



# CANSO GLOBAL SAFETY CONFERENCE 2025

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# KEYNOTE ADDRESS – JANS HANEDA BRIEFING

# PRESENTER



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# HANEDA ACCIDENT AND CONTEMPLATING SAFETY

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- Interim report of the JTSCB (Japan Transport Safety Board)

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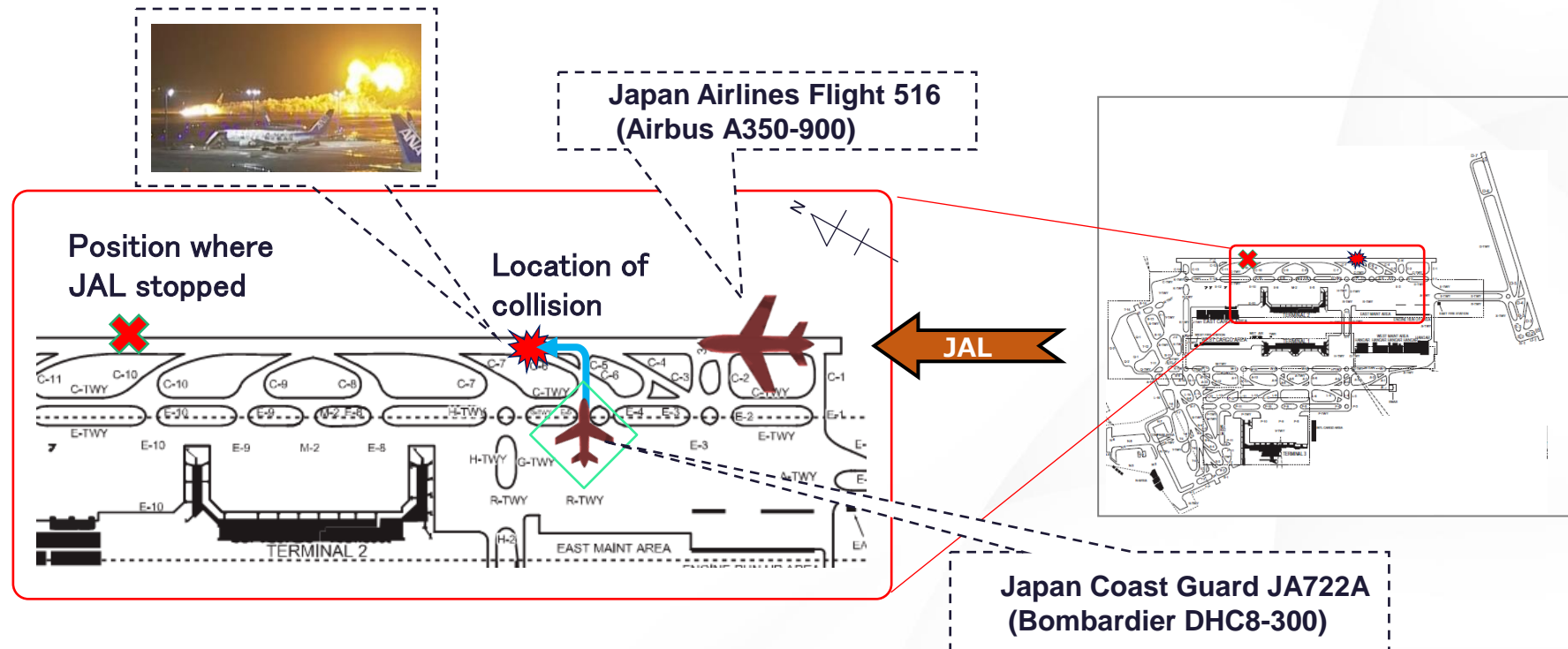
# 1. FOREWARD

- The investigation of the accident is still ongoing by JTSB (Japan Transport Safety Board).
- The JTSB released an interim report at the end of last year but has announced that it will take more time for the final report.
- Please be noted that if there is any difference between the facts when the final report is given and today's speech, the final report will take priority.

