JUST CULTURE IN SWITZERLAND: AN EIGHT-YEAR ORDEAL

Controllers are rarely prosecuted following incidents, but when it does happen, proceedings can take years, and incur a significant personal toll. In this article, **Fabian Hummel** tells the story of his eight-year ordeal, and **Marc Baumgartner** outlines other Swiss cases.

An Operational Perspective

On the 15th of March 2011, two aircraft were taking off on crossing runways at Zurich airport. One of the two aircraft aborted its take-off when the pilot became aware that they were on a crossing path. The other aircraft continued its takeoff.

This event attracted immediate and significant media focus, along with instantaneous social reports. The CEO got requests for interviews even before the operational incident report was filed.

The ATCO had a licence for Zurich tower and approach. After the incident and following the media pressure, the ATCO was able to continue only as an approach ATCO. After another incident in the approach, management together with the Union decided that the ATCO should undertake nonoperational duties in the unit. The Swiss Accident Investigation Body carried out an investigation and the report was published on 6 March 2012 (and approved shortly afterwards; Swiss Accident Investigation Board, 2012). In Switzerland these reports are publicly available. This report was used by the prosecutor to press charges on 25 July 2014. On 28 April 2016, the district court of Bülach (responsible for court cases concerning the airport) retained none of the charges against the ATCO at its second audience. The ATCO was acquitted. In the written judgement (GG.140060-C/U BG Bülach), the court recommended that the airport and the air navigation service provider take systemic measures to improve safety at the airport.

The prosecution appealed. At its second audience, on 12 December 2018, the cantonal court of Zurich charged the ATCO with negligence (see box text). The ATCO appealed this decision.



Felonies and Misdemeanours against Public Traffic

Disruption of public traffic Art. 237

 Any person who wilfully obstructs, disrupts or endangers public traffic, in particular traffic on the roads, on water or in the air and as a result knowingly causes danger to the life and limb of other people shall be liable to a custodial sentence not exceeding three years or to a monetary penalty.

If the offender thus knowingly endangers the life and limb of a large number of people, a custodial sentence of from one to ten years may be imposed.

2. If the person concerned acts through negligence, the penalty is a custodial sentence not exceeding three years or a monetary penalty.

On 29 October 2019, the Federal Court of Justice (Judgement 6B_332/2019) accepted the appeal of the controller and instructed the cantonal court of Zurich to revise its earlier condemnation (Tribunal Federal, 2019a). The ATCO was acquitted of all charges, though it was an acquittal based primarily on the assessment of the endangerment. More than eight years of a professional odyssey finally came to a positive ending.



In July 2019, the ATCO requalified as an approach controller. Shortly after having been acquitted by the Federal Court, he started the tower requalification course and has been working since the end of 2021 as a fully qualified ATCO.

Following the incident, several changes were made at the airport and at the air navigation service provider (21 in total). Some of the noteworthy changes are as follows:

Introduction of Management of Serious Incidents	MOSI (Management of Serious Incidents) provides a platform process to enable concerned actors to exchange information and stay informed about a serious incident. The ATCO is temporarily removed from position until the first internal investigation results are known.
Freeze of crossing runway operations	Following an intervention by the Minister of Transport, CROPS (Crossing Runway Operations) was stopped. CROPS previously allowed operations on crossing runways. It was since reintroduced in 2022.
Calibration flights during night- time	Calibration flights for navigational equipment, which were active during the incident, were mostly banned during the daytime and scheduled during the night, where no regular air traffic takes place.
Additional ATCO for second aerodrome control	During high traffic periods, a second shift is planned in order to open a second sector position in the tower and share the workload.
Upgrades and introduction of new safety systems	The runway incursion and monitoring system, which was already operational during the incident, was upgraded to enhance conflict detection between two movements on crossing runways. Furthermore, a new alerting system (Advanced Runway Safety Improvement – ARSI), was developed and introduced to produce early warnings in case of conflicting clearances.
Arrival capacity	During times with dependent operations between arrivals and departures, the acceptance rate for arrivals was lowered to better reflect the operational circumstances.
Additional ATCO at Approach when calibration flights take place	In order to assist with the complexity of the calibration flights, an additional ATCO is rostered for the approach services.
Increased spacing for landing aircraft when configuration Landing RWY 14 and Departure RWY 10	This recommendation was introduced following an audit by the Swiss CAA.

A Personal Perspective

The controller in question is Fabian Hummel, one of the authors of this article. At the first European CISM (critical incident stress management) Network meeting in Lucerne in 2021, he agreed to outline his emotional reactions to the events during the long period from the incident to the Federal Court judgement. Fabian described how, over the months and years of the ordeal, his emotional state fluctuated. From a personal perspective, some of the key events are as follows.

1. April 2011 – Licence revoked. Two weeks after the incident, I was informed that I would no longer work in the tower, temporarily, but would continue to work on approach sectors. At the time, there were no procedures in place to handle a serious incident, especially after the involvement of the media. This was a low point. I personally could not understand the decision and could not think of a similar case. But my goal was to renew my licence and get back in the tower for work. Later, in 2012, I stopped working as an ATCO and took an office position, still working for TWR/APP Zurich in procedure design and in training.

