expertise could help identify the best network of relevant responders and ways to link and activate them. It could assess emergency response plans already in place to deal with such crises as wildfires, floods, terrorist attacks, health emergencies and international situations, and identify needed improvements or opportunities for mutual reinforcement. It could research best practices, including how to test and rehearse response plans in advance. It could lead the preparation of an evergreen emergency situation instruction manual and model the best possible web portals for ongoing family communications. It could also assess the value of having standing programs in place in advance to offer financial, legal, mental health and other assistance of various kinds to the families of victims as circumstances may require.

CHAPTER 5

WORKING FOR SAFER SKIES AND MORE CREDIBLE INVESTIGATIONS

It is reprehensible to allow innocent civilian aircraft to operate in or near conflict zones without having systems in place to ensure that they are never attacked. Yet, conflict zones around the world continue to present clear dangers to the safety of travelers and the international aviation system. The tragedy of Flight PS752—only 5 and a half years after the loss of Flight MH17—demonstrates this problem is very real.

How can we strengthen the quality and credibility of aviation safety investigations after a commercial airliner has been shot down? And how can we better prevent such awful disasters?

More credible investigations

It should be noted that for the vast majority of air safety investigations, the existing international rules-based system works well and serves the intended purpose: to uncover what happened and improve aviation safety. However, in circumstances similar to the PS752 disaster—where military activity is the cause—experience reveals several serious problems. Investigating a crash that results from a mechanical failure, a design flaw, bad weather,

pilot error and so forth is not the same as investigating a military shoot-down. The existing system is not well suited to handle the latter.

First of all, existing international standards and procedures assign lead investigative responsibilities to the country in which a disaster occurs. In the case of a military shoot-down, that means the very government involved in causing the disaster (Iran in this case) is in complete control of the safety investigation, obvious conflicts of interest notwithstanding, with few safeguards to ensure independence, impartiality or legitimacy. This undermines the investigation's credibility and enables a sense of impunity in avoiding essential questions. The ability of the international community to implement effective measures to prevent similar disasters is thus impaired.

Secondly, while international standards suggest that vital pieces of evidence such as flight data and cockpit voice recorders should be downloaded and analyzed "without delay," no firm timeline is specified. Such evidence is crucial to help investigators understand what happened. The sooner it is available, the



better. Following the crash of PS752, Iran had at least 9 weeks to arrange for the readout of the recorders before global travel restrictions were imposed due to the COVID-19 pandemic. But it failed to do so, and that resulted in more than 6 months of delay before that important evidence became available.¹

Third, the prevailing international procedures recognize the significance of the state in which the crash occurs, and the states in which the aircraft is registered and where the air operator, designers and manufacturers are located. But states with many citizens killed or injured are guaranteed only "expert" status, which means very limited participation in the investigation. This arrangement seems insensitive and imbalanced. In instances of military shoot-downs, it seems even more so.

Fixing these arrangements to more adequately address situations like PS752 is certainly not an easy proposition. To amend the *Convention on International Civil Aviation (Chicago Convention)*, or even its annexes, is a long and complicated process that some countries will undoubtedly resist, and the issues involved are not trivial. But Canada should develop a set of sensible proposals for improved investigative

protocols and procedures, specifically applicable to shoot-down situations, and work to get them implemented in consultation with our allies—to create a greater likelihood that truth can be found and future tragedies can be prevented.

Two enormous tragedies in less than 6 years

After Malaysia Airlines Flight 17 (MH17) was shot down in July 2014 over Ukraine's eastern border with Russia, Ukraine promptly delegated lead investigative responsibilities to the Netherlands. Beyond searching for the truth about what happened, the Dutch also focused on how to improve air safety standards for civilian flights near or over conflict zones. Largely because of their leadership, the international civil aviation community made substantial progress: 11 recommendations were generated regarding better airspace management, risk assessments and air operator accountability. The Netherlands' determined efforts identified the path forward to effect change; they also revealed challenges standing in the way. And the shooting down of PS752 at the beginning of 2020 showed that significant work remains to be done to firmly embed better international standards into global aviation activities, and coordination between civil aviation and military operations still needs focused attention.

In determining the practical meaning of the words "without delay" in ICAO Annex 13, principled guidance can be found in the MH17 case where the flight recorders were recovered and read out within 11 days of the crash, and in the ET302 case where the flight recorders were read out within 9 days of the crash.

This is a global problem that requires states, international associations, industry and the International Civil Aviation Organization (ICAO) to work more effectively together to avoid future tragedies. That is the goal of **Canada's Safer Skies Strategy**. It was launched in the immediate aftermath of PS752, demonstrating Canada's commitment to global aviation safety, the affected families and the broader international community.

Conflict zones

There is an ever-present risk when the flight paths of civilian aircraft approach or cross the airspace of countries in the midst of conflict. Parties to conflict, including both state and non-state actors, have increasingly sophisticated anti-aircraft systems, without necessarily having equally sophisticated failsafe mechanisms and practices to protect the innocent.

The PS752 disaster illustrates the risks inherent in managing airspace during times of conflict and heightened tension, and the tragic consequences that can ensue on a global scale. Warning systems failed, did not exist, or were never activated due to overriding commercial considerations, military or state secrecy, recklessness or incompetence. The current system relies entirely on countries involved in a conflict to close or restrict access to their airspace, but offers few standards to guide that decision-making. Implementing major changes has proven challenging, especially when they affect the commercial or competitive interests of air operators and air navigation service providers responsible for airspace management.

