Final Report

Aircraft Accident and Incident Investigation Office,

State of Kuwait

Report on the Serious Incident on the Loss of Separation between A320 and ATR72-500 at Tribhuvan International Airport (VNKT), Kathmandu on 24 May 2025

Final Report

This investigation has been conducted in accordance with Annex 13 to the ICAO Convention on International Civil Aviation and Kuwait Civil Aviation Safety Regulations 13. The sole objective of the investigation of an accident or incident under these Regulations is the prevention of future accidents and incidents. It is not the purpose of such an investigation to apportion blame or liability.

Accordingly, it is inappropriate that any AAI reports should be used to assign fault or blame or determine liability, since neither the investigation nor the reporting process has been undertaken for that purpose.

This information is published to inform the aviation industry and the public of the general circumstances of this serious incident.

Name of Operator	**:**	Al Jazeera Airways, State of Kuwait
Make and Model of Aircraft	**:**	Airbus A320-251N
Nationality and Registration Mark:		Kuwait 9K-CBA

Name of Operator	**:**	Buddha Air, State of Nepal
Make and Model of Aircraft	**:**	ATR72-500
Nationality and Registration Mark:		Nepal 9N-ANW

Location of the Occurrence: Runway 02 Tribhuvan International Airport (VNKT), Kathmandu, Nepal

State of Occurrence **:** State of Nepal

Date and Time of Occurrence: 24 May 2025 at 0707 Local Time (0122 UTC)

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Abbreviation

AAI	Aircraft Accident Investigation
ADS-B	Automatic Dependent Surveillance – Broadcast
AGL	Above Ground Level
AIP	Aeronautical Information Publication
AOC	Air Operator's Certificate
ATC	Air Traffic Control
ATCO	Air Traffic Control Officer
ATPL	Airline Transport Pilot's Licence
BHA	Buddha Air
CPL	Commercial Pilot's Licence
IFR	Instrument Flight Rules
JZR	Jazeera Airways
PIC	Pilot-in-command
RA	Resolution Advisory
R/T	Radio-telephony
TA	Traffic Advisory
TCAS	Traffic Collision Avoidance System
VFR	Visual Flight Rules
VOR/DME	VHF Omni-range/ Distance Measuring Equipment

SYNOPSIS

The State of Kuwait received information on 25 May 2025 through the Mandatory Occurrence Report system that Jazeera Airways flight number JZR1540 A320 Registration 9K-CBA whilst accelerating for take-off on Runway 02 at Tribhuvan airport was instructed by ATC to abandon take-off and stopped on the runway. Soon after that the pilots of JZR 1540 noted an aircraft passed at around 800 ft above.

This information was immediately passed to the State of Nepal in the form of a Notification on 26 May 2025 seeking further information and their intention whether or not to institute an investigation on this occurrence. Reminder was sent on 27, 28 and 30 May including calling the published contact number as found in the ICAO website http://www.icao.int/safety/AIA/Pages/default.aspx but no reply received. Since Jazeera Airways is commercial aircraft operator holding an AOC granted by the State of Kuwait, the aircraft 9K-CBA is also registered in the State of Kuwait, the authority therefore decided to form an investigation team to institute an investigation on this occurrence as the State of Operator and State of Registry.

The investigation report concluded the occurrence to be Loss of Separation. In the report, a total of seven findings and four safety recommendations were made.

1.0 FACTUAL INFORMATION

1.1 History of the Flight

Jazeera Airways - JZR 1540, a flight operating under Instrument Flight Rules (IFR)

The commander of JZR1540 received IFR clearance to depart Nepal for Kuwait and commenced the flight from the international departure terminal parking bay number 2 at 06:56:52L. The weather at that time in the morning was fine with good visibility.

The commander followed ATC instruction to taxy via taxiway E to enter runway at 07:03:10L and continued backtrack to line up for departure from Runway 02. During the taxy, both the commander and co-pilot maintained listening watch on the ATC Tower frequency 118.1 Mhz. Prior to entering the runway for backtrack, the commander switched on the Traffic Collision Avoidance System (TCAS) and selected the TA/RA mode to enhance their level of situational awareness.

Having entered the runway and backtracking to line up, ATC advised the pilots to expedite taxy. The commander followed the instruction and remaining on the Tower frequency 118.1 Mhz to listen out for any radiotelephony communication whilst observing the maximum taxy speed limitation for operating the A320 aircraft. The commander continued to taxy and at

07:05:52L made a 180 degrees reversal at the turn pad located before the end of the runway to line up Runway 02. Then ATC gave the clearance for take-off.

At 07:07:14L, the commander increased the engine thrust to commence the take-off roll. During the take-off roll and accelerating on the ground, both the commander and the co-pilot suddenly heard a low voice on the radio saying "Go-around". Immediately after that both pilots received ATC instruction to stop and abandon the take-off.

