

Mandate of the Special Rapporteur on extrajudicial, summary or arbitrary executions

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Excellency,

I have the honour to address you in my capacity as Special Rapporteur on extrajudicial, summary or arbitrary executions, pursuant to Human Rights Council resolution 44/5.

I would like to bring to your attention allegations I have received concerning the shooting down on 8 January 2020, of Ukraine International Airline (UIA) Flight PS752, en route from Tehran to Kiev shortly after take-off, by the Islamic Republic of Iran. All 176 passengers and crew were killed, including many children, and citizens or residents from Iran, Canada, Ukraine, Sweden, Afghanistan, Germany, Switzerland and the United Kingdom. The allegations I have received also concern the investigation carried out by the Iranian authorities and the treatment of the victims' families in the aftermath of the strike.

According to the information received:

On 8 January 2020, 176 people lost their lives in the downing of Ukraine International Airlines Flight 752 (PS752). The below information is a short summary of the context in which flight PS752 was shot down, the response from the Iranian authorities, the lack of independent and credible investigations and prosecutions to date and the treatment of families of victims and protestors. Detailed information received on each of these aspects is contained in annex I, which is an integral part of this communication.

The context and targeting of Flight PS752

The targeting of UIA Flight PS752 occurred in the context of heightened tensions between the Islamic Republic of Iran and the United States (US). This included the lethal strike by the United States on 3 January 2020 against Major General Soleimani and members of Iraq's Popular Mobilization Forces and Iran's retaliatory strikes on 8 January 2020 on US assets in Iraq. In anticipation of a US response, the Iranian Revolutionary Guard Corps (IRGC) moved anti-aircraft missile units to positions around a sensitive military installation near Tehran's Imam Khomeini Airport, a civilian airport. However, the Iranian officials decided not to close the airport or issue a notice to airmen. Instead, the authorities set up a communication system between civilian Air Traffic Services (ATS) and the military to ensure civilian aircraft were not targeted.

Flight PS752 departed at approximately 02:42 UTC (06:15 local time) on 8 January 2020. It had been delayed for reasons which are unclear. After requesting take off, the controller told the pilot to wait for clearance so he could coordinate with others including the defense system. The flight was cleared for takeoff at 2:40 UTC (06:10 local time) and took off two minutes later. At 2:43:56 UTC (6:13 local time), an IRGC air defense TOR missile unit operator reportedly detected the flight as a target and tried to notify the Coordination

Center of the target, but for reasons that are unspecified, this communication failed. Shortly afterwards the unit fired its first missile, which hit the plane and 30 seconds later fired its second missile. The missiles were fired within 1 minute and 15 seconds of the flight first being detected.

Inadequate investigations, prosecutions and reparation

The Government of Iran denied for three days that the flight had been shot down insisting that the crash was caused by a fire. However, a special, secret investigation was launched on 8 January 2020, which concluded the same day that the flight had been hit by a missile fired as a result of human error. Iran's Civilian Aviation Organization, was also apparently aware of this from the outset. During this three day period, Iranian officials reportedly used bulldozers to collect parts of the plane, which prevented them from being analyzed in situ and looting occurred at the crash site. Allegedly, some personal possessions from the crash site were burned under instruction. On 11 January 2020, the military issued a statement publicly admitting that the crash had been caused by missile fire.

Iran notified the International Civil Aviation Organization about the incident and began an investigation on 9 January 2020 and invited international experts to participate. However, during initial visits to the crash site these experts were closely monitored. In January 2020, Iran submitted a second preliminary accident report, in July 2020 it issued its third factual report and in August 2020 released its Flight Recorder Read-Out Report. The final report remains pending.

The July 2020 report identifies four critical failures that led to the targeting of flight PS752. However, there are a number of concerns with each of them:

- (1) The report indicates there was an error in the north alignment of the mobile unit. However, while such a miscalibration would shift the perceived flight path, it would not, as stated in the report, make the plane appear to be flying more towards the center of the missile's coverage. Furthermore, no explanation is given as to how the miscalibration occurred and why it was not detected.
- (2) The plane was wrongly identified and classified. However, the report does not explain why standard procedures such as checking the characteristics of the target, did not make clear that this aircraft was not a missile. The report also does not address why the second missile was launched, especially after the track and descent profile of PS752 after being hit by the first missile did not match what one would expect if it had been a cruise missile.
- (3) There was defective communication between the unit and the command center; and (4) the unit commander failed to follow military procedure by launching missiles without authorization. However, it is unclear how information on civilian flights was communicated to the missile system crew nor how a minor disruption in communication alleged to be only of a few seconds resulted in the missile crew being unaware of the take off at the exact time a target appeared. It is also unclear whether the operators that night had the requisite level of training to interpret the information they were receiving and to act accordingly.

It appears that a military tribunal was formed in relation to the events and that three people are or were in custody – likely the operators of the mobile missile unit. News reports indicate as many as 10 others may have been arrested. However, no information has been provided on the identities of those arrested, why they were investigated and on whether any action has been taken against high-level officials. Discussions on compensation for the victims’ families are ongoing. Iran has allocated 200 million euros in its 2021 budget for compensation and indicated the exact level will be established by courts and in line with international norms as well as existing precedent.

Treatment of the victim’s families and protestors

The initial denial of the circumstances of the crash by the Government deepened the impacts of the tragedy on affected family and friends, as did the failure to protect the crash site and passengers’ property from looting which deprived family members of mementos of significant sentimental value. Additionally, Iranian officials coerced families into publicly declaring support for the Government or risk the non-return of the remains of the deceased and interfered with funeral arrangements. This included preventing private funerals from being held and insisting in some cases that victims be buried in the martyrs’ sections of cemeteries without their families’ permissions or presence.

A number of families reportedly applied to repatriate their loved ones to their countries of residence but encountered delays and obstacles, having been obliged by Iran’s Ministry of Foreign Affairs to sign a form declaring that the victims had only Iranian nationality. Family members, including some residing outside Iran, have also been subjected to constant harassment, intimidation, threats, and physical assault at the hands of the authorities. The authorities also apparently made an initial offer of financial compensation linked to a condition that no legal action be taken against Iran.

The downing of flight PS752 triggered widespread protests in Iran which were met with excessive use of force, including physical attacks and the use of tear gas, batons, rubber bullets and pointed pellets. Hundreds of individuals were arrested and subjected to physical and psychological torture and ill-treatment have been used for the purpose of extracting confessions with families denied information about the individual’s fate and whereabouts in some cases.

Without prejudging the allegations set forth above and in annex I to date but subject to any clarification your Excellency’s Government may wish to provide, it appears that your Excellency’s Government did not respect and protect the lives of these innocent civilians and failed to investigate their killing, as required under Article 6 of the International Covenant on Civil and Political Rights (ICCPR),¹ the Convention for the Suppression of Unlawful Acts Against the Safety of Civil Aviation (Montreal Convention),² and the Chicago Convention on International Civil Aviation (Chicago Convention).³ It appears that your Excellency’s Government may have also committed

¹ Your Excellency’s Government signed the ICCPR on 4 April 1968 and ratified it on 24 June 1975.

² Montreal Convention of 1971, ratified by Iran on 10 July 1973.

³ Convention on Civil Aviation (“Chicago Convention”), 7 December 1944, 15 UNTS 295, ICAO Doc. 7300/9, as amended, ratified by Iran on 19 April 1950.

an internationally wrongful act against other States, particularly Ukraine, the State where the plane was registered. Your Excellency's Government has an obligation to accept responsibility, and provide reparation for, any wrongful act that it has committed against other States, as a result of this attack on a civilian plane.

In this connection, I would like to refer your Excellency's Government to Annex II, an integral part of this letter, which provides further detail on some of the main international norms and standards that appear to be contravened by these allegations.

Your Excellency's Government's Deputy Foreign Minister for International and Legal Affairs has indicated that "[t]he Islamic Republic of Iran's stance is based upon transparency, as it has nothing to hide about this incident." I would accordingly welcome your clarification on the factual allegations that have been made as to the downing of Flight PS752 and your explanation of the steps taken to date to investigate this tragedy and to ensure that such a tragedy never occurs again. It is critical that these questions be answered. Otherwise, the families of the victims are left understandably to wonder why their family members died and why this flight in particular was struck, when others following the same route escaped attack. Some may even wonder whether the flight was targeted purposefully, either because of something specific about it or perhaps to divert attention from the increasing hostilities between your Excellency's Government and the United States and to let that tension cool.

As it is my responsibility, under the mandate provided to me by the Human Rights Council, to seek to clarify all cases brought to my attention, I would be grateful for your observations on the following matters:

Investigation

1. Please provide information on the investigations your Excellency's Government has performed into the downing of Flight 752, including the steps taken and evidence collected, as well as any additional investigations planned.
2. Under what guidance and rules did Iran permit international investigators to conduct their investigation and assessment? If there was a memorandum of cooperation or a similar document, please could you provide a copy?
3. What is the current status of the international investigation undertaken pursuant to the Chicago Convention?
4. Has there been any investigation into the adequacy of any precautions taken by the military on the morning 8 January 2020 to protect civil aviation?
5. Has your Excellency's Government investigated whether the soldiers who targeted the flight actually believed the aircraft was a missile and if so, whether that belief was reasonable under the circumstances? What has your Excellency's Government concluded?
6. Did the military hide the cause of the crash from civilian authorities for a period of time? Has there been an investigation of the military's failure to provide

accurate information to civilian authorities? Have any military personnel been disciplined for this behaviour?

Operation of the airspace and airport

7. Please provide information on the decision not to close civilian airspace and not to issue a NOTAM. Please include information on who made these decisions and why.
8. How were flights that were approved for landing and take-off communicated to individual missile units? Who decided on this procedure and what consideration was given of possible communication disruptions?
9. Why was Flight PS752 delayed? Were any passengers taken off the flight prior to its departure?

Tor Unit operators and equipment

10. Please provide information on the Tor unit crew. As of 6:30 a.m. the morning of 8 January 2020, how long had they been on duty? What military training had the operators of the missile unit received?
11. Was the IRGC 9K331 Tor-M1 (SA-15 GAUNTLET) air defence system that destroyed Flight PS752 equipped with a Secondary Surveillance Radar (SSR) interrogator compatible with ICAO Modes A, C or S? If not, please explain why not.
12. Russian operational practice with the Tor-M1 is to support one or more such systems with a separate surveillance radar, equipped with an integral or separate Secondary Surveillance Radar (SSR) interrogator, and to continuously transmit tracking and track identity data to the fire control system of the Tor-M1 during operations. Was the IRGC Tor-M1 air defence system that destroyed Flight PS752 supported by a separate surveillance radar providing tracking and track identity data? If not, please explain why not.
13. The 9K330 Tor-M and 9K331 Tor M1 air defence systems are equipped with a long-range television telescope system for visual tracking and identification of targets. Did the crew of the IRGC Tor-M1 air defence system in question employ the television telescope to identify the target before they launched their missile? If they did not do so, please explain why not.
14. Given that the track and descent profile of PS752 after being hit with the first missile did not resemble what an operator would expect to see after hitting a military aircraft or cruise missile, why did the crew of the IRGC Tor-M1 air defence system in question decide that a second missile should be launched? Did the crew of the unit in question employ the television telescope to identify the target before they launched their second missile? If they did not do so, please explain why not.

15. PS752 ADS-B data, point of impact data, and geo-located open source video data, combined with the known range parameters of the Tor-M1, indicate that the crew launched the first missile at the first available opportunity, despite the track of PS752 presenting sufficient time for multiple launch opportunities were it an attack. Please explain why the crew decided to launch at the first available opportunity rather than scrutinize the track to ensure it was a hostile target?

The “mistakes”

16. Please explain precisely the calibration error made that would result in the perceived flight path your Excellency’s Government suggests and at what time that calibration error was made. What procedures and oversight does the Iranian military require with respect to calibration of missile units after movement? Were those procedures followed on 8 January 2020?
17. What steps did the operators of the missile unit take to confirm the identity of the target? Were there standard operating procedures for identify targets and were those procedures followed?
18. Russian operational practice with many older air defence systems, including those not retrofitted with digital ground map displays, is to mark civil air traffic lanes on the glass display screen of the search radar using a marker pen, and they will usually validate this by observing actual civil air traffic using the search radar of the air defence system. Did the crew of the IRGC Tor-M1 air defence system in question mark civil air lanes on the screen of the search radar? If they did not do so, please explain why not.
19. Did the missile unit monitor the target track and evaluate its course? Did the unit attempt to view the target through its television telescope, prior to launching another strike?
20. A common practice in air defence operations is to employ the altitude, climb rate and airspeed of an unknown radar track to determine whether it is a potential threat. Flight PS752’s altitude, climb rate and airspeed reportedly did not match that expected of a military aircraft or cruise missile employing terrain masking to approach a target. Did the crew of the IRGC Tor-M1 air defence system in question consider the altitude, climb rate and airspeed of Flight PS752 before they launched? If they did not do so, please explain why not.
21. Given reports that 10 more aircraft departed prior to PS752 some of which were following tracks and climb profiles that would have been almost identical to the track and climb profile of PS752, why did the crew of the IRGC Tor-M1 air defence system in question decide that PS752 was different and constituted a threat that justified launching a missile?

Crash site

22. Did your Excellency’s Government bulldoze the crash site and fail to safeguard the crash site from looters? If so, who made each of these decision and why?

Prosecution

23. Has any individual been criminally charged in connection with the downing of Flight 752? If so, please provide a full list of those charged as well as information on the charges in each case and the bases for those charges. What is the current status of any prosecution or criminal investigation? Has any high-level military officer been investigated or prosecuted for the planning and supervision of military operations that night?

Remedies and reparations

24. Please provide information on any remedial measures being taken to ensure that civil aviation will be adequately protected in the future and whether stricter standards have been set for closing the civilian airspace in the future?
25. Has your Excellency's Government formally taken responsibility for the downing of Flight 752? If not, why not.
26. Is it correct that your Excellency's Government apportioned \$200 million euros of its 2021 government budget for compensation of the victims of flight PS752? How did your Excellency's Government settled on that figure?

This communication and any response received from your Excellency's Government will be made public via the communications reporting website within 60 days. They will also subsequently be made available in the usual report to be presented to the Human Rights Council.

While awaiting a reply, I urge that all necessary interim measures be taken to correct the alleged violations and prevent their re-occurrence and in the event that the investigations support or suggest the allegations to be correct, to ensure the accountability of any person(s) responsible for the alleged violations.

I may publicly express my concerns in the future as, in my view, the information upon which the press release would be based is sufficiently reliable to indicate a matter warranting immediate attention. I also believe that the wider public should be alerted to the potential implications of the above-mentioned allegations. The press release would indicate that I have been in contact with your Excellency's Government's to clarify the issue/s in question.

I would also like to inform your Excellency's Government that a copy of this letter is being sent to the Governments of Afghanistan, Canada, Sweden and Ukraine as states whose nationals were killed.

Please accept, Excellency, the assurances of my highest consideration.