ICAO member states' roles and responsibilities

ICAO is a specialized agency of the United Nations that works in cooperation with 193 member states to enable and maintain global civil air transportation. It carries out its mandate by adopting standards and recommended practices concerning air navigation (ICAO Annexes), preventing

unlawful interference and facilitating bordercrossing procedures for international civil aviation. ICAO also defines the protocols for air accident investigations that are to be followed by transport safety authorities in countries that are signatories to the *Chicago Convention*.

The international standards contained in ICAO Annexes never supersede the primacy of national laws or regulatory requirements. ICAO has no authority over the decisions of national governments—it is not an international aviation regulator. It cannot, for example, arbitrarily close or restrict a country's airspace, shut down routes, or penalize airports or airlines for poor safety performance. Instead, to promote adherence to international standards, ICAO has a system of continuous auditing and monitoring of member states' aviation safety and security performance.

Each member state has sovereignty over its own airspace. Proper management of that airspace involves an explicit commitment to ensure flight safety and refrain from using weapons against civil aircraft flights. It also entails promptly communicating the potential risks facing civil aviation operations in its territory, including those related to military activities. In situations where a military activity may arise, ICAO Annex 11 directs authorities responsible for air navigation services to work closely with responsible military authorities. It calls on civil and military air traffic service providers to make agreements for the immediate exchange of information to limit the consequences of dangerous activities.

In the event of armed conflict (or the risk thereof), the authority responsible for air traffic services is called upon to determine the geographic conflict area, assess the dangers or possible dangers to civil aviation, and decide whether the operation of civil aircraft should be avoided in that area, or could be allowed to continue under certain conditions.² It should

² ICAO Doc 9554, Manual Concerning Safety Measures Relating to Military Activities Potentially Hazardous to Civil Aircraft Operations

publish an international NOTAM with the necessary information, recommendations and safety measures to be taken.

ICAO standards also require that states inform their own air operators in a timely manner about potential risks to aviation security—in their own and in foreign airspace. Some states, including Canada, the United States and the United Kingdom, have the power to prohibit national air operators (to whom they have issued a permit or certificate) from flying in the airspace of another country, or to impose a restriction on a foreign airspace.

A recent amendment to ICAO Annex 6, following a recommendation from the Dutch Safety Board, includes the requirement to conduct a risk assessment and to take appropriate risk mitigation measures to ensure a safe and secure flight when overflying a conflict zone. The previous version of this requirement was not specific to conflict zones, but more general to all safety aspects of a flight.

Despite the likely risks to civil aviation, states with conflict zones do not always close or restrict their airspace, nor do states in which the air operator is based always issue relevant advisories, restrictions or prohibitions. There are a number of reasons why—for example, the loss of air navigation services as a result of an attack, the lack of relevant information/ intelligence, the sudden onset of a conflict, a state's predilection to keep military information secret, and commercial considerations (which in some cases can be substantial). Under these circumstances, it is the air operator that decides whether to use that airspace or not, and thus it is essential that air operators be provided with the most up-to-date global airspace information and intelligence.

It is a sad reality that international standards on airspace management are not being applied consistently and equally by all ICAO member states. Notwithstanding recent improvements to the ICAO Annexes and international standards related to conflict zones, there is significantly more work to be done on the engagement



and implementation side, for which ICAO has limited enforcement capabilities. Parallel action is therefore required, independent of ICAO, involving multiple states and non-state civil aviation industry stakeholders.

It is in this context that Canada created its Safer Skies Strategy. Prime Minister Trudeau made the announcement at the Munich Security Conference on February 14, 2020, to bring together a coalition of like-minded states and private civil aviation associations to meet 3 key objectives:

- to share information on civil aviation and military activities
- to raise awareness with respect to international standards
- and, importantly, to take immediate coordinated action where coalition members act collectively to the greatest extent possible to protect civil aviation around conflict zones by closing the foreign airspace with conflict-related risks to all of their air operators

Safer Skies working paper at ICAO Council

At the 219th Session of the ICAO Council in Montréal on March 11, 2020, Canada's Transport Minister, Marc Garneau, presented a working paper which requested ICAO to analyze what has been accomplished to improve aviation safety in relation to conflict zones over the past few years, as well as the future work that remains to be done to make international standards and practices as good as they can be. The working paper also noted the inherent limitations in those standards and practices, and proposed Safer Skies as a necessary parallel initiative. It received unanimous support from all 36 Council members.

Safer Skies progress to date

The overarching goal of this strategy is to have a common approach among like-minded countries to better protect commercial civilian aircraft by prohibiting their own air operators from flying in or near dangerous foreign airspaces.

The COVID-19 pandemic notwithstanding, through virtual meetings and conference calls, the Government of Canada has stood up these key components of the Safer Skies Strategy:

1. Conflict Zone Information Office: This office has started to monitor worldwide open source airspace information on civil/ military conflicts around the globe. The Office is also collecting, monitoring and analyzing classified information to enable decision-making on airspace restrictions and warnings, and to inform air operators of potential airspace issues arising from conflicts. The information will be shared with trusted international partners. Once fully up and running, the Conflict Zone Information Office will position Canada as a world leader and key contributor at ICAO and other international forums dedicated to improving risk mitigation with respect to conflict zones.

Comprised of subject-matter experts from key states, private industry and international organizations, the Committee serves as a pre-eminent global platform to consolidate discussions on conflict zone-related matters. It also advocates at ICAO for stronger safety measures related to conflict zones.

2. Safer Skies Consultative Committee:

- Nations such as Australia, France, Germany, the Netherlands, New Zealand, the United Kingdom and the United States are engaged, as well as the International Air Transport Association and the Expert Group on Risk Information on Overflying Conflict Zones.
- 3. An annual international **Safer Skies Forum:** The Safer Skies Forum will gather states, international organizations and industry representatives annually to provide a venue for the sharing of best practices on conflict zone risk mitigation, strengthening global consensus, and promoting capacity-building with international partners.