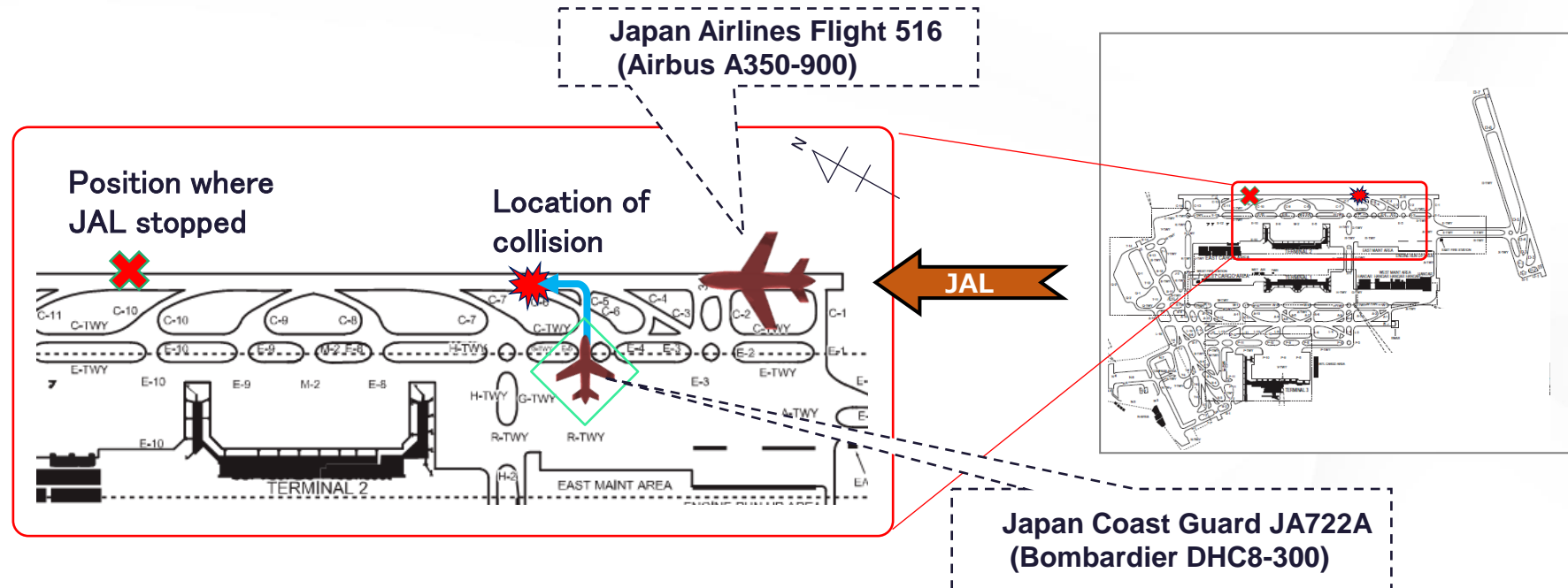
# HANEDA ACCIDENT

# 2.1 OVERVIEW OF HANEDA ACCIDENT

- On 2 January 2024 (at around 17:47JST), a passenger aircraft and a Japan Coast Guard(JCG) aircraft collided at Tokyo International Airport.
- Five of the six people on the JCG aircraft died, but all 379 people on the passenger aircraft survived.



## 2.2 OVERVIEW OF HANEDA ACCIDENT



### ATC communication between JCG pilot and ATC

17:45:11	JA722A	TOWER JA722A Charlie.
	Tokyo TOWER	JA722A Tokyo TOWER good evening, No.1, taxi to holding point C5.
17:45:19	JA722A	Taxi to holding point C5 JA722A No.1, Thank you.

## 2.3 SAFETY MEASURES IN RESPONSE TO ACCIDENT

- In response to the accident, the Japan Civil Aviation Bureau (Collaboration between regulator and provider (JANS) ) has been implementing the following safety measures in order of Step 1, 2, and 3 since January 9.

