



AIR ACCIDENT INVESTIGATION: NEW INDEPENDENT ADMINISTRATIVE AUTHORITY IN SPAIN

The recent accidents involving American Airlines Flight 5342 and Jeju Airlines Flight 7C2216, which occurred on January 29 and December 29, 2024, respectively, have shocked both the aviation industry and the general public, serving as a stark reminder of the crucial role of accident investigation in enhancing air safety¹.

Despite commercial aviation maintaining a low accident rate and being one of the safest modes of transportation in the world, air accidents –though rare– tend to attract significant media attention due to their scale and impact, often resulting in a high number of casualties.

In this context, specialized accident investigation authorities play a vital role in analyzing accidents and incidents, identifying their causes, and issuing recommendations to strengthen safety measures and mitigate future risks, thereby reinforcing public confidence in air travel. Spain has recently taken a significant step in this field by creating a new independent administrative authority aimed at optimizing investigation processes, ensuring impartiality, and adopting best international practices in aviation safety.

In this newsletter, after briefly outlining the legal framework governing technical accident investigations, we will explore the characteristics of this new multimodal institution and some potential implications of its establishment, considering the challenges facing air accident investigation today.

LEGAL FRAMEWORK FOR TECHNICAL ACCIDENT INVESTIGATION

The legal framework governing the technical investigation of air accidents is based on a complex set of regulations that combine international, European, and national provisions.

At the international level, the 1944 Chicago Convention establishes the obligation for States to conduct technical investigations, as regulated in Annex 13, which pertains to the "Investigation of Aviation Accidents and Incidents"². Within the European framework, Regulation (EU) No 996/2010 of the European Parliament and the Council, dated October 20, 2010, governs the investigation and prevention of accidents and incidents in civil aviation³. Meanwhile, in Spain, the regulatory framework includes the Air Safety Act⁴ and Royal Decree 389/1998⁵, which has undergone multiple amendments.

Additionally, soft law –comprising circulars from the International Civil Aviation Organization (ICAO), safety protection guidelines, and aviation emergency response manuals– complements this regulatory framework. These guidelines provide specific directives on key issues such as the protection of safety-related information, protocols for responding to civil aviation emergencies, and assistance to victims and their families.

NEW MULTIMODAL AUTHORITY FOR ACCIDENT INVESTIGATION IN SPAIN

The Civil Aviation Accident and Incident Investigation Commission (CIAIAC)⁶ has been responsible in Spain for the technical investigation of serious accidents and incidents, as well as for issuing recommendations to enhance the safety of civil air navigation⁷. In addition, the CIAIAC publishes annual reports outlining its activities and recommendations from the previous year, along with the status of their implementation⁸.

However, in light of regulatory developments and in alignment with European and international legal frameworks, the Spanish legislator

¹ On January 29, 2025, American Airlines Flight 5342 (ICT-IAD) collided with a military Black Hawk helicopter over the Potomac River near Washington, D.C., resulting in the deaths of all 67 people on board both aircraft. Preliminary investigations suggest that the helicopter was flying above its permitted altitude, and that air traffic control had issued a warning before the impact. Wreckage from the plane has been recovered, and 55 victims have been identified.

As for Jeju Airlines Flight 2216 (BKK-MWX), operated with a Boeing 737-800, it made an emergency landing at Muan International Airport, South Korea, on December 29, 2024, after failing to deploy its landing gear, leading to the tragic loss of 179 of the 181 people on board. Initial findings indicate that a possible bird strike may have damaged the aircraft's hydraulic systems, while the absence of crucial data from the black boxes complicates the full clarification of the events.

² Annex 13 has not been published in Spain's Official State Gazette (Boletín Oficial del Estado), which, strictly speaking, complicates its enforcement. However, the principles that inspired this Annex are reflected in other regulations.

³ Regulation (EU) No 996/2010 of the European Parliament and the Council, dated October 20, 2010, on the investigation and prevention of accidents and incidents in civil aviation, repealing Directive 94/56/EC.

⁴ Act 21/2003, of July 7, on Air Safety (hereinafter referred to as the "LSA").

⁵ Royal Decree 389/1998, of March 13, regulating the investigation of civil aviation accidents and incidents, which transposed Directive 94/56/EC into Spanish law.

⁶ The CIAIAC (Civil Aviation Accident and Incident Investigation Commission) was established by Decree 959/1974, of March 28, concerning the investigation and reporting of civil aviation accidents.

⁷ It is important to note that the investigations conducted by this Commission do not aim to determine liability, as this falls under the jurisdiction of other branches of government.

⁸ For illustrative purposes, we refer to the latest [Annual Report of the CIAIAC](#).



has taken a significant step forward by consolidating the technical investigation of railway, maritime, and aviation accidents under a single entity: the Independent Administrative Authority for the Technical Investigation of Railway, Maritime, and Civil Aviation Accidents and Incidents (AAI)⁹.

The creation of this multimodal authority represents a milestone aimed at optimizing resources and improving efficiency in accident investigations in Spain. By leveraging economies of scale, unifying organizational structures, and maintaining technical expertise, the AAI seeks to enhance investigative processes while ensuring specialization. To achieve this, the authority will be structured into three dedicated divisions, each focusing on a specific mode of transportation, ensuring a specialized, efficient, and impartial approach tailored to modern challenges, as highlighted by the legislator¹⁰.

Additionally, the new framework emphasizes transparency and stakeholder participation. This ensures that victims and interested parties have access to relevant information –within the limits of classified data restrictions– and allows for the engagement of key stakeholders in the investigative process. Furthermore, the findings, recommendations, and necessary safety measures will be made publicly available to foster greater accountability and awareness.