These key components of the Safer Skies Strategy will help make international civil aviation safer. Using solid information, likeminded countries will be able to reach agreements with other countries to share information on, and take action to prohibit, commercial air travel in or near dangerous foreign airspaces. In spite of the COVID-19 pandemic and its impacts on the aviation sector, the initiative is progressing well, along an aggressive timeline.

To advance aviation safety and to help honour the memory of those who lost their lives onboard PS752, it is strongly recommended that Canada should continue the vigorous pursuit of **Safer Skies**.

Annex A

BACKGROUND INFORMATION ON PREVIOUS DISASTERS IN WHICH CIVILIAN AIRCRAFT WERE SHOT DOWN

(Compiled by Transport Canada: The first 3 cases may be the most relevant in terms of comparisons. The others are included to provide a more complete picture.)

Iranian Airlines 655

Summary:

Iran Air Flight 655, a scheduled passenger flight from Tehran to Dubai via Bandar Abbas (Iran), was shot down on July 3, 1988, by a surface-to-air missile fired from a U.S. naval vessel, the USS Vincennes. The aircraft, an Airbus A300, was destroyed and all 290 people on board were killed. The jet was hit while flying over Iran's territorial waters in the Persian Gulf, along the flight's usual route, shortly after departing Bandar Abbas International Airport, the flight's stopover location.

Key considerations:

- The incident occurred during the final stages of the Iran-Iraq War.
- The USS *Vincennes* had entered Iranian territorial waters after one of its helicopters drew warning fire from Iranian speedboats operating within Iranian territorial limits.
- According to the United States, the *Vincennes* crew had incorrectly identified the Airbus as an attacking F 14 Tomcat. Iranians disagreed with this conclusion—claiming negligence.

• In the days immediately following the incident, U.S. President Ronald Reagan issued a written diplomatic note to the Iranian government, expressing deep regret. However, the United States continued to insist that the *Vincennes* was acting in self-defence in international waters.

Outcome:

- In November 1988, the International Civil Aviation Organization (ICAO) released a report of its fact-finding investigation, Air Airbus A300, EP-IBU, Accident in the Vicinity of Qeshm Island, Islamic Republic of Iran on 3 July 1988.¹
- A U.S. military investigation into the incident was concluded in August 1988 and finalized in a report by Admiral William Fogarty entitled *Formal Investigation into the Circumstances Surrounding the Downing of Iran Air Flight 655 on 3 July 1988.*²
- Refusing a U.S. offer of ex gratia compensation, Iran took its case to the International Court of Justice (ICJ). In 1996, more than 8 years after the incident, the governments of the United States and Iran reached a settlement. The settlement included a US\$61-million payment to the families of the Iranian victims, but no admission of legal liability or formal apology to Iran.

¹ https://reports.aviation-safety.net/1988/19880703-0_A30B_EP-IBU.pdf

² https://www.jag.navy.mil/library/investigations/VINCENNES%20 INV.pdf

Korean Airlines 007

Summary:

Korean Air Lines Flight 007 (KAL007), a scheduled passenger flight from New York City to Seoul via Anchorage, was shot down on September 1, 1983, by a Soviet military aircraft. KAL007, a Boeing 747, was en route from Anchorage to Seoul, but due to a navigational mistake made by the crew, the aircraft deviated from its original planned route and flew through Soviet prohibited airspace and was shot down. All 269 passengers and crew aboard were killed.

The Soviet Union initially denied knowledge of the incident, but 6 days after the incident admitted shooting down the aircraft, claiming that it was on a spy mission. The Soviets, however, continued to deny knowledge of where KAL 007 had gone down.

It was later revealed the Soviets had located the wreckage on September 15, 1983, and found the flight recorders in October of the same year. This information was kept secret until 1993—following the dissolution of the Soviet Union.

Key considerations:

- The incident happened at a very tense time in U.S.-Soviet relations during the Cold War. KAL007 entered Soviet airspace about the time of a U.S. aerial reconnaissance mission. The Soviet Air Forces treated the unidentified aircraft as an intruding U.S. spy plane, and destroyed it after firing warning shots, which were likely not seen by the KAL pilots.
- Since the aircraft had departed from U.S. soil and U.S. nationals had died in the incident, the National Transportation Safety Board (NTSB) was legally required to investigate. However, the U.S. State Department closed the NTSB investigation on the grounds that it was not an accident, and pursued an ICAO investigation instead.

Outcome:

- The ICAO investigation did not have the authority to compel the states involved to hand over evidence; instead, it had to rely on what they voluntarily submitted. Consequently, the investigation did not have access to sensitive evidence such as radar data, intercepts, air traffic control (ATC) tapes, or the flight data recorder (FDR) and cockpit voice recorder (CVR) (whose discovery the U.S.S.R. had kept secret). Instead, the investigation relied heavily on simulations. ICAO released its report on December 2, 1983.
- On November 18, 1992, Russian President Boris Yeltsin released both the FDR and CVR of KAL 007. On May 28, 1993 (10 years later), ICAO presented its second report to the Secretary-General of the United Nations.

Malaysia Airlines 17

Summary:

Malaysia Airlines Flight 17 (MH17), a scheduled passenger flight from Amsterdam to Kuala Lumpur, was shot down on July 17, 2014, by surface-to-air missiles launched from pro-Russian separatist-controlled territory in Ukraine while it was flying over eastern Ukraine. All 283 passengers and 15 crew were killed.

