AIRCRAFT SERIOUS INCIDENT INVESTIGATION REPORT

DEVIATION FROM A RUNWAY (LIMITED TO WHEN AN AIRCRAFT IS DISABLED TO PERFORM TAXIING)

HONDA AIRWAYS CO., LTD.

HONDA AIRCRAFT HA-420, JA924H

OITA AIRPORT, OITA PREFECTURE, JAPAN

AT ABOUT 14:11, JANUARY 28, 2024

July 31, 2025
Adopted by the Japan Transport Safety Board
Chairperson RINOIE Kenichi
Member TAKANO Shigeru
Member MARUI Yuichi
Member SODA Hisako
Member TSUDA Hiroka
Member MATSUI Yuko

1. PROCESS AND PROGRESS OF THE AIRCRAFT SERIOUS INCIDENT INVESTIGATION

1.1 Summary of the serious incident	On Sunday, January 28, 2024, a Honda Aircraft HA-420, JA924H, operated by Honda Airways Co., Ltd., deviated from the runway to the left side of Runway 01 at Oita Airport when landing, and stopped after entering the green area and was disabled to perform taxing. There were three people on board in total, consisting of a captain, a trainee, and an observer, but no one was injured.
1.2 Outline of the serious incident investigation	The occurrence covered by this report falls under the category of "deviation from a runway (limited to when an aircraft is disabled to perform taxiing)" as stipulated in Article 166-4, item (iv) of the Regulation for Enforcement of the Civil Aeronautics Act of Japan (Order of the Ministry of Transport No. 56, 1952) and is classified as a serious incident. On January 28, 2024, the Japan Transport Safety Board (JTSB) designated an investigator-in-charge and an investigator to investigate this serious incident. An accredited representative and an adviser of the United States of America, as the State of Design and Manufacture of the aircraft involved in this serious incident, participated in the investigation.

	Comments on the draft Final Report were invited from the parties relevant to the cause of the serious incident and the Relevant State.

2. FACTUAL INFORMATION

2.1 History of the Flight

According to the statements of the captain, the trainee, and the observer, who had been the instructor when the captain had received the type rating training on the Honda Aircraft HA-420 and was also the instructor of the trainee, as well as the records of the CVFDR (Cockpit Voice and Flight Data Recorder: an integrated recording device that functions as both a flight recorder and a cockpit voice recorder) and the CMF (Central Maintenance Function: a function that records maintenance data), the history of the flight was summarized as below.

Figure 1: The Aircraft

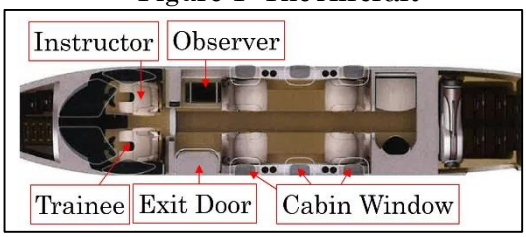

Figure 2: Seating Position

On January 28, 2024, a Honda Aircraft HA-420, JA924H, operated by Honda Airways Co., Ltd., took off from Oita Airport at 12:21 Japan Standard Time (JST: UTC+9hr, unless otherwise stated all times are indicated in JST on a 24-hour clock), piloted by the trainee for the training in preparation for a practical test for type rating change. The captain was in the right seat as an instructor, the trainee was in the left seat, and an observer, who was a pilot from another company, who had been in charge of the company's type rating training, was seated in a left-facing seat in the 0bserver cabin behind the cockpit (see Figure 2).

After the landing on Runway 01 with an instrument approach, the aircraft performed continuous touch-and-go training on the runway. Afterward, the aircraft flew on the right traffic pattern and then was cleared to land receiving the wind information of the wind direction of 330° and wind velocity of 11 kt from the tower control position at airport traffic control tower of Oita Airport at 14:08:12. The aircraft flew on the final leg with a crosswind from the left. The observer told the trainee, “Let's go straight,” as the aircraft's landing roll tended to meander during the continuous touch-and-go training.

At 14:10:48, the sound of the aircraft touching down was recorded on the CVFDR. Immediately after the touchdown, the trainee applied the right rudder pedal because the aircraft’s heading changed to the left when the trainee moved the control wheel to the left as feeling the left wing raised. Although the captain recognized that the aircraft's heading was changed to

the left, the captain monitored the situation as judging that the trainee's correction would be possible. The changes to the left and right in the roll angle and the sideslip angle were continuously recorded on the CVFDR. Afterward, the trainee deployed the speedbrakes installed on the aircraft's tail when judging the aircraft was beginning to run almost parallel to the runway center line. The speedbrake deployment was recorded on the CVFDR at 14:10:56 just after the observer's voice saying, "Go straight, go straight," when sensing the aircraft meandering began to be recorded on the CVFDR (see Figure 4, Figure 6 ①.).

