Is France Moving Towards Establishing A Similar Board to the NTSB in America?

Introduction

Most countries have well-established permanent specialized independent organizations for conducting technical investigations into the causes of aeroplane accidents. In some cases, these technical investigations are held in parallel with judicial inquiries and are based partly on feedback from prior experience. Their main goal is to prevent the recurrence of an accident due to identical causes or risks identified by the investigation. Although measures have been adopted to facilitate coexistence, these independent organizations often find it difficult to work in harmony with the judicial investigating authorities.

This model for investigating authorities. This model for investigating air accidents has been adopted gradually by other transport sectors. One example is the recently established board of the French *Bureau Enquêtes-Accidents* (BEA) that has legal jurisdiction over marine accidents. A similar board is soon to be established with powers to investigate land transport accidents.

Clearly, the future possible merger of separate boards for the air, marine and land transport sectors into an organization similar to the American National Transport Safety Board (NTSB) is an issue that will surely arise.

Formation of NTSB

The NTSB is an independent body established by the US Congress on 1 April 1967 and entrusted with responsibility for investigating all serious accidents in the civil aviation, marine and land transport sectors; the latter sector includes rail, road and pipeline accidents. The NTSB also has powers to issue safety recommendations At least eight other countries have subsequently established similar organizations (including Canada's Transportation Safety Board (TSB), Australia's Australian Transport Safety Bureau and the Netherland's Dutch Transport Safety Board (DTSB)) more or less inspired by the American NTSB. Most were established similarly-they either began as organizations whose function was to conduct enquiries into aviation accidents and incidents and were gradually given the role of holding enquiries into accidents in other transport modes, or they were merged with other existing specialized investigative organizations.

with a view to accident prevention.

This article looks primarily at the situation in France.

The Aviation Precedent

The concept of a systematic technical investigation performed by a specialized organization was born at about the same time as modern air transport. The Chicago Convention (1946 Convention on International Civil Aviation) specified an obligation to conduct an investigation into air accidents occurring outside the plane's country of registration stipulating, '...the State in which the accident occurs will institute an investigation into the circumstances of the accident, in accordance, so far as its laws permit, with the procedure which may be recommended by the International Civil Aviation Organization.'

Annex 13 was adopted in 1951 to cover accident investigations, the obligations of states, and international cooperation.

The core principle is feedback to provide lessons that can be learned from. The

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accident analysis must involve in-depth study of the causes and causal circumstances by examining the extent to which any system or system element and any interaction between such systems played a role in the accident. The analysis must lead to conclusions regarding changes that could or must be made as well as to information to be provided to personnel to reduce the chance of a reoccurrence of the accident. Experience-based feedback is common to all areas of safety management and is a basic tenet of danger science and risk prevention (cindynics). In the aviation sector, it was soon clear that it was necessary to collate and systematically disseminate this information to create a basis for ongoing safety-related research. Judicial and technical investigations serve two groups of people-the victims and their families who want to know who was responsible for what went wrong and perhaps sue for compensation; and the authorities responsible for public safety, who need information to act on to prevent a future recurrence of the same or similar accident.

Professional investigative organizations are needed for two main reasons:

- To conduct accurate investigations and analyses of the complex systems and issues leading to the accident
- To ensure that the investigation findings fairly represent all parties without influence by any party

These investigations and analyses must be conducted by experts—aided by specialists in specific system components—who can accurately describe the events leading to the accident.

The above concepts of technical excellence and impartiality raise two critical issues: 1. The credibility of the

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Concorde Air France flight AF4590 crashed on 25 July 2000 near Paris right after takeoff from Charles de Gaulle Airport (Reuter=Kyodo)

investigating organization vis-à-vis all interested parties, including victims, builders, operators, infrastructure managers, regulatory authorities and personnel; and 2. The often difficult relationship between a technical investigation oriented towards discovering the technical causes of the accident, and a judicial investigation to establish legal responsibility. As an example, during the technical investigation into the Concorde crash outside Paris in July 2000, the British authorities officially complained of obstacles encountered noting, 'The manner in which the judicial investigation has been conducted has constituted a major obstacle to the participation of the Air Accident Investigation Branch (AAIB) in the technical investigation.'

Often both investigations are conducted simultaneously (but with different objectives) and since the legal profession seeks to assign blame, technical investigations can have unforeseen legal consequences. Incidentally, most articles on inquiries mention these issues of independence and permanence.

EU Problems

In the EU, problems arise with regard to the results of accident investigations.

