

# When Worlds Collide

**Technical accident investigation and criminal proceedings can work at cross-purposes.**

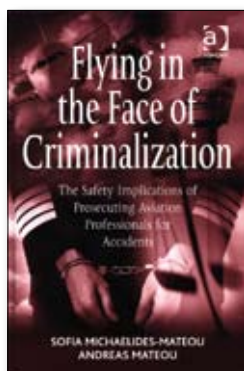
BY RICK DARBY

## BOOKS

### Civil Versus Criminal Liability

**Flying in the Face of Criminalization: The Safety Implications of Prosecuting Aviation Professionals for Accidents**

Michaelides-Mateou, Sofia; Mateou, Andreas. Farnham, Surrey, England, and Burlington, Vermont, U.S.: Ashgate, 2010. 232 pp. Figures, references, index.



“Aviation professionals who have been criminally prosecuted subsequent to an aviation accident were charged with a variety of criminal offenses,” the authors say. “Despite the differences in the legal systems and the penal codes for each country, the common elements of the charges are based on breach of duty, negligence and manslaughter.”

Specific charges against pilots and air traffic controllers have included “causing death through a reckless, careless and dangerous act”; “criminal negligence causing bodily harm and dangerous operation of an aircraft”; “manslaughter and negligent flying causing death”; and “negligent homicide and negligently disturbing public transport.” Being killed may or may not put an individual beyond the reach of the law, depending on how you look at it — the pilots of an ATR 42 taking off in icy conditions

at Milan, Italy, in October 1987, who died along with 34 passengers, were posthumously charged with murder and convicted.

The International Civil Aviation Organization (ICAO) Standards and Recommended Practices, Annex 13, *Aircraft Accident and Incident Investigation*, tells state accident investigation bodies: “The sole objective of the investigation of an accident or incident shall be the prevention of accidents and incidents. It is not the purpose of this activity to apportion blame or liability.” Further, Annex 13 says that the investigators shall not make the information gained available to police and judicial investigators “unless the appropriate authority for the administration of justice determines that their disclosure outweighs the adverse domestic and international impact such action may have on future investigations.”

ICAO, however, has no authority over any state’s legal apparatus. The authors note that Annex 13 “does not ensure that, in practice, the evidence and results of the investigations are not used in subsequent legal consequences and litigation. Concurrent to the accident investigation carried out in terms of Annex 13, police and judicial investigation will also be carried out in order to determine what offenses were

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committed, the exact nature of the offenses and the parties who have allegedly committed any such offenses.”

Increasingly, serious aviation accidents result in two investigations — one by the national accident investigation authority and another, sometimes following and sometimes in parallel, by criminal investigators.

“The comprehensive collection of cases that we have included shows that there were 27 cases of aviation accidents which were criminally investigated from 1956–1999 and 28 cases from 2000–2009,” the authors say. “There were 27 cases spanning 43 years and over 28 cases in the last decade. Our research into cases where aviation professionals have faced criminal charges subsequent to an aviation accident has led us to believe that there will be a significant increase in cases where aviation accidents will be followed by criminal prosecutions.” Such prosecutions, they say, are “based on the public’s expectation that criminal prosecution will ensure aviation safety, and perhaps judicial authorities believe that prosecution will be the only way to increase safety and protect the public.”

Two worlds are colliding. The first is traditional, technical accident investigation, which is best served by full disclosure of all relevant facts by everyone involved, in addition to physical evidence. The goal is to determine causal factors and offer recommendations for reducing the likelihood of accidents with similar causal factors. The second is law enforcement, with its own codes and traditions, and based on administering justice against individuals, including corporate “persons,” who commit acts that cause harm.

A large portion of accidents — 80 percent is a commonly cited figure — involve human error. Legal systems have long recognized the concept of responsibility for human error and created a system of civil liability for error involving negligence, whereby injured parties or relatives of those killed can sue for financial compensation. The authors discuss in detail the meaning of civil liability, particularly as it

pertains to aircraft accidents. “Liability in tort (negligence) may be imposed as the legal consequence of a person’s act or omission to act in accordance with a legal duty imposed on him,” they say.

That legal duty must be a “duty of care” of the defendant toward the claimant. In simplified layman’s terms, a person or entity must take reasonable care to avoid acts or omissions which can reasonably be foreseen as likely to injure someone in relation or proximity to the defendant, or under the defendant’s control.

Thus, while there is no absolute justice in the world, a well-established means exists for the scales to be reasonably balanced through civil litigation entirely outside the criminal justice system. Then what is the justification for law enforcement to step in?

The Convention on International Civil Aviation, ICAO’s “constitution,” says in Article 12 that “each contracting state undertakes to adopt measures to ensure that every aircraft flying over or maneuvering within its territory and that every aircraft carrying its nationality mark, wherever such aircraft may be, shall comply with the rules and regulations relating to the flight and maneuver of aircraft there in force.”

“It is therefore clearly stated that the provisions establishing criminal liability are set out in the domestic legislation of each contracting party, which differs from state to state,” the authors say. “Modern aircraft are capable of crossing half the globe, flying non-stop from Singapore to New York and from London to Sydney. During the flight, the aircraft will traverse countries with different legal systems and aviation legislation.”

