AIRCRAFT SERIOUS INCIDENT INVESTIGATION REPORT

AN ATTEMPTED OF LANDING ON A RUNWAY BEING USED BY OTHER AIRCRAFT KAGOSHIMA AIRPORT AT AROUND 11:25 JST, JUNE 2, 2022

1. INDEPENDENT ADMINISTRATIVE INSTITUTION
CIVIL AVIATION COLLEGE
CIRRUS SR22, JA74MD
2. KAGOSHIMA INTERNATIONAL AVIATION CO., LTD.
AGUSTA A109E (ROTORCRAFT), JA02KG

August 2, 2024
Adopted by the Japan Transport Safety Board

Chairperson TAKEDA Nobuo
Member SHIMAMURA Atsushi
Member MARUI Yuichi
Member SODA Hisako
Member NAKANISHI Miwa
Member TSUDA Hiroka

1. PROCESS AND PROGRESS OF THE AIRCRAFT SERIOUS INCIDENT INVESTIGATION

1.1 Summary of the Serious Incident	On Thursday, June 2, 2022, at Kagoshima Airport, while a Cirrus SR22, JA74MD, operated by Independent Administrative Institution Civil Aviation College, stopped on Taxiway T2 in preparation for take-off following the instruction from an air traffic officer, an Agusta A109E, JA02KG, operated by Kagoshima International Aviation Co., Ltd., attempted to approach and land to the take-off and landing position for helicopters (Helipad) established on the taxiway in order to perform a stop-and-go*1 being cleared by another air traffic controller.
1.2 Outline of the Serious Incident Investigation	This occurrence covered by this report falls under the category of Article 166-4, item (xviii) of the Regulation for Enforcement of Civil Aeronautics Act of Japan (Order of the Ministry of Transport No.56 of 1952), as the case equivalent to "the case equivalent to an attempted landing on a runway being used by other aircraft" as stipulated in item (ii) of same article, and is classified as a serious incident. On June 2, 2022, the Japan Transport Safety Board (JTSB) designated an investigator-in-charge and three other investigators to investigate this

*1 The "stop and go" means that an aircraft stops once on the runway (on the helipad set on the taxiway in this serious incident) and takes off from that position.

	serious incident. An accredited representative and an adviser of the Republic of Italy, as the State of Design of the aircraft involved in the serious incident, and an accredited representative of the United States of America, as the State of Manufacture of the aircraft involved in this serious incident, participated in the investigation. Comments on the draft Final Report were invited from parties relevant to the cause of the serious incident and the Relevant States.

2. FACTUAL INFORMATION

2.1 History of the Flight	According to the statements of the air traffic controller who was in charge of the tower control position (hereinafter referred to as "the Tower"), the air traffic controller in charge of the ground control position (hereinafter referred to as "the Ground"), at Kagoshima Airport air traffic control tower, the flight student of Cirrus SR22, JA74MD (hereinafter referred to as "Aircraft A"), operated by Independent Administrative Institution Civil Aviation College, the instructor pilot in command (PIC) and the flight student of JA02KG, Agusta A109E, JA02KG (hereinafter referred to as "Aircraft B"), operated by Kagoshima International Aviation Co., Ltd., as well as the records of the flight data recorders on Aircraft A and Aircraft B, and Air Traffic Control (ATC) communication record, the history of the serious incident is summarized as follows: (1) From the Start of ATC services by the Tower and the Ground until about 10:50 (JST: UTC+9 hours; unless otherwise noted, all times are indicated in JST in this report on a 24-hour clock) From about 07:00, on June 2, 2022, the Tower and the Ground started the ATC services in the operation room at Kagoshima Radar approach control facility, then at about 09:50, moved to the operation room at Kagoshima Airport traffic control tower (hereinafter referred to as "the Control Tower"), and they started the ATC services, respectively, for the Tower to serve as the coordinator position who liaises and coordinates with relevant organizations, and for the Ground to serve as the ATC clearance delivery position who provides approved flight routes and altitudes to aircraft departing under the instrument flight rules (IFR). At that time, Runway 34 was in use. When checking the traffic situation, the Tower found that several training aircraft were conducting touch-and-go[*2] in between the take-offs and landings of scheduled flights and felt that the workload at the airport traffic control position was increasing, thus, while serving as the coordinator position, the Tower monitored the radio communications at the airport traffic control position so as to enable to support, as necessary.