Agnes Callamard
Special Rapporteur on extrajudicial, summary or arbitrary executions

ANNEX I - FACTS ALLEGED

According to the detailed information received:

I. THE VICTIMS

On 8 January 2020, 176 people lost their lives in the downing of Ukraine International Airlines Flight 752 (PS752). Women, men and children died. The youngest passenger was but one year old; the oldest aged 74. In all, 28 children were killed. Entire immediate families - mother, father and children - died. Newly-weds too were among those who lost their lives. A husband travelling separately from his wife was killed after only 13 days of marriage. A wife died separated from her husband only by a ticketing error.

Some boarded flight PS725 because earlier plans had changed; others never joined the flight for similar reasons. Prior to boarding, a number of passengers expressed to family and friends their anxiety about the flight ahead, given the context of heightened tensions with the United States. Some spoke of a sense of foreboding.

Of the 48 people aged between 21 and 30 killed on flight PS725, many were academics or students of higher education, taking advantage of their end of year break to travel to Iran to celebrate with family and friends. The majority of those aboard were aged between 31 and 60, and in the prime of their professional and personal lives. Many passengers were distinguished teachers and professionals in fields ranging from medicine and dentistry to engineering, chemistry and finance. Among the crew, the three pilots of PS752 for example, had between them a combined record of 31,200 hours experience in flying Boeing 737s - the aircraft used for the flight - including a combined 12,100 hours as captains.^[1] Another 28 of those lost were aged under 18, and they will never have the opportunity to fulfill their potential.

According to Iranian officials, in addition to the nine Ukraine crew members killed, 146 of the passengers who died were travelling on Iranian passports, ten others on Afghan passports, five on Canadian, four on Swedish, and two more on Ukrainian passports.⁴ Many of those killed, 138 in total, were residents of Canada, 16 of Sweden, 11 of Ukraine, four of Germany, four of the United Kingdom and three of Switzerland.

II. THE CONTEXT AND THE TARGETING OF FLIGHT PS752:

1. A context of heightened tensions

The targeting of UIA Flight PS752 occurred in the context of heightened tensions between the Islamic Republic of Iran and the United States.⁵ In January 2020 alone, incidents included the lethal strike by the United States on 3 January against Major General Soleimani and members of Iraq's Popular Mobilization Forces. On

^[1] As per the information provided by Ukraine International airlines, available at <https://www.facebook.com/flyuia.ua/posts/3118910491457829>

⁴ As Iranian authorities noted at the time, a number of passengers had more than one nationality, see <https://web.archive.org/web/20200112032437/https://www.flightradar24.com/blog/wp-content/uploads/2020/01/Iran-CAO-PS752-Initial-Report.pdf>

⁵ A/HRC/44/38, Annex, para. 8.

4 January, in response to Iran's threats to retaliate, the American President warned that the US would be targeting 52 Iranian sites of historic and cultural significance. On 8 January, Iran launched retaliatory strikes on US assets in Iraq starting at 01:20 local time. The operation titled "Martyr Soleimani" targeted the Ayn al-Asad airbase in Al Anbar Province with ballistic missiles.⁶

A senior officer with Iran's Islamic Revolutionary Guard Corps (IRGC) explained that, following the strikes on US airbases, the Iranian air defense system was on high alert for an American counterattack. The Commander of the IRGC, Aerospace Force (the IRGC Commander) is reported to have said that the day Iran attacked Ain al-Asad, they thought the US forces would respond within 20 minutes, so they were ready to attack 400 American targets. According to the Commander, "all the offensive and defense units were on full alert ... all defense networks were in several stages of readiness 3-3 ... These systems were at the highest level of readiness, they had been informed that cruise missiles had been fired and were on their way. [The Americans] had put the situation in a state of war on the night of the incident and the integrated defense network was on full alert."⁷

It has been alleged that in preparation for the ballistic strike the Iranian Government planned against Coalition forces in Iraq, late on the night of 7 January 2020, the IRGC moved anti-aircraft missile units around a sensitive military installation near Tehran's Imam Khomeini Airport, a civilian airport. The IRGC Aerospace Force Commander has indicated that these forces were deployed at around midnight on that night. They reportedly consisted of TOR MITB units. Video evidence from the morning of the strike indicates that one of the units – the unit that launched the missiles – was stationed at or around Bid Kaneh, Iran, a position allegedly confirmed by the IRGC Aerospace Force Commander.

The precise arrangement of the TOR MITB mobile units in the area has not been made public. However, it appears that several units may have been deployed in the area, reporting to, and coordinated by, an operational command center. This command center would coordinate in turn with the Aerospace Force of the Islamic Revolutionary Guard Corps command.

2. Imam Khomeini Airport and air traffic

The IRGC Aerospace Force Commander reportedly indicated after the strike "[we had] repeatedly demanded that the country's airspace be suspended from flights." However, this did not happen and flights continued. Iran's Foreign Minister, later stated: "[the continuation of flights] was a technical decision as well as a political decision. Tehran was not in the area of hostilities. And we engaged in war against Iraq for eight years without closing our airspace." It has been reported that Iranian officials were worried that closing the airport would have warned the United States that an attack was imminent, or would have had negative financial implications, as the airport and overflights are a source of revenue. The Tehran Military Prosecutor, has suggested an

⁶ See A/HRC/44/38, Annex, paras 67, 82-85 where I found that both strikes, by the United States and by your Excellency's Government, violated *jus ad bellum* and international human rights law.

⁷ These are unofficial translations of the statements made. The Special Rapporteur would welcome any corrections, should your Excellency's Government believe they have been misunderstood.

additional justification, indicating that the airport would have been closed only if there was a confirmed air attack on the country. It is further reported that the Iranian Government did not issue a Notice to Airmen (NOTAM)⁸ or other notice about potential military dangers at the airport.

Shortly after Iran's ballistic missile strikes in Iraq on the morning of 8 January 2020, but prior to the downing of Flight PS752, it has been reported that the US Federal Aviation Authority restricted US aircrafts from operating in the "Tehran flight information region," which includes the airspace surrounding the Imam Khomeini Airport, "due to the heightened military activities and increased political tensions in the Middle East, which present an inadvertent risk to U.S. civil aviation operations due to the potential for miscalculation or mis-identification."⁹

India and the UAE had NOTAMS in place from the summer of 2019, warning against flying over certain parts of Iran. These NOTAMS are still active. Italy also had a NOTAM in place from June 2019 to September 2019 requiring its operators conduct a risk assessment for flights over Iran.¹⁰

The Iranian Government has suggested that, despite not closing the airspace or issuing a NOTAM, it did set up a communication system between civilian Air Traffic Services (ATS) and the military to ensure that civilian aircraft were identified and not targeted. The PS752 Accident Investigation Factual Report, issued by the Iranian Government in July 2020 (the July 2020 report) refers to this communication system and indicates that it was adjusted at approximately 4 a.m. local time, the morning of 8 January.¹¹

According to the Report, at 00:30 UTC (04:00 local time), "the military sector informed the civil sector of the country's Airspace Control that only the flights already detected and cleared for flight operations by the defense network could be permitted to start up."¹² The report does not give details as to which elements of the Military were involved or concerned. Prior to that point, the civilian ATS was making the determination and providing information on flights to the military. The report continues that "making such a procedural change and emphasizing the receiving of the go-ahead from the defense sector prior to initiating the flight, was implemented with the aim of more ensuring the correct identification of civil flights by the defense network and avoiding targeting them by mistake."¹³

⁸ A NOTAM is a "notice distributed by means of telecommunication containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations," Annex 15, Definitions, <https://www.icao.int/NACC/Documents/Meetings/2014/ECARAIM/REF05-Annex15.pdf>.

⁹ https://content.govdelivery.com/attachments/USFAAA/2020/01/07/file_attachments/1354310/KICZ%20A0002-20%20Prohibition%20NOTAM%20-%20Tehran.pdf

¹⁰ NOTAM LIXX A4578/2019, see [Iran – Safe Airspace](https://safeairspace.net/iran/), <https://safeairspace.net/iran/>

¹¹ July 2020 Report at 3, <https://www.flightradar24.com/blog/wp-content/uploads/2020/07/PS752-Factual-Report-July-2020.pdf>

¹² July 2020 Report at 3.

¹³ July 2020 Report at 3.

The Air Traffic Controller complied with these requirements with respect to Flight PS752: ATC contacted the Area Control Center for clearance, which in turn communicated with the Air Defense Coordination Center, which cleared the flight.¹⁴ After the change in procedures at 4:00 a.m. local time, six other flights took off from the airport without incident, before Flight PS752.¹⁵

3. *Timeline of Flight PS752*

UIA Flight PS752 was a flight from Tehran to Kiev, Ukraine, although many of the passengers were flying on to Canada through a connecting flight leaving from Ukraine. Flight PS752 was delayed in departing. An initial request for take-off was made at 05:13 local time. Iran and Ukraine have reported that the plane was over-weight and that luggage needed to be removed. There were reportedly 82 pieces of luggage that were later retrieved from the airport following the crash. However, it is unknown whether these were taken off the plane or were not loaded. Cell phone calls from people on the plane indicate that some people disembarked the plane prior to its departure. Following the crash, news agencies were initially told by Iranian officials that there were 179 people onboard, a number that was later adjusted to 176. There are no data and documentation available to confirm the actual cause of the flight delay and whether individuals left the plane prior to its departure.

According to the July 2020 report, Flight PS752 requested to start its engines at 2:21:28 UTC (approximately 05:51 local time). The request was made roughly 11 minutes following the take-off of Qatar Airways flight QR8408 bound for Hong Kong.

The requisite documentation for take-off was submitted at 05:48 local time and the aircraft's doors were locked at 05:49. At 05:51, the pilot notified the traffic controller that they were ready to take-off.¹⁶ The controller told the pilot to wait for clearance "so that he could make the required coordination with other relevant units, including the defense system."¹⁷ The controller contacted Mehrabad Airport's controller, another international airport, in Tehran to coordinate the take-off. The Mehrabad Airport controller alerted the defense system coordinator at the Tehran's Area Control Center (ACC), which oversees air traffic over Tehran.

The clearance to take-off was issued at 2:40:20 UTC (06:10 local time)¹⁸ and the aircraft took off at 2:42:19 UTC or 06:12 local time approximately two minutes later.¹⁹ The aircraft's pilot then contacted the Mehrabad approach radar unit and announced the flight plan. The radar controller directed the flight's path and told the pilot to "climb to 6,000 feet, then turn right, and continue straight to PAROT position located 70 miles northwest of Mehrabad Airport, which was read back by the pilot."²⁰

¹⁴ July 2020 Report at 3-4.

¹⁵ <https://www.flightradar24.com/blog/ukrainian-flight-ps752-crashes-shortly-after-take-off-from-tehran/>

¹⁶ <https://www.reuters.com/article/us-iran-crash-ua-president/ukraine-airline-says-plane-had-no-warning-of-threat-before-iran-crash-idUSKBN1ZA0FQ>

¹⁷ Second Preliminary Report, Islamic Republic of Iran, Civil Aviation Organization, Aircraft Accident Investigation Board, 21 January 2020, page 2 (Second Preliminary Report), https://www.cao.ir/news/organizational/detail?public_content=27851&title=

¹⁸ July 2020 Report at 3-4

¹⁹ <https://www.flightradar24.com/blog/ukrainian-flight-ps752-crashes-shortly-after-take-off-from-tehran/>

²⁰ Second Preliminary Report, page 2.

Radar data showed that at 06:15 local time, the aircraft veered to the right, back in the direction of the Imam Khomeini International Airport before disappearing completely at 06:18 local time.

At 2:43:56 UTC (06:13 local time), the IRGC air defense TOR missile unit operator reportedly detected the flight as a target. At 2:44:21 UTC (06:14:21 local time), almost half a minute later, the operator notified the Coordination Center of the target, but for reasons that are unspecified, this communication failed. At 2:44:41 UTC (06:14:41 local time), 20 seconds after attempting to contact the Coordination Center, and 45 seconds after detecting the plane, the air defense unit fired its first missile. The airplane was hit by this missile at 2:44:59 UTC (6:14:59 local time). On the Cockpit Voice Recorder (CVR), a sound similar to detonation occurred at 2:44:56 UTC (6:14:56 local time).²¹ At 2:44:58 UTC (06:14:58 local time), the plane's transponder ceased functioning.

In a recording released on 3 February, the pilot of Flight EP3768 notified traffic controllers that he had witnessed a missile attack near the airport:

Pilot: "There's a flare on the route, like something from a missile. Should anything like this be happening there?"

Controller: "Zone 320? How many miles away? Where?"

Pilot: "Can't say for sure. But I think it is near [airfield] Payam, [city] Karaj."

Tower: "How many miles? Where?"

Pilot: "I now see the light as it flies off of there."

Tower: "We were not informed of this."

Tower: "How does it look like? What does this light look like?"

Pilot: "That's definitely a flash from a missile."

Tower: "It's not flying toward the [Tehran], is it?"

Pilot: "It might be. Oh, no it was flying from the direction of the city."

Tower: "We were informed of anything but keep watching."

The IRGC air defense TOR unit fired its second missile at 2:45:11 UTC (06:15:11 local time), 30 seconds after the first and 1 minute and 15 seconds after first detecting the plane. The missile unit received a message that that strike had failed. However, video of the missiles suggests both missiles struck the plane, as detonations are visible. The CVR recording ended at 2:45:15 UTC (06:15:15 local time). At 2:46:11 (06:16:11 local time), there was a fire in the plane. At 2:48:23 (06:18:23 local time), the plane crashed in a playground in Khalajabad near Shadhedshahr, with no survivors.

III. INVESTIGATION OF THE DOWNING OF FLIGHT PS752

It has been alleged that the Iranian Government's investigation has been inadequate. Evidence seems to have been destroyed at the crash site and, at least initially, government officials lied about their knowledge of the incident. The investigation itself has not been transparent and appears to have focused on the low-level officers who launched the missiles, ignoring the decisions by high-level officials that made this tragedy possible. The international community has been excluded from

²¹ UR-PSR Flight Recorder Read-out Report, The Civil Aviation Organization of the Islamic Republic of Iran, Flight PS752 Accident, August 2020, para. 9, <https://www.tsb.gc.ca/eng/enquetes-investigations/aviation/2020/a20f0002/report/CAOIRI-records-20200823.pdf>

key portions of the investigation, even though they would add the necessary impartiality, crucial to a fair investigation. Compounding these deficiencies, family members have had no role in the investigation and, it appears, have been harassed and pressured by the Government.

1. Denial of the Targeting for Three Days

For three days, the Government of Iran denied that missiles had brought down Flight PS752. Ali Abedzadeh, head of Iran's Civil Aviation Organisation (CAO), insisted on national television that no missile hit the plane and that the crash was caused by a fire. An Iranian defense expert asserted that Iran's advanced defence system could never mistake a passenger airliner for a missile or military plane. Yet at 7 a.m. on Saturday, 11 January 2020, the military issued a statement admitting that Iranian missiles struck Flight 752 as a result of human error. President Rouhani issued a statement later that morning, indicating that he had been informed only "a few hours ago" of the truth.