At 07:07:32L, the commander followed the instruction to reject the take-off and stopped on the ground. The speed of the Jazeera aircraft during the take-off roll reached a speed of over 95 kts. Soon after that the commander noted on TCAS an aircraft flew passed them at around 800 ft above. The other aircraft was later identified to be Buddha Air flight number BHA 100D ATR72-500 Registration 9N-ANW.

The commander was then instructed to line up again for another departure. During the interview with the pilots held by the AAI investigation team, both pilots' recalled at that point in time that the sound of the duty ATC Tower controller was changed from a man's voice to a woman's voice.

The rejected take-off had led to hot brakes. As there was also the need to re-programme the flight computer for another departure, the commander elected to return to bay for maintenance check. After completion of the maintenance check and re-programming, the aircraft was released for service. The subsequent departure was uneventful.

Buddha Air – BHA 100D ATR72-500 9N-ANW

There was no information received from the State of Nepal about the occurrence after sending several requests. The investigation team could only rely on information obtained from online software ADS-B data to continue with the investigation. Efforts have been made to verify the online information on the time, date and location. They were found to be consistent with the information in the Jazeera pilots' reports and interview.

The investigation indicated that the aircraft that went around and flew close to the Jazeera aircraft overhead was an ATR 72-500 operated by Buddha Air, callsign BHA 100D. Buddha Air is a commercial aircraft operator registered in the State of Nepal operating mainly domestic flights within Nepal. Their fleet included aircraft types of ATR 72-500 and ATR 42-320.

The flight BHA 100D was a Mount Everest Sightseeing flight scheduled to depart from and return to Tribhuvan airport. Being a sightseeing flight, it is operating under Visual Flight Rules (VFR). The pilots would fly passengers to the east of the airfield to enjoy the views of the

tallest mountain in the world then return to land at Tribhuvan airport after around 45 minutes of flying.

On this type of Sightseeing Flight, the return VFR route to Tribhuvan airport would via a compulsory reporting point Barbi. Pilots are required to report their position to the Approach Control on 120.6 Mhz. Closer to the airfield, pilots would change to the Tower frequency 118.1 Mhz.

Appendix 1- Extract from Nepal AIP on the published route of the Mount Everest Sightseeing Flight.

At 07:03:10L the BHA 100D completed the sightseeing trip and was over the mandatory reporting point Barbi when JZR 1540 entered the runway via taxiway E to backtrack to line up for departure Runway 02.

At 07:07:14L when the BHA 100D was on final approach to Tribhuvan airport Runway 02 for landing, the JZR 1540 had line up for departure. The BHA 100D continued its descent from over 1000 ft above ground at around 3 nm from the runway. When it was around 300 ft above ground at around 1.1 nm from the runway, the BHA 100D commenced a go around. The BHA 100D flew straight ahead along the runway and passed the JZR 1540 overhead at around 800 ft above.

The timing of the BHA 100D commenced the go-around happened just moment before the ATC controller instructed the JZR 1540 to abandon the take-off.

The online ADS-B information also indicated that the BHA 100D conducted a go-around and subsequently landed without further event.

Tribhuvan International Airport ATC

Both IFR and VFR flights are permitted in Tribhuvan International Airport. According to the JZR pilots' report, it was not a busy morning in the airfield. There were no interruption or difficulties in radio communication with the Tower Controller. There was no continuous R/T on the frequency 118.1 Mhz affecting radio monitoring.

1.2 Injuries to Persons

There were no injuries.

1.3 Damage to Aircraft

There was no damage reported to any aircraft.

1.4 Other Damage

Nil

1.5 Personnel Information

1.5.1 A320 - Pilot-in-command (PIC)

Nationality : Indian
Age : 49 years old
Licence Type : Kuwait ATPL
English Language Proficiency Level and Expiry Date: Level 6, non-expiry
Last LPC : 31 August 2024 valid until 31 August 2025
Last OPC : 24 February 2025 valid until 31 August 2025
CAT C airfield recency : Valid until 28 February 2026
Last flight to Tribhuvan : 21 May 2025
Total hrs on type : 9000
Total flying hrs : 13100
Medical Certificate : Valid until 11 August 2025

The PIC was duly qualified and experienced on the A320 aircraft type. He had operated to Tribhuvan, Kathmandu 3 days before the occurrence.

1.5.2 A320 - Co-pilot

Nationality : Kuwaiti
Age : 30 years old
Licence Type : CPL(A)
English Language Proficiency Level and Expiry Date: Level 4 Expiry 05 June 2028
Last LPC : 03 September 2024 valid until 30 September 2025
Last OPC : 09 March 2025 valid until 30 September 2025
Total hrs on type : 596
Medical Certificate : Valid until 01 August 2025

The co-pilot was duly qualified for the flight.