Figure 3: Oita Airport

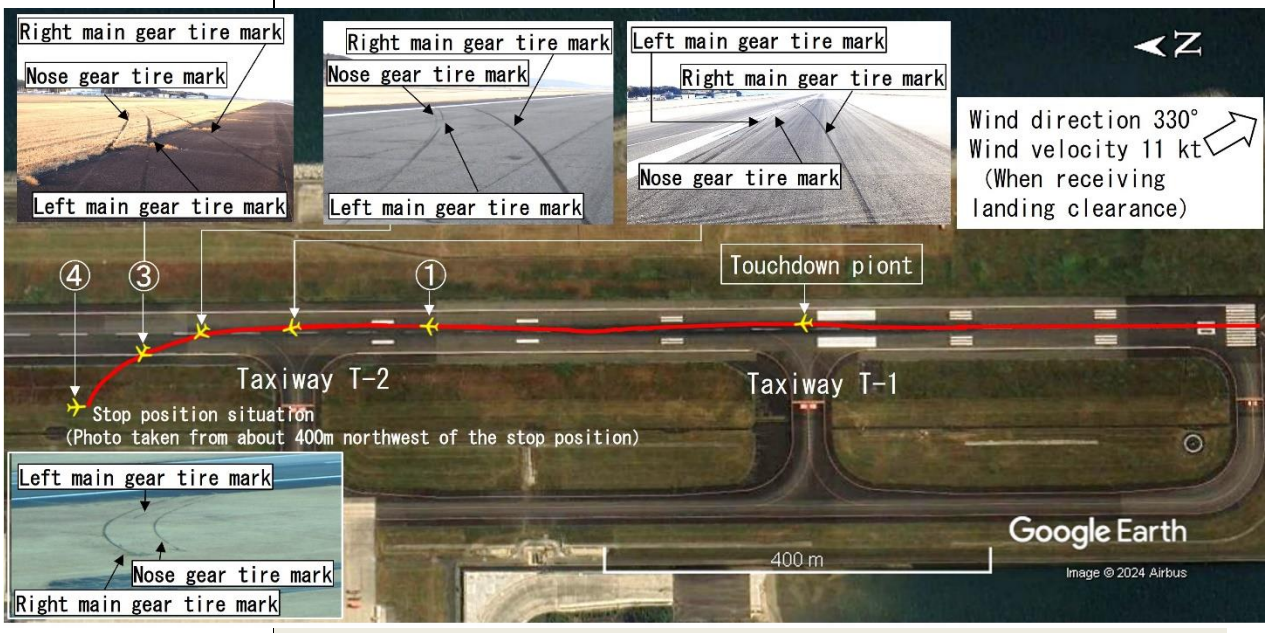

Figure 4 Estimated landing roll track

Immediately after operating the speed brake switch, the trainee realized that the aircraft's heading was changing to the left and attempted

	to apply the right rudder pedal to correct the aircraft's heading. The CVFDR recorded that the aircraft heading, which had been 012.3° at 14:10:57, changed to 010.5° at 14:10:58. The captain had judged that the trainee's correction of the aircraft's travel direction was possible because the trainee was able to control the aircraft' travel direction even when the aircraft was running on the ground in a slightly meandering manner during the continuous touch-and-go training. Meanwhile, the CVFDR recorded the observer's voice saying, " You may not bring it back to the center, you don't need to bring it back, do not bring it back, do not bring it back." when the observer recognized the aircraft's travel direction changing to the left between 14:10:57 and 14:11:03 (see Figure 6 ②.).

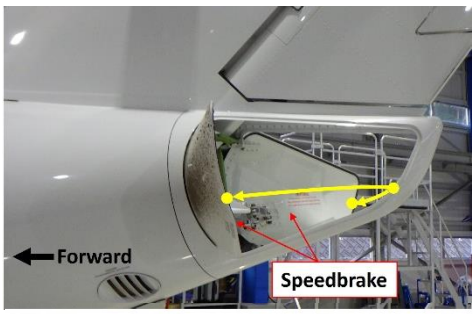

Figure 5: Speedbrake when deployed

The trainee hesitated to apply the right rudder pedal when hearing the observer's voice saying, “Do not bring it back.” Meanwhile, the deviation of the aircraft to the left became severe, the trainee felt that the aircraft was skidding, and that the trainee was unable to control the aircraft's travel direction even when the trainee applied the right rudder pedal. The captain slightly applied the right rudder pedal when the aircraft widely deviated to the left. In addition, the captain and trainee did not apply the brakes because of the high speed of the aircraft.

