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Challenges in Japan's Aviation Administration Revealed in the Wake of the Haneda Accident

— Organizational Reform Is Essential to Prevent Recurrence —

We, the Japan Federation for Aviation Safety (JFAS), would like to once again express our heartfelt condolences for the loss of the five Japan Coast Guard officers who perished in the tragic collision between a Japan Coast Guard aircraft and a Japan Airlines passenger aircraft at Tokyo International (Haneda) Airport on January 2nd, 2024.

The recent accident, involving a collision between two aircraft on an active runway at Japan's busiest airport, and captured on video, had an enormous global impact due to the sheer severity of the incident and its visibility. Since our founding in 1966, the JFAS has continued its efforts to eliminate aircraft accidents in Japan, advocating for the enhancement of various safety measures, including runway incursion prevention.

In the aftermath of the incident, we closely monitored how the Japan Civil Aviation Bureau (JCAB) and other stakeholders responded. At appropriate intervals, we held press conferences to propose concrete countermeasures¹ and submitted formal recommendations to JCAB and other relevant authorities.

While JCAB appears to be aware of the gravity of an aircraft collision occurring on a runway it directly manages, its response so far has followed the same patterns as before, without substantive change. Below is a timeline of the main administrative actions taken following the accident:

Timeline of Governmental Responses After the Haneda Accident:

 Jan 9th: Emergency Countermeasure Compilation Link (MLIT)

¹ Click here for the press conference held by the JFAS on February 8th, 2024 (Japanese only)

- Jan 19th: First meeting of the Expert Panel on the Haneda Runway Collision (7 meetings held in total)
 Link (MLIT)
- Jan 23rd: Press conference by the Chairperson of the Japan Transport Safety Board (JTSB)

Link (JTSB)

- Jun 21st: Cabinet Office includes Haneda accident countermeasures in its annual policy guidelines
 Link (Cabinet Office)
- **Jun 24**th: Interim Report released by the Expert Panel Link (MLIT)
- Aug 28th: JCAB submits budget request including accident countermeasures Link (MLIT)
- Sep 17th: JCAB announces installation of RWSL (Runway Status Lights) on Runway C at Haneda
 Link (MLIT)

At first glance, this rapid and seemingly comprehensive response—from the accident in January through to budget allocation and equipment upgrades—may have left the public with the impression that "the government acted quickly and appropriately," thereby restoring public confidence in air travel. For many, the pace of action may suggest that Japanese authorities are efficient, that "the issue has been addressed," and that future accidents are unlikely.

However, from the perspective of aviation professionals, these actions have raised serious concerns. Comments from the field include:

- "Decisions were made too hastily."
- "Discussions were insufficient and outcomes predetermined."
- "Countermeasures were not subjected to multidimensional debate."
- "Budget execution was decided without public involvement."

As the JFAS, we have carefully analyzed JCAB's response and now aim to <u>explain clearly</u> what measures are truly needed to prevent recurrence.

Section 1. Is It Appropriate to Execute Countermeasures and Budget Allocations Without Clarifying the Cause of the Accident?

On January 3rd, the day after the accident, the JFAS issued an "Emergency Statement". In it, we stressed the importance of dealing only with accurate information, without speculation or assumption, and made clear that in any aviation accident, accident investigation must take precedence over criminal investigation.

Subsequently, the only official public comment made by the Japan Transport Safety Board (JTSB) was during a routine press conference on January 23rd, in which no information regarding the cause of the accident was provided. Aside from brief remarks in later briefings, no substantive findings have been made public, even now—over nine months after the incident.

In contrast, the U.S. National Transportation Safety Board (NTSB) typically holds a press conference within one month of a major accident to provide an outline of the incident and prospects for further investigation. This process forms the basis for rational and targeted countermeasures.

In Japan's case, however, measures have been implemented based on speculation, without any factual findings. JCAB issued an "Emergency Countermeasure" on January 9th, convened seven rounds of expert panel discussions starting January 19th, released an interim report just six months after the accident, and by August, had included lighting equipment upgrades in its preliminary budget request to the Ministry of Finance. By September, additional lighting enhancements at Haneda were formally announced.