*2 The "touch-and-go" means that after the touchdown, the aircraft takes off again without stopping or vacating the runway.

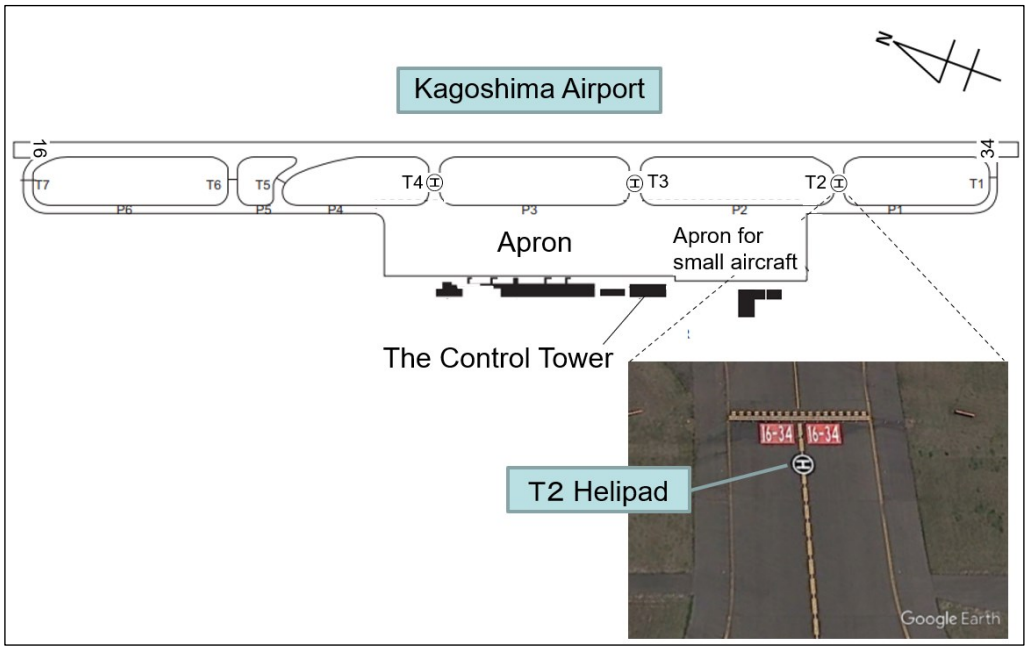

Figure 1: Layout of Kagoshima Airport and Photo of Taxiway T2

At 09:13, Aircraft A took off from Miyazaki Airport for a solo flight training with the flight student in the left pilot seat and was flying under Visual Flight Rules (VFR) toward Kagoshima Airport (hereinafter referred to as "the Airport") after conducting the take-off and landing training in Nagasaki Airport. At about 10:42, Aircraft A requested the TCA position (hereinafter referred to as "the TCA") at Kagoshima Radar approach control facility to be provided the TCA radar advisory service*3 at the point about 70 km northwest of the Airport, and after that, Aircraft A commenced to hold at the visual reporting point *4 at Kamo, (6.8 nm (approximately 10.9 km) west southwest of the Airport) on the advice of the TCA.

Figure 2: Aircraft A

Figure 3: Aircraft B

At 10:32, Aircraft B took off under VFR from the Airport for a flight training, with the PIC in the left pilot seat and the flight student in the right pilot seat. After conducting the flight training in the vicinity of the visual reporting point, "Tsuruta Dam" (16.0 nm (approximately

*3 "TCA radar advisory service" is a service provided by air traffic controllers to VFR aircraft under radar identification in the area as Terminal Control Area in the approach control area with radar vector, its radar position information, advisory of approach sequence and holding, and aircraft traffic information on request basis

*4 Visual reporting points is points used by VFR aircraft entering control zone for their position reporting purposes in order to obtain ATC clearances or instructions for landing and other purposes. These points are established at each airport.

29.6 km) west southwest of the Airport, Aircraft B commenced to fly toward "Kamo" to perform a stop-and-go at the Airport while monitoring radio communications with TCA. However, as several aircraft were flying around "Kamo", the PIC felt the Airport was congested, then waited until the congestion would be relived while conducting the flight training in the vicinity of 25km northwest of the Airport.