1.5.3 ATR 72 - Pilot-in-command

No information available

1.5.4 ATR 72 – Co-pilot

No information available

1.5.5 Nepal ATC Tower Controller

No information available

1.6 Aircraft Information

Aircraft Registration	:	9K-CBA
Aircraft Model	:	A320N
Manufacturer	:	AIRBUS INDUSTRIE

Aircraft Registration	:	9N-ANW
Aircraft Model	:	ATR 72-500
Manufacturer	:	ATR

1.7 Meteorological Information

The weather was fine with good visibility at the time of the occurrence.

1.8 Aids to Navigation

Not applicable.

1.9 Communications

According to pilots' report, there were no difficulties in radio communication.

1.10 Aerodrome Information

The Tribhuvan Airport is situated at an elevation of 4,395 feet above mean sea level, surrounded by high terrains. It is a single-runway aerodrome RWY 02/20. For departure from RWY 02, aircraft would have to enter the runway via a taxiway and backtrack. There is a turn pad to facilitate aeroplanes making 180 degrees turn to line up for departure from RWY 02.

According to the Nepal Aeronautical Information Publication (AIP), the airspace classification of the airport is Class C. As defined by ICAO Annex 11, Class C airspace permits both IFR and VFR flights. All flights receive air traffic control services, with IFR flights being separated from other IFR flights and VFR flights. VFR flights are also provided with traffic information regarding other VFR flights and are separated from IFR flights.

Jazeera Airways categorizes the airfield as Category C, requiring the PIC to have operated to the airfield within the past 12 months. In this instance, the PIC was properly qualified for the flight.

Buddha Air, as a domestic aircraft operator, could reasonably be considered that their pilots are familiar with the airfield operations and qualified to operate at VNKT.

1.11 Flight Recorders

Not applicable

1.12 Wreckage and Impact Information

Not applicable

1.13 Medical and Pathological Information

Not applicable

1.14 Fire

Not applicable

1.15 Survival Aspects

Not applicable

1.16 Tests and Research

Not applicable

1.17 Organisational and Management Information

Jazeera Airways

Jazeera Airways holds a valid Air Operator's Certificate (AOC) issued by the Directorate General of Civil Aviation of Kuwait and is approved to perform scheduled flights to/from VNKT. Jazeera Airways ensures that prior to being assigned as pilot-in-command, the pilot has obtained adequate knowledge of the route to be flown and of the aerodromes (including alternates), facilities and procedures to be used. Since the start of operation to VNKT, there was no significant incident reported at VNKT. Neither was there any significant incident or breaches against the regulatory requirements reported that might affect their AOC renewal.

Buddha Air

Buddha Air holds permission from the Nepal aviation authority to operate commercial flights within the State of Nepal and is one of the longest serving aircraft operator in the State of Nepal with over 26 years of operations. On 6 March 2025, an ATR72-500 landed at VNKT when one of the two nose wheels of the aircraft was lost. No injuries were reported. The safety record as noted from online information indicated that there was no fatal accident involving ATR operation.

Tribhuvan Airport

The Tribhuvan Airport is a government airport operated by the State of Nepal. No information could be found about the organizational and management information of the air traffic control management at the airfield.

1.18 Additional Information

Not applicable

1.19 Useful or Effective Investigation Techniques

The investigation team had made several attempts to contact Nepal to obtain information about the occurrence. But there was no response received. Owing to the lack of information, the investigation relied on available online website ADS-B data along with the Al Jazeera pilot's reports.

1.20 Human Factors

The flight duty records of the Jazeera pilots were checked. The commander had adequate rest before the flight, and the co-pilot had 2 full days rest before the occurrence. There was no evidence to indicate that they did not obtain proper rest in Nepal. The pilots were interviewed on 03 June 2025 by the Investigation team. They were in good spirit, psychologically stable and did not make any remarks about any possible stress at work. Their medical certificates did not contain any limitations on their medical standards.

In comparison, details about the physical, physiological and psychological status of the duty ATC controller at Nepal airport and pilots in the Buddha Air ATR 72 was not available. The investigation team could only rely on their performance to analyse on any possible human factors that might contribute to the occurrence.

2.0 ANALYSIS

Position of the JZR 1540 on the ground in relation to BHA100D in the air

2.1 At 06:56:52L the Commander of JZR 1540 received clearance from the Ground Control on frequency 121.9 Mhz for pushback when the BHA 100D was flying and made the mandatory position report over Barbi on the Approach frequency 120.6 Mhz. Being on two different frequencies, the pilots of both aircraft would not be aware of the presence of each other.