Despite these early denials, officials in the Iranian military have admitted they knew almost immediately that the airplane had been shot down by a missile and that this was not a plane accident caused by a technical problem onboard. It appears that the chief commanders of all military forces, including the Islamic Revolutionary Guard Corps, the central air defense command and the army, were informed and a special, secret investigation was launched on Wednesday, 8 January 2020. By that evening, this investigation concluded that Flight PS752 had been shot down as a result of human error.

It appears that civil officials at the CAO knew the truth from the beginning as well. Air traffic control at nearby Mehrabad International Airport was informed by the pilot of Flight EP3768 that he had seen missile fire and then an explosion. Flight PS752 had been transferred to this airspace and, on the tape, ATC can be heard trying to contact the plane unsuccessfully after this report. In a taped recording of a conversation with a family member, the CAO official in charge of the accident investigation, states that he knew from the beginning it was a missile strike. He is reported in the press as saying: "I was informed at 6:30 a.m. and I called the IRGC at 6:35 a.m. and asked, 'Did you have a missile attack? [The IRGC Aerospace Force Commander] explained and said yes, and we had orders. He said there are some national security considerations in the country."

On 9 January, Canada announced that its intelligence indicated that the Ukrainian passenger aircraft was shot down by an Iranian missile. "We have intelligence from multiple sources, including our allies and our own intelligence. The evidence indicates that the plane was shot down by an Iranian surface-to-air missile." The notion was rejected and the head of Iran's Civil Aviation Organization, was quoted in national media as saying that "scientifically, it is impossible that a missile hit the Ukrainian plane, and such rumours are illogical."

Elected officials, including Iran's President tried several times to call military commanders to clarify the incident following Canada's statement. The Iranian government spokesman commenting on what had transpired on 9 January said that "the Government made back-to-back phone calls and contacted the armed forces asking

what happened, and the answer to all the questions was that no missile had been fired.” Despite allegedly not receiving any information about the missile attack, the lack of information had not prevented the Government spokesperson from issuing a statement on 10 January that the allegation that Iran shot down the plane was a lie. The same advisor posted on Twitter that Iranian journalists had been warned to refrain from participating in psychological warfare involving the Ukrainian aircraft and to stop cooperating with anti-Iranian agents.

Several hours later, the military supposedly first notified President Rouhani that the allegations were correct but wanted him to remain silent. In the evening of 10 January, after a briefing with the Supreme Leader, Ali Khamenei, a decision was made to publicly admit Iran’s fault and apologize. At 07:00 local time on 11 January, the military released a statement admitting that Iran had shot down the plane due to “human error.” By this point, almost 72 hours had passed following the tragic crash.

2. *Bulldozing and Looting of the Crash Site*

Within a day of the crash, officials purportedly used bulldozers to collect parts of the plane and apparently put them in a pile for investigators. It has been reported that investigators from Ukraine at the site observed bulldozers dumping “the fragments without any order on the dump pile, from which experts need to extract the parts and lay out the remains of the hull. When bulldozing, it is impossible to ensure the safety of the parts that are important for understanding the situation. It would be logical to photograph the place of the crash site, to identify some of the fragments, and to take them out and lay them out with care. How do you prove, for example, the nature of the explosion if the bulldozer can already cause new damage to the hull fragments” This bulldozing occurred during the time that the Iranian Government was still officially insisting that the crash was an accident due to technical faults in the airplane but the military and officials from CAO knew the truth. The treatment of the plane debris could have compromised attempts to determine the actual cause of the crash.

In addition, the crash site was not sufficiently cordoned off and inadequate security was put in place, so scavengers were allowed to collect scraps of metal and other debris. Investigators from Ukraine are again quoted as stating that on 10 January “hundreds of people are collecting and taking away fragments of the plane.” As a result of this looting, which apparently also occurred at the airport where luggage was held, family members for the most part did not receive the valuables of their lost loved ones. The families reportedly got empty wallets, the wrong mobile phones, and there have been allegations of cash theft while passports and rings have also gone missing, thereby compounding their loss and depriving them of items that could have provided some comfort. In at least one instance, a site guard reportedly explained to a family member that, under instruction, possessions left over from the looting - among them dolls, papers and clothes - were burnt. One family member reported that the authorities’ failed to fulfill their promise to return his wife’s wedding ring. Reportedly, many of the pieces of excess luggage that were offloaded from the flight prior to take-off were returned looted.

3. *The Investigations*

On 9 January, Iran notified the International Civil Aviation Organization about the incident “consistent with the provisions contained in Annex 13 to the Chicago Convention (Aircraft Accident and Incident Investigation)” and submitted a preliminary accident report.²² The same day, Iran began an investigation and images appeared online of a bulldozer being used to move debris at the scene of the incident, raising concerns that the scene’s integrity would be unduly compromised for a proper forensic investigation to take place.

Iran invited international experts to participate in the investigation. On 9 January, the US National Transportation Safety Board said it had received “formal notification” of the crash from Iran and had designated a representative to the crash inquiry. On 10 January, Ukrainian experts arrived in Tehran to join the investigation. Canada also received an invitation to participate in the investigation on 9 January and its experts visited the scene of the crash on 26 January. Iran also invited the ICAO to provide expert advice in the incident’s investigation, which was accepted by the international organization on 13 January.²³

Ukrainian investigators claimed that the Iranian authorities constantly monitored them so that they would not take anything from the crash site for examination or take pictures. Further, the Ukrainian authorities claimed that by looking at the debris it was clear that the plane was shot down. This hypothesis was communicated to the Iranian authorities. Subsequently, Iranian security officials arrived at the scene, forbade Ukrainian investigators from filming, and ordered them to leave the crash scene. The next morning, the Iranian authorities announced that the plane was indeed shot down by a missile.

On 21 January 2020, Iran submitted a second preliminary accident report to ICAO, acknowledging for the first time that two missiles had been fired at Flight PS752. This report indicated that the impact of the missiles on the flight and an analysis of this action was under investigation. Iran indicated that it had requested that France or the United States provide it with a list of the equipment needed to decode the black boxes and make that equipment available.²⁴

At the ICAO meeting on 5 March 2020, Iran notified the investigative team that the plan to transport the black boxes for analysis to Ukraine had been cancelled because “problems of [the] coronavirus between states.” The Aircraft Accident Investigation Bureau of the Islamic Republic of Iran added that it was also facing delays because the “coronavirus in Iran was affecting organizational activities and the availability of human resources.”

In July 2020, the Civil Aviation Organization of the Islamic Republic of Iran issued its third Factual Report.²⁵ This report attributed the downing of the PS752 Flight to four critical errors: an error in the North alignment of the air defense unit; a defective

²² <https://www.icao.int/Newsroom/Pages/Official-notification-received-from-Iran-on-Flight-PS-752-accident.aspx>; <https://www.flightradar24.com/blog/wp-content/uploads/2020/01/Iran-CAO-PS752-Initial-Report.pdf>

²³ <https://www.icao.int/Newsroom/Pages/ICAO-personnel-to-serve-as-international-advisers-and-observers-in-PS-752-accident-investigation.aspx>

²⁴ https://www.cao.ir/news/organizational/detail?public_content=27851&title=

²⁵ <https://www.flightradar24.com/blog/wp-content/uploads/2020/07/PS752-Factual-Report-July-2020.pdf>

communication between the air defense unit and the coordination center; the wrong identification and classification of the flight; and the failure to follow the military command procedure for missile launch by the air defense unit operator.

In August 2020, Iran released its Flight Recorder Read-Out Report.²⁶ The flight recorders (black boxes) of the PS752 Flight, were downloaded at the Bureau d'Enquêtes et d'Analyses pour la Sécurité de l'Aviation Civile (BEA) laboratory from 17 to 24 July 2020. International participants and observers were present, including: representatives of the U.S. as the State of Design and Manufacture, Ukraine as the State of Registry and Operator, France as the State providing service and technical advice, representatives of Canada, the U.K. and Sweden as the States having a special interest in the accident by virtue of fatalities to their citizens, Iran, and a representative from the International Civil Aviation Organization (ICAO). Flight data reportedly reveals that after the first missile hit the plane, the passengers were still alive for 19 seconds and if the second missile had not been fired the pilot could potentially have diverted the plane and avoided the tragedy. A conversation between the pilot, co-pilot and an instructor was picked up but the recorders stopped working 19 seconds after the first explosion, making it impossible to retrieve data after the impact of the second missile.

On 6 November 2020, the ICAO urged Iran to expedite the issuance of its final investigative report on Flight PS752.²⁷ To date, Iran has not issued a final report.

4. Arrest and prosecution

On 14 January, the spokesman for Iran's judiciary, was quoted by the semi-official FARS news agency as saying that “an investigation into the crash had started and several arrests had been made.” He did not provide details on how many people had been arrested or what their roles in the incident may have been.

On 15 January 2020, President Rouhani stated that a special court with a “high-ranking judge and dozens of experts” should be established to investigate the incident. “This is not an ordinary case and all of the world is looking at us.”

The Military prosecutor indicated that once the cause of the crash was identified as a missile, the matter was referred to the Military Prosecutor’s Office and a military tribunal was formed. It appears that three people are or were in custody, most likely the three individuals in the mobile missile unit. The Prosecutor has suggested that three other individuals were arrested and then released, but news reports indicate that up to 10 other individuals may have been arrested. No information has been provided as to the identities of these people or why they were investigated. It is unclear whether high level official have been detained, prosecuted or reprimanded. No information has been provided as to the charges against those detained, what sort of trial they have had or will have, and the content of the evidence against them. On 15 April 2020, a mid-ranking Iranian cleric said that “contrary to the official claims, no arrests have been made concerning the downing [of the flight].”

²⁶ UR-PSR Flight Recorder Read-out Report, The Civil Aviation Organization of the Islamic Republic of Iran, Flight PS752 Accident, August 2020, para. 9, <https://www.tsb.gc.ca/eng/enquetes-investigations/aviation/2020/a20f0002/report/CAOIRI-recorders-20200823.pdf>

²⁷ <https://www.icao.int/Newsroom/Pages/ICAO-Council-urges-Iran-to-complete-PS752-accident-investigation-Final-Report.aspx>

5. Remedies and Reparations

On 3 February, Iran and Ukraine suspended cooperation due to disagreements over the amount of compensation to be paid to the victim's families. Iran offered to pay \$80,000 per victim, which Ukraine found to be too little. In October 2020, Ukraine's Ministry of Interior issued a statement noting that Iran had agreed to compensate all victims of the crash equally, regardless of their nationality. On 25 November, it was reported in various media that Iran allocated 200 million euros in its 2021 budget to compensate the victims of flight PS752. The same day, the Vice President for Legal Affairs of President Rouhani, told the press that the exact compensation amount will be established by courts and in line with international norms as well as existing precedent.

6. Implications at the international level

At the March ICAO meeting, the organizations' members adopted new conflict zone risk mitigation initiatives, entitled "Safer Skies" as the result of this incident as well as of the MH17 incident. As the first step, the initiative calls on the ICAO to perform a comprehensive gap analysis of current airspace management and conflict zone-related guidance material. The first international Safer Skies Forum on conflict zones took place in December 2020.

IV. INCONSISTENCIES WITH THE GOVERNMENT'S EXPLANATION

The July 2020 accident report produced by the Iranian Civil Aviation Authority identifies four critical failures that allegedly led to the targeting of Flight PS752: (1) there was an error in the North alignment of the mobile unit; (2) the plane was wrongly identified and classified; (3) there was defective communication between the unit and the command center; and (4) the unit commander failed to follow military procedure by launching missiles without authorization.

These explanations appear to present a number of inconsistencies, which the investigation has reportedly not clarified.

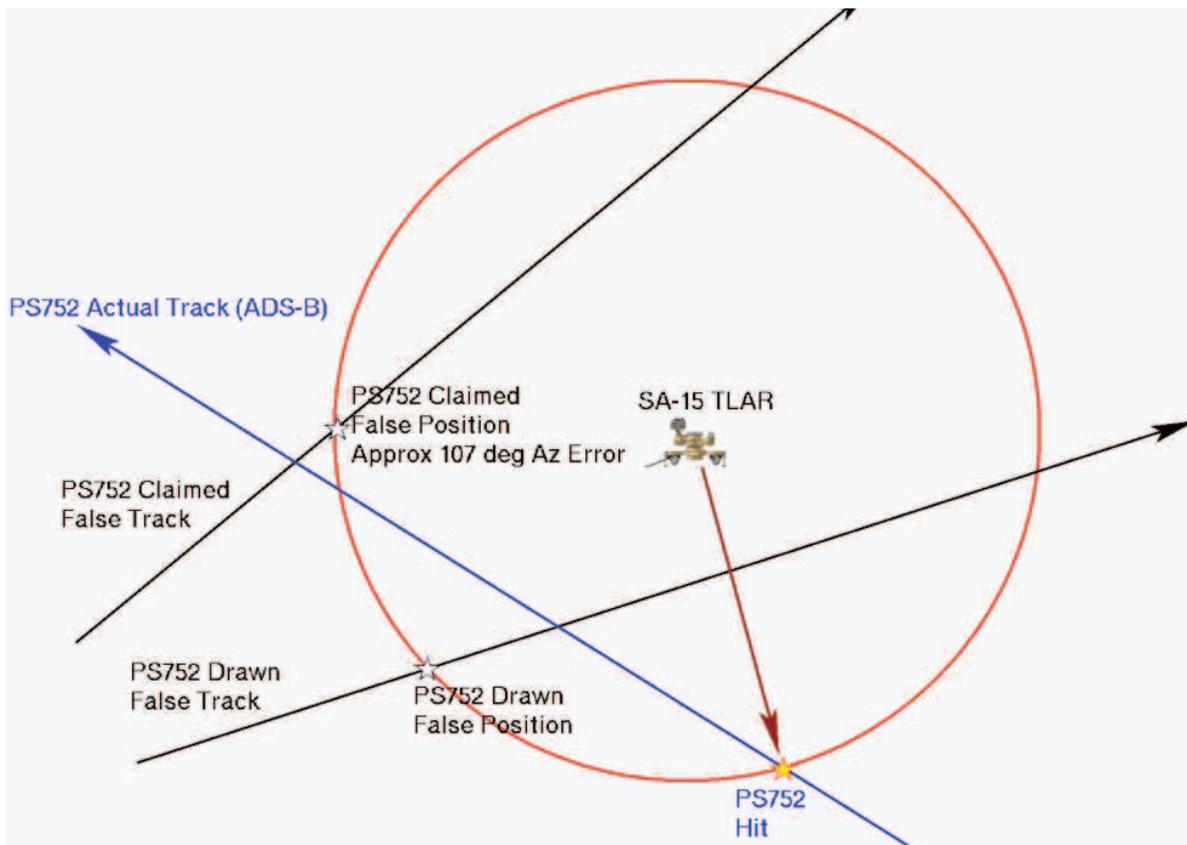
1. Miscalibration of the Missile Unit

According to the July 2020 report, during the "relocation of one of the air defense units" the crew of the individual missile system miscalibrated its search radar with a 107-degree error in north alignment, after the unit had relocated resulting in "a change in its heading".²⁸ The July 2020 report suggests that the miscalibration made the plane appear to be flying more towards the center of the missile's area of coverage.