- **Immediate safety measures (Step 1)**

- Reconfirmed basic operation procedures for both ATCO and aircraft operators, including the procedure of pilot's situational awareness and the usage of phraseology by ATCO.
- Assigned and placed an additional Air Traffic Controller to constantly monitor radar display
- Repainted "runway holding point markings" to provide visual support for pilots
- Clarification of ATC instructions on permission to enter the runway  
e.g. Suspension of providing information of indicating departure sequence (No.1, No.2, etc.)
- Meetings between group of ATC and pilots held at each airport to improve communication

## 2.4 SAFETY MEASURES IN RESPONSE TO ACCIDENT

### ● Safety measures (Step 2)

- Additional measures were discussed by the consultation body※
- **Haneda Airport Aircraft Collision Preventive Measures Review Committee** consisting of experts and related organizations, was established to further promote safety measures to prevent aircraft collisions on the runway, both from a hardware and software perspective.
- On January 12, 2024, the Civil Aviation Bureau of the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) announced the establishment of the committee consisting of experts and related organizations to study further safety and security measures to prevent aircraft collisions on runways, based on objective information available to date, without waiting for a report on the accident investigation results by the JTSB. The committee consists of experts and related organizations. The first committee meeting was held on January 19, and a total of seven committee meetings were held through 24 June 2024. In addition to presentations by committee members and others, the committee heard opinions from air traffic controllers and pilots, and the secretariat reported on overseas case studies, and discussed the need to strengthen the alert system for pilots and air traffic controllers, the need to review the communication between pilots and air traffic controllers, and other issues.
- The interim report was released in June 2024.
- Currently, JANS are working on the measures listed in the interim report.
- All material in the Committee available here (only Japanese)

[https://www.mlit.go.jp/koku/koku\\_tk13\\_000045.html](https://www.mlit.go.jp/koku/koku_tk13_000045.html)

## 2.5 SAFETY MEASURES IN RESPONSE TO ACCIDENT

- **Safety measures (Step 3)**

- Further measures will be taken in response to the final accident investigation report from JTSB.
- Currently only interim report available. (English version available)  
[https://jtsb.mlit.go.jp/eng-air\\_report/interim20241225-JA722A\\_JA13XJ.pdf](https://jtsb.mlit.go.jp/eng-air_report/interim20241225-JA722A_JA13XJ.pdf)

# VOICES/STUDIES LEADING TO STEP 2 SAFETY MEASURES

# 3.1 VOICES LEADING TO STEP 2 SAFETY MEASURES

## ● Meeting pilots and ATCOs

- ATCO and pilots' meetings were held at eight major airports (Sapporo, Narita, Haneda, Chubu, Osaka, Kansai, Fukuoka, and Naha) from the end of Jan to Feb 2024. Here are some of the main opinions. (from ●ATCOs □pilots ◆both ATC and Pilots)

### **Clearance, Instructions and Traffic Information**

- The purpose of ATC issuing traffic information on related aircraft to the pilot is to share awareness of the traffic situation with the pilot. This is to enhance safety by highlighting waiting instructions and reducing the possibility of mistaken instructions to other aircraft.
- Providing information on departure sequence (e.g., No. 1, etc.) is beneficial for takeoff preparation.
- Simple and clear instructions are better in critical situations such as approach to the runway, and additional traffic information is not necessary.
- Pilots also listen in on communications between ATC and other aircraft, so even if traffic information on other aircraft is not provided, it is possible to understand the traffic situation to a certain level.
- ◆ It is effective for safety to use international standard terminology

## 3.2 VOICES LEADING TO STEP 2 SAFETY MEASURES

### ● Meeting pilots and ATCOs

- (from ●ATCOs □pilots ◆both ATC and Pilots)

#### Similar call sign

- ◆ When aircraft with similar flight numbers exist on the same frequency, it is effective for both pilots and air traffic controllers to highlight the different parts of the flight numbers to reduce mishearing by both parties. (Example: ABC133 ABC113)

#### Timing of instructions

- Since the pilot is concentrating on operating the aircraft immediately after landing, it is preferable for the controller to give instructions before landing or after slowing down. This will reduce the number of mishearing.

#### Communication Loop

- The pilot and co-pilot who receive instructions from the air traffic controller should listen to the instructions independently, and then mutually confirm the instructions.

# 3.3 VOICES LEADING TO STEP 2 SAFETY MEASURES

## ● Meeting pilots and ATCOs

- (from ●ATCOs □pilots ◆both ATC and Pilots)

### Winter Operation

- Depending on the snow conditions on the runway surface, the speed at which the aircraft crosses the runway, etc., may not be as expected by ATC.