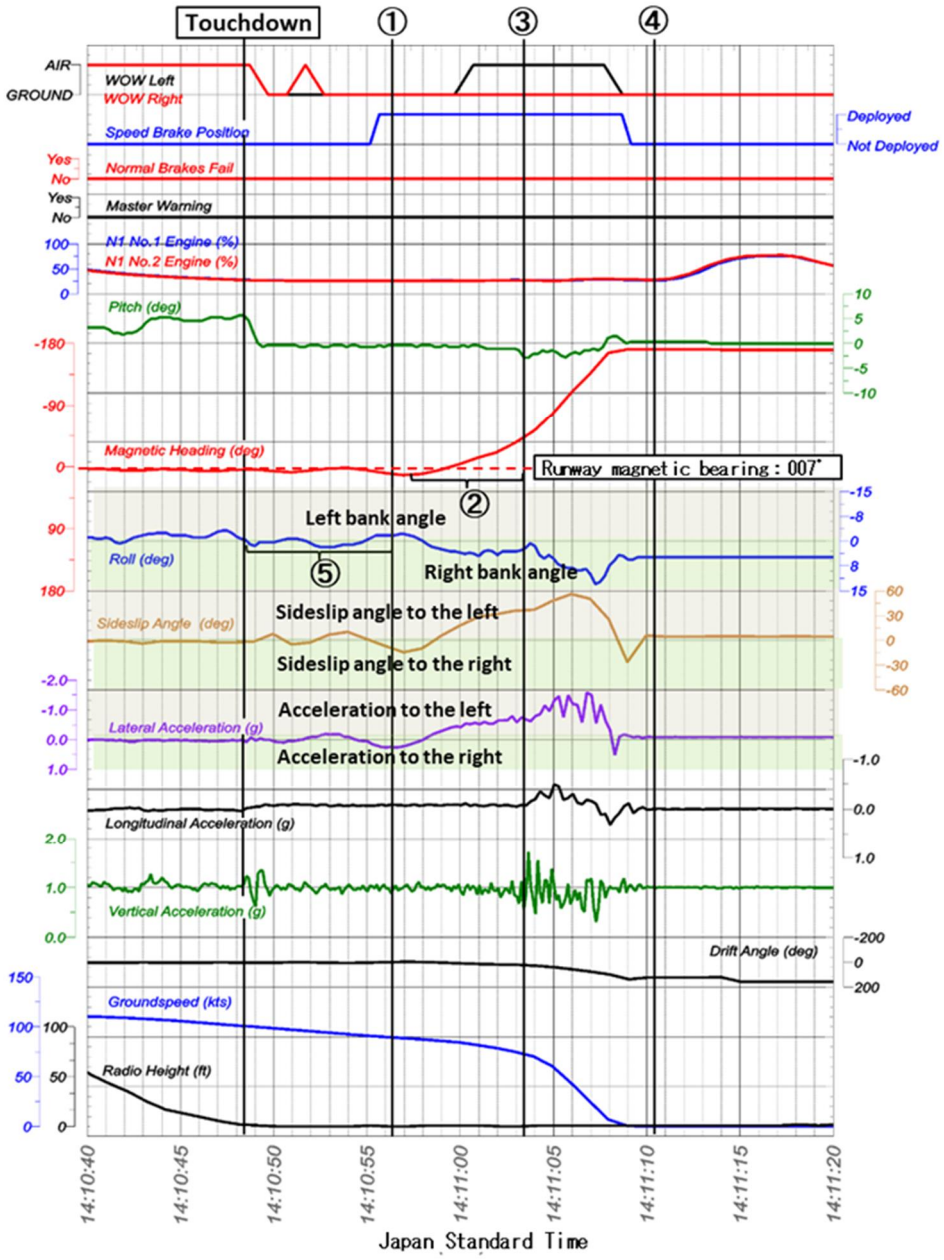

Figure 6 Records of CVFDR and CMF

(Note) WOW*1 used CMF records.

*1 “WOW” stands for Weight On Wheel, which refers to the data indicating whether the airplane is on the ground or in the air by signals from a sensor that works if loads are put on the nose landing gear and the main landing gear. For the aircraft, the WOW of the main landing gear is recorded in the CMF, but the WOW of the nose landing gear is not recorded.