This extraordinarily rapid timeline appears to have been driven by strong political backing, evidenced by the inclusion of the Haneda accident response in the Cabinet Office's "Basic Policy" released on June 21st.

That said, one must ask:

On what basis did JCAB decide to install additional Runway Status Lights (RWSL) at Haneda Airport, when JTSB has yet to release even a summary of its findings?

JCAB may argue that its decision is grounded in the interim report compiled by the expert panel. However, implementing such costly equipment changes without knowing the actual cause of the accident raises serious doubts about whether this qualifies as appropriate execution of public funds.

Moreover, this situation calls into question the very role and function of the Japan Transport Safety Board in Japan's aviation system.

 $^{^2}$ Click here for the emergency statement issued by the JFAS on January $3^{\rm rd}$, 2024

Section 2. The Second Compilation of Runway Incursion Countermeasures Closely Resembles the Previous One (2008)

Runway incursions by aircraft began to attract serious global attention in the 2000s. The primary reason for this was the global surge in air traffic volume. Due to technological advancements in aviation, flying has become far more accessible, and since the beginning of the 21st century, the volume of air traffic has continued to expand rapidly worldwide. Japan is no exception: a fourth runway was added to Tokyo International (Haneda) Airport in 2009, and runway expansions have since continued at Naha and Fukuoka airports. Further additions are also planned for Narita and Chubu airports.

In light of globally reported runway incursion incidents, various countermeasures have been implemented around the world. In Japan, a spate of similar incidents occurred between 2006 and 2007, prompting JCAB to establish a countermeasure committee. In March 2008, JCAB released the "Compilation of Measures Against Runway Incursions." This compilation included many commendable measures, many of which were promptly implemented. However, a considerable number were limited to one-off actions and lacked any follow-up mechanisms such as review processes or risk assessments. This "once implemented, it's done" mentality—based on assumptions like "if no incidents follow, the measures are effective" or "measures are fine unless a recurrence happens"—reveals a flawed administrative mindset. It also reflects a form of responsibility avoidance, illustrated by past statements such as: "We aviation bureau staff cannot modify what has been compiled by an expert committee."

Now, a second compilation of runway incursion countermeasures has been released. However, not only does it closely mirror the previous version, it even contradicts elements of the earlier report⁴. The fact that such content has been published as an interim summary, 16 years after the 2008 compilation, strongly suggests that Japan's runway incursion countermeasures have seen virtually no evolution.

Taken together, this situation reveals a fundamental flaw in the current aviation policymaking process, especially in how it is being led by expert committees and JCAB.

⁴ In the 2008 compilation, the use of "non-standard ATC phraseology" was recommended, which has led to the continued use of such localized terminology at Osaka Itami Airport. From the beginning, the JFAS has called for its abolition, arguing that it only causes confusion in the field and that ICAO-standard phraseology is preferable. In the latest interim report, a clear statement was made to "continue using ICAO-standard ATC phraseology," which has prompted discussions toward discontinuing the use of non-standard terms. However, the outlook remains uncertain and opaque.

³ <u>Click here</u> for the March 2008 report on runway incursion countermeasures.

Section 3. Countermeasure Committees and Panels Composed of Personnel Unfamiliar with On-Site Aviation Realities

Among the members of the countermeasure committee that compiled the 2008 report, there were no active air traffic controllers and only one active airline pilot. The vast majority of members were JCAB officials and airline ground staff. The composition of the committee that met seven times beginning in January this year followed the same pattern: zero active air traffic controllers, and only two active pilots and one retired pilot.

Of the eight experts invited on the basis of their supposed involvement in aviation, only one specialized in human factors, which are critical to analyzing runway incursions—most of which involve human error. The remaining members were primarily individuals associated with aviation systems unrelated to runway incursion prevention.

In addition, the qualifications of the participating pilots and controllers must be addressed. While it is expected that they are capable of carrying out routine duties appropriately, individual areas of expertise—such as knowledge of flight characteristics, radio communication systems, or aviation meteorology—naturally vary. Therefore, it is crucial to include personnel with specialized expertise in areas like airfield lighting, human factors, or international ATC phraseology trends, rather than selecting participants simply because they are pilots or controllers.

However, the pilots who have been invited so far appear not to have been chosen with such qualifications in mind, but rather to maintain appearances—a move that seems more symbolic than substantive.

