

EUROPE

Germanwings Crash Exposes History of Denial on Risk of Pilot Suicide

By NICHOLAS KULISH and NICOLA CLARK APRIL 18, 2015

DÜSSELDORF, Germany — When Andreas Lubitz sent an email in 2009 seeking reinstatement to Lufthansa’s flight-training program after a monthslong absence, he appended what in retrospect was a clear warning signal about his fitness to fly passenger jetliners: an acknowledgment that he had suffered from severe depression.

Lufthansa put the young German back through its standard applicant-screening process and medical tests. But it did not, from everything known about the case so far, pursue any plan to assure that he was getting appropriate treatment. Nor did it impose special monitoring of his condition beyond that required for any pilot who had a flagged health issue.

Instead, Mr. Lubitz haltingly made his way through the training program and ultimately was entrusted as an Airbus A320 co-pilot for Lufthansa’s low-cost subsidiary, Germanwings. Lufthansa was so unaware of the extent of Mr. Lubitz’s psychological troubles that the company and its medical staff had no idea of the tortured drama playing out in his mind, peaking in the two or three months leading up to his final flight. Investigators told The New York Times that he visited a dozen or more doctors as he frantically sought treatment for real or imagined ailments.

In the days just after Mr. Lubitz, 27, flew himself and 149 other people into a French mountainside last month, Lufthansa’s chief executive

confidently pronounced that Mr. Lubitz had been “100 percent” fit to fly, highlighting how little the airline knew of the pilot who shook confidence in the company’s reputation for training and management rigor.

Mr. Lubitz’s journey to the moment when he found himself alone at the controls of Germanwings Flight 9525 from Barcelona to Düsseldorf on March 24 exposes a series of failures and weaknesses at Lufthansa and throughout the industry and its regulators in dealing with mental illness among pilots. And it shows how little the industry and its regulators have done to acknowledge and address the most extreme manifestation of those psychological strains: pilot suicide.

Mr. Lubitz’s increasingly troubled behavior in the period leading up to his final flight raised no alarms at the airline.

Although he had passed his standard medical exam by a flight doctor last August, he had more recent notes from specialists declaring him unfit to work that he never shared with his employer.

In the days before his final flight, he seems to have methodically plotted his own demise and that of his passengers. He researched methods of committing suicide, investigators say, and looked into cockpit security procedures. When he left for work on the morning of March 24, scheduled to fly from Düsseldorf to Barcelona and back, his iPad browser, according to one investigator, still had tabs open about two recent airline disasters. They were the mysterious disappearance last year of Malaysia Airlines Flight 370 and a Mozambique Airlines flight in 2013 in which the captain was found to have intentionally crashed in Namibia, killing himself, five other crew members and all 27 passengers.

“The airline management, the supervisors, the dispatchers — they do not see the pilots very much,” said André Droog, a former psychologist with the KLM Flight Academy in the Netherlands, who is now president of the European Association for Aviation Psychology. “It puts a lot of responsibility on the individual pilot to be responsible and self-critical and to manage their lives very well.”

Lufthansa had, at most, only a partial sense of the severity of Mr. Lubitz’s

condition and how long he had been dealing with it.

Information about Mr. Lubitz's history remains sketchy, but there is evidence that his psychological problems were well established by the time Lufthansa was training him to fly. Just days after Lufthansa's chief executive, Carsten Spohr, vouched for Mr. Lubitz's flightworthiness, German prosecutors disclosed that Mr. Lubitz had exhibited suicidal tendencies and been treated by psychotherapists over a long period before earning his pilot's license.

"If I had known about his medical problems with depression before starting his flying career and during his primary training, I probably would not have accepted him," said Reiner W. Kemmler, the former head of Lufthansa's department of aviation psychology.

Airlines and government regulators did not respond in any systematic or urgent way to warnings from their own experts that they were not doing enough to address mental health issues among flight crews.

As recently as 2012, the International Civil Aviation Organization, an arm of the United Nations that serves as the umbrella organization for airline regulation, raised the lack of systemic screening for psychological problems as a weakness that needed to be addressed, particularly with regard to younger pilots. The Montreal-based group's 2012 Manual of Civil Aviation Medicine cited "an apparent mismatch" between the likelihood that mental rather than physical problems would afflict young pilots, "and the tools being used to detect them (the traditional medical examination)."

The pervasive culture of privacy in Germany created a bias against delving into Mr. Lubitz's condition and effectively blinded the country's airline regulator to the medical problems afflicting German pilots.