	At 14:11:03, an impact sounds were recorded on the CVFDR as well as a substantial change in amplitude of the vertical acceleration. The aircraft deviated from the runway to the left (see Figure 4, Figure 6 ③), and stopped when its nose heading changed approximately 180° counterclockwise (see Figure 4, Figure 6 ④) after entering the green area and was disabled to perform taxiing. The captain explained the situation to the tower control position at airport traffic control tower of Oita Airport and disembarked with two other people. The aircraft was slightly damaged, but no one was injured. This serious incident occurred at Oita Airport (33º 28' 38" N, 131º 44' 10" E) on January 28, 2024, at about 14:11.
2.2 Injuries to Persons	None
2.3 Damage to the Aircraft	Minor damage (1) Right main landing gear door broken (2) Right wing lower forward fairing bent
2.4 Personnel Information	(1) Captain: Age 52 Commercial Pilot Certificate (Aeroplane) March 21, 2000 Pilot Competency Assessment/Confirmation Expiration Date of Piloting Capable Period: November 14, 2025 Type rating for Honda Aircraft HA-420 November 14, 2023 Flight Instructor Rating (Aeroplane) September 13, 2006 Instrument Rating (Aeroplane) November 15, 2000 Class 1 Aviation Medical Certificate Validity: December 30, 2024 Total flight time 9,544 hours 25 minutes Flight time in the last 30 days 8 hours 44 minutes Flight time on the type of aircraft 72 hours 26 minutes Flight time in the last 30 days 2 hours 02 minutes (2) Trainee: Age 66 Airline Transport Pilot Certificate (Aeroplane) March 6, 2006 Pilot Competence Assessment/Confirmation Expiration Date of Piloting Capable Period: November 14, 2025 Type rating for Boeing 767 October 21, 2004 Class 1 Aviation Medical Certificate Validity: January 13, 2025 Total flight time 14,799 hours 26 minutes Flight time in the last 30 days 8 hours 23 minutes Flight time on the type of aircraft 88 hours 13 minutes Flight time in the last 30 days 8 hours 23 minutes (3) Observer: Age 60 Commercial Pilot Certificate (Aeroplane) January 26, 1985 Pilot Competence Assessment/Confirmation Expiration Date of Piloting Capable Period: October 19, 2025

	Type rating for Honda Aircraft HA-420 October 18, 2019 Instrument Rating (Aeroplane) June 15, 2021 Class 1 Aviation Medical Certificate Validity: May 14, 2024 Total flight time 7,506 hours 39 minutes Flight time in the last 30 days 2 hours 24 minutes Flight time on the type of aircraft 584 hours 10 minutes Flight time in the last 30 days 2 hours 24 minutes
2.5 Aircraft Information	(1) Aircraft type: Honda Aircraft HA-420 Serial number: 42000196 Date of manufacture: November 12, 2020 Certificate of airworthiness: No. Dai-2023-617 Validity: January 23, 2025 Category of airworthiness: Airplane Normal N Total flight time: 265 hours 55 minutes (2) When the serious incident occurred, the aircraft's weight was estimated to have been 9,241 lb and the center of gravity was estimated to have been 27.8% MAC*2, both of which were estimated to have been within the allowable range.
2.6 Meteorological Information	(1) Periodic Aeronautical Weather Observation Reports for the airport around the time of the serious incident were as follows: 14:00 Wind direction: 340°, Wind velocity:12 kt, Wind Direction: Variable 300° to 020°, Prevailing visibility :10 km or more Current weather: showers of rain around the airport Cloud: Amount 1/8, Type Cumulus, Cloud base 2,000 ft Amount 4/8, Type Cumulus, Cloud base 3,000 ft Temperature:9°C, Dew point:2°C Altimeter setting (QNH): 30.22 inHg (2) The six-second average values measured by the anemometer installed near the approach end of Runway 01 at the airport around the time of the serious incident were as follows: (Wind direction: true bearing, Runway 01 true bearing: 360°) Table 1: Wind direction and velocity during the period related to the serious incident

Observation Time	Wind Direction (°)	Wind Velocity (kt)	Crosswind Component (kt)
14:10:30	296	10	9.0
14:10:36	306	7	5.7
14:10:42	313	10	7.3
14:10:48	328	8	4.2
14:10:54	327	10	5.4
14:11:00	324	11	6.5

* 2 "MAC" is a chord representing the aerodynamic characteristics of a wing and given by a mean value if the chord is not constant as in the case of a sweptback wing. 27.8% MAC indicates a position located at 27.8% distance from the leading edge of the mean aerodynamic chord.