2.2 At 07:03:10L, the Commander of JZR 1540 followed the Tower Controller's instruction on frequency 118.1 Mhz to taxy the aircraft to enter the runway via taxiway E and backtrack to the departure end of RWY 02. At that moment in time, the BHA100D was proceeding to join the right base turn. It could not be positively determined whether or not BHA 100D had already contacted Tower on frequency 118.1 Mhz before that moment or later. But when the JZR pilots changed from Ground Control frequency 121.9 Mhz to Tower frequency 118.1 Mhz and maintaining listening watch thereafter, they did not report hearing the callsign of BHA100D on the approach to land.

2.3 When JR 1540 entered and backtracking on the runway, the Tower Controller instructed the pilots of JZR 1540 to expedite taxy. This instruction made by the Tower Controller would mean that he was aware of the presence of BHA 100D on the approach to land on RWY 02. But other than such ATC instruction to expedite taxy, there was neither any information given about an aircraft was on the approach to increase the situational awareness of JZR pilots nor was there a radio call made by the BHA 100D pilots about their descent to land on RWY 02.

2.4 Using the online ADS-B data and information provided by the JZR pilots, a timeline is generated. Figure 1 – Occurrence Timeline

	Time	JZR1540	AGL	BHA position
T1	06:56:52	Push back	12,385	Mandatory call at Barbi
T2	07:03:10	Entering RWY 02 Via TWY E	4,235	Proceeding to join right base
T3	07:05:52	180-degree Turn	1,060	Right Base
T4	07:07:14	Take off Roll	510	On the RWY extended centerline
T5	07:07:32	Abort take off	360	At 1.1 nm from RWY
T6	07:08:11		810	Overfly JZR1540

2.5 Turn Pad – ICAO Annex 14, Volume I - Aerodrome Design and Operations has the following about turn pad: -

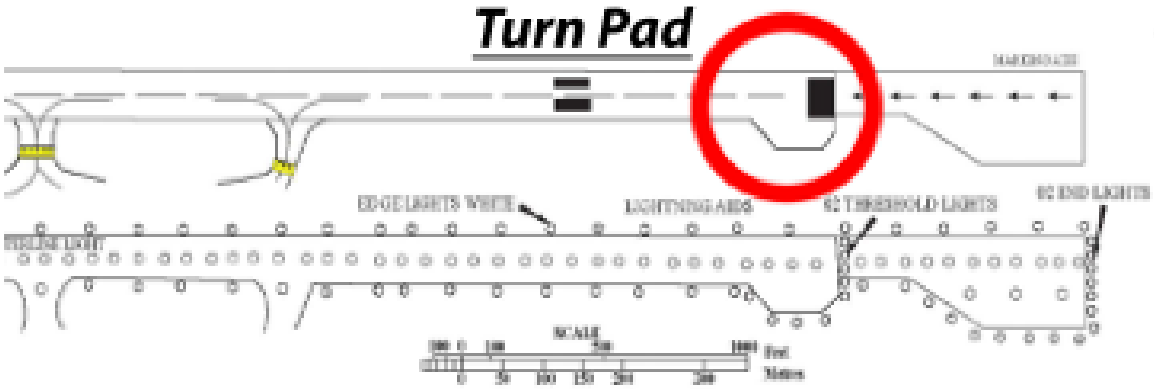
"*Para 3.3.1*

Where the end of a runway is not served by a taxiway or a taxiway turnaround … , a runway turn pad shall be provided to facilitate a 180-degrees turn of aeroplanes."

"Para 3.3.2 Note 1

Such areas may also be useful if provided along a runway to reduce taxiing time and distance for aeroplanes which may not require the full length of the runway."

In the case of VNKT, the turn pad was located before the end of the runway to reduce taxiing time. Figure 2 – location of the turn pad



2.6 At 07:05:52L, the Captain of JZR 1540 made the 180 degrees reversal turn on the turn pad near the end of runway and at 07:07:14L he increased the engine thrust to commence the take-off roll. According to online ADS-B data, at this time the BHA 100D was on short final to land on RWY 02 and at around 500 ft AGL.

Appendix 2 – Position of JZR A320 aircraft and BHA ATR 72.

JZR 1540 aborted take-off and BHA100D go-around

2.7 Shortly after 07:07:14L when the A320 aircraft was accelerating on the runway, the Commander heard a low voice on the radio saying "Go-around". Almost immediately the Tower Controller instructed the Commander to stop on the runway. The Commander carried out the necessary procedures to abort the take-off and stopped on the runway at 07:07:32L. At that moment, he also noted on TCAS that an aircraft flew overhead at around 800 ft above.

2.8 The available online ADS-B data reflected that the aircraft was an ATR72-500 operated by Buddha Air callsign BHA 100D. The ATR72-500 commenced a go-around at around 300 ft AGL and at a distance of around 1.1 nm from the runway.

2.9 When the A320 aircraft stopped on the runway, the Tower Controller gave instruction for the JZR 1540 to taxy off the runway and re-line up for departure. At this stage, both pilots on JZR 1540 reported that the ATC controller voice changed from a man's voice to a female's voice. This indicated that the ATC realized the seriousness of this occurrence and decided there was a need for change of controller.