The report appears to mean that the radar was miscalibrated only in the horizontal plane, and not in elevation, but this has not been clarified. The flightpath presented in Figure 2 of the report, purporting to illustrate the aircraft track the missile system crew perceived with this miscalibration, appears to make little sense without more data. A simple 107-degree error would shift the flightpath so that rather than

²⁸ July 2020 report at 4.

transecting the southwest region of the missile system’s coverage, the aircraft’s flightpath would appear to transect the northwest region (see figure below). The error would not cause the aircraft to change its heading in relation to the missile system itself. However, the July 2020 report suggests that the miscalibration made the plane appear to be flying more towards the center of the missile’s coverage. If Figure 2 of the report accurately represents the plane’s flight path as perceived by the missile system’s crew, more information is needed as to exactly what type of calibration errors occurred.



The image above shows the approximate missile system coverage footprint in red and the blue line shows the actual PS752 track based on recorded air traffic reporting data. The black line labeled “Drawn False Track” shows the effect of the miscalibration depicted by the Government in Figure 2. The “Claimed False Track” in black shows generally what one would normally expect from an approximately 107-degree calibration error as claimed in 9.7 p4.

The Iranian Government has not provided any information as to how or why such a significant miscalibration occurred. It is understood that in most modern militaries, there are standard operating procedures for radar calibration, a fundamental and essential task. A command center would ordinarily ensure that all equipment is properly calibrated after any movement, particularly in situations of preparation for combat such as these, in order to ensure that a common situational picture is seen by missile system crews, surveillance radar crews, and air defense commanders. The TOR

M1TB missile system (comprising the launcher and radar subsystem on a CHMZAP8335 trailer, and a crew cabin on an SMZ-782B trailer) has a long-range television telescope system for visual tracking and identification of targets, this optical telescope is boresighted with the fire control radar and thus is always pointing at the target being tracked by the missile system. While it appears that the system in this early model TOR unit does not have the night vision capability installed on newer variants, the operator should have been able to see the navigation lights of the aircraft, moreover the television telescope can be employed for both orientation and calibration, following a movement. It is reported that Russian operational practice with many older air defense systems, including those not retrofitted with digital ground map displays, is to mark civil air traffic lanes on the glass display screen of the search radar using a marker pen, and that they will usually validate this by observing actual civil air traffic using the search radar of the air defense system. It would be incumbent on a missile system crew operating near a civilian airport to perform this sort of orientation – an exercise that would have immediately revealed the claimed miscalibration. That this type of error occurred suggests significant and fundamental shortcomings in training and oversight, directly attributable to military command.

Furthermore, this mistake, does not appear to explain why the missile system targeted this particular flight or why, it apparently failed to identify it as a civilian aircraft. Qatar Airways Flight 8408 took off approximately 32 minutes before Flight PS752 that day.²⁹ Although that flight turned to proceed southeast, it appears to have flown, during take-off and as it turned, in the area where PS752 was initially targeted. The explanation provided by the Government does not indicate whether the claimed miscalibration occurred during the short 32-minute gap between flights and if it did not why the missile system crew did not target the Qatar Airways flight. Similarly, KK1185 took off at 5:17 a.m., fifty-five minutes before Flight PS752, and it followed the flight path that PS752 would have followed. No information is provided on why neither this flight, nor others that took off that night, were targeted³⁰ Much more information is needed about this claimed miscalibration, including precisely when it occurred.

2. *Misidentification of the Aircraft as a Missile*

The July 2020 report argues that “the likelihood of identifying the target for a threat was considerably raised due to [the operator’s] lack of awareness of the 107-degree error,” presumably because on radar the plane no longer appeared to be leaving from the airport. It did not explain how this missile system crew misidentified the plane

²⁹ <https://www.flightradar24.com/blog/ukrainian-flight-ps752-crashes-shortly-after-take-off-from-tehran/>

³⁰ Reportedly, Flight KK1185 left at 5:17 a.m. local time, approximately when Flight PS752 was originally scheduled to fly and then appears to have flown a somewhat jagged route through the region containing military units that morning, based on data in Flightradar24. On the following day, 9 January, it again appears to have made some adjustments in its route in that area. These flight patterns are not observable on other days. These may be glitches or artifacts in the data, but it raises the question whether this plane received information on locations to avoid, that is a common practice where military operations and exercises render some airspace potentially unsafe.

and why standard procedures, such as checking the characteristics of the target, did not make clear that this aircraft was not a missile.³¹

However, it is alleged that, even if the flight path purportedly seen by the missile unit as described in the July 2020 report is accepted, the error would not place the aircraft in a location that would necessarily be associated with a threat: the aircraft would appear to be approaching from the southwest, from the interior not the exterior of the country, an approach that, if it were a cruise missile, would presumably have triggered responses from other air defence systems well before its reaching Tehran.

Additionally, the location of the flight should not have been the only feature used to identify the target. In most militaries, there is a standard checklist used for identifying targets, one that employs characteristics such as altitude, climb or descent rate and airspeed to evaluate unknown radar tracks. This missile system crew however seems to have ignored multiple, readily apparent signs that this was not a missile.

Firstly, this aircraft was significantly larger than any cruise missile. The plane, a 737-800, was 39.5 meters long with a wingspan of 35.8 meters. A Tomahawk cruise missile, by comparison and as an example, is approximately 6 meters long, with a diameter of 21 inches. On an analog radar scope, the difference in size would be apparent by a difference in reflectivity, with the radar “blip” appearing stable for a larger target, and faint, flickering or intermittent for a small target if it was even detectable by the search radar at that range. It is not clear precisely what upgrades or enhancements this mobile missile system may have incorporated, in part because upgrades may have been made to the system after it was acquired from Russia. It has been suggested that this particular unit might not have a scope that would show “blips” indicating the reflectivity of the target and thus the plane’s likely size. However, even if the size was not easily visible because of the design of the search radar display, the fact that this radar system detected the target at 19 kilometers was an indication of the target’s size. This plane was at the likely limit of the radar’s range, so a clear and stable radar signal would indicate a large target. A smaller target would have had a more intermittent signal, if it was detected at that distance at all. The operators should have known this.

Secondly, other characteristics of Flight PS752 should have alerted the missile operators that this was not an incoming cruise missile. The flight was steadily ascending in altitude to levels that would be unusual for a cruise missile.³² When it disappeared from radar as a result of the first strike, the flight was at 8000 feet,³³ whereas a cruise missile typically operates at hundreds of feet above ground level unless there are immediate terrain obstacles requiring it to climb over these. There are no such obstacles apparent on maps of the area. The plane was also flying at a much lower speed than a missile: the plane was traveling at approximately 500 km/h, whereas a

³¹ The July 2020 report does not specify what the missile operator thought the target was, thereby perhaps leaving open the possibility that these operators believed that this was an enemy aircraft. On 11 January 2020, however, the IRGC Aerospace Force Commander indicated that the missile unit identified the target as a cruise missile at a distance of 19 km and there has been no indication since from the Government that that information is inaccurate.

³² All statements by the Government have indicated that the operator mistook the flight for a missile, not a hostile military aircraft.

³³ The Preliminary Report, The Islamic Republic of Iran, Civil Aviation Organization, Aircraft Accident Investigation Board, 9 January 2020, at 2.

cruise missile flies at approximately 885 km/h or higher. There appears to be no question that the TOR MITB provided information on speed and altitude to the missile system operators, but it is alleged that this information was not considered by these operators in targeting the aircraft.

Thirdly, Flight PS752 had a functioning transponder identifying it. The July 2020 report acknowledges that this transponder was working until the first missile hit. It is not clear whether the IRGC air defense TOR unit had an Identification, Friend or Foe (IFF) system, or a secondary surveillance radar interrogator, capable of receiving these transponder signals. It is alleged that if it did not, given the unit's location near an active airport, failsafe measures should have been instituted to ensure that transponder or other tracking data was accurately and promptly provided to the mobile missile system crew. Even without an IFF system, the operators could potentially have seen the plane's anti-collision lights, and possibly the landing lights used during take-off, through their television telescope had they looked. At 6:30 a.m. that day, the visibility was over 10 miles with no significant clouds. According to the IRGC Aerospace Force Commander, the missile operator first identified the plane as a target when it was 19 kilometers away.

There appears to have been adequate time for this identification process to take place. The IRGC Aerospace Force Commander has indicated that the unit had only 10 seconds to decide. However, it is alleged that since the unit launched the first missile 45 seconds after detecting the plane, and the plane was hit at what appears to be the outer limits of the unit's range, the IRGC Aerospace Force Commander was wrong. Indeed, this suggests that the unit had at least a 45 second decision window, as that is the time it actually took to decide and fire and presumably had more time, depending on the location of what the TOR was defending, given that the plane had just reached the edge of the TOR's missile range when it was hit.

Finally, the Government has not addressed at all why a second missile was launched. It is unknown whether the plane could have returned to the airport but for this second shot, however, that possibility at least exists. It appears that launching two shots is standard operating procedure for the Iranian military. It is worth noting that this is also Russian standard SAM launch procedure for many systems including the SA-15 against most target sets. Nonetheless, the track and descent profile of PS752 after being hit by the first missile did not match what one would expect if it had been a cruise missile.

It is incumbent on the State to explain whether the second strike was due to standard procedures or whether it involved an independent decision by the mobile missile system crew, and if so, on what that decision was based.

3. *Communication Issues and Failure to Await Orders*

The July 2020 Report identifies a communication failure and unauthorized action by the missile operator as the two remaining causes of this tragedy: specifically, the operator attempted to contact the command center and then, when that failed, fired on the target without authorization. It is alleged that the targeting of the plane has the appearance of panicked actions by individuals who were fatigued, stressed and potentially inexperienced and insufficiently trained. This early model missile launcher

appears to have had fewer modern features than current versions. It is unknown whether the operators that night had the requisite level of training to interpret the information they were receiving and to act accordingly. Given the known configuration and limitations of these TOR MITB missile systems, it is questionable whether their use is appropriate in a congested, civilian environment, at least without highly trained operators. Although these individuals may have acted without authorization, their actions again raise the question whether the military operation that night was properly planned, and the soldiers properly trained, to protect civilian life.

It is unclear in the Government's reporting to date how the information about cleared civilian flights was communicated to individual mobile missile system crews, a critical step to ensure the safety of civilian aircraft and one that clearly failed. The Government has not disclosed whether the "Air Defense Coordination Center" that cleared Flight PS752 was IRGC airspace command or the local IRGC operational command center, nor has it disclosed how, or even if, the information about Flight PS752 taking off was communicated to the individual mobile missile system crews. The Tehran Military Prosecutor, has suggested that this information was not communicated downstream and that mobile missile system crews were required to inquire about specific suspected targets, having not received notice of flights taking off. As a result, a minor disruption in communications, one of purportedly a few seconds, resulted in this mobile missile system crew not knowing that Flight PS752 had just taken off at precisely the time this supposed target appeared.

The Government has not explained the precise contours of the communication system between civilian ATS and the military, which elements of the military were concerned, if there was a direct link to the IRGC, or if the IRGC were outside the loop of direct communication. The Government has also failed to explain why this information was not automatically communicated downstream, and the steps it took and has since taken to ensure that all civilian aircraft are properly identified by all individual air defense units at all times.

V. TREATMENT OF VICTIMS' FAMILIES

It is alleged that on many occasions the treatment of the victims' families amounted to human rights violations and that a number of family members resident in Iran, or who have family members resident there, are reluctant to speak openly fearing repercussions from the Government for doing so. Indeed, what reportedly emerges is an account of the myriad of ways in which the authorities' decisions caused further suffering to the grieving families.

1. Obfuscation and denial of the circumstances surrounding the crash.

The Government's decision to issue immediate public denials of the circumstances and their responsibility for the crash deepened the impacts of the tragedy on affected families and friends. It took three days before the Government admitted it was Iranian missiles that felled the aircraft.

On 17 January, in the midst of the many funerals, Iran's Supreme Leader reportedly called the downing of PS725 "a bitter accident" but defended the country's armed forces and urged that the deaths (of 176 people) not over shadow the death of

one - General Soleimani, describing protesters against the downing as being deceived by foreign media. As late as 5 April 2020, a spokesman for the Majilis' legal and judicial committee allegedly stated that "the Iranian military did well by downing the passenger plane," adding further that "contrary to the official claims, no arrests have been made concerning the downing." Although reportedly subjected to criminal charges for these statements, the spokesperson continues to be quoted in news reports as being an active member of parliament.

2. *Failure to protect the site and passengers' property from looting*

The authorities allegedly denied to the families access to the crash sites and failed to return the entirety of passengers' belongings, with the result that many families are left without even the smallest mementos of those who lost their lives on PS752.

3. *State interference with the conduct of funerals and burials*

There are reports that, in the context of public protests about the downing of PS752, Iranian officials sought to coerce families into publicly declaring their support for the Government or risk the non-return of their loved ones' remains. Many families were reportedly also denied private funerals. Victims were declared "martyrs" who died for their country. As a result, funerals were heavily controlled. It was reported that IRGC officials hijacked the funerals, putting pressure on many families to bury people under the special section for people killed for the regime. In some cases, victims were buried in the martyrs' sections of the cemeteries without their families' permissions or presence. Many families had no choice but to agree. The authorities wrote 'congratulations on your martyrdom' on the coffins of the victims against their families' wishes.

It is suggested that the labeling of those who died as "martyrs" for Iran was forced upon the families and imposed without their consent: "*They call you a martyr now. In which war were you martyred, my dear brother? A war on ourselves? On which front did you fight, my unarmed soldier? Whose barricades were you defending, my defenseless soldier? In what unequal conflict did you serve, for me not to retrieve so much as a dog tag, not so much as a piece of your shirt? ... In which war did we create 176 new martyrs? Why, then, did you deny it?*"³⁴

A number of families reportedly applied to repatriate their loved ones to their countries of residence but encountered delays and obstacles having been obliged by Iran's Ministry of Foreign Affairs to sign a form declaring that the victims had only Iranian nationality. The burials of two victims at least were reportedly thus delayed for more than forty days.

4. *Ongoing harassment, threats and intimidation*

There are credible reports of family members being subjected to constant harassment, intimidation, threats, and physical assault at the hands of the authorities. Threats reached family members in Canada in addition to those within Iran. As a surviving husband explained, after he criticized the Government online, he received an hour-long phone call from someone claiming to be a high-ranking Iranian official. When he refused to remove his critical post, the authorities contacted his family in Iran

³⁴ <https://www.ps752justice.com/victims/mahsa-amirliravi/>

to put pressure on them. He has been told by another Iranian official that it is easy to silence them, even outside Iran. The aunt of a victim was allegedly detained and abused and warned to keep her family silent. Other family members report leaving Iran in fear of the continued pressure while a number of residents in Canada reported receiving numerous threats on-line.