According to conclusions reached by the Dutch-led joint investigation team (JIT), the missiles used originated from the 53rd Anti-Aircraft Missile Brigade of the Russian Federation. The governments of the Netherlands and Australia hold Russia responsible for the deployment of the surface-to-air missiles and are pursuing legal recourse. The Russian government denies involvement in the shooting down of the airplane.

Key considerations:

• The National Bureau of Air Accidents Investigation of Ukraine, which led investigations during the first days after the crash, had by August 2014 delegated the investigation to the Dutch Safety Board (DSB) because of the large number of Dutch passengers and the flight having originated in Amsterdam. Ukraine ultimately delegated the leadership of investigations into the technical cause of the crash, as well as a separate criminal inquiry, to the Netherlands. The DSB led the investigation into the technical cause, while the Dutch-led JIT has headed the criminal inquiry. Belgium, Ukraine, Australia and Malaysia make up the remaining members of the IIT.

Outcome:

- The DSB released a preliminary technical report on September 9, 2014, and the final technical report was released by the DSB on October 13, 2015.³ In February 2019, 5 years later, the DSB released a report following up on the recommendations stemming from its MH17 investigation.
- In the years following the crash, the JIT released a series of findings into the facts of the case.
- In June 2015, the Netherlands, with the support of other JIT members, sought to create an international tribunal to prosecute those suspected of downing MH17 that would take up the case after the closing of the criminal investigation. A vote that would have established the tribunal was vetoed by Russia at the UN Security Council.
- On July 5, 2017, it was announced that the JIT countries would prosecute any suspects identified in the downing of flight MH17 in the Netherlands and under Dutch law.⁴
- On July 10, 2020, the Dutch government declared that it would take Russia to the European Court of Human Rights for "its role in the downing" of Flight MH17.

ADDITIONAL AIR DISASTERS RESULTING FROM SHOOT-DOWNS

1988: Ariana Afghan Airlines

On November 19, 1988, an Antonov An-26 operated by Ariana Afghan Airlines was flying from Kabul, Afghanistan, to Jalalabad, Afghanistan, when the pilot lost his way. The aircraft entered Pakistani airspace when the pilot asked for help from a nearby airport in Pakistan. It was subsequently shot down by ground fire from the Pakistan Air Force near Parachinar, Pakistan, resulting in 30 deaths. The Ministry of Defence of Pakistan claimed that the aircraft was shot down by ground fire when it entered Pakistani territory and failed to identify itself.

1988: T&G Aviation DC-7

On December 8, 1988, a Douglas DC-7 chartered by the U.S. Agency for International Development was shot down over Western Sahara by the Polisario Front, resulting in 5 deaths. Leaders of the movement said the plane was mistaken for a Moroccan Lockheed C-130. The aircraft was on its way to Morocco for a "locust control mission" there. A second aircraft was also hit, but managed to land at Sidi Ifni, Morocco.

1992: Shooting of Armenian plane by the Azerbaijan military

A Yak-40 plane traveling from Stepanakert airport to Yerevan on March 27, 1992, with a total of 34 passengers and crew, was attacked by an Azerbaijani Air Force Sukhoi Su-25 attack aircraft. With an engine failure and a fire in the rear of the plane, it eventually made a safe landing on Armenian territory.

³ https://www.onderzoeksraad.nl/en/page/3546/crash-mh17-17-iuly-2014

⁴ A treaty signed on July 7, 2017, between the Netherlands and Ukraine, and amendments to Dutch criminal law, made it possible for the Netherlands to prosecute in the cases of all 298 victims, regardless of their nationality.

1993: Georgian aircraft

In September 1993, 2 airliners belonging to Transair Georgia and a third belong to Orbi Georgia were shot down by missiles and gunfire in Sukhumi, Abkhazia, Georgia. The first, a Tupolev Tu-134, was shot down on September 21, 1993, by a missile during landing approach. The second plane, a Tupolev Tu-154, was shot down a day later also during approach. A third one was shelled and destroyed on the ground, while passengers were boarding. A total of 150 people died in the attacks.

1994: Rwandan presidential airliner

The Dassault Falcon 50 airplane carrying Rwandan president Juvénal Habyarimana and Burundian president Cyprien Ntaryamira was shot down as it prepared to land in Kigali, Rwanda, on April 6, 1994. Both presidents died. This double assassination was the catalyst for the Rwandan genocide and the First Congo War. Responsibility for the attack is disputed, with most theories proposing as suspects either the rebel Rwandan Patriotic Front (RPF) or government-aligned Hutu Power extremists opposed to negotiation with the RPF.

1998: Lionair Flight 602

Lionair Flight 602, an Antonov An-24RV, crashed into the sea off the northwestern coast of Sri Lanka on September 29, 1998. The aircraft departed Jaffna-Palaly Air Force Base on a flight to Colombo and disappeared from radar screens just after the pilot had reported depressurization. Initial reports indicated that the plane had been shot down by Liberation Tigers of Tamil Eelam rebels. All 7 crew and 48 passengers died.

2001: Shooting down of Cessna floatplane in Peru

On April 20, 2001, a Cessna A185E floatplane, registered OB-1408, was shot down by a Peruvian Cessna A-37B Dragonfly attack aircraft over the border of Mariscal Ramón Castilla Province of Peru. Two out of 4 passengers on board were killed—American Christian missionary Roni Bowers and her

infant daughter Charity—while pilot Kevin Donaldson was severely wounded. The incident took place during the Air Bridge Denial Program, when a CIA surveillance plane misidentified the floatplane as involved in drug trafficking and alerted the Peruvian Air Force, resulting in its downing. A year later, the U.S. government paid compensation of US\$8 million to the Bowers family and the pilot.