### Cautions for ground movement

- It is important to confirm the locations that require attention along the ground route in advance to reduce risks.

### Regular exchange of opinions

- ◆ Regular exchanges of opinions are useful to deepen mutual understanding between controllers and pilots.

## 3.4 STUDIES LEADING TO STEP 2 SAFETY MEASURES

- Conducted a survey on measures to prevent runway incursions in many States.

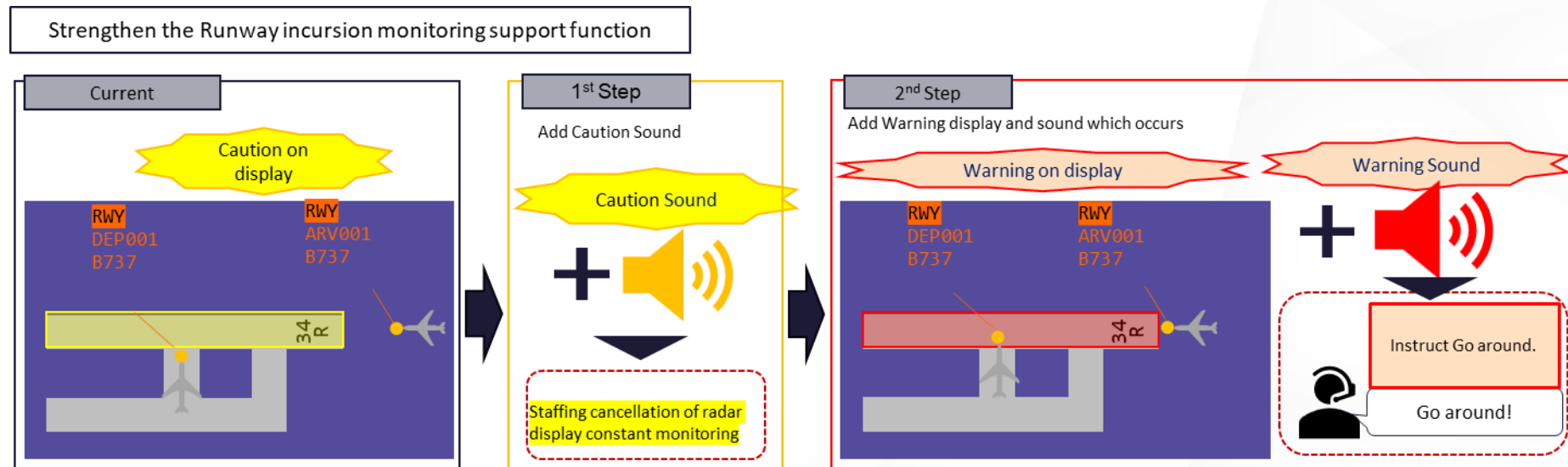
- GAPPRI
- Alert system for air traffic controllers and pilots
- RWSL, STBL, A-SMGCS, Onboard skitter for vehicle
- Task assignments for air traffic controllers
- Mental support for air traffic controllers
- Voice recognition technology
- Runway Safety Team(RST)
- Thank you for your cooperation, and JANS would like to further elaborate on our summary somewhere in future.