The German Federal Aviation Office, which issues pilot's licenses, relies entirely on the country's nearly 500 licensed flight doctors to determine pilots' fitness to fly. But an audit last year by the European Aviation Safety Agency found that Germany's strict data-protection rules have meant that the information that flight doctors submit to the regulator is not sufficiently detailed to allow officials to validate the doctors' findings.

The European Commission called on Germany in November to fix this

among a dozen other oversight failures identified by the aviation safety agency. Berlin responded last year with a series of proposed remedies, which the authorities in Brussels continue to review. A ruling from the commission is expected in the coming months.

Other nations have taken stricter measures than Germany has when it comes to dealing with depression and other mental illnesses among flight crews.

Dr. Richard Soderberg, chief medical officer at the civil aviation and maritime department of the Swedish Transport Agency, said that while depression would not permanently disqualify a pilot in Sweden, the pilot would be grounded during treatment. The agency would then require the pilot to turn over all medical records pertaining to the depression and submit to psychiatric evaluation every six weeks or so, and the pilot would not be allowed to fly alone.

“The privacy of the pilot cannot be traded for aviation safety,” Dr. Soderberg said.

Security measures put into place after the Sept. 11 attacks, intended to guard against threats coming from outside the cockpit, failed to anticipate a threat from within it.

Lufthansa, like other European airlines, had installed the armored cockpit doors insisted on by the United States following 9/11, after they were mandated by regulators worldwide. But European regulators did not follow the United States in additionally requiring that two crew members be in the cockpit at all times.

The point of the policy was not to guard against a rogue pilot but to ensure that someone was available to reopen the locked door for a returning crew member while the remaining pilot was at the controls. European airlines instead permitted a lone pilot in the cockpit, but installed cameras allowing that pilot to check on the identity of anyone at the door, and to decide while seated whether to override keypad entry from the outside.

It was only after the Germanwings crash that Europe reversed course and recommended having two crew members in the cockpit at all times.

A Known Risk

Though the highest-profile example of the pilot-suicide problem, Mr. Lubitz was far from an isolated case. In recent years, a series of commercial pilots appear to have crashed their aircraft intentionally or been stopped by fellow crew members as they tried. In most cases, those pilots had been screened for psychological problems.

“There was almost a denial by the industry, and in particular among pilots, that we don’t do things like that,” said Robert Scott, a former British Navy pilot and aviation consultant in Vancouver, British Columbia, who also heads a branch of the Canadian Mental Health Association. “It’s not part of our culture. It’s beyond the pale.”

“Now we have so much evidence that we have grudgingly come to accept that, yes, it is a problem,” he added.

Over the past two decades, other episodes were played down or hushed up, and in any case did not lead to any major changes in the regulation of the psychological fitness of pilots.

In 1997, a SilkAir Boeing 737 crashed in Indonesia, killing all 104 people aboard. The pilot had recently been demoted in the wake of a complaint about his behavior and what one United States government report termed “cowboy practices.” Investigators later learned he was also under financial and family strains. United States investigators concluded that he had committed suicide. But Indonesian investigators ruled out that explanation.

Two years later, an EgyptAir Boeing 767 departing New York crashed into the Atlantic off Nantucket Island and killed 217 people. The United States National Transportation Safety Board concluded that the co-pilot purposely put the jetliner into a steep dive after uttering repeatedly, “I rely on God.” Under pressure from Egyptian officials, American investigators did not deem the crash a suicide, but ruled out mechanical failures and blamed the co-pilot’s actions at the controls.

That same year, an Air Botswana pilot who had been grounded for medical reasons took off without authorization in one of the airline’s turboprops and threatened to crash into his carrier’s two other passenger

planes that were parked on the ground.

Passengers waiting to board one of the planes were quickly moved to safety. United States officials documented that the pilot followed through on his threat and slammed into the planes, engulfing them in flames and dying in the crash.

The lack of any substantive evidence of what happened to Malaysia Airlines Flight 370 last year has led investigators to consider the possibility that the plane might be another example of one of the pilots' deliberately downing the aircraft.

Beyond those cases, there have also been numerous close calls.

On Aug. 20, 2010, court records show, a pilot on a Spirit Airlines flight out of Port-au-Prince, Haiti, took the passenger jet he was flying out of autopilot and accelerated the airplane nearly to maximum speed, pulling the plane up into a rapid climb.

