Germanwings Flight 9525 ( 4U9525 / GWI18G ) was a scheduled international passenger flight from Barcelona ? El Prat Airport in Spain to Düsseldorf Airport in Germany . The flight was operated by Germanwings , a low @-@ cost carrier owned by the German airline Lufthansa . On 24 March 2015 , the aircraft , an Airbus A320 @-@ 211 , crashed 100 kilometres ( 62 mi ) north @-@ west of Nice in the French Alps after a constant descent that began one minute after the last routine contact with air traffic control and shortly after it had reached its assigned cruising altitude . All 144 passengers and six crew members were killed . It was Germanwings ' first fatal crash in the 18 @-@ year history of the company .

The crash was deliberately caused by the co @-@ pilot Andreas Lubitz, who had previously been treated for suicidal tendencies and been declared " unfit to work " by a doctor. Lubitz kept this information from his employer and reported for duty. During the flight, he locked the pilot out of the cockpit before initiating a descent that caused the aircraft to crash into a mountain.

In response to the incident and the circumstances of Lubitz 's involvement in it , aviation authorities in Australia , Canada , Germany , New Zealand , Norway , and the United Kingdom implemented new regulations that require the presence of two authorized personnel in the cockpit at all times . Three days after the incident , the European Aviation Safety Agency issued a temporary recommendation for airlines to ensure at least two crew members ? including at least one pilot ? are in the cockpit during the entire duration of the flight . Several airlines announced they had already adopted similar policies voluntarily .

# = = Flight = =

Germanwings Flight 9525 took off from Runway 07R at Barcelona ? El Prat Airport on 24 March 2015 at 10 : 01 a.m. CET ( 09 : 01 UTC ) and was due to arrive at Düsseldorf Airport by 11 : 39 CET . The flight 's scheduled departure time was 9 : 35 CET . According to the French national civil aviation inquiries bureau , the Bureau of Enquiry and Analysis for Civil Aviation Safety ( BEA ) , the pilots confirmed instructions from French air traffic control at 10 : 30 CET . At 10 : 31 CET , after crossing the French coast near Toulon , the aircraft left its assigned cruising altitude of 38 @,@ 000 feet ( 12 @,@ 000 m ) and without approval began to descend rapidly . The air traffic controller declared the aircraft in distress after its descent and loss of radio contact .

The descent time from 38 @,@ 000 feet was about ten minutes; radar observed an average descent rate of approximately 3 @,@ 400 feet per minute or 58 feet per second ( 18 m / s ) . Attempts by French air traffic control to contact the flight on the assigned radio frequency were not answered . A French military Mirage jet was scrambled from the Orange @-@ Caritat Air Base to intercept the aircraft . According to the BEA , radar contact was lost at 10 : 40 CET; at the time the aircraft had descended to 6 @,@ 175 feet ( 1 @,@ 882 m ) . The aircraft crashed in the remote commune of Prads @-@ Haute @-@ Bléone , 100 kilometres ( 62 mi ) north @-@ west of Nice .

The crash is the deadliest air disaster in France since the 1981 crash of Inex @-@ Adria Aviopromet Flight 1308 in which 180 people died , and the third @-@ deadliest in France behind Flight 1308 and Turkish Airlines Flight 981 . This was the first major crash of a civil airliner in France since the crash of Air France Flight 4590 on takeoff from Charles de Gaulle Airport in 2000 .

### = = = Crash site = = =

The crash site is within the Massif des Trois @-@ Évêchés , three kilometres ( 2 mi ) east of the settlement Le Vernet and beyond the road to the Col de Mariaud , in an area known as the Ravin du Rosé . The aircraft crashed on the southern side of the Tête du Travers , a minor peak in the lower western slopes of the Tête de I 'Estrop . The site is approximately 10 kilometres ( 6 mi ) west of Mount Cimet , where Air France Flight 178 crashed in 1953 .

Gendarmerie nationale and Sécurité Civile sent helicopters to locate the wreckage . The aircraft had disintegrated ; the largest piece of wreckage was " the size of a car " . A helicopter landed near

the crash site; its personnel confirmed there were no survivors. The search and rescue team reported the debris field covered two square kilometres (500 acres).