(2) From about 10:50 to the landing of Aircraft A

At about 10:50, the Tower and the Ground started the ATC services, respectively, for the Tower at the airport traffic control position, and for the Ground at the ground control position. When looking at the tower situation display*5 on the console, the Tower found that several aircraft were flying around "Kamo" and felt that the traffic volume that had been subdued once was increasing again. While coordinating with the TCA, the Tower took over the radio communication for the training aircraft approaching the control zone via "Kamo".

At about 10:58, the Tower took over the radio communication of Aircraft A which had been holding- at "Kamo" from the TCA. As the Tower had the training aircraft (hereinafter referred to as "Aircraft C") wait on the left downwind leg, thus instructed Aircraft A to continue to hold at "Kamo".

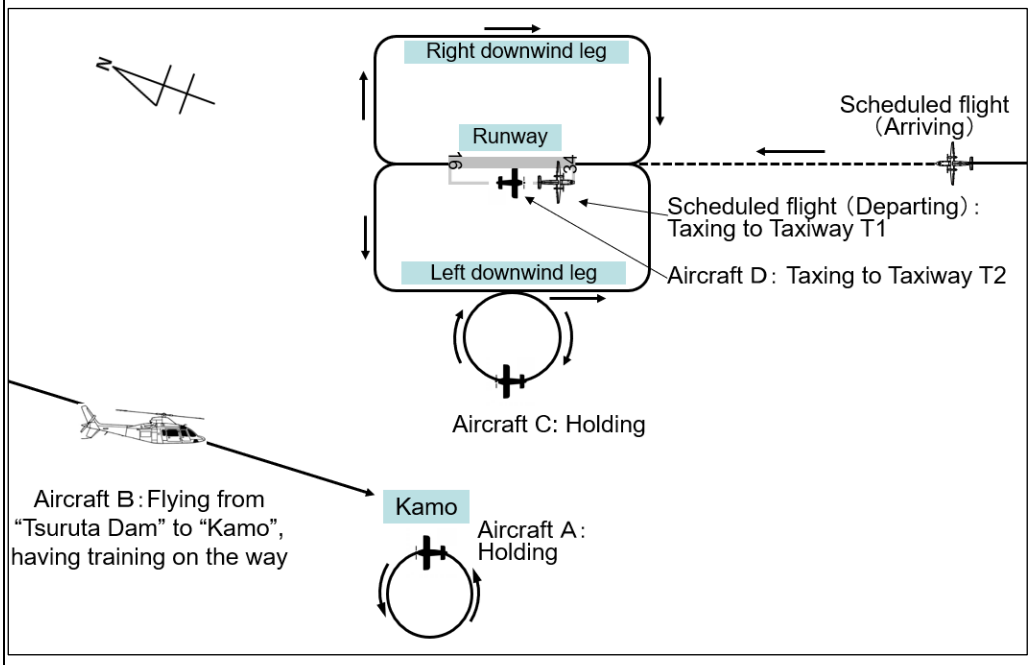

Figure 4: Position of Aircraft Flying around the Airport at about 10:58

On the other hand, after informing to the Tower that the training aircraft (hereinafter referred to as "Aircraft D"), which the Ground had instructed to hold on Taxiway T3 after its landing, would be heading for Taxiway T2 in preparation for take-off again, the Ground instructed Aircraft D to taxi to

*5 The "tower situation display" is a screen that can display radar information used to confirm the position of aircraft flying in the control zone and surrounding areas at an air traffic control tower. It can be used when the position of aircraft flying in the control zone and surrounding area must be confirmed and necessary information must be provided to these aircraft when this can be judged to be necessary for performing ATC services.