5. *Financial compensation in false trade for impunity*

On 15 April, Iran made an offer of financial compensation to Ukraine and the families and promised publication of the black box data, apparently on the condition that no legal action be pursued against Iran. For many families however, their primary goal is to bring the perpetrators of the crime to justice, including those who ordered it. The families of the victims have reportedly repeatedly insisted that justice for families is not compensation that they need closure and to know what exactly happened on that night - that Justice is discovering all the truth.

VI. *ALLEGED VIOLATIONS IN THE CONTEXT OF PROTESTS*

Between 11 and 14 February 2020, sit-ins and protests triggered by the strike on Ukraine Airline International flight PS752 were organized in a number of cities and Universities around the country, including in Tehran, Ahvaz, Amol, Arak, Ardabil, Babol, Gorgan, Isfahan, Karaj, Kermanshah, Mashhad, Qazvin, Qods, Rasht, Sanandaj, Sari, Semnan, Shiraz, Tabriz, Tari, Yazd and Zanzan. Participants in these sit-ins and protests honoured the memory of the 176 victims of the crash, voiced demands for accountability and effective remedies for the victims' families, and expressed frustration towards Iran's political system and leadership.

The protestors were allegedly met with excessive use of force. Security forces, including Special Forces of Iran's police, plain-clothes agents and the Basij militia, reportedly physically attacked the protesters, using tear gas, batons, rubber bullets and pointed pellets. Reports indicate that security forces also shot live ammunition directly at protesters, in some cases aiming at head level. Hundreds of individuals, mainly students, were arrested and interrogated without the presence of a lawyer, and some of them released on bail. Injured protesters were reportedly unable to seek medical assistance in hospitals and clinics due to the heavy presence of security forces in and around medical centers and to fears that they could be arrested if they registered for medical treatment. Internet and telecommunication disruptions were also reported in protest locations, mainly in the capital Tehran.

On 14 January 2020, security forces blocked the gates of Amir Kabir University and physically attacked and arrested students trapped inside the university's campus. Security forces also temporarily closed a metro station in Tehran to prevent individuals from accessing the place of protest and reportedly fired tear gas into another metro station in the capital with individuals inside. In another incident, on 16 January, security forces raided a dormitory of the University of Tehran, and, with the help of the university security personnel, reportedly arrested a number of students.

Reports indicate that physical and psychological torture and ill-treatment have been used for the purpose of extracting confessions from individuals detained for their participation in these protests. Some families who approached the authorities for

information about their detained relatives have also reportedly been denied information about their fate or whereabouts and their place of detention. In some cases, security forces arrested and interrogated members of the detainees' families who approached local Intelligence Department offices to seek information about their relatives.

Iranian political, judicial and religious leaders have publicly denounced the protests and portrayed the protesters as enemies of the state. On 14 January 2020, Ahmad Alamolhoda, the Friday Prayers Imam of Mashhad, referred to the protesters as the "enemy's fifth column" and used incendiary language inciting hatred and violence against them during a public prayer. Similar statements were also made by the head of the Iranian judiciary, Ebrahim Raisi, who accused the protesters of compromising national security.

On 16 January 2020, the Tehran Police authorities reportedly stated that they had put in place a procedure of enhanced surveillance of social networks with the purpose of identifying and prosecuting all those who publish statements in support of the so-called "illegal gatherings".

ANNEX II - LEGAL STANDARD AND CONCERNS IN RELATION TO THE FACTS ALLEGED.

I. IRAN'S SOVEREIGNTY OVER ITS AIR SPACE

In connection with the above allegations and concerns, I would like to refer your Excellency's Government to the relevant international norms and standards that are applicable to the issues brought forth by the situation described above.

I wish first to recall that under aviation law each State has complete and exclusive sovereignty over the airspace above its territory. Article 1 of the Chicago Convention states that, "the contracting States recognize that every State has complete and exclusive sovereignty over the airspace above its territory." In addition, it should be indicated that the principle of the sovereignty of the state over its air space is not only a norm resulting from the above-mentioned agreements, but also a generally applicable customary norm.³⁵

Under international aviation law, all States "...must 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. 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."³⁶

Sovereignty over airspace gives States a number of competences, such as the determination of areas over which there is a prohibition of flights (prohibited area), but also a number of obligations, such as ensuring aviation safety within their territory and conducting safety investigations: "Each contracting State may, for reasons of military necessity or public safety, restrict or prohibit uniformly the aircraft of other States from

Transportation Research Procedia 43 (2019) 113–118

³⁶ Chicago Convention, Article 3 *bis* (a) (added in 2006)

flying over certain areas of its territory (...)”³⁷ These provisions give a State the right to prohibit an aircraft from over-flying its territory if it believes that such over-flying could be a security and safety hazard.³⁸ The size and distribution of prohibited flight zones should be set in a reasonable manner so as not to create unnecessary obstacles for air navigation. The determination of such prohibited zones in the territory of a Contracting State, as well as any subsequent amendments thereto, should be reported to the other Contracting States and the International Civil Aviation Organization as soon as possible.

The responsibility of states from the point of view of international aviation law may thus be triggered, firstly, from the fact that the state has not fulfilled its obligations to ensure the safety of air traffic over its territory, or secondly, from the fact that its authorities caused an accident.³⁹

II. OBLIGATION TO RESPECT AND PROTECT THE RIGHT TO LIFE

I would like to remind your Excellency’s Government of its obligations to respect and protect the lives of those on civilian airplanes in its airspace and, as an integral part of that obligation, to investigate fully any loss of life.

Article 6 of the ICCPR provides that “no one shall be arbitrarily deprived of his life.” It “is the supreme right from which no derogation is permitted even in situations of armed conflict and other public emergencies which threatens the life of the nation,” (Human Rights Committee, General Comment 36 (GC36), para. 2). The State has “an obligation to respect and to ensure the rights under Article 6 of all persons who are within its territory and all persons subject to its jurisdiction, that is, all persons over whose enjoyment of the right to life it exercises power or effective control” (GC36, para. 63).

States must “refrain from engaging in conduct resulting in the arbitrary deprivation of life,” GC36, para. 6. States must also protect the right to life against “reasonably foreseeable threats and life-threatening situations that can result in loss of life.” The “notion of ‘arbitrariness’ is not to be fully equated with ‘against the law’, but must be interpreted more broadly to include elements of inappropriateness, injustice, lack of predictability, and due process of law as well as elements of reasonableness, necessity, and proportionality,” (GC36, para. 12).

Practices “inconsistent with international humanitarian law”, including the “failure to apply the principles of precaution and proportionality”, violate Article 6 (GC 36, para. 64). Further, States “engaged in acts of aggression as defined in international law, resulting in deprivation of life, violate ipso facto Article 6 of the Covenant.” States that “fail to take all reasonable measures to settle their international disputes by peaceful means might fall short of complying with their positive obligation to ensure the right to life,” (GC36, para. 70).

III. INTENTIONAL USE OF LETHAL FORCE AND MISTAKES

³⁷ Ibid, Article 9

³⁸ Transportation Research Procedia 43 (2019) 113–118

³⁹ Ibid

Under international human rights law any loss of life that results from the use of force without strict compliance with the principles of necessity, proportionality, and precaution is unjustified. The *principle of necessity* limits the use of force by law enforcement officials to only that which is “strictly necessary” in order to carry out their duties. They shall not use lethal force except in self-defence or defence of others against the imminent threat of death or serious injury, to prevent the perpetration of a particularly serious crime involving grave threat to life, to arrest a person presenting such a danger and resisting their authority, or to prevent his or her escape, and only when less extreme means are insufficient to achieve these objectives.

It is clear that the evening of 7 January, leading into the morning of 8 January, was not a classical policing scenario. Indeed, various officials reportedly spoke of a state of war. The context and the situation matter. Reacting to threats is not an exact science, and governments understandably want to err on the side of protection. Indeed, Article 6 of the ICCPR “imposes a positive obligation on the State to protect life, including by taking effective preventive measures against a real and immediate risk to life from [an attack].”⁴⁰ The “existence and nature of a public emergency which threatens the life of the nation may ... be relevant to a determination of whether a particular act or omission leading to deprivation of life is arbitrary and to a determination of the scope of the positive measures that States parties must undertake,” (GC36, para. 67).

The context of the strike against PS752 demands contextual and situational analysis, the reference to other sources of law and purposive interpretation. This means assessing necessity, proportionality and precaution through a situational analysis that takes into account the location, circumstances, possibilities of armed resistance and the planning involved.⁴¹ It also means that the lethal use of force cannot be justified or allowed when it is not necessary, it is likely to cause disproportionate harm, or it reasonably could have been avoided by feasible precautionary measures.⁴²

The European Court for Human Rights (ECHR) has contextualized its assessment of necessity and proportionality, and as such it provides useful guidance for assessing State use of force under similar human rights conventions. In addressing terrorism, for example, it recognizes that the standard of absolute necessity may be simply impossible “where the authorities had to act under tremendous time pressure and where their control of the situation was minimal... The Court is acutely conscious of the difficulties faced by States in protecting their populations from terrorist violence, and recognises the complexity of this problem.”⁴³

For instance, in the case of *Isayeva, Yusupova and Bazayeva v. Russia*, which concerned the indiscriminate aerial bombing of a convoy of civilians trying to leave Grozny, the capital of Chechnya, in October 1999, the ECHR Court concluded that the

⁴⁰ House of Lords, House of Commons, Joint Committee on Human Rights, The Government’s Policy on the Use of Drones for Targeted Killing, Second Report of Session 2015-16, at 8, available at <https://publications.parliament.uk/pa/jt201516/jtselect/jtrights/574/574.pdf>.

⁴¹ UNODC and OHCHR, Resource Book on the use of force, 2017.

⁴² N Melzer, Human Rights Implications of the Usage of Drones, 2013, p. 30.

⁴³ ECHR, *Finogenov and others v Russia*, [2011], Application Nos. [18299/03](#) and [27311/03](#) available at <https://hudoc.echr.coe.int/eng#%7B%22itemid%22:%5B%22001-108231%22%7D> para 211-212

operation had not been planned and executed with the required care for the lives of the civilian population. There had therefore been a violation of the substantive requirements of the right to life. In *Finogenov*,⁴⁴ the ECHR ruled that there had been no violation of the right to life when the Russian state used gas to resolve a hostage crisis in a theater because the authorities were acting under time pressure and their control of the situation was minimal. It found that the authorities could reasonably have concluded from the circumstances that there existed a real and serious risk for the lives (in this case of the hostages), and that the use of lethal force was, sooner or later, unavoidable.

In this instance, however, the targeting of Flight PS752 was a mistake, which raises the issue of State and individual responsibility when there has been a mistake of fact. The concept of mistake of fact has legal standing in both national and international jurisdictions. Under international human rights law, one of the most developed jurisprudence is found in the ECHR, which has established a strong jurisprudence on mistake and use of lethal force. It is presented here for that reason. In addition, its jurisprudence has effect in Ukraine.

Of particularly relevance is the ECHR decision in *McCann*,⁴⁵ when the Court had to determine whether a State has used reasonable force in relation to three IRA suspects, neither of whom had been armed, nor did they have a detonation device or a bomb at the time they were killed. The Court found that to ascertain breach to the right to life, it had to examine the planning of the operation, and its investigation, along with its actual execution.

With regard to the former, the Court determined that deprivations of life must be subjected to the most careful scrutiny, particular where deliberate lethal force is used, taking into consideration not only the actions of the agents of the State who actually administer the force but also all the surrounding circumstances including such matters as the planning and control of the actions under examination. It found that respect and protection of the right to life imposes on States a duty to take “appropriate care” in the planning, organisation and control of policing anti-terrorist operations (or, as in later jurisprudence, military operations), to try and safeguard the lives, not just of the people that may fall victim to the terrorists’ actions, but also, if possible, of the terrorists themselves. As summarized by Korffe, “*If the State can reasonably organise an operation in such a way as to avoid killing terrorist or other suspects, without danger to the general population or law enforcement officials, it is under a duty to do so. What needs to be proven on the “beyond reasonable doubt” standard is simply that, in the light of the facts as known to the authorities at the time, such reasonable arrangements could have been made. If that has been established, and they were not made, a violation has occurred.*”⁴⁶

With regard to the execution of the operation, the Court accepted that “the soldiers *honestly believed*, in the light of the information that they had been given that it was necessary to shoot the suspects in order to prevent them from detonating a bomb and causing serious loss of life. The actions which they took, in obedience to superior

⁴⁴ Ibid

⁴⁵ ECHR, *McCann and Others v. UK*, [1995] Application No. 18984/91, available at <http://iusgentium.ufsc.br/wp-content/uploads/2017/08/Texto-Cmpl-McCANN-AND-OTHERS-v-UK.pdf>

⁴⁶ Douwe Korff, human rights handbook No8, Council of Europe, 2006

orders, were thus perceived by them as absolutely necessary in order to safeguard innocent lives,” (para 200, emphasis added). The Court concludes that there is “no violation of the right to life where it “is based on an honest belief which is perceived, *for good reasons*, to be valid at the time but which subsequently turns out to be mistaken.”⁴⁷

By requiring that “good reasons” support the “honest belief”, the Court was rejecting the notion that any belief, no matter how unreasonable, could justify the taking of a life under international law. In other words, the mistake of fact needs to be both honest *and* reasonable to exonerate the state completely.⁴⁸ A belief which is not held on reasonable (objectively justifiable) grounds cannot provide a legitimate basis for the use of lethal force: “The clear and constant case law of the Court is to the effect that honest belief be founded upon “good reason” so as to satisfy the requirements of Article 2(2). Any defence to State killing must be founded upon objectively justifiable grounds. It is an objective test, the existence of which is necessary in order to give adequate effect to the rights of victims under Article 2. It rightly requires law enforcement officers to make reasonable attempts to ascertain the true facts before using lethal force.”⁴⁹ The reasonableness standard for finding “honest and reasonable belief” focus therefore on whether the way in which the belief was formed was reasonable, rather than the belief itself.

A similar approach is found under international humanitarian law (IHL),⁵⁰ as applied to international conflict, where a legitimate mistake must meet both the honest and reasonable tests. An attack can proceed only if it respects the principles of precautions in attack, distinction between civilian and military targets, and proportionality. A party to the conflict failing to take all necessary precautions would be liable for a violation of international humanitarian law, even if the targeting of civilians or civilian objects was conducted in good faith (honesty criteria).⁵¹ As stated by Milanovic, “The upshot of this analysis is that IHL appears to excuse uses of lethal force against civilians or civilian objects which result from honest *and* reasonable mistakes of fact. Honest but *unreasonable* mistakes of facts would not be excused, since they would inevitably be in violation of IHL rules on precaution.”⁵²

International aviation law imposes obligations in relation to the right to life of civilian passengers under Article 1(b) of the Montreal Convention which provides that a person “commits an offence if he unlawfully and intentionally...destroys an aircraft in service.” The Convention obligates the State to take “all practicable measures” to

⁴⁷ ECHR, *McCann and Others v. UK*, [1995] Application No. 18984/91, para. 200 (emphasis added).