Currently, investigations requested for judicial or insurance purposes often aim to reassure the public and determine responsibility under regulations already established by legislative authorities. But such investigations do not satisfy the need now felt in Europe and the USA for independent technical inquiries oriented towards discovering the causes of accidents and recommending improvements to existing legislation.

Situation in France

The BEA is the official French body responsible for technical investigations into civil aviation accidents and incidents. It was created in 1946 to investigate accidents, conduct inquiries and prepare reports in complete independence. To investigate specific accidents, assistance is provided by an investigation commission established by the Minister of Civil Aviation when necessary.

To prevent any conflict with the role entrusted to them, the BEA and members of the investigation commission act with complete independence and do not receive or request instructions from any authority or body.

Be that as it may, independence is a relative concept in relation to whom and to what? Above all, independence is the ability to resist any type of pressure, including political pressure (which may not necessarily be the heaviest).

Even if independence is complete and can be demonstrated in each instance, it can still be questioned by those who are not satisfied with the conduct of the investigation and the conclusions. This is especially true when an investigation results in an uncertain conclusion.

Aviation accidents in most developed countries and especially those with major aircraft industries have benefited from the existence of these professional investigation bodies. Some reasons appear to be:

- Pressure of public opinion after major loss of life
- Unacceptability of accidents in the face of technological progress
- International character of aviation (accident locality, nationality of operator, plane, engine manufacturer, and victims) requiring cooperation between different countries
- Limited aircraft models by about six major manufacturers, permitting rapid rectification of faults on all aircraft operating worldwide at manufacturers' discretion or on instruction (airworthiness certification) by government authorities, possibly as a result of recommendations from investigation bodies

One of the main reasons for establishing independent investigation bodies is the need to act rapidly and prevent a second accident, explaining why air accident investigations often produce a provisional report within days or weeks, well in advance of a final report that can take months or years. These needs for urgency and transparency conflict with the privacy requirements of legal investigations and with the level-headed slowness of the judiciary. In France, notwithstanding the need for urgency and transparency, Article 226-13 of the Penal Code (29 March 1999) requires investigation personnel,



Gendarmes at derailed TGV locomotive near Saint-Geours-de-Maremne in southwest France. Five passengers were slightly injured in the accident on 31 October 2001 when the TGV was heading to Irun at the French-Spanish border. (AP/WIDE WORLD PHOTOS)

accident site investigators, commission members and experts to observe strict confidentiality rules.

Legal Status of Investigation and Investigators

Technical investigators have long based their conduct on legislation of limited scope while trying to remain effective without clashing with the judiciary. However, this approach is reaching its limits. A good example is found in Canadian law outlined below.

- In its conclusions, the TSB is not qualified to assign or determine civil or penal responsibility; its conclusions must nevertheless be complete, whatever the inferences that may be drawn.
- The conclusions of the TSB cannot be interpreted as assigning or determining civil or penal responsibility.
- The conclusions of the TSB do not commit the parties to a judicial, disciplinary or other proceeding.
- On-board (black box) recordings are protected. No one can knowingly communicate the contents or allow them to be communicated, nor can they be forced to produce the contents or to testify about them at a judicial,

disciplinary or other proceeding.

- Notwithstanding other provisions, a court or coroner who petitions for production and examination of an onboard recording will examine it *in camera*. If it is concluded that the public interest is more imperative than the protection conferred on the recording, the court or coroner may order its production and examination.
- On-board recordings cannot be utilized within the framework of disciplinary proceedings or with regard to the capacity or competence of an agent or employee.

Likewise, the French BEA issued a similar warning: 'Pursuant to Annex 13 to the Convention on International Civil Aviation, to EU Directive 94/56/EC, and to Law No. 99-243 of 29 March 1999, a technical investigation shall not be conducted in such a way as to establish fault or evaluate individual or collective responsibility. Its sole objective is to draw from this event information likely to prevent future accidents.'

Law No. 99-243 of 29 March 1999 was adopted in an effort to comply with EU Directive 94/56/EC and was supplemented by a decree on 8 November 2001 're-establishing' the BEA. Although it establishes legal precautions and reaffirms the primacy of the judiciary, the law has been met by sharp reservations on the part of some French magistrates and judicial experts who are not convinced of the usefulness of independent technical investigations once a preliminary judicial investigation has started. Perhaps this explains why 50 years passed from France's signing of the Chicago Convention to its ratification in French domestic law!