	Taxiway T2. The Tower requested the Ground to delay in transferring the radio communication for Aircraft D that was taxiing to Taxiway T2. At the request of the Tower, the Ground did not transfer the radio communication for Aircraft D until after Aircraft D was ready for take-off after it stopped on Taxiway T2. At 11:05, the Tower instructed Aircraft A to fly from "Kamo" to the left downwind leg for Runway 34. After that, Aircraft C conducted a touch-and-go and Aircraft D took off. At 11:08, the Tower instructed Aircraft A that entered the left downwind leg to commence to approach Runway 34. At about 11:10, although there were several aircraft flying around "Kamo", Aircraft B commenced to fly toward "Kamo" to conduct the stop-and-go training, established communication with the TCA, and then was instructed by the TCA to establish communication with the Tower just before "Kamo". At 11:12, as the separation between Aircraft A and its following aircraft was getting shorter, the Tower instructed Aircraft A to go around and enter the right downwind leg, which Aircraft A followed. At 11:15, the Tower instructed Aircraft B, which called the Tower by radio just before "Kamo", to hold at Kamo. At 11:16, the Tower instructed Aircraft A that had executed a go-around to hold on the right downwind leg. At 11:17, the Tower instructed Aircraft B holding at "Kamo" to fly to the left downwind leg. At 11:18, the Tower instructed Aircraft A holding on the right downwind leg while circling to commence to approach for landing. At 11:19, the Tower instructed Aircraft B approaching the left downwind leg to hold on the left downwind leg. At 11:20, the Tower cleared Aircraft A to land on Runway 34. At 11:21, the Tower instructed Aircraft A that had landed to vacate the runway via Taxiway T3 and establish communication with the Ground. (3) After the landing of Aircraft A to the go-around of Aircraft B The Ground visually confirmed that after landing, Aircraft A vacated via Taxiway T3, and informed to the Tower that the Ground would have Aircraft A taxi to Taxiway T2 for its take-off. However, as carrying out radio communication, the Tower did not notice the call, and did not respond to it. At 11:22, Aircraft A requested a taxiing from Taxiway T3 to T2 to the Ground. The Ground instructed Aircraft A to taxi to Taxiway T2. Feeling like the Tower was busy again, the Ground advised the Tower to delay in the transfer the radio communication of Aircraft A as in the same for Aircraft D, however, even at this time, as carrying out radio communication, the Tower did neither notice the call, nor respond to it. At 11:24, the Tower instructed Aircraft B to follow the aircraft approaching Runway 34 around 3 nm (5.4 km) on the final approach course (hereinafter referred to as Aircraft E) and make an approach to T2 Helipad. Before transferring the communication for Aircraft A to the Tower, the

Ground was considering the timing when to inform to the Tower that Aircraft A was taxiing to Taxiway T2. However, while the Ground was unable to inform the information on Aircraft A to the Tower who was occupied in making incessant radio communication and coordination, Aircraft A reached Taxiway T2 and stopped short of the runway-holding position marking with its nose to the left. The Ground was considering the timing to transfer the radio communication for Aircraft A while monitoring the operation of the Tower.

At 11:25, after visually confirming that Aircraft E landed, the Tower cleared Aircraft B flying on the left downwind leg to stop and go at T2 Helipad. At this time, as focusing on planning for other aircraft, the Tower did not request approval of using the Helipad by Aircraft B from the Ground who was managing the Helipad.