⁴⁸ see Milanovic, *Mistakes of Fact When Using Lethal Force in International Law: Part I*, available at <https://www.ejiltalk.org/mistakes-of-fact-when-using-lethal-force-in-international-law-part-i/>.

⁴⁹ Third party intervention of the Equality and Human Rights Commission in the case of *Armani Da Silva v United Kingdom*, Application No. 5878/08

⁵⁰ As articulated more fully in my report, A/HRC/44/38, it is unclear whether an International Armed Conflict existed at the time of the strike. However, the statements by Iranian officials do point to a state of war mindset within the military authorities, if not in terms of preparedness. For the purpose of contextual and situational analysis, and purposive interpretation, it is therefore important to highlight the standards related to “mistakes” under IHL.

⁵¹ <https://www.icty.org/en/press/final-report-prosecutor-committee-established-review-nato-bombing-campaign-against-federal#IVB2> See Milanovic, *Op. cit.* 47

⁵² Milanovic, *Mistakes of Fact When Using Lethal Force in International Law: Part I*, available at <https://www.ejiltalk.org/mistakes-of-fact-when-using-lethal-force-in-international-law-part-i/>

prevent these acts, (Article 10(1)). The Montreal Convention does not, however, specify whether the mistake of fact doctrine could apply to such circumstances. The Beijing Convention, intended to replace the Montreal Convention, excludes military action from the prohibitions under Article 1(b), with the intent that these actions would be covered by IHL and the Chicago Convention (and accordingly their principles as to mistake of fact). Your Excellency's Government, however, has not ratified the Beijing Convention and reportedly demanded that the Montreal Convention be applied to find State responsibility when the US shot down an Iranian airliner in 1988 by mistake.⁵³

Relatedly, there exists a controlling legal principle which "advocates that, prime facie, a passenger airliner, whether trespassing intentionally or not, should not be considered to pose a military threat to a territorial sovereign sufficient to justify the plane's destruction."⁵⁴

Self-defense under Article 51 of the UN Charter should be objectively necessary in order to deter unlawful use of force and to protect innocent parties. Any other rule would further encourage purported acts of self-defense, which is already too loosely employed.⁵⁵ As stated by the ICJ, "the requirement of international law that measures taken avowedly in self-defence must have been necessary for that purpose is strict and objective, leaving no room for any 'measure of discretion.'"⁵⁶

The above standards apply to State responsibility under international law. International and national criminal law, focusing on individual liability for use of lethal force, requires a higher level of responsibility and, even in those circumstances, can consider both the reasonableness of the mistake and the precautions taken to avoid the mistake.

Article 8(2) b of the Rome Statute makes it a war crime to "intentionally direct [] attacks against the civilian population as such or against individual civilians not taking direct part in hostilities," Article 32 (1), which covers mistakes, provides that "[a] mistake of fact shall be a ground for excluding criminal responsibility only if it negates the mental element required by the crime." Under customary international criminal law, as articulated by the ICTY, it appears that individuals could potentially

⁵³ <https://www.icj-cij.org/en/case/79> The Montreal Convention does not expressly state whether the prohibition against destroying civilian aircraft applies to military strikes. See Trapp, Uses of Force against Civil Aircraft, available at <https://www.ejiltalk.org/uses-of-force-against-civil-aircraft/>. States have taken opposing positions on this point, depending on their interests.

⁵⁴ Farooq Hassan, A Legal Analysis of the Shooting of Korean Airlines Flight 007 by the Soviet Union, 49 J. Air L. & Com. 555 (1984)

⁵⁵ See, e.g., Milanovic, Mistakes of Fact When Using Lethal Force in International Law: Part II, available at <https://www.ejiltalk.org/mistakes-of-fact-when-using-lethal-force-in-international-law-part-ii/>.

⁵⁶ Oil Platforms (Islamic Republic of Iran v. US), Judgment, I.C.J. Reports 2003, para. 73; See Draft Articles on the Responsibility of States for Internationally Wrongful Acts, with commentaries, Article 49, para. 3 (A "State which resorts to countermeasures based on its unilateral assessment of the situation does so at its own risk").

be guilty of war crimes, if they were reckless in launching or ordering the attack.⁵⁷ Mere negligence will not be sufficient to establish a war crime.⁵⁸

The above analysis and review allows for the drawing of the following implications when it comes to mistake of fact leading to loss of life - States and their agents bear full responsibility for intentional lethal use of force “by mistake” unless it may be proven that:

1) the agents acted under an honest and reasonable belief that the target constituted a serious harm to life, with a reasonable belief largely tested according to the precautionary steps taken to assert that the beliefs are well-founded AND

2) the State itself had taken all necessary precautions to ensure that its agents were well-equipped to make reasonable decisions.

IV. MISTAKES OF FACT AND PS752

There is reportedly no doubt that PS752 was intentionally targeted by the IRPG mobile unit of your Excellency’s Government: the latter was not seeking to strike another target. It deliberately aimed at and struck PS 752 and its passengers and crew. As highlighted above, your Excellency’s Government has apparently indicated that the IRPG military personnel who launched the attack against Flight PS752 made a series of “mistakes”, believing the plane to be an incoming US missile and thus an imminent threat to life and to Iran. The facts of the strike raise a number of questions regarding the nature and extent of the intentions, which engage not only the liability of the individuals who conducted the strike, but also that of their chain of command, and the liability of the State. In particular:

1. Could such mistakes be defined as honest and/or reasonable?
2. Is the explanation of a series of mistakes plausible?
3. If “mistakes” appear to be the most plausible explanation for the strike, what is the impact of the mistakes of the individual agent on the responsibilities of the State in terms of respect for, and protection of, the passengers and crew of PS752?

1. A series of unreasonable mistakes

Your Excellency’s Government has reportedly not released sufficient information to the international community to determine *what* the IRPG crew in fact believed. To the best of my knowledge, there is no public interview of members of the crew and no public record of police or prosecutors’ interviews. It is therefore difficult to determine whether the beliefs were honestly held. In addition, no information has been made public as to the exact nature of the briefings and instructions received by the crews at the time they were posted in and around Teheran. Standard operating procedures were reportedly violated to such an extent that one may reasonably question whether these operating procedures had been changed or weakened by the IRPG chain

⁵⁷ J.D.Ohlin, “Targeting and the Concept of Intent,” Michigan Journal of International Law, Vol. 35, Issue 1 (2013) at 92-99 available at <https://repository.law.umich.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1026&context=mjil>

⁵⁸ De Hoon, Navigating the Legal Horizon: Lawyering the MH17 Disaster, Utrecht journal of international and European law, (2017) 33(84), pp.90–119 available at <https://www.utrechtjournal.org/articles/10.5334/ujel.368/#n15>

of command on the evening preceding the strike, or whether the crews had been instructed to strike even if unable to get all required approvals.

As per the information received set out in Annex I of this letter, the information released by the authorities points to a number of violations of standard procedures, themselves highlighting an apparent failure to abide by the principle of precaution. For instance: 1) How this missile unit misidentified the plane and why standard procedures, checking the characteristics of the target, did not make clear that this aircraft was not a missile;⁵⁹ 2) How or why such a significant miscalibration occurred and was not identified by the crew or others. That this type of error reportedly occurred suggests significant issues in training and oversight, attributable to military command.

The information received indicates a failure to take all feasible precautions both on the part of the individual members of the Mobile Unit and on the part of others, including within the chain of command, which may amount to recklessness. Such conclusion will apply whether international human rights law or international humanitarian law is the operating legal framework. An “honest” mistake (state of mind) that was not reasonable (precautions and standard procedures) may mitigate the nature and extent of criminal responsibilities of the individuals involved but does not impact on the responsibilities of the State.

2. *Failure to take precautions*

Failure to close the airport and issue a NOTAM

It is necessary to examine not only the actions of the soldiers who directly killed innocent civilians, but also “all surrounding circumstances,” including the “planning and control” of the operation.⁶⁰ A state must take those “measures within the scope of [its] powers which, judged reasonably, might have been expected to avoid [the] risk” to life.⁶¹ Specifically, when a State initiates an operation, it must exercise “appropriate care in the control and organization” of that operation to protect civilian life.⁶² A government operation, including military actions, must be organized “to avoid or minimise, to the greatest extent possible, harm to civilians.”⁶³

In this case, whether your Excellency’s Government acted with appropriate care to protect the lives of Flight PS752’s passengers requires an examination of the steps both military and civilian officials took to ensure the safety of civil aviation as the State moved anti-aircraft units into the area. The Chicago Convention and its Annexes set forth the existing standards for ensuring the safety of civilian flights; these standards

⁵⁹ I note that the July 2020 report does not specify what the missile operator thought the target was, thereby perhaps leaving open the possibility that these operators believed that this was enemy aircraft. On 11 January 2020, however, Commander Hajizadeh indicated that the missile unit identified the target as a cruise missile at a distance of 19 km and there has been no indication from your Excellency’s Government that that information is inaccurate.

⁶⁰ ECHR, *Makaratzis v. Greece*, [2004] Application No. 50385/99, para. 59-60.

⁶¹ ECHR, *Council of Europe, Osman v. the United Kingdom*, para. 116.

⁶² ECHR, *McCann and Others v. UK*, para. 212.

⁶³ ECHR, *Isayeva v Russia* (2005) 41 EHRR 38, para. 183; See generally Milanovic, *Mistakes of Fact When Using Lethal Force in International Law: Part III*, <https://www.ejiltalk.org/mistakes-of-fact-when-using-lethal-force-in-international-law-part-iii/>.

are supplemented by ICAO's guidance, as contained in its Risk Assessment Manual for Civil Aircraft Operations over or near Conflict Zones (Doc. 100084), Circular 330, Civil/Military Cooperation in Air Traffic Management, and the Manual Concerning Safety Measures Relating to Military Activities Potentially Hazardous to Civil Aircraft Operations (Doc. 9554).⁶⁴

The most critical decision for the State is whether to keep the airspace open. Following the downing of flight MH17, the Dutch Safety Board highlighted the need for the ICAO and the international community to "clarify the responsibility of States related to the safety of their airspace so that States are clear about the cases in which the airspace must be closed."⁶⁵ Clarification is required because States are failing to fulfill their obligation to close airspace to protect civilian life, so this known obligation must be made more explicit and mandatory, with enforceable mechanisms.

The ICAO is in the process of amending Annexes and guidance manuals, but the standards and recommendations in effect as of January 2020 already established the State's obligation to close the airspace to protect civilian life or, if lesser steps are sufficiently protective of life, to issue a NOTAM and ensure close cooperation between ATS and the military. According to Doc. 9554, the State responsible for air traffic services should "assess the hazards or potential hazards" and determine whether civil aviation flights in the location "***should be avoided or may be continued under specified conditions***" (emphasis added). "Normally, civil aircraft should not operate in an area of hazardous military activity."⁶⁶ If airspace remains open, the State should issue a NOTAM⁶⁷ containing all "necessary information, advice and safety measures."⁶⁸

Evidence provided thus far appears to show that your Excellency's Government was or should have been aware that its airspace was not safe for civil aviation. As such, your Excellency's Government would have had an obligation under public international law to close their airspace or send out a NOTAM and failure to do so may not only be a violation of international law but also a civil law violation towards victims.

Failure to take precautions regarding Civil-Military communications

It is important that the State consider not only the "actual threats" deemed to exist, but the risks of mistakes made by soldiers under pressure. As the Dutch Safety

⁶⁴ The Manuals are advisory in nature but are relevant in determining whether a State has met its duty of care. See ICAO, Manual Concerning Safety Measures Relating to Military Activities Potentially Hazardous to Civil Aircraft Operations, Article 1.1. available at <http://www.wing.com.ua/images/stories/library/ovd/9554.pdf>.

⁶⁵ Dutch Safety Board, "Flying over Conflict Zones, Follow-up Recommendations, MH17 Crash Investigation," February 2019, available at <https://www.onderzoeksraad.nl/en/page/4953/flying-over-conflict-zones---follow-up-recommendations-mh17-crash>

⁶⁶ Manual, Article 5.6.

⁶⁷ As previously described, a NOTAM is a "notice distributed by means of telecommunication containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations". Annex 15, Definitions, available at <https://www.icao.int/NACC/Documents/Meetings/2014/ECARAIM/REF05-Annex15.pdf>.

⁶⁸ Manual, Article 10.3; see Chicago Convention, Annex 15, Article 5.1.1.1.(l)(requiring States to issue a NOTAM informing pilots of the "presence of hazards which affect air navigation," including "military exercises").

Board found in examining the MH17 downing in Ukraine, in determining the risks to civil aviation, too often the “unintended consequences of human actions” are not considered.⁶⁹

“If civil aircraft operations through the area are allowed, immediate attention should be given” by the State “to special arrangements regarding co-ordination between military units” and air traffic control.⁷⁰ The Chicago Convention⁷¹ provides that “arrangements for activities potentially hazardous to civil aircraft ... shall be coordinated with the appropriate air traffic services authorities,” (Standard 2.17 of Annex 11), that “arrangements shall be made to permit information relevant to the safe and expeditious conduct of flights of civil aircraft to be promptly exchanged between air traffic services units and appropriate military units,” (Standard 2.16.3) and that “Air traffic services units shall, either routinely or on request, in accordance with locally agreed procedures, provide appropriate military units with pertinent flight plan and other data concerning flights of civil aircraft,” (Standard 2.16.4).

The stakes could not be clearer. “[C]larity in communication” between military units and air traffic control is “essential to ensure proper understanding and avoid potentially disastrous results.”⁷² The “safety of the civil aircraft may depend on positive identification by the military units.”⁷³ The shooting down of Flight PS752 appears to demonstrate the lethal result of reportedly insufficient communication by your Excellency’s air defense units and commands.

Other failure to take precautions

Your Excellency’s Government reportedly had had prior warnings of the possibility of a US response to the targeting of their bases in Iraq. As such, they had ample opportunity to plan their reaction and to take measures to foil any possible US attacks. Given the gravity of the situation, one would have expected that the Iranian IRGC, in collaboration with other national military actors, would have placed their best trained, best equipped teams on the ground, backed up by a strong chain of command and the best possible equipment.

The reported repeated mistakes of the crew, the multiple references to them being in a stressful situation, and the possibility that long nighttime shifts may have caused fatigue, an issue not yet examined publicly, all point to a failure of the chain of command and a failure of preparedness and precaution. The mistakes indicate a reckless, if not criminal, disregard for standards procedures and the principles of precaution which should have been implemented to the fullest given the circumstances and the location of the Unit (in the middle of civilian objects), whether under international human rights or humanitarian law. Such recklessness characterizes not only the reported decision-making and actions of those within the Mobile TOR Unit, but also of those within the chain of command, both civilian and military. Indeed, on the basis of information received, one may even question whether there was an order

⁶⁹ Dutch Safety Board, MH17 Crash Report, October 2015 at 247.

⁷⁰ Manual, Article 10.6.

⁷¹ Annex 11, available at <https://www.theairlinepilots.com/forumarchive/quickref/icao/annex11.pdf>.