2001: Siberia Airlines Flight 1812

On October 4, 2001, Siberian Airlines Flight 1812, a Tupolev Tu-154, crashed over the Black Sea en route from Tel Aviv, Israel, to Novosibirsk, Russia. Although the immediate suspicion was of a terrorist attack, American sources proved that the plane was hit by a S-200 surface-to-air missile fired from the Crimean Peninsula during a Ukrainian military exercise. This was confirmed by the Moscowbased Interstate Aviation Committee. All on board (66 passengers and 12 crew) died. The president of Ukraine, Leonid Kuchma, and several high commanders of the military expressed their condolences to the relatives of the victims. The Ukrainian government paid out US\$200,000 in compensation to the families of every passenger and crew who died when the plane crashed. They paid out a total of US\$15 million in compensation for the accident.

2003: Baghdad DHL attempted shoot-down incident

Shortly after takeoff from Baghdad on November 22, 2003, an Airbus A300-200F cargo plane, registered OO-DLL, was struck on the left wing by a surface-to-air missile while en route to Muharraq, Bahrain. The aircraft lost all hydraulic control, meaning the crew had to use engine thrust control to maneuver the plane. Despite no controls, a high landing speed and a damaged left wing, the plane touched down at Baghdad airport. Seconds after touchdown, OO-DLL went off-runway due to lack of controls. All 3 people on board survived. The plane's position was last reported in 2011 as still being at Baghdad airport.

2007: Balad Air Base in Iraq

On January 9, 2007, an Antonov An-26 crashed while attempting a landing at Balad Air Base in Iraq. Although poor weather is blamed by officials, witnesses claim they saw the plane being shot down, and the Islamic Army in Iraq claimed responsibility. Thirty-four of the 35 civilian passengers on board died.

2007: Mogadishu TransAVIAexport Airlines II-76

On March 23, 2007, a TransAVIAexport Airlines Ilyushin Il-76 airplane crashed in the outskirts of Mogadishu, Somalia, during the Battle of Mogadishu in 2007. Witnesses, including a Radio Shabelle reporter, claim they saw the plane shot down, and Belarus initiated an antiterrorist investigation, but Somalia insisted the crash was accidental. All 11 Belarusian civilians on board died.

2020: East African Express EMB120

On May 4, 2020, a chartered East African Express Embraer EMB 120 Brasilia crashed on approach to Bardale airstrip in Somalia, killing all 6 people on board. The plane was allegedly downed by Ethiopian soldiers, who may have mistaken its "unusual" flight path for a potential suicide mission. An investigation is ongoing.

Annex B

THE INTERNATIONAL LEGAL FRAMEWORK

International law

International law is largely based on the principles of sovereignty and the equality of states. From these principles stem the concepts of exclusive state jurisdiction over a territory and the people living in that territory. With certain exceptions, these principles also impose a duty on states not to intervene in the area of exclusive jurisdiction of another state. Generally, a state must consent to the rules that it will be bound by, whether explicitly through treaties or implicitly through state practice. Of course, all states are bound by peremptory norms. These concepts place limits on the rights of a state to take action against another state. They also explain why international courts and tribunals do not have automatic and general jurisdiction over states.

State responsibility

The breach by a state of a legal obligation contained in a treaty or convention is an internationally wrongful act. As a matter of customary international law, a state that has committed an internationally wrongful act is generally required to make reparations to the injured state(s). Reparations may include a public acknowledgment of wrongdoing on the part of the offending state, an official and public apology, the punishment of the individuals responsible, assurances of non-repetition—including the steps taken to prevent a recurrence—compensation, restitution and any other form of satisfaction. Depending on the nature of the internationally wrongful act, states can resort to various

means to ensure that an offending state is held accountable and makes full reparations to the affected states. Typically, states use state-to-state negotiations. However, if negotiations fail, a state may have recourse to dispute settlement mechanisms. Depending on the nature of the internationally wrongful act, these may include referring the dispute to international courts and tribunals or to international bodies, resorting to mediation or arbitration, or to the good offices of a neutral state.

Convention on International Civil Aviation (also known as the Chicago Convention)

The Chicago Convention (which dates back to 1944) sets out the rules for international civil aviation. It contains legal obligations owed to all contracting states, including the prohibition on the use of weapons against civil aircraft in flight. Annex 13 to the Chicago Convention establishes the standards and recommended practices relevant to aircraft accident and incident investigations. A dispute arising from the interpretation or application of the Chicago Convention can be referred to the Council of the International Civil Aviation Organization (ICAO). States must first attempt to settle the matter through negotiations before the ICAO Council has jurisdiction to make a decision regarding the dispute. Parties may appeal this decision to the International Court of Justice (ICJ).

Convention for the Suppression of Unlawful Acts against the Safety of Civil Aviation (also known as the Montreal Convention 1971)

The Montreal Convention 1971 requires states to prohibit, prevent and punish certain offences against civil aviation, including the destruction of an aircraft in service. States also have international obligations to prosecute or extradite any person alleged to have committed an offence against civil aviation and report to the ICAO Council, as promptly as possible, any relevant information in its possession, including the circumstances of any offence against civil aviation. States are also under an obligation to endeavour to take all practicable measures for the purpose of preventing the offences mentioned in Article 1 of this Convention. The Convention also contains a provision that requires all disputes related to the interpretation or application of this treaty to be settled first through negotiation then through arbitration. If the parties cannot agree on the organization of the arbitration within 6 months, the dispute may be referred to the ICJ.