He had exhibited erratic behavior before, notably in February 2010, when he was found lying on the floor of the cockpit on a flight from San Juan, P.R. He failed to tell the airline or his medical examiner that he was self-medicating with St. John's wort, an herbal supplement often used for psychological issues.

In March 2012, a JetBlue flight to Las Vegas was diverted after the captain began talking incoherently about religion, 9/11 and Iraq, and said, "We need to take a leap of faith."

An off-duty JetBlue pilot on board the flight teamed up with the co-pilot to lock the captain out of the cockpit. Passengers helped subdue the troubled pilot, who was trying to re-enter the cockpit. He was later found not guilty of criminal charges by reason of insanity.

There is a common theme of denial in many cases of pilot suicide, as the responses of the Egyptians and the Indonesians demonstrate. After a Royal Air Maroc captain crashed an ATR-42 turboprop in 1994, killing all 44 aboard, Moroccan investigators concluded that he had committed suicide, according to a United States summary of the case, but his pilot's union disputed the finding.

"We can no longer feel 100 percent confident in the person sitting beside us in the cockpit," said Mr. Scott, the aviation consultant and pilot. "That is an

awful feeling.”

The transportation safety board has cited several of these cases as reasons for improving flight data recorders, including making it harder for pilots to disable recorders and improving ways for the devices to survive crashes and be recovered even when aircraft crash in deep water.

Screening out pilots who are determined to keep flying and are willing to lie will be difficult, experts said. “At the moment I don’t see tests if somebody doesn’t want to talk about his problems and he’s hiding all his symptoms,” Mr. Kemmler, the former Lufthansa official, said. “We don’t have a psychological flight recorder.”

But flight doctors are well aware of the risks.

“It remains astonishing how many pilots with mild or fading depressive disorders taking antidepressants flew without the knowledge of flight doctors — and still fly for us,” Dr. Uwe Stüben and Dr. Jürgen Kriebel, who both worked for Lufthansa, wrote in the abstract of a paper published in 2011, while Mr. Lubitz was still a trainee.

In 2009, the year Mr. Lubitz returned from his monthslong absence from training, Dr. Stüben was Lufthansa’s director of medical services and would have been involved in evaluating Mr. Lubitz’s case, while Dr. Kriebel, also employed at Lufthansa’s aeromedical center at the time, normally performed psychiatric examinations on the young trainees.

Dr. Stüben declined to comment for this article. Reached by telephone, Dr. Kriebel said, “I won’t comment on the situation because the facts of the crash fall under my obligation of confidentiality.”

European Union regulations that took effect in April 2013 require flight doctors to refer pilots with certain medical or psychological conditions — including depression — to national aviation authorities.

Because of his previous episode of depression there was a mark in Mr. Lubitz’s medical file that required flight doctors to examine him for any signs of a recurrence — and to refer the case to regulators only if they suspected that had happened. Lufthansa has declined to disclose the nature or intensity of those examinations.

To questions about the details of how the company handled Mr. Lubitz, Lufthansa said, “We do not wish to forestall the investigation of the case by the public prosecutor. For this reason, we will currently not comment on the specific case.”

Passing Unnoticed

The class photo from his high school graduation yearbook shows a scrawny teenager wearing a striped long-sleeved T-shirt, a crew cut and a slightly crooked grin. Andreas Günter Lubitz appears to have been the opposite of a large personality; his classmates voted him “third most orderly” among the 108 graduates of the Mons Tabor Gymnasium in Montabaur, Germany.

Mr. Lubitz stood out in only one way: his passion for flying and goal of becoming a commercial pilot. He began flying gliders at 14. “He was gifted. He was very precise and also absorbed it all quickly,” said Peter Rücker, 64, who has flown gliders for 50 years and knew Mr. Lubitz from the local club.

A full-page advertisement that Lufthansa took out on the back of the Mons Tabor yearbook asked: “Do you want to make your dream of flying a reality?” For Mr. Lubitz the answer was most assuredly yes. He applied to join the company’s highly selective flight academy straight out of high school and in 2008 was among the roughly 5 percent of applicants accepted into the training program.

But he broke off his training and for several months received psychiatric care, spending at least part of that time back home in Montabaur. When he was ready to return to the flight school the next year he sent Lufthansa the email about his “episode of severe depression,” attaching medical documents, the company said. After he was tested and readmitted, Mr. Lubitz completed all his requirements and graduated from the program. He received his commercial pilot’s license in 2012.