# RESULTS FROM STEP 2 SAFETY MEASURES

# 3.5 RESULTS FROM STEP 2 SAFETY MEASURES

## ● Alerting systems for air traffic controllers

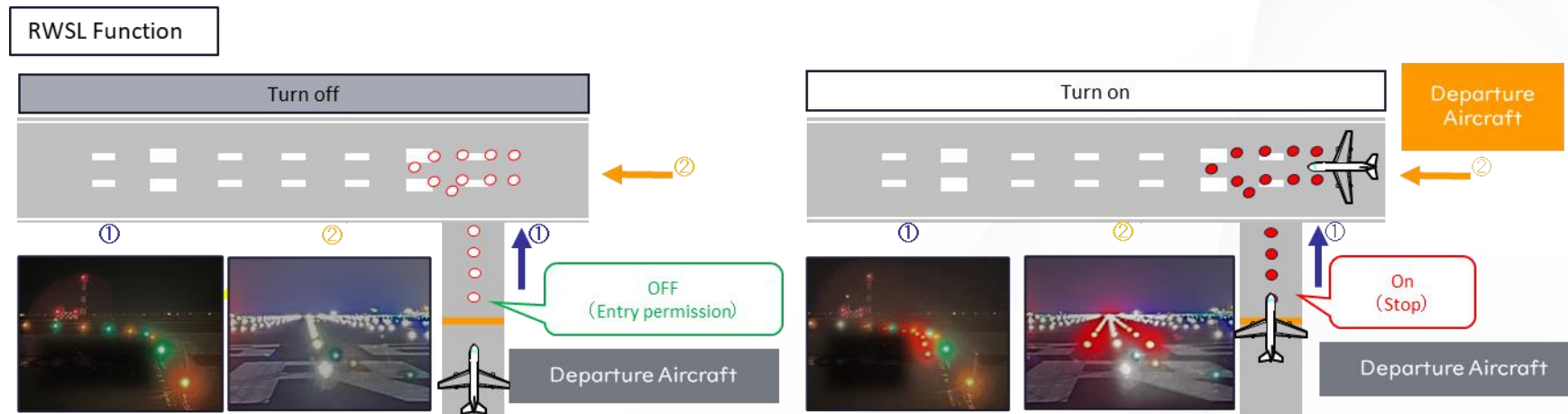
- As the first step in enhancing the runway occupancy monitoring support function, an alert system for air traffic controllers, an alert sound was added on 31 October 2024.
- The second step is scheduled to be operational by March 2026.



## 3.6 RESULTS FROM STEP 2 SAFETY MEASURES

### ● Alerting systems for pilots

- Increase the introduction of position data transmitters for vehicles operating on the runway.
  - Expand installation of Runway Status Lights (RWSL) that function independently of ATC instructions to all runways where take-offs and landings are operated on the same runway at major airports.
- ※ Major 8 Airports: Sapporo, Narita, Haneda, Chubu, Osaka, Kansai, Fukuoka, Naha



# 3.7 RESULTS FROM STEP 2 SAFETY MEASURES

## ● Review of ATC-pilot communication

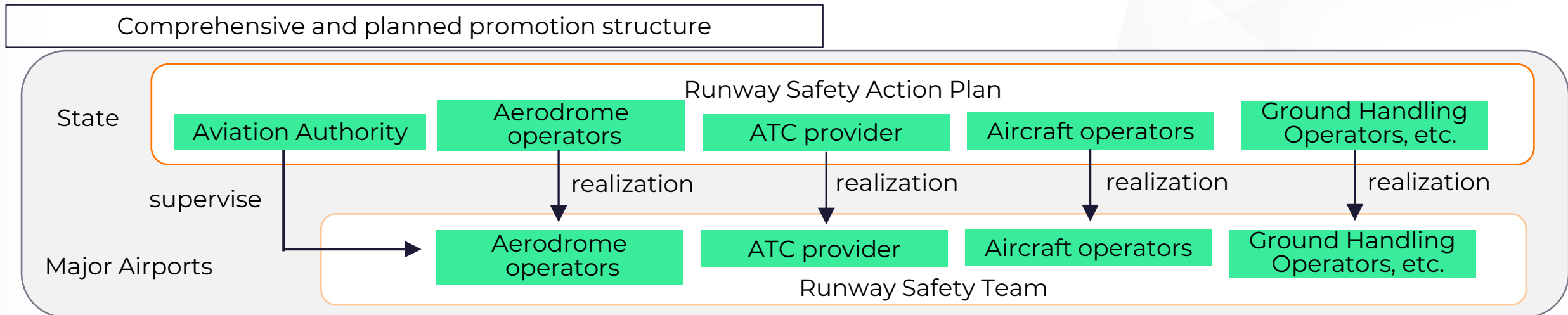
- The suspension of providing information on the order of takeoff (No.1, No.2, etc.) was lifted after making ATCO and pilots aware of the precautions to be taken when providing information
- Reiterating pilots to do basic behaviors such as external monitoring and read back of ATC instructions.
- Further enhancement and utilization of **manuals and educational materials related to ATC communication for ATCO and Pilots**
- Promote and deepen communication, etc. (CRM) among pilots
- To prevent human errors in ATC communications, initial and regular training on pilot-to-pilot communication (CRM: Crew Resource Management) is **mandatory for all pilots, including private pilots.**