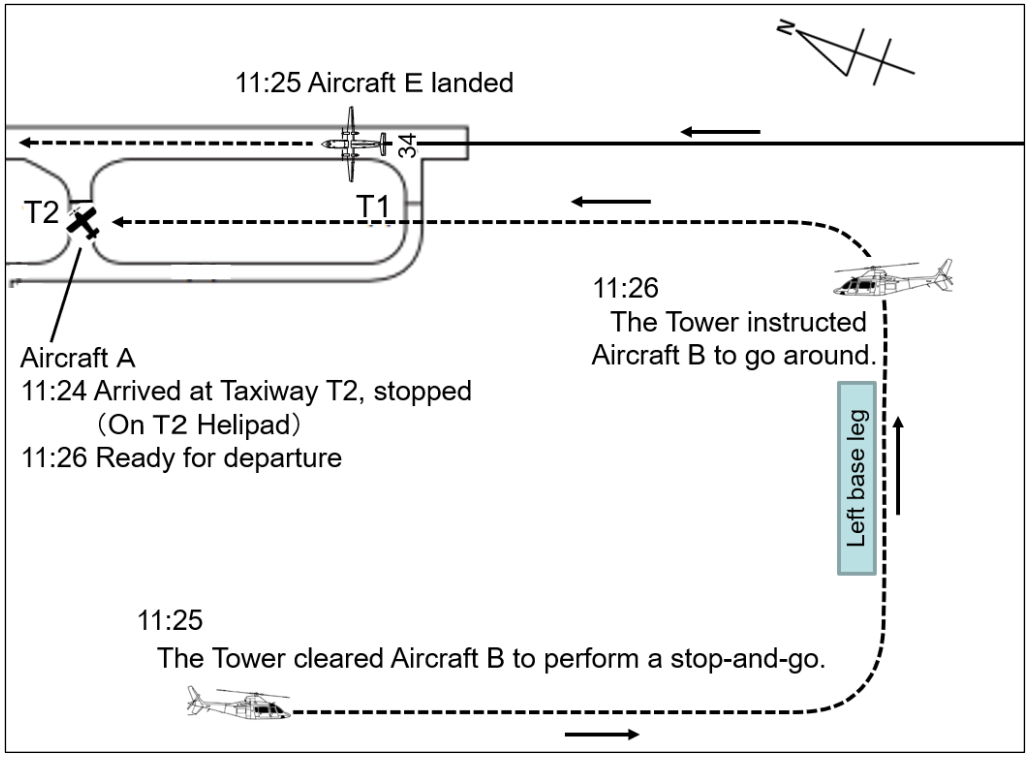

Figure 5: Position among Aircraft
before and after the Occurrence of the Serious Incident

At 11:26, as receiving the report from Aircraft A that stopped on Taxiway T2 that it was ready for the take-off, the Ground instructed Aircraft A to establish communication with the Tower without informing the Tower about the presence of Aircraft A that was a departing aircraft. Upon the report from Aircraft A that it was ready for the take-off, the Tower recognized that Aircraft A was stopped on Taxiway T2. At that time, the PIC and the flight student of Aircraft B, who had listened to the radio communication from Aircraft A and visually confirmed Aircraft A that had stopped on T2 Helipad, had doubts about having been cleared to perform a stop-and-go by the Tower, and thought to check it. Immediately after that, the Tower instructed Aircraft B flying on the left base leg to execute a go-around.

This serious incident occurred around 11:25 on June 2, 2022, on Taxiway

	T2 at Kagoshima Airport (31° 47' 41" N, 130° 43' 26" E).
2.2 Injuries to Persons	None
2.3 Damage to the Aircraft	None
2.4 Personnel Information	(1) Tower: Age 49 Air Traffic Control Certificate October 1, 1994 Aerodrome Control Service October 1, 1994 Medical Examination Certificate Validity: June 30, 2022 (2) Ground: Age 60 Air Traffic Control Certificate October 1, 1983 Aerodrome Control Service November 1, 1985 Medical Examination Certificate Validity: June 30, 2022
2.5 Aircraft Information	(1) Aircraft A Aircraft type: Cirrus SR22 Serial number: 4685 Date of manufacture: August 30, 2018 Airworthiness certificate: Dai-2021-697 Validity date: March 18, 2023 (2) Aircraft B Aircraft type: Agusta A109E Serial number: 11090 Date of manufacture: October 21, 2000 Airworthiness certificate: Dai-2022-104 Validity date: June 17, 2023
2.6 Meteorological Information	The observation data in the aerodrome routine meteorological report at the Airport at around the time of the serious incident were as follows: 11:00 Wind direction: 160°, Wind velocity: 4 kt Wind direction fluctuation 130° to 250° Prevailing visibility: 30 km Clouds: Amount 1/8, Type Cumulus, Cloud base 2,500 ft Temperature: 24°C, Dew point: 15°C Altimeter setting (QNH): 29.81 inHg
2.7 Additional Information	(1) Information on the Airport Established and administered by the government, the Airport, has Runway with a length of 3,000 m and a width of 45 m. It boasts of 80 daily scheduled flights, in addition, in some days, there are over 70 daily take-offs and landings (including training flights for touch-and-go and stop-and-go and others) by small aircraft stationed at the Airport and other small aircraft flying from other airports. The total number of aircraft which took off or landed 30 minutes before the serious incident occurred was 17 (four IFR departure aircraft, four IFR arrival aircraft, three VFR departure aircraft, four VFR arrival aircraft, two aircraft that conducted touch-and-go). Due to the concentration of VFR aircraft operations at the Airport, the runways and surrounding airspace are congested. The concentration of VFR aircraft operations may occur on specific days and times depending on the weather conditions and others. Helicopters use basically the runway for their take-offs and landings,