Go-around Call and subsequent ATC Instructions

2.10 There was no ATC transcript to know who made the call for "Go-around". As a standard R/T procedure, ATC controller must state the callsign of an aircraft before giving any instruction. In this case, the absence of callsign preceding the "Go-around" call could reasonably be judged that the "Go-around" call was made by one of the pilots on the BHA 100D.

2.11 The call made by the Tower Controller to instruct JZR 1540 to abort take-off came immediately after the "Go-around" call could further indicate that by then the Tower Controller realized something unusual and there was the immediate need to instruct JZR 1540 to stop on the runway.

2.12 After the instruction to abort take-off, the change in the Tower Controller's voice from a man's voice to a female's indicated there was a sudden change in Tower Controller. This further showed that ATC Supervisor had noted that something very unusual happened and an immediate relieve of the duty Tower Controller was necessary.

2.13 The abort take-off did not cause any damage to the JZR aircraft or occupants. However, it had led to hot brakes and the need to re-programme the flight computer for another take-off. The Commander then requested clearance to return to bay for maintenance check and set up for another departure. The ATC subsequently gave the necessary clearance.

Subsequent Operations

2.14 After maintenance check and when the engineer cleared the aircraft for departure, the Commander of JZR 1054 requested for departure. The subsequent take-off was uneventful. The online ADS-B information also indicated that the BHA 100D conducted a go-around and subsequently landed uneventfully.

2.15 There was no information about the crew complement in the cockpit of the BHA 100D at the time of the occurrence and the working conditions on the ground in the Tower at VNKT. The investigation team could not establish whether the flight BHA 100D was a normal flight or a training flight. Similarly, the investigation team could not establish whether the duty Tower Controller at VNKT was under training or on a normal daily duty.

Nepal Air Traffic Control

2.16 Nepal AIP VNKT AD2.23 para 2 a) and 2 e) states the following: -

"Para 2 a)

Landing sequence will be issued by approach and all aircraft are to strictly adhere to this sequence. Approach sequence is to be established by 10 DME and no overtaking is permitted after 10 DME."

"Para 2 e)

Pilots to report traffic in sight to release restriction for climb and descend."

2.17 According to para 2.16 above, it could be interpreted that the BHA 100D was given the sequence in the approach by the Approach Controller on 120.6 Mhz. It could further be expected that there would be radio call on Tower frequency 118.1 Mhz when the aircraft BHA100D had established on final to land on RWY 02 and had the JZR 1540 in sight. A practice that is also adopted in general VFR operation to enhance the situational awareness of other pilots.

2.18 A radio call by the pilots of BHA 100D or conversely the provision of traffic information by the Nepal ATC Controller about an aircraft on final would certainly enhance the situational awareness of the pilots of JZR 1540 or pilots maintaining listening watch on 118.1 Mhz.

2.19 It could be argued that there might have been radio call made by BHA 100D or traffic information given by ATC and that it was only the JZR 1540 pilots who did not get it. But at a time of high workload to manoeuvre the aircraft to line up for departure, it was also reasonable not to expect the pilots of JZR to be looking out for traffic when he had to complete the following essential task:-

- expedite taxy as instructed by ATC
- complete a 180 degree turn on the turn pad
- call and complete the "Before take-off" checklist
- increase thrust to commence the take-off roll

2.20 The JZR1540 entered the runway at 07:03:10L. The turn pad near the departure end of RWY 02 was not designed for holding and the presence of any aircraft on the pad or on the single runway would become an obstacle to other aircraft on the approach for landing. It must then be ruled that from the moment the JZR 1540 entered the runway via taxiway E, the runway was occupied by it, and no other aircraft could take-off or land on the runway until the JZR 1540 left the runway or flying away. In this respect, ATC must closely monitor other traffic to provide positive control to maintain separation.

2.21 Nepal AIP VNKT AD2.23 para 2a) as stipulated in para 2.17 above specifies that "*Approach sequence is to be established by 10 DME"* i.e. 10 nm from the VOR/DME "KTM". The "KTM" VOR/DME is located less than one nautical mile from the beginning of Runway 02. In the absence of radar data, it could not be established if the BHA 100D had complied with the procedure specified in the AIP to establish on final at 10 DME or more from the VOR/DME KTM.

2.22 The elapse time from the JZR 1540 entered the runway to the commencement of take-off roll was 4:04 minutes. If the BHA 100D had established on final to land at a distance of 10 DME or more, the elapse time for it to descent and arrive at the runway would be more than 5 minutes based on an average approach speed of 100-110 kts. This would provide sufficient time for another aircraft to backtrack and depart on Runway 02. If, however the distance is less than 10 DME, the time allowed for separation would be significantly reduced, and ATC must closely monitor the situation and give traffic information as early as possible.