⁷² Manual Article 5.11; see also Article 7 (setting forth means to ensure that military units can identify civil aircraft).

⁷³ Manual, Article 5.6.

or implicit encouragement by the chain of command to the crew on the ground to apply lethal force without going through standard procedures and precautionary steps.

3. Inconsistencies within the claims of “mistakes” and intentionality

As highlighted in the information received, it appears that the various claims presented in your Excellency’s Government’s July 2020 Report are not consistent with one another or with the evidence thus far provided. The multiple claims and stories create a maximum of confusion. The report appears potentially to be contrived to mislead in one or more ways. The inconsistencies in the official explanation and the reckless nature of the mistakes have led many to question whether the downing of the flight PS752 was not intentional. I have not found or received concrete proof that the targeting of a civilian plane was intentional and premeditated. However, it also appears that, on the basis of the information released by Your Excellency’s Government, it is not possible to answer many basic questions and clarify conjunctures. Without answers, suspicions such as whether civilians were intentionally targeted will remain.

The question of intentionality thus needs to be further investigated. The scope of such inquiry should include a number of scenarios as far as the intentionality is concerned, including: i) the exact wording of the instructions given to the crews on the evening before the strike; ii) whether there was an execution plot at the highest level of the chain of command, and iii) whether the crew had been instructed by their superior officers to shoot the plane, and, if so, whether the superiors at this point knew that the intended target was a civilian plane.

In conclusion, the facts alleged to date, subject to any clarification your Excellency’s Government may provide, indicate violations of the prohibition against arbitrary deprivation of life, which stem from the soldiers’ decision to use lethal force, against standard procedures, and from systemic failures of precaution by civilian and military authorities. Had Iran closed its airspace for civilian traffic that evening, knowing full well that hostilities with the US might easily escalate, the plane would never have been shot down. It further appears that had Iran properly coordinated its air defenses with civilian air traffic control, the plane would never have been shot down and that, had Iran properly trained its forces at various levels, the plane would never have been shot down.

V. FAILURE TO INVESTIGATE EFFECTIVELY AND INDEPENDENTLY

The duty to investigate is central to upholding the right to life.⁷⁴ It asserts the inviolability and inherent value of the right to life through mechanisms of accountability, while simultaneously promoting remedies where violations have occurred. To this end, the duty gives practical effect and worth to a State’s obligations to respect and protect life. International law imposes a positive duty on States to conduct

⁷⁴ See, e.g., ECHR, *McCann and others v. United Kingdom*, Judgment (Grand Chamber), 27 September 1995, para. 161; IACtHR, *Montero-Aranguren and others (Detention Center of Catia) v. Venezuela*, Judgment, 5 July 2006, para. 66; African Commission on Human and Peoples’ Rights (ACHPR), General Comment No. 3 on the Right to Life, November 2015, paras. 2, 15; Human Rights Committee, General Comment No. 31, paras. 15 and 18; The Minnesota Protocol on the Investigation of Potentially Unlawful Death (2016), Office of the United Nations High Commissioner for Human Rights, New York/Geneva, 2017.

a competent and effective investigation when individuals have been killed within a State's jurisdiction.⁷⁵ States should take appropriate measures in their investigations to establish the truth relating to the events leading to the deprivation of life.⁷⁶ The right to know the truth⁷⁷ extends to society as a whole, given the public interest in the prevention of, and accountability for, violations of the right to life.⁷⁸

The Montreal Convention reaffirms precautionary and investigatory requirements with respect to civil aviation. Article 5 of the 1971 Montreal Convention provides that a Contracting State must take the necessary measures to establish criminal jurisdiction over offences laid down in the Convention. Article 6 requires Contracting States to investigate and, if appropriate, prosecute an alleged offender. Article 10(1) requires that the State take "all practicable measure[s]" to prevent these acts. Finally, and importantly, Article 8 provides that if they do not prosecute, all States that are party to the Montreal Convention are obliged to extradite alleged offenders that are present on their territory and to include the offenses included in the Montreal Convention in their extradition treaties. It moreover allows States Parties to consider the Montreal Convention as the legal basis for any extradition in respect of these offenses.

International law requires that investigations be: (i) prompt, (ii) effective and thorough; (iii) independent and impartial, and (iv) transparent. Authorities must take whatever reasonable steps they can to secure evidence concerning the incident, including eyewitness testimony, forensic evidence and, where appropriate autopsies which provide a complete and accurate record of injury and an objective analysis of analysis of clinical findings, including the cause of death.⁷⁹ Any investigation or prosecution should occur "within a reasonable time in a manner compatible with the object and purpose" of the obligation and "without delay".⁸⁰ The investigation must also "be independent of any suspected perpetrators and the units, institutions, or agencies to which they belong."⁸¹

In situations where an investigation reveals evidence that a death has been caused unlawfully, States must ensure that identified perpetrators are prosecuted and appropriately punished through the judicial process.⁸² Investigations and prosecutions are essential to deter future violations, and to promote truth and the rule of law.⁸³ This can extend across multiple contexts, encompassing both the individual circumstances of death and wider trends. Where a series of connected breaches suggest some form of practice, tolerance or policy, rather than merely isolated events, the duty to investigate gains increased importance. A State's positive duty to protect life requires the gathering of data regarding trends concerning loss of life, and the assessment of any impacting factors related to those trends.

⁷⁵ *Ivcher Bronstein v Peru*, Judgement of February 6, 2001 Series C No. 74, paras 156 – 157.

⁷⁶ Draft General Comment 36, para 30.

⁷⁷ See, e.g., Article 2, ICCPR and Article 24, ICPEd. See also Principles 2-5, Updated Set of principles for the protection and promotion of human rights through action to combat impunity, UN doc. E/CN.4/2005/102/Add.1; and also UN docs. E/CN.4/2004/88 and E/CN.4/2006/91.

⁷⁸ See, e.g., IACtHR, *Slaughter of the Rochela v. Colombia*, Judgment, 11 May 2007, para. 195; IACtHR, *Bámaca Velásquez v. Guatemala*, Judgment, 25 November 2000, para. 197.

⁷⁹ ECHR *Mikayil Mammadov v Azerbaijan*. Application No. 4762/05. [2009], para 223

⁸⁰ *Questions Relating to the Obligation to Prosecute or Extradite (Belgium v Senegal)* (Merits) [2012] ICJ Rep 422, paras. 114-115.

⁸¹ A/HRC/41/CRP.1, para 265.

⁸² UN Commission on Human Rights, Updated Set of Principles for the Protection and Promotion of Human Rights through Action to Combat Impunity, UN doc. E/CN.4/2005/102/Add.1, 8 February 2005, Principle 1.

⁸³ Report of the UN Special Rapporteur on extrajudicial, summary or arbitrary executions to the General Assembly, UN doc. A/70/304; Preamble to the UN Basic Principles and Guidelines on the Right to Remedy and Reparation.

Family members have the right to take part in an investigation into an unlawful death, and to obtain available information on the causes of death. Family members have the right to equal and effective access to justice; to adequate, effective and prompt reparation;⁸⁴ to recognition of their status before the law;⁸⁵ and to have access to relevant information concerning violations and accountability mechanisms.

If an investigation identifies a breach of rights, reparations may apply, such as restitution, compensation, rehabilitation, guarantees of non-repetition, and satisfaction.⁸⁶ The obligation of States to investigate alleged breaches of rights is a crucial aspect of the process to identify harms and their appropriate remedies. The right to know the truth⁸⁷ extends to society as a whole, given the public interest in the prevention of, and accountability for, international law violations.⁸⁸ States are under a duty to investigate both individual deaths and collective and policy trends with regards to unlawful use of force. Where there are infringements upon the right to life, appropriate remedies should apply.

States have a duty to cooperate internationally in investigations of potentially unlawful death, particularly when it concerns an alleged international crime.⁸⁹

The consequences of non-investigation are extremely serious, including violation of the right to life; continuation of policies and practices that may impact on the right to life; and perpetuation of a range of violations and bad practices because of the veil of ignorance or secrecy surrounding them. The failure to investigate unlawful casualties further limits our ability to gather holistic data and restricts our understanding of the context, which is particularly important given the increasing need to protect civilian aviation in proliferating zones of conflict.

1. Promptness of the Iranian investigation

Your Excellency's Government has suggested that the reported initial 3 days' denial was prompted by the necessity to conduct a preliminary investigation and that the investigation was quite short in comparison to other similar episodes globally. I accept the need for preliminary investigations, but that still does not excuse or explain the explicit and apparently knowingly false denials in the interim.

2. Effectiveness of the investigation

⁸⁴ Reparation includes restitution, compensation, rehabilitation, guarantees of non-repetition, and satisfaction. See, e.g., Working group on Enforced or Involuntary Disappearances (WGEID), General Comment on Article 19 of the Declaration on the Protection of All Persons from Enforced Disappearance, UN doc. E/ CN.4/1998/43, paras. 68-75; and Report of the Working Group on Enforced or Involuntary Disappearances, UN doc. A/HRC/22/45, 28 January 2013, paras. 46-68.

⁸⁵ Article 24(6) ICPED obliges States Parties to adopt adequate measures (for example, issuing certificates of absence due to enforced disappearance) to regulate the legal status of a disappeared person and his/her relatives in fields such as social welfare, family law and property rights. See WGEID, General comment on the right to recognition as a person before the law in the context of enforced disappearances, General Comment No. 11, 2011, in UN doc. A/HRC/19/58/Rev.1 (2012), para. 42.

⁸⁶ See, e.g., Human Rights Committee, General Comment No. 31, op. cit., paras. 15-17 and 19; Article 24, ICPED; and Committee on Enforced Disappearance, *Yrusta v. Argentina*, Views (Comm. No. 1/2013), April 2016.

⁸⁷ See, e.g., Article 2, ICCPR and Article 24, ICPED. See also Principles 2-5, Updated Set of principles for the protection and promotion of human rights through action to combat impunity, UN doc. E/CN.4/2005/102/Add.1; and see also UN docs. E/CN.4/2004/88 and E/CN.4/2006/91.

⁸⁸ See, e.g., IACtHR, *Slaughter of the Rochela v. Colombia*, Judgment, 11 May 2007, para. 195; IACtHR, *Bámaca Velásquez v. Guatemala*, Judgment, 25 November 2000, para. 197.

⁸⁹ See, e.g., IACtHR, *La Cantuta v. Peru*, Judgment, 29 November 2006, para. 160.

In order to be effective, an investigation must, at a minimum, take all reasonable steps to: (a) Identify the victim(s), (b) Recover and preserve all material probative of the cause of death, the identity of the perpetrator(s) and the circumstances surrounding the death, (c) Determine the cause, manner, place and time of death, and all of the surrounding circumstances; and (d) determine who was involved in the death and their individual responsibility for the death. I have serious concerns that the Iranian investigation into the strike of PS752 has failed to meet the requirement of effectiveness.

In particular, the allegations appear to demonstrate that the investigation conducted by the Iranian authorities has failed to meet international standards on the following issues:

1. Clarification of the causes and circumstances leading to the strike and the multiple killings

2. Identification of responsibilities within the chain of command: Investigations must seek to identify not only direct perpetrators but also all others who were responsible for the death, including, for example, officials in the chain of command who were complicit in the death. The investigation should seek to identify any failure to take reasonable measures which could have had a real prospect of preventing the death. It should also seek to identify policies and systemic failures that may have contributed to a death, and identify patterns where they exist

3. Identification and protection of eye-witnesses in order to obtain their evidence in relation to the death and the circumstances surrounding the death.

As highlighted above, I have serious concerns that the various explanations provided by your Excellency's Government as to what happened on 8 January do not add up and indeed are the sources of much confusion.

Lack of investigation of the failure to close the airport

Additionally, the decision to leave the airport open, with no NOTAM, has apparently not been discussed thus far and does not appear to have been investigated, even though the IRGC Air Force Commander allegedly indicated in January, “[t]hings were done in such a way” that it was “possible for this person to make this huge mistake.” Those initial decisions, made at a level far above the unit commander, appear to have been critical and direct causes of this tragedy: they must be investigated and addressed to ensure this never happens again. As highlighted above, the failure to close the airport constituted, in my opinion and on the basis of the information received, a fundamental flaw amounting to a violation of the prohibition against arbitrary deprivation of life. Such a violation is compounded by the failure to investigate the reasons and actors behind the failure to close the airport.

Lack of investigation of the Chain of Command

The investigation should seek to identify not only those individuals that were directly responsible for shooting down the airplane but also those within the chain of

command who may have ordered it, conspired to it, aided and abetted, or were in other ways involved in, downing the plane.

Almost a year after the downing of Flight PS752, it is still not known what high officials in your Excellency's Government did that morning to protect civilian life and why they did not close the airspace, issue a NOTAM, or take actually effective steps to ensure civilian flights were protected. There must be an investigation "aimed at ensuring that those responsible are brought to justice, at promoting accountability and preventing impunity, at avoiding denial of justice and at drawing necessary lessons for revising practices and policies with a view to avoiding repeated violations. Investigations should explore, inter alia, the legal responsibility of superior officials with regard to violations of the right to life committed by their subordinates."⁹⁰ Interviews by officials revealed that in situations amounting to a state of war or high alert the main source and line of command is the IRGC's Khatam-al Anbiya Central Headquarters, which allegedly take over all the forces, and its command is the Commander in Chief.

One would expect the investigation to, therefore, detail the responsibilities of such individuals as the Commander of the Central Headquarters, the Commander of the Air System at the Headquarters, or the Chief of Staff of the Armed Forces deputy coordinator role in the Central Headquarters. It would also be incumbent on the investigation to determine the role of the Supreme Leader, Ali Khamenei, as Commander in Chief of the Armed Forces.

3. *Independence and impartiality of the investigation*

Investigations "must always be independent, impartial, prompt, thorough, effective, credible and transparent, and in the event that a violation is found, full reparation must be provided, including, in view of the particular circumstances of the case, adequate measures of compensation, rehabilitation and satisfaction. States parties are also under an obligation to take steps to prevent the occurrence of similar violations in the future."⁹¹ The victim's next of kin should be allowed to participate, and States should "support and cooperate in good faith with international mechanisms of investigation and prosecutions."⁹²

As permitted by Annex 13 of the Convention on International Civil Aviation, the Aircraft Accident Investigation Board of the Civil Aviation Organization of the Islamic Republic of Iran has taken the lead on the investigation of the crash. It has apparently not publicized details of the failures in supervision and prevention that allowed this event to occur. It has not analyzed and publicized what steps should be taken to protect civil aviation from such mistakes in the future. Yet this type of critical

⁹⁰ See also ECHR, *McCann and others v. United Kingdom*, Judgment (Grand Chamber), 27 September 1995, para. 161; IACtHR, *Montero-Aranguren and others (Detention Center of Catia) v. Venezuela*, Judgment, 5 July 2006, para. 66; African Commission on Human and Peoples' Rights (ACHPR), General Comment No. 3 on the Right to Life, November 2015, paras. 2, 15; Human Rights Committee, General Comment No. 31, paras. 15 and 18; *The Minnesota Protocol on the Investigation of Potentially Unlawful Death* (2016), Office of the United Nations High Commissioner for Human Rights, New York/Geneva, 2017.