	however, in case of traffic congestion on the runway, helicopters may use the Helipads set on Taxiway T2, T3 and T4. (2) ATC Services At the time of the occurrence of the serious incident, while taking the turn every one hour, four air traffic controllers were providing the ATC services at the tower control position, the ground control position, the ATC clearance delivery position, and the coordinator position. (3) Operation of the Helipad The Helipad set on the taxiway is under the jurisdiction of the ground control position. Air traffic controllers in charge of the tower control position need prior approval from the air traffic controller in charge of the ground control position when giving a clearance for aircraft to land at the Helipad or perform a stop-and-go. ATC Operation Processing Procedures of the Control Tower stipulates that regarding the use of the Helipad, the tower control position and the ground control position shall coordinate each other, however does not clarify the specific contents about the coordination, thus, they used to make the coordination in such a way that the tower control position shall receive prior approval from the ground control position when giving a clearance for a helicopter to land at the Helipad or perform a stop-and-go, and the ground control position shall relay the information on the departing aircraft, which is cleared to taxi to the Helipad or the taxiway set with the Helipad, to the tower control position. When the ground control position gives an approval to use the Helipad to the tower control position, the ground control position is supposed to use the "Helipad in use" reminder, however, at the time of the occurrence of the serious incident, as there was no coordination between the Tower and the Ground regarding the use of the Helipad, the reminder was not used.

3. ANALYSIS

(1) Situation at the Time of Issuing Stop-and-go Clearance

The JTSB concludes that the Tower certainly issued a clearance to perform a stop-and-go at the Helipad to Aircraft B despite Aircraft A that stopped on the taxiway set with the Helipad. It is most likely that the Tower cleared Aircraft B to perform a stop-and-go at the Helipad was because the Tower did not visually confirm enough whether there would be any aircraft and others that could be an obstacle to a stop-and-go by Aircraft B on the Helipad and the surrounding area, and did not recognize the presence of Aircraft A.

When the air traffic controller in charge of the tower control position issues a clearance for landing or stop-and-go and others, it is the basic actions to visually confirm enough whether there would be any aircraft and others that could be obstructions in the vicinity, which should be ensured.

(2) How to deliver Information among the Control Positions

The JTSB concludes as follows:

The ATC Operation Processing Procedures of the Control Tower stipulated that regarding the use of the Helipad, the tower control position and the ground control position shall coordinate each other, however, did not clarify the specific contents about the coordination. Usually, when the tower control position requests prior approval from the ground control position when giving a clearance for a helicopter to land at the Helipad or perform a stop-and-go, which would allow the ground

control position to recognize the presence of the helicopter, which would land or perform a stop-and-go, besides, the tower control position would be able to know the situation of the Helipad usage through acceptance or rejection from the ground control position. In addition, the ground control position used to deliver the information on the departing aircraft, which was cleared to taxi to the Helipad or the taxiway set with the Helipad, to the tower control position, and then transferred the radio communication.

In this serious incident, the Tower did not request an approval from the Ground regarding giving Aircraft B a clearance to perform a stop-and-go at the Helipad was probably because at this time, the Tower was focusing on planning for other aircraft, and forgot it. The Tower did not request prior approval from the Ground regarding the giving Aircraft B a clearance to perform a stop-and-go at the Helipad, which probably caused the Tower to miss the opportunity to recognize the presence of Aircraft A, which also more likely contributed to the Tower giving Aircraft B a clearance to perform a stop-and-go at the Helipad without recognizing the presence of Aircraft A. And because of this, it is most likely that the Ground did not recognize the presence of Aircraft B.

About 30 minutes before the serious incident occurred, when Aircraft D was taxiing for the take-off, the Tower requested the Ground to delay in transferring the radio communication. When instructing Aircraft A that landed to taxi to Taxiway T2, the Ground thought that that it would reduce the workload of the Tower, as in the same with Aircraft D, and advised the Tower to delay in transferring radio communication for Aircraft A also, in addition to the taxiing related information. At this time, the reason that the Tower in the middle of a communication with aircraft did not respond to the advice from the Ground was probably because the words of the Ground did not get through to the Tower. Although the Ground well recognized the necessity to relay the information on Aircraft A and advise the Tower to delay in the transition of radio communication, as not recognizing the presence of Aircraft B, the Ground was probably considering the timing when to inform them to the Tower again while providing ATC instructions to aircraft the Ground was in charge of. While unable to inform the information on Aircraft A to the Tower who was occupied in making incessant radio communication and coordination, the Ground did not transfer the radio communication to the Tower until receiving the report from Aircraft A that stopped on the taxiway that it was ready for the take-off.