From Civil Aviation to Other Modes of Transport

In France, it took many years before the concept of a permanent and specialized investigation body spread from civil aviation to other transport sectors. Instead when a serious accident occurred in another transport sector (such as railways, cable cars, buses, tunnels and ships), the government established an *ad hoc* commission or called on a regulating agency or even the company concerned to conduct an internal investigation and communicate the results to the supervising body.

This approach was insufficient due to the complexity of inquiries, media attention, greater public demand for safety, a tendency towards litigation where people expect explanation before assessing penalties, distrust of companies acting as both judge and jury, and the need for trust in regulatory bodies and their political masters.

Major spills from oil tankers like the *Torrey Canyon* disaster in 1967 with serious ecological impacts focussed the public's attention on the dangers of marine accidents. In 1995, the International Maritime Organization (IMO) adopted a Code for the Conduct of Inquiries Concerning Maritime Accidents and Incidents and recommended that states establish permanent measures for holding such inquiries. This led the French Minister of Equipment, Transport and Housing to

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establish the BEA board for marine accidents at the end of 1998-a body that is essentially responsible for administering a permanent investigation commission. A similar trend—although to a lesser degree-occurred at the international level in the land transport sector. In the September 2001 White Paper on Transport Policy, the European Commission declared, '...European regulations have provided for this type of (independent technical) investigation for civil aviation. A similar statute for railway inquiries also now exists. The Commission is now considering a proposal for the development of similar inquiries for accidents in the maritime sector, and in the longer term it would be appropriate to develop similar enquiries for road accidents as well.'

At a conference on 23 January 2001, the EU's General Director of Transportation recommended adoption of modular Accident Investigation Offices in member states with feedback to the EU level. The French legislature needed only a few months to provide maritime investigators with the legal basis that had taken so long for aviation investigators when the Law Regarding the Safety of Infrastructure and Transport Systems, and Technical Inquiries after an Event at Sea or a Land or Air Transport Accident or Incident was promulgated on 3 January 2002.

Following an accident or incident at sea or on land (covering rail and other guided transport systems as well as road and river transport in the territory of France), the Minister of Equipment, Transport and Housing may decide to open a technical investigation solely for the purpose of preventing accidents or incidents without prejudicing any judicial investigation. The technical investigation can collect and analyze information needed to determine the circumstances and the definitive or possible causes of the accident or incident and, if necessary, can formulate safety recommendations. The law essentially encompasses the legislation adopted for civil aviation with respect to the status of investigators, their rights and obligations, and relations with the judiciary.

But the French approach demonstrates a fundamental difference between the aviation domain and the maritime and land domains. For aviation, any serious civil accident or incident occurring to an aircraft with an airworthiness certificate delivered pursuant to the Convention on International Civil Aviation will be the object of a technical investigation. For sea and land, the Minister of Equipment, Transport and Housing has discretion in deciding whether or not to establish a technical investigation.

However, since its creation, the BEA has conducted inquiries into all major maritime accidents. It is still too early to know whether this will be the case with BEA's land counterpart, but there may be difficulties with regard to railways and road transport. Although a systematic quantitative analysis of serious railway accidents is feasible, the same cannot be said for the 7000 annual road accidents with casualties. Given these conditions, it is probable that any BEA for land transport accidents will rely first on feedback from local inquiries to focus on accidents that are most likely to provide useful lessons. It is also necessary to find a good balance between excessive intervention, which would consume vast resources, and the need for the investigating body to develop sufficient technical competence to ensure a permanent flow of useful information.

Single Authority for Transport Accident Inquiries?

In my February 1993 report to the French Minister of Equipment, Transport and Housing, I recommended creation of permanent and independent offices of investigation for marine and land transport and the merging of these offices within a national body for transport safety that would become a new independent administrative authority equivalent to the NTSB. The Minister published my report and stated that he would adopt its conclusions but resigned several days later and his successor did not pursue the issue. However, I am pleased that the BEA marine and land transport boards have been and are being established, but I am concerned about issues concerning coordination and union.

I am convinced that there is everything to gain by exchanging information and perhaps sharing certain jurisdictions, but it is too early to envisage merger within one body. In any event, the nationally and internationally respected BEA board for aviation accidents has shown that independence and jurisdictional authority will win out in the end. The BEA board for marine accidents appears to be taking steps in the same direction and it remains to be seen whether the BEA board for land transport accidents will follow the same approach.

For my part, I am convinced that the new body will find ways to fulfill its role and justify its creation.



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