Sentencing can be drastic. “In the Korean Airlines DC-10 accident in Tripoli [Libya] in 1989, in which four crewmembers, 68 passengers and six persons on the ground were killed, the pilots who were arrested by the Libyan authorities were sentenced to life imprisonment and extradited to Korea,” the authors say. “Following the midair collision in Zagreb [Yugoslavia, now Croatia] in 1976 in which all

176 people aboard both flights were killed, the upper-sector assistant ATCO [air traffic controller] who was on duty at the time of the accident was found guilty and actually served 27 months in prison before being released. In the Tuninter ATR 72 accident [ASW, 7/09, p. 26], the Italian courts sentenced the captains to 10 years' imprisonment, and in the accident that occurred at [Milano Linate Airport, *Accident Prevention*, 4/04], the courts imposed sentences ranging from six to eight years."

Sentences are sometimes reversed or reduced on appeal; occasionally, such as for the captain of the Airbus A320 that crashed during a demonstration flight at Habsheim, France, in 1988, courts have upheld and even increased the sentence, the authors found. Regardless of the outcome, legal cases typically continue for long periods. The Habsheim case took nine years to go to court and a further year for the appeal. The July 2000 fatal accident involving a Concorde at Paris — in which charges were filed against various managers at the Concorde division of Aerospatiale, Continental Airlines and two Continental Airlines maintenance personnel — did not go to trial until 2010. "Undoubtedly, the length of time that it takes for the completion of the judicial investigation, the laying of charges and the commencement of the court proceedings increases the financial and emotional burden on the accused and causes additional damage to their reputation," the authors say.

From a system safety standpoint, the jeopardy in which aviation professionals can find themselves because of prosecution is part of a larger picture. Prosecution requires evidence, and fruitful sources of evidence can include the findings of the accident technical investigation and sensitive, supposedly protected data. The authors cite examples of courts relying heavily on the accident investigation reports. In one criminal case, the court accepted the probable cause finding of the investigation report and admitted the entire report as evidence into the trial.

"Data from the CVR [cockpit voice recorder] and FDR [flight data recorder] have been extensively used during the criminal prosecutions against pilots, ATCOs, engineers and other aviation professionals," the authors say. As one example, they note that in the court case following the Tuninter accident, "the persuasive arguments by the prosecution that the pilot had panicked and did not discharge his legal duties to complete the 'Emergency' checklist were given weight the moment the CVR transcript was heard in court and the captain was heard praying."

In a survey of pilots and ATCOs conducted by the authors, most respondents expressed the belief that criminalization will have no effect, or a negative effect, on safety. "Pilots and ATCOs who are already working under great pressure to maintain a high safety level and achieve high productivity targets due to the economic pressures of the industry are alarmed that the additional fear of prosecution due to an error will increase their stress, and this will have a negative effect on their concentration, decision making and ultimately on their performance," the authors say.

Extracts from some of the survey responses suggest the rationale for their positions:

- "The judicial authorities will only be looking for such evidence that will show whether somebody is to blame and therefore can be successfully prosecuted. Inevitably, the search for such evidence concentrates on pilots, ATCOs, aircraft mechanics and so on. The deeper and more complicated potential institutional, structural and managerial causes of the accident, which are the province of the accident investigator, tend to be ignored (and in certain countries actively suppressed because the government is directly involved with the running of the aviation industry)."
- "ATCOs and pilots are not going to their work having in mind to produce an incident or an accident. They represent

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the ‘sharp end’ of organizations, and thus they are more visible in the case of an accident/incident than the ‘blunt end’ of their organization. ... It is unrealistically assumed that ATCOs and pilots can deal effectively with any kind of conceivable emergency situation they may face; ATCOs and pilots are normally intervening in many cases where management inefficiencies, system design problems and politically imposed constraints are hindering the normal flow of their everyday tasks.”

- “Creating a blame culture will be counter-productive. It cannot be said that countries that have prosecuted pilots and ATCOs have a higher safety record. Having a healthy safety culture allows mistakes to be picked up and learned from. Prosecuting people discourages others from reporting their mistakes.”

The authors say that “a very small number” of respondents felt that criminalization of accidents has had a positive effect on safety. They included comments such as these:

- “Someone has to pay if someone does something wrong and people get injured or die and there is no management or technical explanation.”
- “Criminal or multiple gross negligence should be prosecuted to clearly demonstrate that the aviation community does not tolerate this.”

If criminal proceedings against aviation professionals must continue, is there a better way they could be performed? The authors suggest consideration be given to establishing a

European aviation court — and presumably similar courts in other regions — with uniform rules and procedures, instead of the patchwork quilt of current jurisdictions. “The establishment of a European aviation court was overwhelmingly supported by the survey respondents, as it was thought that this would provide a court with a common legal basis to commence a criminal prosecution, dealing specifically with aviation matters and having the specialized knowledge and experience in such matters,” they say.

The authors quote a respondent: “[Such a body would be] more professional and more experienced and will have experts in specific fields. If based on a just culture, it will ensure common standards and will be more fair and just.”

Another respondent said, “Most of the legal world is not aware of the real nature of aviation. Of course, law is law and should be applied everywhere, but what about the special circumstances that both ATCOs and pilots undergo? A court of law with judges and lawyers that are experts would offer a better trial.”

### Revised and Updated

**Instrument Flight Procedures and Aircraft Performance**  
Åkerlind, Olle; Örtlund, Håkan. Molkom, Sweden: Håkan Örtlund Produktion, 2010. <[www.flightproc.com](http://www.flightproc.com)>.

The authors say this latest edition “deals with subjects heavily affecting the pilot’s workday. Since this book was first introduced, rules and regulations concerning procedures and weather minimums have been subject to extensive revisions. As a consequence, the chapters dealing with flight procedures and weather minimums have been extended.” The spiral-bound book is extensively illustrated with diagrams. ➤