In the Control Tower, the information about the departing aircraft taxiing to the Helipad or the taxiway where the Helipad is established is relayed in advance from the ground control position to the tower control position. However, the information on Aircraft A was not relayed to the Tower, and the Ground did not transfer the radio communication for Aircraft A to the Tower until receiving the report from Aircraft A that stopped on the taxiway that it was ready for the take-off, which probably contributed to the Tower failing to recognize the presence of Aircraft A.

It is required for the tower control position and the ground control position to ensure to relay the information and make coordination regarding aircraft and others that use the taxiways and the Helipad regardless of the status of their ATC services. In addition, the tower control position issues not only take-off clearances but hold short of runway instruction and provides traffic information to the departing aircraft on the taxiway, therefore, the radio communication for the departing aircraft should be transferred from the ground control position to the tower control position as they approach the runway.

(3) Workload of the Tower

The JTSB concludes as follows:

On the runway at the Airport, during approximately 30 minutes before the serious incident

occurred, 17 aircraft were taking off, landing, or conducting touch-and-goes. In addition, in the airspace around the airport, several VFR aircraft were holding and waiting for the landing sequence and, therefore, regarding the flying method of those VFR aircraft, the Tower was confirming the radar screen display and coordinating with the TCA between radio communications with aircraft. Therefore, at the time of the serious incident, the Tower was handling several VFR aircraft and was probably under a heavy workload.

As described in (2), with regard to giving Aircraft B a stop-and-go clearance on the Helipad, the Tower did not sufficiently visually confirm obstacles and others on the Helipad and did not request a clearance from the Ground, possibly due to the Tower's heavy workload as a result of a temporary increase in traffic.

The reason why the Ground did not transfer the radio communication for Aircraft A to the Tower until the Ground received the report from Aircraft A, which stopped on the taxiway, that it was ready for take-off, was most likely because the Ground considered the heavy workload of the Tower. However, the radio communication for the departing aircraft should be transferred from the ground control position to the tower control position as it approaches the runway, so it is necessary to consider the method of transferring communication from the Ground to the Tower under a heavy workload.

(4) Operations for the Helipad and Taxiway Set with the Helipad

At the Airport, the Helipad for which the tower control position issues take-off and landing clearances is located on the taxiway under the jurisdiction of the ground control position, therefore it is more likely that there is a risk that the tower control position and the ground control position may issue the ATC instruction or clearance for the use of the same area at the same time. It is necessary for the Control Tower to ensure the safety of helicopters landing or performing stop-and-go on the Helipad and aircraft on the taxiway by establishing the specific procedures for approval and permission, with regard to the method of operation and use of the Helipad and taxiway set with the Helipad as countermeasures to reduce risk.

(5) Aircraft A and Aircraft B at the time of the Serious Incident

At the time of the serious incident, Aircraft A, which was stopped just short of the runway-holding position marking on Taxiway T2, was turning its nose to the left, and unlike Aircraft B, listening to the ground control frequency. It is therefore likely that Aircraft A did not realize that Aircraft B had been cleared for a stop-and-go and was approaching the T2 Helipad.

In addition, Aircraft B, having been cleared to perform a stop-and-go at the Helipad, listened to Aircraft A's radio communication as it approached around the left base leg and visually confirmed that Aircraft A had stopped on the taxiway; therefore, Aircraft B was in doubt as to a stop-and-go clearance it had been given from the Tower and thought to check, but immediately thereafter received a go-around instruction. Based on these considerations, Aircraft B was probably able to execute a go-around in time.

(6) Classification of Severity

The JTSB concludes that the distance between Aircraft A and Aircraft B was most likely approximately 1,420 m, when Aircraft B was instructed by the Tower to go around.

The serious incident certainly falls under the severity classification of Category C (An incident characterized by ample time and/or distance to avoid a collision) of the “Manual on the Prevention of Runway Incursions" of ICAO with classification tools provided by ICAO. (See Attachment “Severity Classifications of Runway Incursions”).

4. PROBABLE CAUSES

The JTSB concludes that the probable cause of this serious incident was certainly that the Tower issued a clearance to perform a stop-and-go at the Helipad to Aircraft B, despite the presence of Aircraft A, which was stopped on the taxiway set with the Helipad.