Another key objective of this reform is to promote a just culture¹¹ in accident investigations, safeguarding both information and the rights of those involved. By striking a balance between accountability and organizational learning, the new approach encourages individuals to report safety-related information without fear of unjust repercussions. This ensures that investigations are not only rigorous and effective but also contribute to strengthening transport safety across all modes by fostering continuous learning and adaptation to evolving challenges.

CRITICAL ASPECTS OF THE NEW AUTHORITY AND CHALLENGES IN TECHNICAL ACCIDENT INVESTIGATION

While the design and objectives of the new Independent Administrative Authority (AAI) demonstrate clear strengths, it is crucial to address potential implications and challenges to ensure its effective implementation.

For instance, the AAI aims to standardize investigation procedures and the legal framework across the three transport sectors, creating a coherent and streamlined system that fosters collaboration and the exchange of best practices. However, the coexistence of different sectoral approaches and specializations carries the risk of internal friction. To mitigate this, strong coordination mechanisms must be established to leverage the benefits of unification without compromising the technical specificity of each sector.

Similarly, the AAI's interaction with authorities and the parliamentary committee on specific matters, while necessary, could prove excessively complex. The requirement to issue prior opinions on issues such as confidentiality or witness suitability has the potential to slow down processes and hinder swift decision-making. To counteract this, it will be essential to implement safeguards ensuring the confidentiality of information while preventing its misuse or unauthorized disclosure.

Regarding the confidentiality of information used in technical investigations, Spanish regulations align partially with Article 14 of the EU Regulation, which restricts the use of such information, for example,



in judicial proceedings¹². However, the Spanish framework does not fully address the disclosure provisions outlined in Article 14.3, leaving a regulatory gap that must be addressed through further legislative development. Proper alignment with European regulations is essential to ensure consistent application of these provisions.

Furthermore, protecting the integrity of investigations and associated information presents another significant challenge. The special regime established under the new law, which regulates access to information for victims, families, and associations directly involved in an investigation, is a positive step but also introduces risks. Sharing information before reaching definitive conclusions could lead to misinterpretations, public pressure, or even conflicts among stakeholders. This underscores the need to carefully manage access to information, ensuring that disclosure does not interfere with judicial proceedings, thereby preserving the technical and legal independence of investigations.

Beyond these internal challenges, air accident investigations face additional complexities due to the international and highly technical nature of the aviation sector. One of the main difficulties lies in the overlap of multiple jurisdictions, each with its own legal framework and regulatory requirements, which can complicate the coordination of investigative efforts. Ensuring effective collaboration between national and international authorities is also crucial, as investigations often involve multiple stakeholders across different countries. Another significant challenge is the collection of evidence, particularly in cross-border incidents where access to crucial data may be restricted or subject to varying legal standards.

⁹ Act 2/2024, of August 1, establishes the Independent Administrative Authority for the Technical Investigation of Railway, Maritime, and Civil Aviation Accidents and Incidents (AAI). In addition to assuming the responsibilities of the Civil Aviation Accident and Incident Investigation Commission (CIAIAC), this new body also takes over the functions previously held by the Railway Accident Investigation Commission (CIAF) and the Permanent Commission for the Investigation of Maritime Accidents and Incidents (CIAIM).

¹⁰ For clarification, it is important to note that the formal establishment and effective operation of this authority will not take place until its organic statute is approved, a step that remains pending by the legislator. This approval must occur within a maximum period of one year, no later than August 22, 2025.

¹¹ The just culture principle fosters an environment where errors can be openly reported without fear of professional repercussions, enabling the identification of issues and, where necessary, the implementation of preventive measures to enhance safety.

¹² In Spain, Article 18 of the Air Safety Act (LSA) strengthens the confidential nature of investigation information, establishing a more restrictive legal framework than that set out in Article 14 of the EU Regulation. This raises the question of whether it would be advisable to establish a special legal regime for investigation-related information, removing it from the scope of the LSA to ensure a more tailored and effective regulatory approach.



Additionally, the legal weight of investigative reports and their admissibility in judicial proceedings can raise questions about their evidentiary value and influence on legal outcomes. Finally, some investigative bodies may face constraints in terms of technical resources, which can impact the depth and efficiency of accident analyses, further emphasizing the need for continuous advancements in expertise and technology.

Ultimately, civil aviation accidents represent critical events that require thorough analysis to improve safety and prevent future incidents. However, success in accident investigation also depends on an integrated approach that balances international cooperation, technical expertise, and the right mix of confidentiality and transparency. The effectiveness of the AAI will hinge on its ability to navigate these challenges, ensuring rigorous, independent, and impactful investigations that contribute to the continuous improvement of transport safety.

CONCLUSIONS

The creation of the Independent Administrative Authority (AAI) in Spain marks a positive step toward a more efficient and modern approach to accident investigation, continuous safety improvements, and the prevention of incidents across the affected sectors.

However, this transition entails not only a structural reorganization but also a cultural shift in the way safety is approached. Merging the functions of the former commissions into a single entity aims to enhance coherence and effectiveness, but this process will inevitably come with challenges and complexities. The success of the AAI will depend on how it is implemented and managed in the coming years. To achieve its objectives, it will be essential to proactively address potential risks, such as excessive bureaucracy and the possible loss of technical specialization, ensuring that the new authority fulfills its mission to strengthen safety across all modes of transport while earning the trust of society. Additionally, striking the right balance between investigative independence and collaboration with other national and international entities will be critical to preventing technical investigations from being compromised by external influences. Building trust-based relationships with all stakeholders, including airlines, regulators, and the public, will be key to enhancing investigative processes and fostering greater confidence in the system.

In the end, only time and transparency in its operations will determine whether this reform truly represents progress in the field of accident and incident investigation in the transport sector.



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