2.23 When the BHA 100D on the approach to land and reached a height of around 300ft AGL and in sight with the JZR 1540 aircraft rolling for take-off and yet no ATC clearance to land, the commander of BHA 100D had no choice but to carry out a go-around and made the necessary "Go-around" call.

2.24 Soon after this "Go-around" call, the ATC controller gave the instruction for JZR 1540 to abort take-off and stopped on the RWY.

Human Factors and Organizational Aspects

2.25 The investigation team reviewed the operation of JZR 1540 and there were no human factors or organizational aspects that affected the performance of the pilots. In fact, the rapid actions of the Commander of the JZR 1540 to follow the ATC instruction to stop on the runway averted a possible disastrous scenario of being airborne and flying in close proximity with the BHA 100D at low level.

2.26 After the occurrence, Jazeera Airways also completed their necessary internal investigation on the occurrence to fulfil their due diligence in safety management. A copy of their internal investigation was also presented to the investigation team for reference.

2.27 The BHA 100D pilots, being operating in VFR at an airfield that they are reasonably familiar might have developed a sense of complacency reducing their awareness to make additional radio calls to broadcast their position in the approach when in sight with the JZR 1540 on the runway. Continuing the approach and starting to realize the imminent development of a dangerous scenario to continue the approach for landing, the BHA 100D pilot made the radio call for "Go-around" to commence the go around manoeuvre at around 300 ft AGL and 1.10 nm from the runway. This decision made by the pilot of BHA 100D to go around indicated that they maintained their standard airmanship without obvious human factor affecting the operations.

2.28 No information was received about the physical, physiological and psychological status of the duty ATC controller at the time of occurrence. Was the duty ATC controller in the early stage of the start his shift or near the end when he could be feeling tired? However, as the duty ATC controller, one must maintain vigilance to provide essential traffic information to aircraft on the ground and in the air in the interest of safety. Was he under training or was he on his normal duty?

2.29 It could not be determined why the ATC duty controller did not pass traffic information or give instruction to the BHA 100D to go around. The ATC instruction given to JZR 1540 to stop on the runway came almost immediately after the "Go-around" call made by pilot of the BHA 100D indicated that the duty controller had been monitoring the approach. It was likely that the traffic scenario at the time was rather unusual to the duty controller, and he was trying to work out a solution as best as he could.

2.30 When hearing the "Go-around" call made by the pilot of BHA 100D, the duty ATC controller immediately instructed the JZR 1540 to stop on the runway. The ATC instruction had prevented the development of a possible air accident but the reluctance to instruct BHA 100D to go around early in the approach had led to a loss of separation between the two aircraft.

2.31 After the ATC instruction for JZR 1540 to stop on the runway, the duty ATC controller was immediately relieved from his duty, and a female controller took over. This indicated that the management followed the standard practice to handle any ATC related occurrence.

3.0 CONCLUSIONS

From the information available, the following findings and contributing factors were made with respect to this serious incident. These shall not be read as apportioning blame or liability to any particular organisation or individual.

3.1 Findings

3.1.1 The weather at the time of occurrence was fine with good visibility. The pilot of BHA 100D did not give radio call as required by Nepal AIP VNKT AD2.23 para 2 e) para on Tower frequency 118.1 Mhz when the JZR 1540 was in sight.

3.1.2 The pilots of BHA100D did not give any radio call when established on final to land to enhance the situational awareness of the ATC Tower Controller and pilots of JZR 1540.

3.1.3 From the moment the JZR 1540 entered the runway to the commencement of take-off roll, a period of 4:04 minutes had elapsed. If there were further delay in the taxying and reversal turn operation, a longer period might be required. The time allowance given for JZR 1540 to depart from Runway 02 and had the runway available for BHA100D to land was inadequate. The time allowance could also be affected if the BHA100D established on final to land at a distance shorter than 10 DME.

3.1.4 Seeing the presence of JZR 1540 still on the runway, the BHA 100D pilots initiated the Go-around and gave a radio call when the aircraft was around 300 ft AGL and at a distance of around 1.1 nm from the runway.

3.1.5 The Tower Controller did not provide adequate separation between arrival and departure aircraft. When the JZR 1540 entered the runway via taxiway E and backtrack, ATC should maintain a close monitoring on the progress of the BHA 100D approach. Traffic information should be given for all traffic or instruct the BHA 100D to go-around in a timely manner.

3.1.6 Had the JZR aircraft lifted off and climbing away with BHA 100D in the go-around, it could result in a dangerous situation when two aircraft would be in close proximity in the air or even collided at low altitude.

3.1.7 The timely decision of the BHA 100D pilots to call for Go-around and the immediate call from the ATC controller for JZR 1540 to abort take-off prevented a possible disastrous aircraft accident.