2. December 2012 – Union information event. One and a half years after the incident, the union organised an information event for fellow ATCOs and colleagues. The path ahead was still unclear; the prosecutor was building a case, but it was not clear if charges would be pressed. After presentations from the union, my lawyer, the head of the Swiss transportation safety investigation board, a media expert, and myself, I felt the huge support of my co-workers and their wish to have me back in the tower and at the radar. This was very important to me. If I had felt that my colleagues doubted my ability to return and work as an ATCO, I would not have fought to renew my licence.

3. March 2014 – Public prosecutor pressed

charges. Three years after the incident, the
public prosecutor pressed charges. All hope that
they would end the investigation was lost. In the
months before that decision, arguments were
made about why the investigation against me
should be terminated. On the other hand, we did
not want to reveal too much of our defence argument. EveryIn the t
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time I received a letter in my mailbox with an official-looking emblem on it, my heart dropped. I immediately felt stress symptoms return. Also, media attention increased again. Every time an unknown number called, I was afraid it was the press.

4. January 2017 – Public prosecutor filed an

appeal. After being acquitted by the district court, and already planning my licence renewal almost six years after the incident, the public prosecutor filed an appeal. We had twenty days to hand in a statement to this 40-page appeal, with years of future court proceedings still to come.

5. April 2021 - First OJT shift back in the tower.

After being finally acquitted by the Federal Court of Switzerland, I started unit training to recover my tower licence, and had my first OJT shift in the tower. When I first received the email about my acquittal from my lawyer, I didn't really trust it. I couldn't believe it at first. I could finally relax after a call to my lawyer, who translated the acquittal written by the judge. This was more than ten years after the incident, and with a lot of support from my lawyer (who postponed retirement to work my case), people within the company at all levels of "After being finally acquitted by the Federal Court of Switzerland, I started unit training to recover my tower licence, and had my first OJT shift in the tower."

management, my fellow ATCO colleagues and co-workers, my wife (who is also an ATCO), my friends. Now I am happy to work as an ATCO in Tower and Approach Zurich.

During the 10 years of absence from the operational environment, I undertook various courses and took on several responsibilities. I became a team resource management (TRM) facilitator, unit class rating instructor, and deputy head of the tower. I undertook project manager training, basic management training, and worked on interesting projects. I was elected as a CISM peer by my work colleagues. In my private life, I became a commercial pilot, got married, bought a flat, and even built a plane.

A National Perspective

Two other cases – one in Zurich Tower in 2012 (SAIB, 2014, see skyguide, 2021), and one in ACC Zurich in 2013 (SAIB, 2014) – led to federal court cases. The ACC case followed a different

legal procedure. The Federal Prosecutor issued a penal fine of 20,000 CHF against the ATCO. (The local prosecutor of Zurich airport was not involved due to an investigation against one of the involved airline crews, bringing an international dimension which falls into the legal competency of the Federal Prosecutor.)

The ATCO appealed the penal fine issued by the Federal Prosecutor and the court audience took place at the Federal Penal Court. The single judge of the federal penal court asked questions to the

Head of the Aviation Branch of the STSB in order to understand some of the technicalities of the incident investigation report. The judge of the Federal Penal Court in Bellinzona sentenced the ATCO to a fine and probationary period of two years. The appeal to the Federal Court of Justice was not successful for the ATCO and confirmed the guilty verdict, sentencing the same

probationary period and a lesser fine (Judgement 6B_1220/2018; Tribunal Federal, 2019b).

The court cases were highly publicised and followed by the air traffic controller community at national and international levels. Where public audiences were possible, many colleagues and press showed up in the court room. After the sentence of the en-route case, CANSO and IFATCA, together with the European Cockpit

Association, addressed letters to the Ministers of Justice and Transport. These called for a Just Culture according to

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international standards and recommendations, and called for EU law, in particular EU 996/2010 and 376/2014 to be implemented into Swiss law. Subsequently the stakeholders of the Swiss Aviation Sectors created the 'Just Culture Platform', an association of Swiss aviation organisations who are committed to anchoring Just Culture in organisations, in the Swiss legal system and in society (see https://en.justculture.ch/just-cultureplattform).

Two conferences brought together representatives from aviation, government, and judiciary for public debates. These were organised by Swiss Airline Pilots Association (see Kazekas, 2019) and the Centre for Aviation and Space Competence (2023). In parallel, IFATCA organised a training session for the Swiss federal and cantonal prosecutors, where the Dutch Aviation Prosecutor provided information about the Dutch system.

Lobbying of the Swiss Parliament by the Just Culture Platform led to an answer in the form of a report on "error culture" in Switzerland by the government (Der Bundesrat, 2022). While the request from Parliament to the Government was widening the scope of the possible introduction of Just Culture to other domains such as the medical, nuclear, and public transport in general, the report of the government highlighted the possibility to find a sector-specific solution. This suggested that aviation should look into legislative change.

The future for Just Culture in Switzerland is uncertain and there is far to go before the principles of Just Culture in hazardous industries are compatible with the penal code. But there are signs of progress. What is critical is that we work together as professionals to make Just Culture a reality not only in organisations, but at national and international levels in systems of justice. As written by The Federal Council of the Swiss Government, "Nuclear power plants, hospitals and airplanes become safer when operators learn from mistakes." And it is especially important to remember that 'operators' are organisations, not just individuals. **S**

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Marc Baumgartner is an air traffic controller and supervisor in Geneva ACC. Marc was a member of the Performance Review Body/Performance Review Commission. For eight years until 2010, he was President and CEO of IFATCA and coordinates the activities of IFATCA in SESAR and EASA.

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