It is highly probable that the reason why the Tower cleared Aircraft B to perform a stop-and-go at the helipad was because the Tower had not sufficiently visually confirmed that there were no aircraft and others there that could obstruct a stop-and-go by Aircraft B, and had not recognized the presence of Aircraft A.

The failure of the Tower to recognize the presence of Aircraft A was probably due to the fact that the Tower missed the opportunity to recognize the presence of Aircraft A because the Tower did not request prior approval from the Ground responsible for managing the Helipad and because the Ground did not transfer the radio communication for Aircraft A to the Tower.

It is possible that a background factor in these incidents was the heavy workload on the Tower due to a temporary increase in traffic.

5. SAFETY ACTIONS

5.1 Safety Actions Required	As described in "3. ANALYSIS", when the air traffic controller in charge of the tower control position issues a clearance for landing or stop-and-go and others, it is the basic actions to ensure sufficient visual confirmation that there would be aircraft and other obstructions in the vicinity. In addition, it is necessary for the control tower to ensure the safety of helicopters landing or performing stop-and-go on the Helipad and aircraft on the taxiway by establishing the specific procedures for approval and permission with regard to the method of operation and use of the Helipad and taxiway set with the Helipad as countermeasures to reduce risk.
5.2 Safety Actions Taken after the Serious Incident	(1) Safety actions taken by the Civil Aviation Bureau of the Ministry of Land, Infrastructures, Transport and Tourism The following actions to be taken have been notified to air traffic control facilities nationwide. 1 Review and stipulate the effectiveness of reminders to properly monitor the operation and use of the runway and the Helipad. 2 Specify the scope of responsibility for the runway and the Helipad and the procedures for coordinating among the relevant control positions to permit aircraft and others to enter the runway and the Helipad. 3 Stipulate that the relevant control positions should check proactively, among other things, if there are any doubts about reminders or coordination procedures. (2) Safety actions taken by Kagoshima Airport Office, Osaka Regional Civil Aviation Bureau of the Ministry of Land, Infrastructures, Transport and Tourism 1 Disseminated the occurrence of the serious incident to all air traffic controllers to draw their attention to ensuring that proper ATC services (Visual confirmation at the time of issuing ATC clearances and instructions, and others) shall be provided.

	2 Organized the system to support the work of the tower control position through continuous assertions and double checks performed by other control positions during operation hours. Provided assertion training to all air traffic controllers to help them recognize the importance and effectiveness of assertion, particularly during busy periods. 3 It was decided to specify in the ATC Operation Processing Procedures that the Helipad shall in principal only be used for take-offs, and that when the Helipad is used for landings or stop-and-go trainings, the tower control position and the ground control position shall ensure sufficient coordination, the tower control position must obtain clearance from the ground control position and, after obtaining clearance, use reminders to avoid overlapping use of the taxiway and the Helipads due to forgotten coordination. 4 When an aircraft requests an intersection departure*6 for take-off, the ground control position shall instruct the aircraft to taxi after obtaining the consent of the tower control position. It was decided to specify in the ATC Operation Processing Procedures in case that the consent cannot be obtained due to congestions and other reasons, the ground control position shall not clear the aircraft for the intersection departure but shall instruct the aircraft to taxi to the taxiway located at the runway threshold in order to prevent aircraft not recognized by the tower control position from traveling to the taxiway established the Helipad and overlapping the use of the taxiway and the Helipad.

*6 "Intersection departure" refers to a method of take-off in which aircraft start a take-off rolling from a point other than the end of a runway (where the runway meets a taxiway).

Attachment

Severity Classifications of Runway Incursions

Severity classifications described in ICAO the "Manual on the Prevention of Runway Incursions" (Doc 9870) are as described in the table below

Table 6-1 Severity classification scheme

Severity classification	*Description*** 1
A	*A serious incident in which a collision is narrowly avoided.*
B	*An incident in which separation decreases and there is significant potential for collision, which may result in a time-critical corrective/evasive response to avoid a collision.*
*C***2	*An incident characterized by ample time and/or distance to avoid a collision.*
D	*An incident that meets the definition of runway incursion such as the incorrect presence of a single vehicle, person or aircraft on the protected area of a surface designated for the landing and take-off of aircraft but with no immediate safety consequences.*
E	*Insufficient information or inconclusive or conflicting evidence precludes a severity assessment.*

**1 See the definition of "incident" of Annex 13.

**2 Shaded to show the pertinent classification of the serious incident