State-to-state negotiation

In the context of the aviation treaties mentioned above, state-to-state negotiation is not only the leading method to hold an offending state accountable and ensure it makes full reparations for its internationally wrongful act, but it is a necessary first step toward any legally binding remedy in the case of a dispute. It is a condition precedent to submitting the matter to the ICAO Council or the ICJ. Historically, states have prioritized state-to-state negotiation on reparations in the case of the destruction of a civilian aircraft as it is considered the most effective mechanism to settle such matters between states.

International Court of Justice

The ICI is a forum for settling state-tostate disputes. The ICJ addresses state-level violations of international law and does not exercise criminal jurisdiction over individuals. The Court can only settle a dispute when the states concerned have recognized its jurisdiction, either generally or as a party to a treaty that gives the ICJ jurisdiction to settle disputes within that treaty. The Chicago Convention and the Montreal Convention 1971 contain a dispute-resolution-mechanism provision that gives jurisdiction to the ICJ. However, as stated above, this jurisdiction may only be exercised after other measures have failed to settle the matter: negotiation and submission to the ICAO Council in the case of the *Chicago Convention*; negotiation and arbitration in the case of the Montreal Convention 1971.

Other relevant treaties

The *Montreal Convention 1999* and the *Warsaw Convention* relate exclusively to the compensation owed by airlines to passengers and do not involve state responsibility or compensation for damage to passengers owed as a result of an internationally wrongful act of a state.

Annex C

THREE RESOLUTIONS ADOPTED UNANIMOUSLY BY THE CANADIAN HOUSE OF COMMONS WITH RESPECT TO PS752

January 27, 2020

The following motion,¹ moved by the Hon. François-Philippe Champagne, Minister of Foreign Affairs, was adopted with the unanimous consent of the House:

That this House:

- a. stand alongside the families and relatives of the victims who lost their lives during the tragedy of Flight PS752 on January 8, 2020;
- b. request that a full and transparent international investigation be carried out so that families obtain the answers to their questions and justice;
- c. demand cooperation from Iran which must remain fully transparent about the investigation;
- d. demand that Iran offer fair compensation to the families of the victims;
- e. demand that Iran fully respect the will of families of victims;
- f. demand that Iran hold those responsible for this tragedy to account by conducting an independent criminal investigation followed by transparent and impartial judicial proceedings which meet international standards; and
- g. request that Canada continue to support the families of the victims, hold Iran accountable for its actions and work with the international community to that end.

June 17, 2020

The following motion,² moved by the Hon. Marc Garneau, Minister of Transport, was adopted with the unanimous consent of the House:

WHEREAS Ukraine International Airlines Flight PS752 was unlawfully shot down on January 8, 2020, near Tehran, taking the innocent lives of all 176 people on board, including 55 Canadian citizens and 30 permanent residents, as well as others from Iran, Ukraine, the United Kingdom, Sweden and Afghanistan;

WHEREAS the government of Iran has publicly acknowledged that its military forces fired the missiles that caused these deaths, that it is legally obligated to conduct appropriate and transparent safety and criminal investigations to bring those responsible to justice and to safeguard civil aviation, and that it is obliged to make reparations to the affected States, including in the form of compensation to the families of all the victims, in accordance with international law;

WHEREAS the flight recorders from PS752 have been recovered by Iran, but have not yet been downloaded to allow their data to be analyzed, which should have been done "without delay", according to international standards, immediately following January 8th (long before any limitations imposed as a result of the COVID-19 pandemic); and

¹ https://www.ourcommons.ca/DocumentViewer/en/43-1/house/ sitting-8/hansard#Int-10734005

https://www.ourcommons.ca/DocumentViewer/en/43-1/house/sitting-40/hansard#Int-10888760

WHEREAS the families of the victims—in Canada, in Iran and in other countries around the world—continue to grieve the tragic and senseless loss of their loved-ones and are anxious to learn the whole truth about the tragedy of Flight PS752, who was responsible, and how they are being held to account, in addition to seeking honourable treatment with respect to compensation from both the airline and Iran, and in matters related to their ongoing safety and peace of mind;

NOW BE IT RESOLVED THAT THIS HOUSE:

- 1. Express its deep condolences to the families of the victims who lost their lives in the horrific downing of PS752, condemn the perpetrators, and stand in solidarity with the families in the pursuit of transparency, accountability and justice for those families;
- 2. Support steps taken thus far, including the implementation of a whole-ofgovernment approach to addressing the needs of the families, the provision of consular services, immigration and travel supports, the identification and repatriation of remains, financial support (directly from the government in the form of emergency financial assistance and by matching private donations to the Canada Strong Campaign), mental health and counselling services, a regular on-going flow of information and replies to inquiries, investigative work, the formation of a Canadaled International Coordination and Response Group, the launch of the "Safer Skies" initiative at the Munich Security Conference, and Canada's representations to the International Civil Aviation Organization (ICAO);

- 3. Call upon all relevant departments and agencies of the Government of Canada to exercise all necessary diligence, persistence and determination to grapple effectively with the complexities inherent in international disasters of this magnitude, as well as the additional impediments created by the COVID-19 pandemic, so the families can ultimately know the truth about what happened, notwithstanding the time and effort such pursuit of justice may require;
- 4. Call upon the Government of Canada in the meantime:
 - a. to pursue, with the other affected States of the Coordination Group, negotiations on reparations with Iran to obtain appropriate compensation for the families of the victims from the state of Iran, in addition to the obligations of the airline industry;
 - b. to resolve outstanding immigration issues in a fair, equitable and compassionate manner;
 - c. to implement appropriate means of honouring and commemorating the precious lives lost; and
 - d. to help protect families from foreign interference, intimidation, harassment and cyber threats.
- 5. Support the work of the Government of Canada, in partnership with the international community through the CG and ICAO, and otherwise, to expose as much as possible the sequence of events and the decision-making chain that resulted in deadly missiles being launched against this civilian aircraft contrary to international law, and to determine how and why civilian aircraft were allowed to be in that airspace over a dangerous conflict zone, all in an effort to avoid repetitions of this disastrous set of circumstances.