		14:11:06	319	8	5.2
		14:11:12	319	8	5.2

2.7 Additional Information

(1) Conditions at the Serious Incident Site

Oita Airport is located at an elevation of 17 ft and has a single runway at 01/19 (360°/180° (true bearing)), which is 3,000 m long and 45 m wide. According to the airport's cross-sectional survey location map prepared in March 2023, the crossing slope from the runway centerline marking near Taxiway T-2 to the western runway edge marking is approximately -1.3%, and the crossing slope from the runway centerline marking near Taxiway T-2 to the point where the aircraft deviated from the runway to the western runway edge marking is approximately -1.2%.

During the on-site investigation, the tire marks of the Aircraft could be found from a point about 950 m from the threshold of Runway 01, and the tire marks indicating a continuous deviation to the left were confirmed from a point about 1,030 m from the runway threshold. After that, the tire marks of the nose landing gear approached the tire marks of the left main landing gear, and after the two tire marks intersected at a point about 1,090 m from the runway threshold, the tire marks of the nose landing gear remained to the left of the tire marks of the left main landing gear.

The aircraft deviated from the runway to the left at a point approximately 1,160 m from the runway threshold, rotated its nose counterclockwise, and came to a stop approximately 1,230 m from the runway threshold and approximately 83 m to the left of the runway centerline while facing a heading of approximately 188°.

(2) Information regarding CVFDR

The aircraft was equipped with a CVFDR at the rear of the fuselage, capable of recording approximately 25 hours of flight data and approximately two hours of cockpit voice data, both of which were recorded at the time of the serious incident.

The aircraft was not required to be equipped with a flight data recorder and cockpit voice recorder by the Civil Aviation Act, and the aircraft's CVFDR flight records only recorded parameters specified by the manufacturer.

(3) Operation Check of Related Systems

There were no failures found during the operation check on the aircraft's brakes, rudder, nosewheel steering, and speedbrakes. In addition, there were no records of malfunction of the steering system when checking the records of the steering computer installed on the aircraft.

Besides, during the flight inspections conducted for airworthiness inspection on January 16 and January 24, 2024, it was confirmed that the CVFDR had recorded the phenomenon where the aircraft banked to the left when the speed brakes were deployed in flight, and in both cases, the bank angle was within allowable limits.

According to the design and manufacturer, no yawing or banking during ground roll due to speed brake deployment has been reported during test flights of the Honda Aircraft HA-420.

(4) Nosewheel Steering

The nosewheel steering of the aircraft is electrically controlled and hydraulically operated by the rudder pedals mounted on the floor in front of both pilot seats.

The nosewheel steering will not respond to the rudder pedal operation for about two seconds after the WOW of the nose landing gear changes to the Ground Mode. In addition, as for the operation angle for the nosewheel steering, the maximum operation angle is changed in correspondence with the ground speed of the aircraft. Although the design/manufacturer has been providing a steering control system to improve ground maneuverability and response capability for a crosswind on request of users since April 1, 2022, the aircraft was not equipped with the system.

Furthermore, the operation angle for the nosewheel steering is recorded neither on the CVFDR nor on the CMF.

(5) Procedures upon Landing

There are the following descriptions in "NORMAL PROCEDURES, LANDING" of the aircraft's Airplane Flight Manual (AFM):

LANDING

1.Thrust Levers.....IDLE

2.Brakes.....Apply (after touchdown)

NOTE Establish directional control using rudder and then apply brakes symmetrically during the initial part of landing rollout.

3.SPEEDBRAKE (if installed).....EXT

Besides, according to the AFM, if maximum braking force was applied immediately after touchdown and maintained the maximum braking force until the aircraft came to a complete stop, the aircraft would be able to exit from the runway via Taxiway T-2, given the landing weight at the time of this serious incident. On the other hand, the captain and the trainee stated that when landing on Runway 01 with the Honda Aircraft HA-420, they would exit from the runway via Taxiway T-4 or T-5 because the company's Apron is located near Taxiway T-4 (see Figure 3).

(6) Landing in Crosswinds

There are the following descriptions in "TAKEOFF AND LANDING" of the aircraft's AFM, LIMITATIONS.