## 3.8 RESULTS FROM STEP 2 SAFETY MEASURES

- Establishment of a safety promoting system and strengthening of cooperation among related stakeholders

- Strengthening the structure related to the RST
- Strengthening the cooperation with international stakeholders



## 3.9 RESULTS FROM STEP 2 SAFETY MEASURES

- **Reinforcement of the implementation system for air traffic control operations**

- Increase staff and review work assignments
- Fatigue management, mental health care, improvement of working environment

- **R&D and introduction of new technologies through industry-academia-government collaboration**

- Utilize new technologies such as voice recognition, big data, and AI in aerodrome control
- Development of a runway incursion detection system on the aircraft

# FROM INTERIM REPORT OF JTSCB

## 4.1 FACTUAL SUMMARY FROM INTERIM REPORT OF JTSCB

- A JCG aircraft was headed for runway 34R, which was assigned for takeoff to transport earthquake relief supplies to Niigata Airport in response to the damage caused by the Noto earthquake that occurred on January 1.
- In order to facilitate smooth takeoff and landing on the runway, Tower ATC decided to have the JCG aircraft takeoff from taxiway C5 after the JAL landed, using an intersection departure.
- After receiving the transfer from Ground ATC, Tower ATC instructed the JCG aircraft to taxi to the runway holding point C5, and also informed the JCG aircraft that its departure sequence was number one.

## 4.2 FACTUAL SUMMARY FROM INTERIM REPORT OF JTSCB

- Although the JCG aircraft correctly called back the ATC's instructions, the JCG aircraft entered the runway and stopped, assuming that it had been given clearance to enter the runway and that it had priority over the preceding departing aircraft for departure.
- The Tower ATC was unaware that the JCG aircraft had entered the runway and remained on the runway.
- The JAL aircraft, unaware that the JCG aircraft was stopped on the runway, continued its approach and collided with the JCG aircraft immediately after it touched down.

## 4.3 FACTUAL SUMMARY FROM INTERIM REPORT OF JTSTB

- This accident is considered to have occurred due to a combination of the following three points. From the perspective of preventing a future accident from recurring, it is necessary to analyze the factors behind those three points and clarify the causes.
  1. The JCG aircraft understood that it had received clearance from air traffic controller to enter the runway and stopped there.
  2. ATC was not aware that the JCG aircraft had entered the runway or stopped on the runway.
  3. JAL did not recognize the JCG aircraft, which stopped on the runway, until just before the collision.

JTSTB plans to conduct a more detailed investigation to determine the cause of the incident and to identify specific measures to prevent recurrence.

# SHARING LESSONS LEARNED



# 5.1 IMPORTANCE OF SHARING LESSONS LEARNED

## Haneda accident

- The human factor seems to be the major cause of this accident.
- There will never be zero chances for human error.
- In the future, AI assistants and warnings with voice recognition will be effective.
- Although those are still in the R&D phase, we believe that it is important for safety to empower machines to understand the factual situation and issue warnings.
- It is up to the leaders of the current generation to consider how to invest in this area.
- We need to think about this together with R&D organizations and industry, and CANSO may be an important facilitator in this process.

## 5.2 IMPORTANCE OF SHARING LESSONS LEARNED

### After the accident

- Many ANSP colleagues warmly contacted us to offer help in any way needed.
- Since much information was needed, we sincerely appreciate their assistance.

### Share the past cases and lessons learned

- Accidents generally occur when multiple safeguards are defeated that would normally have been difficult to pass through.
- Past cases contain many lessons to strengthen those safeguards.
- It is important to share the lessons Learned for strengthen safeguards for safety.
- Learning from the past to improve safety saves time. It is a reliable, efficient, and effective measure.

## 5.3 IMPORTANCE OF SHARING LESSONS LEARNED

### Insights from JANS

- Sometimes it is hard to tell the truth.
- There are many human aspects of the individual that must also be considered.
- While considering these aspects, however, we at ANSP are professionals who are responsible for the lives of people.
- Through the CANSO's Safety WG and other opportunities, we need to foster a safety culture.
- Sharing lessons learned and learning from others is critical.
- Safety WG (and GAPPRI) is one of our treasure.
- **Safety is our top priority!**



# THANK YOU