There appear to be additional delays in Mr. Lubitz’s training beyond the break of several months in 2009. He was accepted into the training program, which usually takes one and a half to two years, in 2008, but did not begin working for Germanwings until September 2013. Even with the 11 months that

the company said he worked as a flight attendant, waiting for a pilot slot to open up, significant gaps in his career remain publicly unaccounted for. Lufthansa, citing the continuing investigation, declined to provide a fuller accounting.

The offer to fly for Germanwings was not as prestigious as working at Lufthansa, but for Mr. Lubitz it was his first job flying planes.

He split his time between his parents' house in an upper-middle-class neighborhood of Montabaur, where he kept a room, and an apartment on the outskirts of Düsseldorf, where he lived with his girlfriend. Residents told local news media that they often saw him out and about in his pilot's uniform. He was "always laughing, always happy," said Habibalah Hassani, who sells pizza from a corner stand near the white brick apartment building that was Mr. Lubitz's home in Düsseldorf. "I could not see that he was ill."

His most recent required checkup with a flight doctor came in August 2014; he passed.

Mr. Rücker from the glider club said he saw Mr. Lubitz on four or five different weekends last fall, when he returned to renew his glider license, and that he seemed fine. But all was not well with the young pilot.

He began to visit a series of doctors, complaining first of psychiatric problems and later of difficulties with his vision. He visited the Düsseldorf University Hospital in February and March for diagnostic testing. Doctors could determine no physiological causes for the vision difficulties, leading investigators to conclude that they may have been psychosomatic.

Investigators believe that he visited many different doctors, "well into the double digits," in part so that none would recognize the true scope of his health problem, according to an official who spoke on the condition of anonymity because of German privacy laws. Prosecutors said Mr. Lubitz did not go to Lufthansa for help with his medical condition. That could have grounded him — and possibly cost him his job.

In fact, Mr. Lubitz had recent notes from specialists — though not a flight doctor — pronouncing him unfit for work, but he never told Germanwings. He tore up one of the notes and threw the scraps in his wastebasket, where they

were found by investigators after the crash.

The jetliner took off from Düsseldorf to Barcelona shortly after dawn at 6:45 a.m. on March 24. The captain, Patrick Sondenheimer, flew to Spain, but it was agreed that his co-pilot would fly back. The aircraft spent one hour on the ground at Barcelona-El Prat Airport. Mr. Lubitz never left the plane, only exiting the cockpit for a moment to exchange greetings with a catering officer. There were few empty seats on the A320, the workhorse of the Airbus fleet, which was filled with students returning from a high school exchange, a pair of highly regarded opera singers and workers in the fashion industry, among many others.

The plane departed from Barcelona 26 minutes late at 10:01 a.m., the flight path a scenic route over the Mediterranean, the Côte d'Azur and the snow-capped French Alps. Before long the plane was cruising at 38,000 feet, the pilots chatting courteously with each other, according to one investigator who has read a transcript of the flight's cockpit audio recording. The captain decided to go to the restroom at 10:30 a.m. Mr. Lubitz was left alone in the cockpit and he set the aircraft on a gradual but unplanned descent.

France's Bureau of Investigations and Analyses said the readings from the flight's data recorder showed that Mr. Lubitz programmed the autopilot to fly the plane down to an altitude of 100 feet. Not once but several times he accelerated the plane's descent as it hurtled toward the mountains. Captain Sondenheimer must have realized something was wrong, either as the plane began to descend or at the latest when his co-pilot blocked his re-entry into the cockpit.

Captain Sondenheimer pounded on the door with increasing desperation, demanding to be let in. Air traffic controllers urgently called to say the plane's altitude was too low. Automated systems repeated their commands for him to pull up. From outside the cockpit came screams from the passengers.

Amid this cacophony, Mr. Lubitz was silent. Only his steady breathing could be heard on the audio recording as he flew for the last time. At 10:40 a.m. and 47 seconds the plane dropped off the flight radar at 6,175 feet, roughly the height of the craggy mountains.

Nicholas Kulish reported from Düsseldorf and Bremen, Germany, and Nicola Clark from Paris. Reporting was contributed by Andrew W. Lehren from New York; Jack Ewing from Montabaur, Germany; Melissa Eddy from Düsseldorf; Alison Smale from Berlin; Silvia Taulés from Barcelona; and Serge F. Kovalski from Phoenix. Susan Beachy and Alain Delaquérière contributed research from New York.

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