Crosswind.....20knots

In addition, regarding landing in crosswinds, there is the following description in AFM, CROSSWIND LANDING: (Excerpt)

Upwind aileron should be applied immediately after touchdown to ensure the upwind landing gear remains firmly in contact with the surface. Directional control should be maintained by applying rudder to track the center line. Apply

slight forward pressure on the yoke to ensure nosewheel contact with the runway. Symmetrical braking and speedbrake (if installed) should be applied as required to decelerate.

(7) Training at the time of the Serious Incident

The practical examination that the trainee was scheduled to take was based on the Pilot Practical Examination Implementation Standards (KUU-JOU No. 2038), and there are the following descriptions in the standards. (Excerpt)

Chapter 1 GENERAL PROVISIONS

1-1 An examiner of airmen licensing (hereinafter referred to as "examiner") must, when conducting a practical examination under the provisions of Article 29 Paragraph 1 of the Aviation Act (including as applied mutatis mutandis to Article 29-2 or Article 34, paragraph (3) of the Civil Aeronautics Act), comply with these standards.

However, that the same does not apply in cases where, due to unavoidable circumstances, it is difficult to comply with these standards, and approval is obtained from the Director, Flight Standards Division, Civil Aviation Bureau (CAB).

(Omitted)

1-5 When conducting the practical examination, a person with the relevant examination qualification or higher (however, in case of obtaining an airman competence certificate for the first time, a flight instructor) will train an applicant to take the examination in advance and confirm whether the applicant has the competence to meet the required level.

1-5-1 The practical examination shall be attended by the person who had ever proved the examinee's competence.

According to the company's training plan, the trainee was scheduled to take the practical examination for the type rating in early November 2023. However, due to delays in the training of other pilots, it was changed that the trainee was scheduled to take their practical examination in mid-January 2024.

Since there was no pilot with the type rating of the Honda Aircraft HA-420 and airline transport pilot certificate in the company, the company attempted to ask the outside pilot who had an airline transport pilot certificate to prove the competence of the trainee, who had an airline transport pilot certificate, and attend the trainee's practical examination in order to meet the above mentioned standards 1-5 and 1-5-1, which, however, had not been realized yet.

Judging that, because there had been cases in which the proviso in 1-1 above had been applied to other companies, the same proviso could also apply to the trainee's practical examination, the company decided that the

captain would conduct the competence certification of the trainee, be present during the trainee's practical examination and they would submit an application for the proviso. However, as the captain had no experience of instructor duty on the Honda Aircraft HA-420, the company decided that the captain would conduct the trainee's competence certification and attend the trainee's practical examination when the company confirmed that the captain could safely conduct a training flight, and they applied for the practical examination and arranged the date of the practical examination. In rescheduling the date for the practical examination, the company had to postpone the incorporation date until after the practical examination as the aircraft was to be incorporated into a business aircraft operated by another company.

The company had planned to provide the captain with training in the right seat as an instructor for about three hours. However, without having received any instructor training in the right seat, the captain performed instructor duties in the right seat twice for a total of 1 hour and 18 minutes: once during the training on board with the trainee on January 22, 2024 (0 hour 31 minutes) and once during the ferry flight of the aircraft after an airworthiness inspection on January 26, 2024 (0 hour 47 minutes), and the flight at the time of this serious incident was the captain's third flight as an instructor.

The company asked the observer to board the aircraft with the captain so that the captain could receive any advice on the captain's operation in the right seat, as the captain had no experience of instructor duty in the right seat. In addition, the company also expected the observer who had trained the trainee before the serious incident to give any advice on the trainee's operation. Furthermore, even the training on board with the captain and trainee at Kitakyushu Airport was conducted with a pilot other than the observer on board who had experience as an instructor for the captain and trainee.

(8) Similar Cases of the Honda Aircraft HA-420

According to the design and manufacturer, since the Honda Aircraft HA-420 obtained its type certification from the Federal Aviation Administration in 2015, by the end of April 2025, there have been 23 cases of runway excursions (excluding overruns), of which 14 resulted in investigations under Annex 13 to the Convention on International Civil Aviation, including two aviation serious incident (AI2023-01 and this serious incident) investigated by the JTSB as well as the serious incident occurred on April 13, 2025 at Chubu Centrair International Airport (under investigation),Six of these incidents were caused by an inability to maintain directional control during the ground roll after landing.