3.2 Contributory Factors

3.2.1 Inadequate radio procedures for VFR traffic to report their position on the approach to land.

3.2.2 The time allowance for JZR 1540 to depart and allow BHA 100D to approach and land was insufficient.

3.2.3 Lack of positive air traffic control to maintain separation between departure and arrival aircraft.

3.2.4 Insufficient training or instructions for controllers to address the scenario for loss of separation.

4.0 SAFETY RECOMMENDATIONS

Prompt Safety Recommendations - none

The 'Safety Recommendations' listed in this Report are proposed according to paragraph 6.8 of Annex 13 to the Chicago Convention.

4.1 Nepal ATC should review the necessity to require VFR flights to make more position report or radio calls when established on final to land.

4.2 Nepal ATC should review the procedures to give traffic information and time required for aircraft to depart on RWY 02 as it might take a duration of more than 5 minutes to taxy and completion of the 180 degrees reversal turn and commencement of take-off.

4.3 Nepal should update the contact details of their investigation authority with the ICAO office.

4.4 Nepal ATC to review their training programme for ATC controllers to enhance their awareness in preventing loss of separation.

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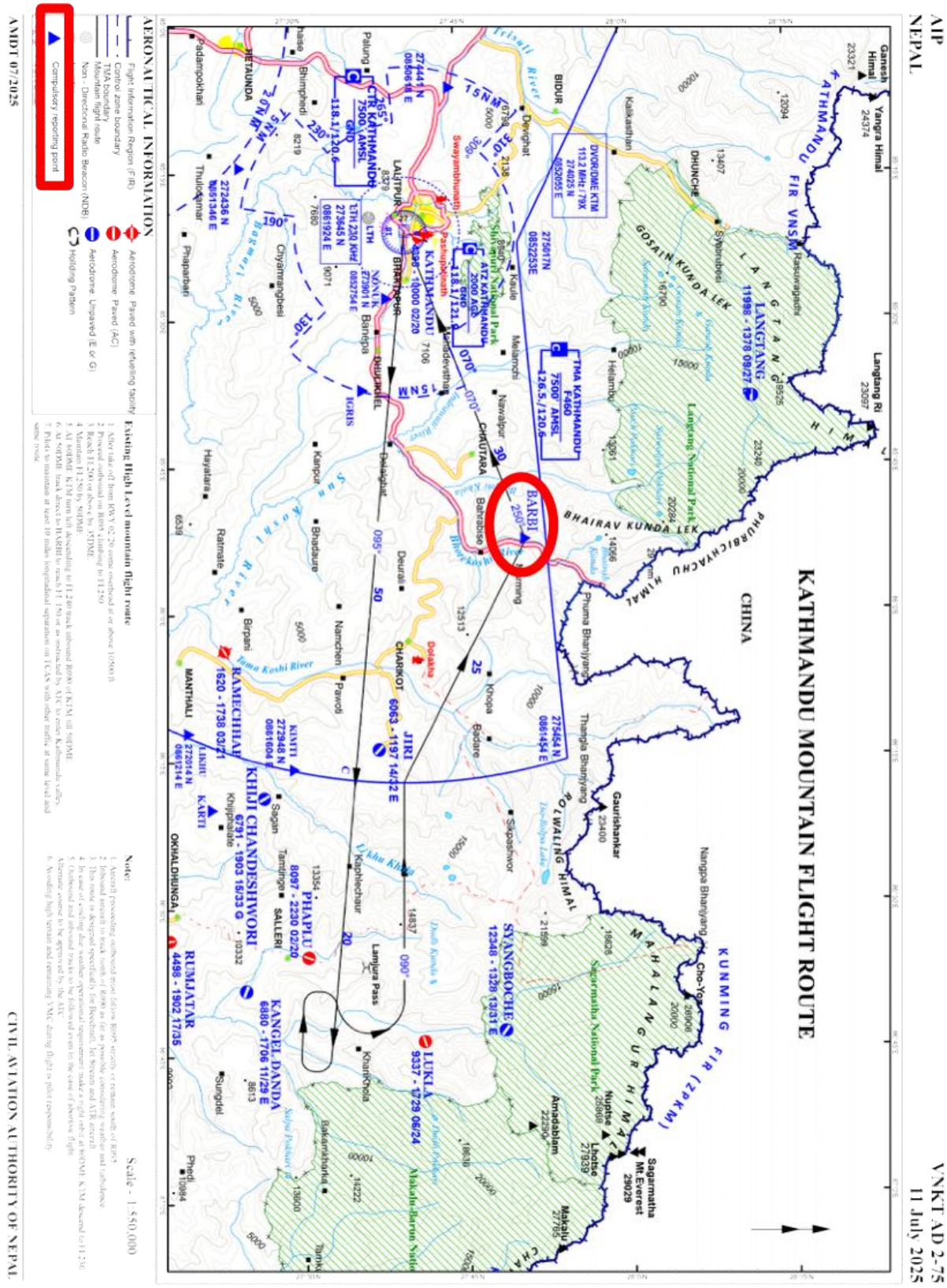
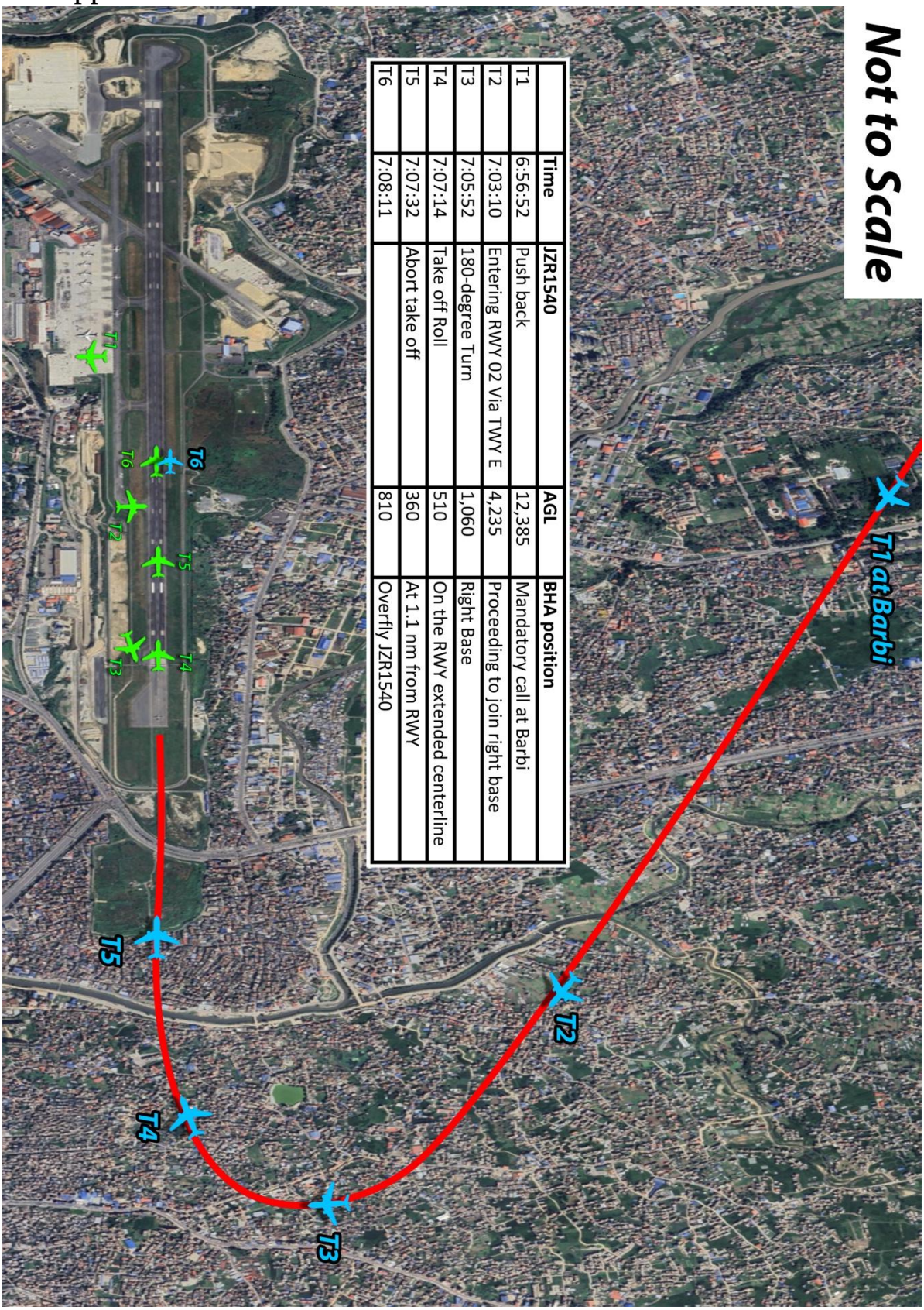
Appendix 1: Kathmandu Mountain Flight Route



Appendix 2: Position of JZR A320 aircraft and BHA ATR 72



	Time	JZR1540	AGL	BHA position
T1	6:56:52	Push back	12,385	Mandatory call at Barbi
T2	7:03:10	Entering RWY 02 Via TWY E	4,235	Proceeding to join right base
T3	7:05:52	180-degree Turn	1,060	Right Base
T4	7:07:14	Take off Roll	510	On the RWY extended centerline
T5	7:07:32	Abort take off	360	At 1.1 nm from RWY
T6	7:08:11		810	Overfly JZR1540