



Official AAE statement on

Technical Accident and Criminal Offence

The Opinions

ISBN 978-2-913331-57-0



No. 1 – 2007

€10

**Opinion of the Air and Space
Academy on**

TECHNICAL ACCIDENT AND CRIMINAL OFFENCE

Opinion No.1 - 2007

© Air and Space Academy, October 2014. All rights reserved.

ACADÉMIE DE L'AIR ET DE L'ESPACE

Ancien Observatoire de Jolimont

1 avenue Camille Flammarion

31500 Toulouse - France

contact@academie-air-espace.com

Tel : +33 (0)5 34 25 03 80

www.academie-air-espace.org

Printed by:

Evoluprint

Parc Industriel Euronord - 10 rue du Parc - 31150 Bruguières

www.evoluprint.fr

ISBN 978-2-913331-57-0

ISSN pending

Cover photo: Accident of a Boeing 737-205, tail number 3X-GCM, at Freetown-Lungi International Airport (FNA), Air Guinee Express. Credits: Mihai.crisan. Creative commons: CC-BY-SA-2.5,2.0,1.0. GNU Free Documentation License

TECHNICAL ACCIDENT AND CRIMINAL OFFENCE

The Air and Space Academy (AAE) considers that the procedure for investigations following civil aviation crashes should be re-examined and improved.

AAE notes that:

- the technical investigation and the judicial investigation, carried out in parallel, are often in competition;
- the scientific and legal approaches do not always seem coherent;
- dysfunctions are not uncommon;
- and the timeline of the protracted legal investigation is incompatible with the expectations of victims' families.

Many of these difficulties are not specific to aeronautics, but AAE obviously has a particular interest in this sector.

The French justice system took 14 years to process an accident that occurred on 20 January 1992, close to Mont Sainte-Odile, involving an Airbus A320 flown by Air Inter on the Lyon-Strasbourg route. The same time was needed for the French justice system to conclude its investigation of the

Air France Concorde accident of 25 July 2000.

Other French legal cases are related to accidents that have occurred to foreign airlines outside of French national territory, for example the Boeing 737 accident of Flash Airlines in Sharm el-Sheikh on 3 January 2004 and the MD82 accident of West Caribbean Airways in Venezuela on 16 August 2005.

AAE has no vocation to comment on the principles of criminal investigation in France, nor to compare it with criminal investigation procedures in force in other large industrialised countries.

Neither can it comment on the functioning or the substance of criminal procedures in progress.

On the other hand AAE is concerned that this type of procedure can affect whole sections of the nation's activity as well as the safety of users in the sectors concerned, whilst at the same time not meeting, in our opinion, the

expectations of the families of the victims of their dysfunctions.

In order to improve the scientific and legal processing of accidents occurring in high technology sectors subject to thorough safety regulation procedures, AAE would like to see a reflexion into criminal investigations as well as into safety investigations. This reflexion should specifically include the case of rare risks and access to specialised knowledge, and should respect the human and societal interests of all concerned parties.

For its part, AAE has launched a study relating to technical aeronautical expertise. It intends this reflexion to go beyond the aeronautical framework to embrace a very broad human, scientific and industrial perspective.

- 1 -

In France, following any accident (or particularly significant event), there are generally two investigations:

- on the one hand, an inquiry commissioned by the management in its role as administrative police; this investigation seeks to find the causes of the accident in order to derive lessons to improve safety in the future;
- on the other hand, a judicial investigation within the framework of the penal code; this inquiry also seeks to discover the causes of the accident in order to determine possible responsibilities in the past, and to sanction them if they constitute an offence.

In practice, however, these two viewpoints on the same accident often seem to compete with, and even impede each other, rather than being complementary.

It would be preferable if the two investigations provided mutual support, whilst meeting their respective goals.

- 2 -

Administrative investigations tend more and more – this has been the case for some time in civil aviation under the terms of international treaties – **to be carried out by permanent multidisciplinary organisations** independent of the controlling body. These organisations, supported by international experience, possess specialist knowledge relating to the technologies and practices in the fields in question and also to the specific investigative methods needed to find technical accident causes.

However, the conditions in which the **legal experts** are nominated and the functioning of the penal procedure, although aimed at a largely mythical objectivity, do not seem to bring out the aptitudes appropriate to the great diversity of knowledge and practices which contribute to the safety of large-scale systems.

It would be seem necessary for the examining magistrate, when calling upon technical expertise, to have access to tools or resources to help to forge an appreciation of the scientific and technical quality of the material at their disposal.

- 3 -

Activities developed to meet society's demands can generate serious risks.

Whether these are difficult to identify in advance and are therefore covered by the precautionary principle or whether, as tends more and more to be the case, they can be characterised by science, these risks are taken into account so as to reduce their probability of occurrence to the point that it becomes socially acceptable.

If nevertheless such an accident occurs, its legal appreciation is not coherent with its scientific processing.

Penal appraisal and development ambitions should be made to be more coherent.

- 4 -

The criminal process set in motion after a fatal accident cannot be regarded to be satisfactory for close relations of the victims.

Indeed, for various reasons, including those mentioned above, many years can pass between the loss of a close relation and the judgement, or rather the series of judgements supposed to reveal the “truth” about the circumstances and the causes of the accident (over 14 years for the first judgement relating to the plane crash of Mont Sainte-Odile; 6 years and rising for Concorde!).

The length of this period also favours the emergence and propagation of sensationalism over hard facts (the Habsheim crash and AZF explosion¹ are typical of this kind of situation).

For this reason the process is not satisfactory for the general public either, who raise questions about the safety of such or such system: their reflexions are diverted towards the sensational to the detriment of in-depth discussions which should make it possible to direct safety progress effectively.

The interests of the victims and those of the public should be better taken into account.

- 5 -

Under the threat of criminal charges, and the workload involved in building up a case, even under the threat of criminal penalty, **people of all hierarchical levels,** who are called on to make important decisions on safety in industry or in the controlling bodies, **adopt more and more protective postures** which go against the best principles of risk management.

The future safety of the large technical-human systems might be substantially affected by this.

Criminal proceedings concerning accidents in such large-scale systems should make a more positive contribution to progress in safety.

1 A chemical factory in Toulouse, France, which exploded on 21 September 2001