	In addition, the Flight Standardization Board Report (FSBR) [*3] the following summary of the areas that pilots flying the Honda Aircraft HA-420 should focus on during ground training: a Nosewheel Steering b Nosewheel positioning and control logic at touchdown and ground roll. c Adverse interaction of asymmetrical braking with Nosewheel Steering. d Crosswind takeoff and landing. e Unique limitations, cautions, warnings, and critical piloting techniques and procedures found in the AFM. f Proper application of aircraft controls and hazards of incorrect aircraft controls application during two-engine and single-engine operations. g Discuss what leads to yaw, divergence, and a loss of control about the vertical axis during ground roll and how to quickly regain control (i.e., what control inputs improve stability and control during landing rollout and what inputs lead to divergence). Based on previous accidents and other incidents involving the Honda Aircraft HA-420, the company had realized that landing the Honda Aircraft HA-420 requires high skills and that safety during landing is ensured by the skills of the pilot.

3. ANALYSIS

(1) Weather Conditions around the time of the Serious Incident

The JTSB concludes that the wind conditions near the touchdown zone of Runway 01 around the time of the serious incident were most likely from the left with a crosswind component of approximately 5 to 7 knots, below the AFM limit of 20 kt. Besides, based on the routine aviation weather observation report at 14:00, it is possible that the wind direction fluctuated around the time of the serious and that the wind direction also fluctuated when the Aircraft landed, which may have caused the crosswind component of the wind velocity to change.

(2) Touchdown to Speedbrake Deployment

The JTSB concludes that the aircraft most likely touched down in a left crosswind. Although corrections were made after touchdown, the left and right bank angles were recorded on the CVFDR (see Figure 6, ⑤), therefore, the aileron control for the left crosswind was more likely insufficient to counteract the left crosswind. It is probable that the aircraft banked to the right, making it difficult to control the aircraft's direction using the rudder and nosewheel steering, and that the aircraft began its ground roll while meandering. As described in the AFM of the Honda Aircraft HA-420, when landing in a crosswind, it is important to operate the ailerons to the upwind

[*3] A Flight Standardization Board Report (FSBR) is a report prepared by the Flight Standardization Board, an organization established by the Federal Aviation Administration, that outlines the requirements for pilots to meet the aircraft type rating for new aircraft types, as well as the procedures and training content for normal and emergency operations.

side and not to bank the aircraft to the downwind side to keep the upwind main landing gear firmly on the ground.

(3) From Speedbrake Deployment to Stop

The JTSB concludes that the force on the right rudder pedal was likely applied at this time, as the change in the aircraft's heading to the right was recorded one second after the deployment of the aircraft's speedbrake, according to the CVFDR's records. The change in heading to the left recorded one second later was likely caused by a decrease in right rudder pedal pressure or an increase in left rudder pedal pressure. Besides, the designer and manufacturer stated that no yaw or banking during ground roll due to speed brake deployment had been reported during test flights of the Honda Aircraft HA-420, however, the aircraft tended to bank to the left when the speedbrakes were deployed in the air during airworthiness inspections, and it is likely that this tendency also contributed to the change in the aircraft's heading. The trainee tried to correct the aircraft's travel direction; however, it is highly probable that because the trainee hesitated to apply the right rudder pedal and did not take proper action to correct the aircraft's deviation to the left when recognized the observer's comments about the travel direction, the deviation of the aircraft to the left was greater, as it was making a ground roll in a left crosswind. Furthermore, it is likely that the down slope from the runway centerline marking to the west side runway edge marking on the runway contributed to this deviation to the left. Besides, the aircraft is more likely to have deviated to the left while skidding, as the tire marks of the nose landing gear were left to the left side of the tire marks of the left main gear. From the impact sound recorded on the CVFDR at 14:11:03, it is more likely that the aircraft deviated from the runway and entered a grassy area at that time, then moved while changing its heading counterclockwise, stopped while facing the heading of 188º, and disabled to taxi. In addition, no malfunction in the steering system was recorded in the steering computer, however, it was not possible to determine how the nosewheel steering was operating at the time of the serious incident because the CVFDR did not record the operating status of the nosewheel steering.

The captain and the trainee stated that they did not apply the brakes due to the high speed of the aircraft. Besides, the position where the aircraft deviated to the left was likely short of the position where the captain and the trainee applied the brakes because they stated that they vacated the runway from Taxiway T-4 or Taxiway T-5 when landing on Runway 01 on the Honda Aircraft HA-420. Based on the above, the position where the aircraft began to deviate was short of the position where the captain and the trainee would normally begin to apply the brakes, which likely contributed to the failure of the captain and the trainee to apply the brakes. Furthermore, the aircraft's heading was unstable, which is likely to have contributed to the failure of the captain and the trainee to apply the brakes.