October 29, 2020

The following motion, ³ moved by Heather McPherson (Edmonton Strathcona), was adopted by the House without dissent:

That the House:

- a. condemn the threats, harassment and intimidation tactics that are targeting family members of Flight PS752 victims;
- b. call for the government to investigate the complaints; and
- c. call for greater action to protect the safety of all family members of Flight PS752 victims.

³ https://www.ourcommons.ca/DocumentViewer/en/43-2/house/sitting-22/hansard#Int-10980831

Annex D

OFFICIAL DOCUMENTATION RELATING TO THE DOWNING OF FLIGHT PS752 ISSUED TO DATE BY IRAN

On the date of occurrence, January 8, 2020, the Aircraft Accident Investigation Board (AAIB) within Iran's Civil Aviation Organization (CAO) issued a formal *Notification* that Ukraine International Airlines Flight 752 had crashed shortly after take-off from Imam Khomeini International Airport near Tehran, with 167 passengers and 9 crew members on board. There were no survivors.

On January 9, 2020, the CAO/AAIB issued its first *Preliminary Report* with respect to PS752.

This document can be accessed HERE.1

On January 21, 2020, the CAO/AAIB issued its *Preliminary Report #2* with respect to PS752.

This document can be accessed HERE.²

In July 2020, the CAO/AAIB issued a *Factual Report* with respect to its PS752 investigation.

This document can be accessed HERE.³

In August 2020, the CAO/AAIB issued a *Flight Recorder Read-out Report* with respect to PS752.

This document can be accessed HERE.4

To be consistent with international standards set out in the *Convention on International Civil Aviation* and with the expectations of the International Civil Aviation Organization (ICAO), a further and final report from Iranian authorities with respect to the downing of Flight PS752 can normally be expected within about 12 months of the crash.

¹ https://www.cao.ir/web/english/investigation-reports?p_p_ id=NetFormGetFile_WAR_NetForm&p_p_lifecycle=2&p_p_resource_id=getFile&_NetFormGetFile_WAR_NetForm_file=RFpLRk5zMTJJRIIILONyVEZzbEMvNTVCQXZKSzl2RGtZVIBDNnVF-V0d2emFYWIIPdVo3aVpEMW9ad0R3SWhxdWdMSzlaUjIERjR-WRApmKIJHclQrOXVnPTO=.pdf

² https://www.cao.ir/web/accidents/reports?p_p_id=Net-FormGetFile_WAR_NetForm&p_p_lifecycle=2&p_p_re-source_id=getFile&_NetFormGetFile_WAR_NetForm_file=RF-pLRk5zMTJjRll1L0NyVEZzbEMvNTVCQXZKSzl2RGtZVIBDNn-VFV0d2emNac2FNODVBcy9JbW1OMy9iblpyN2x0eVFyaUhiT-TZqNApBMGNJWURVc0hBPT0=.pdf

³ https://www.cao.ir/web/english/investigation-reports?p_p_id=NetFormGetFile_WAR_NetForm&p_p_lifecycle=2&p_p_resource_id=getFile&_NetFormGetFile_WAR_NetForm_file=RF-pLRk5zMTJjRIIILONyVEZzbEMvNTVCQXZKSzl2RGtZVIBDNnVF-V0d2eWErSzVqQlh5OTV1bWFnc1JRd0JpWGdQd21LM04rWGN-ldApTbnM2UGZXcGl3PT0=,pdf

⁴ https://www.cao.ir/news/organizatioal/detail?p_p_id=Net-FormGetFile_WAR_NetForm&p_p_lifecycle=2&p_p_resource_id=getFile&_NetFormGetFile_WAR_NetForm_file=V-05LYXVPMDZCRnZSNTZUcjEvZZIIRWwzc0hoUDRwLldt-NDF6SnF5S0ttd00lems0MTVJZ29tenJlenZUS0ZJTm5HcFBv-VEVaMExDUgpQaHNSaFBNL0pRPT0=.pdf

Annex E

CONSULAR SERVICES

When Canadian citizens must deal with emergency circumstances overseas—including the aftermath of disasters like airplane crashes—Global Affairs Canada (GAC) attempts to provide appropriate assistance insofar as that is legally and physically possible. The help can take various forms, tailored to the specific situations and countries involved. The general objective is to ensure that Canadians have the information and support services needed to deal effectively with the emergency they face.