Section 4. The Lack of Human Factors Perspectives in Runway Incursion Countermeasure Discussions

According to statistics from the U.S. Federal Aviation Administration (FAA), approximately 80% of runway incursion incidents involve human error. Therefore, in devising countermeasures, it is essential to carefully examine questions such as:

- Why did the pilot of the aircraft in question enter the runway?
- Were the ATC (air traffic control) communications appropriate?
- Were visual support facilities sufficient?

In other words, it is self-evident that the perspectives of human factors specialists, air traffic controllers, and pilots are critical.

From this perspective, a proper review of past measures should have included the following:

- 1. Conducting countermeasure discussions based on the testimony of the Japan Coast Guard aircraft captain, from human factors standpoint.
- 2. Interviewing a broad range of controllers and pilots regarding ATC phraseology, and examining countermeasures from human factors perspective.
- 3. Interviewing numerous pilots regarding visual aids and facilities, and evaluating countermeasures accordingly.

However, none of these have been adequately addressed.

Item 1. has not been conducted at all.

Item 2. was superficially addressed in the "Emergency Countermeasure" issued on January 9, which unilaterally stated that the term "No.1" must not be used—but this instruction was later withdrawn. This sequence of actions makes it clear that the human factors perspective was seriously lacking.

Item 3. was seemingly approached by soliciting feedback only from pilots of "cooperative" airlines, even though the JFAS had already been offering suggestions on visual support for many years⁵. The content of the interim report and the manner in which it was compiled make it evident that this, too, was merely a token gesture.

Section 5. Only Partial Implementation of the Globally Standard Safety Management System (SMS)

The compilation released in March 2008 stated that efforts to prevent runway incursions at the operational level would be advanced through the application of the **S**afety Management System (SMS). However, JCAB's subsequent actions were limited and failed to follow through in practice, leaving SMS implementation as little more than a theoretical concept.

In response, the JFAS repeatedly urged JCAB—since 2014—to introduce Runway Safety Teams (RSTs), which are considered indispensable for applying SMS effectively. RSTs are explicitly encouraged under the SMS framework and have been recommended by the

that Runway Guard Lights (RGLs)—which offer greater visual effectiveness than Runway Status Lights (RWSLs) mentioned in the report—would be more appropriate for enhancing safety. The Council called on JCAB to open discussions on the matter. In response, JCAB acknowledged that RGLs were not discussed in the countermeasure committee meetings, but did not indicate any intention to revisit the issue. Despite this, JCAB promptly submitted a budget request and proceeded to announce the start of construction work for RWSL installation on Runway 34R at Haneda Airport, demonstrating a high degree of procedural readiness, as previously described.

 $^{^{5}}$ About a month after the release of the interim report, the Aviation Safety Council expressed its view

International Civil Aviation Organization (ICAO) since the 2000s as a key tool for runway incursion prevention at the operational level.

Despite these recommendations, no progress was made for six years following the 2008 compilation. It was not until the late 2010s that RSTs were finally introduced at Narita, Haneda, and Itami airports. Even then, they did not adhere to the ICAO-recommended model, in which the Service Provider should lead the RST, and the Regulator (JCAB) should participate only as an observer. Instead, JCAB continues to take a central role, suggesting that it lacks a proper understanding of SMS, reducing the meetings to a ceremonial formality.

Although the June interim report has encouraged the expansion of RSTs to other airports, their structure remains unchanged. Pilots and controllers—those with the most direct operational knowledge—are still not involved. This clearly illustrates that even after a serious aircraft collision, JCAB continues to work only with stakeholders that are convenient or compliant.

In short, Japan has only implemented selected components of SMS, in ways that suit JCAB's organizational convenience. Currently, only certain divisions—such as JCAB's Safety Division—are positioned as Regulator, as defined by ICAO. Other sections are treated as Provider, even though ICAO principles clearly dictate that regulatory authorities like JCAB must be classified entirely as Regulators, and the Provider designation should apply strictly to airlines, air traffic service providers, and airport operators.

From the perspective of SMS, this fragmented and self-serving classification clearly indicates that Japan's aviation governance remains incomplete and structurally inconsistent.