Based on the CVFDR records and the trainee's statements, the advice of the observer more likely contributed to the fact that the trainee's hesitation to apply the right rudder pedal. On the other hand, the captain stated that the captain applied the right rudder pedal slightly without taking over control from the trainee, however, it is more likely that the application was not sufficient to correct the aircraft's deviation to the left. In addition, the captain did not take over control, probably because the captain judged that the trainee would be able to deal with the aircraft's deviation to the left, based on the trainee's operations during the continuous touch-and-go training. Moreover, it is likely that the trainee had more flying experience than the captain and that the Observer, who had trained the trainee and was also the instructor when the captain himself received type rating training, gave advice to the trainee, which likely contributed to the

captain's failure to take over control. The observer more likely advised the trainee during the landing roll because the observer had experience of flying with the trainee as an instructor. However, because the observer was seated in the side-facing seat behind the cockpit, it was more likely difficult for the observer to correctly identify the operations by the trainee and the captain and the situation of the landing roll and to give advice properly.

(4) Training System

The JTSB concludes as follows:

As it was difficult for the company to have a qualified pilot with an airline transport pilot certificate to conduct the trainee's competence certification and attend the trainee's practical examination as required by the Pilot Practical Examination Implementation Standards, the company decided that the captain would conduct the trainee's competence certification and attend the trainee's practical examination, submitted an application for the proviso to the Pilot Practical Examination Implementation Standards, and rescheduled the date of the trainee's practical examination.

The company considered that it would be necessary for the captain to be trained as an instructor by sitting in the right seat for about 3 hours before the captain in the right seat would give training to the trainee, as the captain had no experience of pilot training with the Honda Aircraft HA-420. However, the captain conducted the training of the trainee without training as an instructor by sitting in the right seat.

The captain conducted the training of the trainee without being trained as an instructor by sitting in the right seat, probably because of the short time between the date the company received the aircraft's airworthiness certificate after the aircraft passed the airworthiness inspection and the date of the trainee's practical examination. As the time was limited, the company more likely chose to conduct the trainee's training as well as the captain's own familiarization training as an instructor sitting in the right seat, taking advice from the observer on board the aircraft to conduct the trainee's training and the captain's instructor training. The background to this is more likely to be that it was difficult for the company to choose to further delay the examination to provide instructor training for the captain, as it had arranged to postpone the time of incorporation of the aircraft into commercial aircraft operated by another company until after the examination when it applied for the trainee's practical examination. However, it is more likely that the company should have conducted the practical examination after ensuring that the captain's training was conducted as an instructor sitting in the right seat, because the company had recognized that high pilot techniques were required when landing he Honda Aircraft HA-420 and the considerations regarding the control of the Honda Aircraft HA-420 during landing were described in the FSBR.

In addition, at the time of this serious incident, the observer was in a position to advise both the captain and the trainee, and it is likely that the observer overruled the captain, who was the instructor, to advise the trainee during the landing roll, thereby influencing the captain and trainee's operations. Since the company is considered to have sufficient knowledge and experience in pilot training, it shall, when conducting pilot training for new types of aircraft, establish a training plan that prioritizes safety, including training for instructor duties. In addition, the company needs to clarify that if a pilot capable of performing the company's instructor duties is required to sit in a seat other than the cockpit, only the cockpit instructor shall conduct in-flight training.

4. PROBABLE CAUSES

The JTSB concludes that the probable cause of this serious incident was that during landing on Runway 01 at Oita Airport, the aircraft more likely deviated from the runway, entered the green area, then stopped and was disabled to taxi on its own because the appropriate response to the aircraft's deviation to the left during the landing roll was not taken.

The reason for the failure to react appropriately to the aircraft's deviation to the left during the landing roll is most likely because the trainee hesitated to operate the rudder pedal, and the captain did not take over.

5. SAFETY ACTIONS

5.1 Safety Actions Required	As shown in Analysis 3, the company shall provide pilot training for new types of aircraft after establishing a training plan that prioritizes safety, including training to perform instructor duties.
5.2 Safety Actions Taken after the Serious Incident	Actions taken by the Company (1) To develop and establish a training program for training instructors that takes into full consideration the performance and characteristics of the Honda Aircraft HA-420. (2) To conduct recovery from meandering on a runway and practice take-offs and landings in simulated weather conditions that cannot be practiced in a real aircraft. (3) To clarify in the instructor's teaching guidelines of the company that an instructor shall carry out a takeover without hesitation, as immediate decisions are required during a landing. (4) To clarify the instructions to ensure that pilots who are available to perform instructor duties while seated in a position other than the cockpit shall be committed to observation and assertion.