With respect to an airplane crash, consular services can typically include:

- obtaining information from airline companies and/or government agencies to help identify victims and locate next of kin
- determining the status/condition of victims and notifying the next-of-kin
- establishing family points of contact and lines of communication, including foreign language skills and translation services, as necessary
- determining and explaining the necessary processes and issues going forward so families know what to expect, and then providing ongoing and updated information as situations evolve
- helping to arrange for travel documents, such as passports and visas, to facilitate emergency travel from Canada to the location of the disaster, or vice versa

- helping to identify remains and helping to arrange for their local burial or repatriation to Canada, depending on each family's wishes; repatriation includes both departure from the country in which the disaster occurred and arrival in Canada
- dealing with local authorities (e.g., police, coroners, government agencies, etc.)
 to obtain such necessities as death certificates and to advocate for families' concerns or requests
- meeting with families in the country in which the disaster occurred and, as appropriate, facilitating visits to the crash site or participating in memorials
- helping with such things as contacting the airline responsible for the crash, insurance companies, banks or other public or private entities; collecting and returning personal effects; liaising and coordinating with other Canadian government entities such as the RCMP, the Canada Border Services Agency, Transport Canada or Immigration, Refugees and Citizenship Canada; handling media inquiries and any requested meetings between the families and elected Canadian officials, etc.
- providing a list of local lawyers and facilitating the transfer of private funds, as required

Given the magnitude of the PS752 disaster and the absence of any meaningful diplomatic relationship with Iran, several extraordinary steps had to be undertaken in this particular case. For example, since neither Ukraine International Airlines nor local authorities in Iran were able to produce immediately a complete passenger manifest to allow accurate scoping of this disaster, GAC worked through the Canadian embassy in Kyiv to gain timely access to this vital information.

GAC deployed a Standing Rapid Deployment Team (SRDT) to Iran for most of January to work on consular issues for victims' families there with the support of the Canadian embassy in Turkey and the Italian embassy in Iran (Italy being Canada's "protecting power" in Iran). Italy's hard work on Canada's behalf was invaluable.

An SRDT was also deployed, for the first time, to 5 Canadian cities—Toronto, Edmonton, Winnipeg, Montréal and Vancouver—to facilitate the delivery of consular services to the significant numbers of loved ones in each of these centres. On an extraordinary basis, the teams also extended their services to the families of not only Canadian citizens but permanent residents. Due to specific circumstances of PS752, Canada also facilitated access to counselling services, basic legal advice and information, and financial assistance.

Because official death certificates were difficult to obtain in Iran, a consular substitute was created in the form of personalized letters from GAC to serve the same purpose. Work had to be done with the insurance industry and others to obtain their understanding and cooperation.

It is important to note that many of the extraordinary services provided to PS752 families were either different from those offered to the ET302 families or were not provided to the ET302 families. The feedback that ET302 families provided to the Government of Canada helped shape the PS752 response, and lessons learned from both ET302 and PS752 will continue to shape and improve the Government of Canada's responses in future.

Annex F

AS COMPILED BY TRANSPORT CANADA, A LIST OF KNOWN DEPARTURES FROM TEHRAN'S IKA INTERNATIONAL AIRPORT BOTH BEFORE AND AFTER PS752

- 9 aircraft took off prior to the downing of Flight PS752
- over an hour after the downing of Flight PS752, flights resumed

Flight	Airline	Destination	Scheduled time	Actual times	Aircraft
J2 9006	Azerbaijan Airlines	Baku, Azerbaijan	1:25 am	1:36 am	Embraer 190
LX 4021/ LH 601	Swiss/ Lufthansa	Frankfurt, Germany	2:25 am	2:43 am	Airbus 330-300
TK 875	Turkish Airlines	Istanbul, Turkey	3:00 am	3:35 am	Airbus 321
OS 872	Austrian Airlines	Vienna, Austria	3:45 am	4:23 am	Airbus 320
PC 513	Pegasus Airlines	Istanbul, Turkey	4:20 am		
AFL/ SU 513	Aeroflot	Moscow, Russia	4:30 am	4:31 am	Airbus 320
TK 873	Turkish Airlines	Istanbul, Turkey	4:45 am	5:07 am	Airbus 321
QR 491	Qatar Airways	Doha, Qatar	4:45 am	5:01 am	Airbus 320
PS 752	Ukraine International Airlines	Kyiv, Ukraine	5:15 am	6:12 am	Boeing 737-800
KK 1185	AtlasGlobal	Istanbul, Turkey	5:15 am	5:17 am	Airbus 330
QR 8408	Qatar Airways	Hong Kong	5:30 am	5:40 am	Boeing 777-200
IR 719	Iran Air	Istanbul, Turkey	5:45 am	12:41 pm	Airbus 306

Flight	Airline	Destination	Scheduled time	Actual times	Aircraft
TBZ 6650	ATA Airlines	Najaf, Iraq	6:00 am		
IR 721	Iran Air	Frankfurt, Germany	6:20 am	7:49 am	Airbus 330
TK 899	Turkish Airlines	Istanbul, Turkey	6:20 am		
W5 112	Mahan Air	Istanbul, Turkey	6:50 am		
IR 658	Iran Air	Dubai, United Arab Emirates	7:00 am	3:11 pm	Airbus 321
IR 717	Iran Air	Vienna, Austria	7:30 am	7:53 am	Airbus 306
TK 879	Turkish Airlines	Istanbul, Turkey	7:40 am	8:23 am	Airbus 330
W5 61	Mahan Air	Dubai, United Arab Emirates	8:00 am	8:19 am	Airbus 340
IR 713	Iran Air	Stockholm, Sweden	8:50 am	8:41 am	Airbus 330
W5 116	Mahan Air	Istanbul, Turkey	9:00 am	9:07 am	Airbus 340
IR 715	Iran Air	Ankara, Turkey	9:30 am	9:55 am	Airbus 300
IRQ 2213	Qeshm Air	Istanbul, Turkey	11:00 am	2:32 pm	Airbus 300
EK 972	Emirates	Dubai, United Arab Emirates	11:05 am	11:18 am	Boeing 777-300
W5 63	Mahan Air	Dubai, United Arab Emirates	11:15 am	11:25 am	Airbus 310
W5 120	Mahan Air	Istanbul, Turkey	11:30 am	11:40 am	Airbus 340
W5 5058	Mahan Air	Sulaymaniyah, Iraq	12:00 pm		