Section 6. Safety Is to Be "Managed," Not "Supervised"

The interim report includes a proposal titled "Strengthening of Safety Oversight." This very phrase underscores how outdated JCAB's thinking has become. The notion of "supervising" safety must be immediately abandoned.

Let us clarify the difference:

- **Management**: The coordination of operations to ensure smooth functioning, including the maintenance and preservation of systems and equipment.
- **Supervision**: Exercising authority by directing or policing others.

In essence, management involves coordinating actions within a flat, cooperative structure, while supervision implies a hierarchical, top-down relationship.

During the 20th century, civil aviation authorities around the world indeed relied on safety supervision. However, in the 21st century, global aviation governance has transitioned toward Safety Management Systems (SMS), where all stakeholders operate as equals within a shared, collaborative framework.

JCAB must recognize this global shift and summon the courage to adapt. Clinging to outdated concepts of supervision will only hinder progress and obstruct the evolution of Japan's aviation safety framework.

Section 7. Proposals for Change in Japan's Aviation Administration

Following the release of the runway incursion countermeasures in March 2008, the number of such incidents in Japan temporarily declined. This led many within JCAB to mistakenly believe that the measures had been properly implemented and were effective. However, the real issue lies in the rigid administrative structure of Japan, which resists change unless new incidents occur. This institutional inertia is undoubtedly one of the factors that contributed to the recent accident.

To address this situation, the JFAS puts forth the following proposals for change in Japan's aviation administration:

- 1. The Japan Transport Safety Board (JTSB) should issue interim reports promptly, in order to ensure that necessary actions are taken without delay.
- 2. Japan Civil Aviation Bureau (JCAB) must refrain from making assumptions or acting on speculation when devising runway incursion countermeasures. Instead, it should listen sincerely to the voices of frontline personnel and human factors experts.
- 3. The Ministry of Land, Infrastructure, Transport and Tourism (MLIT), the Ministry of Finance, and the Cabinet Office must recognize that the national budget is funded by taxpayers. These agencies should immediately revise the current system, which allows for budget execution without sufficiently considering public input.
- 4. JCAB must understand that its role is not to supervise safety, but to manage it—and act accordingly.
- 5. JCAB must undertake organizational reforms to ensure the correct and comprehensive implementation of the Safety Management System (SMS), as recommended by ICAO.
- 6. Specifically, as a regulatory authority, JCAB must fully position itself as a Regulator, while recognizing that air traffic services and airport management should be conducted by Providers. It must restructure itself to clearly separate regulatory functions from service provision roles.
- 7. All stakeholders in aviation—including JCAB staff, airline employees, and airport management personnel—must recognize that SMS must be implemented across the entire aviation sector. They must take active steps to achieve this collective goal.

Section 8. Final Remarks: Airlines, Airport Operators, and Frontline Personnel Must Speak Up and Take Action

The introduction and promotion of the Safety Management System (SMS) in Japan has largely been driven by JCAB, and as a result, airlines and related entities have steadily adopted SMS practices. As stated in the previous section, these organizations are positioned as Providers under the SMS framework and thus bear responsibility for active implementation.

Although Japan's air traffic service providers are structurally part of JCAB, at the operational level, SMS implementation is progressing steadily.

In contrast, JCAB, which functions as a Regulator, has failed to properly fulfill its SMS responsibilities. This failure is one of the contributing factors to the recent aviation accident, and JCAB must recognize this fact.

Furthermore, while airlines and airport operators are categorized as Providers, SMS cannot function effectively if only Providers are committed to its implementation. They must also fulfill their role in pointing out deficiencies in JCAB's efforts, especially considering that JCAB remains their regulatory authority, and the pre-SMS hierarchical dynamic persists.

It is understandable that it may be difficult to speak out under such circumstances. However, this accident must serve as a turning point. It is now imperative for these organizations to raise their voices in support of expanded and proper SMS implementation.

In addition, employees of airlines, group companies, airport operators, and air traffic services must recognize that achieving aviation safety requires JCAB, as the Regulator, to participate actively in SMS implementation. These personnel must not only call upon relevant stakeholders but also take action themselves.

We fully acknowledge how demanding and time-consuming frontline duties can be. Even so, ask yourself what you can do within those constraints. Discuss it with your colleagues. Small steps can drive meaningful change.