⁹¹ GC36, para. 28.

⁹² *Ibid*

analysis is essential to ensure that steps are taken worldwide to prevent such attacks in the future.⁹³

This concern has been expressed by the international community. As Canada's Minister of Transport and Minister of Foreign Affairs stated in August, following the release of partial flight recorder data, "this preliminary report only provides limited and selected information regarding this tragic event. The report only mentions what transpired after the first missile strike but not the second and only confirms information that we already know. We expect the Islamic Republic of Iran to provide an answer on important questions of why the missiles were launched in the first place and why the air space was open. These are the questions that Canada, Canadians and most importantly, the families of the innocent victims need answered." Canada and Ukraine are reportedly considering their own independent criminal investigations.

VI. FAILURE TO RESPECT RIGHTS IN RELATION TO THE TREATMENT OF THE DECEASED AND THE FAMILIES OF THE VICTIMS

The families of the victims have numerous rights under international human rights law as a result of this tragedy. These include the right to an investigation, the right to a remedy and reparation, the right to humane treatment, the right to freedom of religion and belief, the right to freedom of association and expression and the right to participate in cultural life. Some of these rights "found **the right to truth**, which is owed to families and to society, and includes an 'inalienable right' to know the truth about past events, a duty to preserve memory, and a victim's right to know."⁹⁴ A core component of the right to reparation also includes "[v]erification of the facts and full and public disclosure of the truth,"⁹⁵ (A/75/384, para. 50.)

The families of those killed on PS752 grieve the tragic and senseless loss of their loved-ones and are anxious to learn the whole truth about what happened to 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 on-going safety and peace of mind.

The manner of their treatment by your Excellency's Government is material to the question of both of the dignity afforded to the families and the realization of their associated human rights in the long and arduous aftermath.

1. Disrespectful handling of the crash site

The reported treatment of the crash-site, in effect a mass grave, raises serious concerns. Decisions as to a mass grave's treatment, preservation and management in the immediate, medium and longer term should be taken with full regard and respect for the rights of the families to access the site, once secured and safe, to have all and

⁹³ When Flight MH17 was struck by a missile, the incident was investigated by the Dutch Safety Board, thereby affording an impartial examination of the missile strike. The Dutch Safety Board examined not only the technical aspects of the crash but also the failures by various actors globally to protect civil aviation in conflict zones.

⁹⁴ UN Doc E/CN.4/2005/102, Principles 2-4.

⁹⁵ Basic Principles and Guidelines, para. 22(b).

any of their property returned to them and to have a say in how the site itself might be memorialized.⁹⁶ Sites must not be damaged or destroyed, and those searching for or speaking of mass graves must not be imprisoned, threatened or silenced. Such acts amount to multiple human rights violations, including of the prohibition against enforced disappearances, of the obligation to investigate extrajudicial killings, of the right to truth and the suppression or annihilation of individual identity and of collective cultural, racial, ethnic, religious, political or other identity in death. Governments should ensure that mass graves are preserved and protected and take all measures necessary to immediately protect mass gravesites from erosion, destruction, manipulation and looting.

The Minnesota Protocol requires the crime scene, defined as any physical space where evidence may be collected, such as the crash site, be “secured at the earliest possible opportunity and unauthorized personnel shall not be permitted entry.”⁹⁷ All material collected, including all “personal effects of the deceased, either worn by or in the possession of the deceased,” should be recorded and properly stored.⁹⁸ The personal effects must be returned to the families when there is no further need of them in the investigation.⁹⁹ There is no excuse for the State allowing personal items to be stolen or looted or failing to return these items to the families.

Families are entitled to have the remains of their loved ones, as well as all personal effects, returned to them at the location of their choosing, including to their homes or residences outside the Islamic Republic of Iran. This right is founded in the fundamental principle of human dignity as expressed in the Universal Declaration of Human Rights, as well as the ICCPR’s recognition that the “family is the natural and fundamental group unit of society and is entitled to protection by society and the State” ICCPR, Article 23. International humanitarian law expressly requires that States “facilitate the return of the remains of the deceased and of personal effects to the home country...”¹⁰⁰ The Minnesota Protocol states that families “have specific rights in relation to human remains”: the remains “should be returned to family members, allowing them to dispose of the deceased according to their beliefs.”¹⁰¹ The Human Rights Council has confirmed the right of families to receive the remains of their loved ones in the countries where they live: “[r]elatives of individuals deprived of their life by the State must be able to receive the remains, if they so wish,” GC36, para. 56.¹⁰² Human rights courts around the world have reiterated the right of family members to receive the remains in their home country, and to bury them according to their beliefs, with a “corresponding obligation of the State to honor and guarantee it.”¹⁰³ Denying this right can constitute inhumane and degrading treatment.¹⁰⁴ Without the remains and

⁹⁶ See A/75/384

⁹⁷ Minnesota Protocol, para. 59, 263(g)(2).

⁹⁸ Minnesota Protocol, paras. 61-66, 263(g)(2).

⁹⁹ See, e.g., Minnesota Protocol, para. 78.

¹⁰⁰ Article 34(2) of Additional Protocol I of the Geneva Conventions.

¹⁰¹ Minnesota Protocol, para. 37.

¹⁰² See also HRC, *Ali Bashasha and Hussein Bashasha vv. Libyan Arab Jamahiriya*, Communication No. 1776/2008, Decision of 20 October 2010, para. 9; *Mihoubi v. Algeria*, Communication No. 1874/2009, Decision of 18 October 2013, para. 9; see generally Last Rights, Extended Legal Statement and Commentary, 30 January 2019, available at www.lastrights.net.

¹⁰³ IACtHR, *Case of Gelman v. Uruguay*, Merits and Reparations, Judgment of 24 February 2011, para. 258.

¹⁰⁴ IACtHR, *Case of González et al. (“Cotton Field”) v. Mexico*, Merits, Reparation and Costs, Judgement of 16 November 2009, para. 424.

the ability to bury their dead according to their beliefs and customs, the family is unable to properly begin the mourning process.

The right to freedom of religion and belief mandates that families be allowed to bury their loved ones without interference by the State for political purposes. Freedom “to manifest one’s religion or beliefs may be subject only to such limitations as are prescribed by law and are necessary to protect public safety, order, health, or morals or the fundamental rights and freedoms of others” ICCPR, Article 18. This right, and the concept of worship, extends to “ritual and ceremonial acts” such as burials, Human Rights Committee, General Comment 22, para. 4. Forcing attendance by State officials for political purposes, requiring burial in martyr gravesites against family wishes, and other similar measures interfere with the family’s intimate, personal and spiritual desires at one of life’s most agonizing and painful moments.

This accumulation of reported violations – the arbitrary killing of family members, the failure to secure and protect the crash sites, the looting of personal effects, the State resistance to family desires as to repatriation and burial, the interference with private burials and the failure to provide a full and complete recitation of the truth – indeed the “treatment accorded the next of kin during the whole process of seeking the truth has caused them great suffering and anguish.”¹⁰⁵

2. *Threats and harassment of families*

I note with concern the threats that members of your Excellency’s Government appear to be making against family members of the victims, including those living outside of Iran, who are speaking out in an attempt to obtain the truth. Such threats are unlawful, as they are attempts to negate the State’s obligations to respect and protect the right to life. The threats by Government officials create risks to the safety of individuals and the families. As such, the threats themselves could constitute violations of Article 6 of the ICCPR. They create high level of stress and fears which impact directly on people’s ability to enjoy their life, to access and use social media, to inform and communicate. As such they are also an attack to their right to a life with dignity, and they also violate the families’ rights to freedom of expression and association and the right to privacy.

These threats, if confirmed, also may constitute the extra territorial use of force, which is defined as the use of potentially lethal force by a State against an individual or a group of individuals located on the territory of another State. As such, they may constitute intentionally wrongful acts against the States in which these families live.

First, it is “important to highlight and insist that Article 2 (4) of the Charter of the United Nations and customary international law prohibit the threat or use of inter-State force, subject to limited exceptions: consent and self-defense. A State may consent to the use of force on its territory by another State, while the UN Charter allows action taken in self-defense” (A/HRC/41/CRP.1, para. 342).

Outside these narrowly defined conditions, the use of force extra territorially is unlawful under international law governing intra-states relationship. It is also unlawful

¹⁰⁵ Cotton Field case, para. 424.

under international human rights law in that a State party cannot perpetrate violations of its obligations on the territory of another State, which it could not perpetrate on its own territory¹⁰⁶. That human rights treaty obligations apply to the conduct of a State outside its territory has been confirmed by, among others, the International Court of Justice, the Human Rights Committee, the Inter-American Commission on Human Rights and the European Court of Human Rights¹⁰⁷ (A/HRC/41/CRP.1, para. 343).

It should be noted that the threats attributed to your Excellency's Government create an obligation on the part of the States in which these families reside. "International human rights law imposes on States a duty to respect, protect and ensure human rights. Under the obligation to protect, States must act with due diligence to protect against actions by a Third Party that may infringe on a persons' human rights, including their right to life. A State may incur international responsibility for failing to do so" (A/HRC/41/CRP.1, para. 330). It is therefore incumbent on these States to take all appropriate and reasonable measures to protect these families and to monitor and warn them of any threats to their safety (A/HRC/41/CRP.1, paras. 348-369).

VII. VIOLATION OF THE RIGHTS OF PROTESTORS

With regards to the alleged violations against the rights of the protestors, I reiterate the concerns, standards and questions raised in IRN 2/2020, sent on 19 February 2020 and to which your Excellency's Government has yet to respond and share the concerns raised by the Special Rapporteur on the situation of human rights in the Islamic Republic of Iran in his report to the Human Rights Council (A/75/213, para 27).

I particularly highlight that states are required to respect and fully protect the rights of all individuals to assemble peacefully and associate freely, including persons espousing minority or dissenting views or beliefs, human rights defenders and others seeking to exercise or to promote these rights and to take all necessary measures to ensure that any restrictions on these rights are in accordance with their obligations under international human rights law.¹⁰⁸ States not only have a negative obligation to abstain from unduly interfering with the rights of peaceful assembly and of association but also have a positive obligation to facilitate and protect these rights in accordance with international human rights standards.¹⁰⁹

With regards to the use of force, assemblies should ordinarily be managed without resort to force.¹¹⁰ Firearms may only be used in violent assemblies and force and firearms may only be used as a last resort when unavoidable and require exercising

¹⁰⁶ A/68/382

¹⁰⁷ See for instance Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, para. 109; General comment No. 31 (2004), on the nature of the general legal obligation imposed on States parties, para. 10; *Coard and others v. United States*, case 10.951, Report No. 109/99, 29 September 1999, para. 37; *Al-Skeini and others v. the United Kingdom*, application No. 55721/07, Grand Chamber judgement of 7 July 2011, paras 106-186;

¹⁰⁸ Articles 21 and 22 of the ICCPR and Human Rights Council resolution 24/5 (operative paragraph 2),

¹⁰⁹ A/HRC/41/41, para 13

¹¹⁰ Compilation of practical recommendations for the proper management of assemblies, A/HRC/31/66, para 57

the utmost restraint.¹¹¹ Firearms should never be used simply to disperse an assembly; indiscriminate firing into a crowd is always unlawful.¹¹² Any use of force must comply with the principles of necessity and proportionality.¹¹³ Medical assistance should be provided as soon as possible when necessary.¹¹⁴ Incidents of excessive use of force should be subject to a prompt, independent and impartial investigation.

Additionally, individuals should not be deprived arbitrarily of their liberty.¹¹⁵ Any person who is detained must be held in an officially recognized place of detention and accurate information on their place or places of detention, including transfers, must be made promptly available to their family members, and their counsel.¹¹⁶ All detained persons have a right to fair proceedings before an independent and impartial tribunal.¹¹⁷ No statement established to have been made as a result of torture can be invoked as evidence in any proceedings, except against a person accused of torture as evidence that the statement was made.¹¹⁸

Your Excellency's Government reported treatment of those legitimately protesting against the shooting down of PS752 appears to have violated the rights of hundreds of individuals and has not been investigated or remedied to date.

VIII. STATE RESPONSIBILITY FOR INTERNATIONAL WRONGFUL ACTS

An internationally wrongful act of a State "may consist of one or more actions or omissions or a combination of both."¹¹⁹ Whether "an act is wrongful is derived from treaties obligations or customary law obligations which the State in question may have violated," A/HRC/41/CRP.1, para. 220. There is an internationally wrongful act of a State when "conduct consisting of an action or omission a) constitutes a breach of an international obligation of the State and b) is attributable to the State under international law."¹²⁰

As I have found, Iran's launching of ballistic missiles against Coalition forces in Iraq was a wrongful act against the Governments of Iraq and the United States, not justified as self-defence under Article 51 of the UN Charter, A/HRC/44/38, Annex. The military preparations at Tehran's civil airport, which ultimately resulted in these civilian deaths, were a component of that unlawful operation.

In addition, your Excellency's Government appears not to have complied with the requirements of the Montreal Convention, described above, or the Chicago

¹¹¹ UN Basic Principles on the Use of Force and Firearms by Law Enforcement Officials, principles 13 and 14

¹¹² Ibid, para 60

¹¹³ A/HRC/31/66, para 57

¹¹⁴ UN Basic Principles, principle 5 (c)

¹¹⁵ Article 9 ICCPR

¹¹⁶ 1992 Declaration on the Protection of all Persons from Enforced Disappearance, article 10

¹¹⁷ Article 14 ICCPR

¹¹⁸ Human Rights Council Resolution 16/23, para 7 (c)

¹¹⁹ Draft Articles on the Responsibility of States for Internationally Wrongful Acts, with commentaries (2001), Article 1, para. 1.

¹²⁰ Ibid., Article 2.

Convention. The Chicago Convention details the obligations that States have to each other with respect to civil aviation. Article 3 *bis* (a), specifically provides that “every State must refrain from resorting to the use of weapons against civil aircraft in flight”.

Your Excellency’s Government has itself taken the position, before the International Court of Justice, that an internationally wrongful act occurred when a State shot down an Iranian airliner, apparently by mistake.¹²¹ Your Excellency’s Government argued that the shooting down of Iranian flight 655 was a violation of the Preamble and Articles 1, 2, 3 *bis* and 44 a and h of the Chicago Convention. It further argued that in refusing to “accept liability for the actions of its agents...failing to pay compensation for the aircraft,” or to work out “a proper mechanism for determination and payment of damages due the bereaved families”, the United States violated Articles 1, 3 and 10(1) of the Montreal Convention.¹²² Those provisions apply here as well.

¹²¹ Islamic Republic of Iran v. United States, Application Instituting Proceedings filed in the Registry of the Court on 17 May 1989, Aerial Incident of 3 July 19, 1989, International Court of Justice, <https://www.icj-cij.org/en/case/79>

¹²² See Trapp, Use of Force against Civil Aircraft, available at <https://www.ejiltalk.org/uses-of-force-against-civil-aircraft/> (assessing the application of the Montreal Convention to the military).