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= = Aircraft = =
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The aircraft that crashed was a 24 @-@ year @-@ old Airbus A320 @-@ 211, serial number 147, registered as D @-@ AIPX. It first flew on 29 November 1990. It was delivered to Lufthansa on 5 February 1991 and was leased to Germanwings from 1 June 2003 until mid @-@ 2004. The aircraft was returned to Lufthansa on 22 July 2004 and remained with that airline until 2014, during which time it was named Mannheim. It was finally transferred to Germanwings on 31 January 2014.

The aircraft had accumulated about 58 @,@ 300 flight hours on 46 @,@ 700 flights . The original Design Service Goal ( DSG ) of the aircraft was 60 @,@ 000 hours or 48 @,@ 000 flights . In 2012 , an optional Extended Service Goal ( ESG1 ) was approved , extending the aircraft 's service life to 120 @,@ 000 hours or 60 @,@ 000 flights , provided a required package of service and inspections was performed before the DSG was reached .

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= = Crew and passengers = =
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During its final flight, the aircraft was carrying 144 passengers, two pilots, and four cabin crew members from at least 18 countries? mostly Germany and Spain. The count was confused by the multiple citizenship status of some people on board.

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= = = Crew = = = =
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The flight 's pilot in command was 34 @-@ year @-@ old Captain Patrick Sondenheimer , who had ten years of flying experience ( 6 @, @ 000 flight hours ) flying A320s for Germanwings , Lufthansa , and Condor . The co @-@ pilot was 27 @-@ year @-@ old First Officer Andreas Lubitz , who joined Germanwings in September 2013 and had 630 flight hours of experience .

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= = = = Andreas Lubitz = = = =
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Andreas Günter Lubitz was born on 18 December 1987 and grew up in Neuburg an der Donau , Bavaria and Montabaur in the German state of Rhineland @-@ Palatinate . He took flying lessons at Luftsportclub Westerwald , an aviation sports club in Montabaur .

Lubitz was accepted into a Lufthansa trainee programme after finishing high school . Starting in 2008, he received pilot training at the Lufthansa Flight Training school in Bremen, Germany, and at the Lufthansa Airline Training Center in Goodyear, Arizona, United States. Lubitz took time off from his flight training for several months and informed the Flight Training Pilot School in 2009 of a previous episode of severe depression. He later completed the training and spent an eleven @-@ month waiting period working as a flight attendant for Lufthansa before gaining his commercial pilot 's licence.

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= = = Passengers = = =
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Among the passengers were sixteen students and two teachers from the Joseph @-@ König @-@ Gymnasium of Haltern am See , North Rhine @-@ Westphalia . They were returning home from a student exchange with the Giola Institute in Llinars del Vallès , Barcelona . Haltern 's mayor , Bodo Klimpel , described the crash as " the darkest day in the history of [ the ] town " . Bass @-@ baritone Oleg Bryjak and contralto Maria Radner , singers with Deutsche Oper am Rhein , were also on the flight .

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= = Investigation = =
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The French Bureau of Enquiry and Analysis for Civil Aviation Safety (BEA) opened an investigation into the crash; it was joined by its German counterpart, the Federal Bureau of Aircraft Accident Investigation (BFU), and was assisted by the US Federal Bureau of Investigation (FBI). Hours after the crash, the BEA sent seven investigators to the crash site; these were accompanied by representatives from Airbus and CFM International. The cockpit voice recorder, which was damaged but still usable, was recovered by rescue workers and was examined by the investigation team. The following week, Marseille prosecutor Brice Robin announced that the flight data recorder, which was blackened by fire but still usable, had also been found. Investigators isolated 150 sets of DNA, which were compared with the DNA of the victims 'families.

#### = = = Cause of crash = = =

According to French and German prosecutors , the crash was deliberately caused by the co @-@ pilot . Brice Robin said co @-@ pilot Andreas Lubitz was initially courteous to Captain Sondenheimer during the first part of the flight , then became " curt " when the captain began the mid @-@ flight briefing on the planned landing . Robin said when the captain returned from a probable toilet break and tried to enter the cockpit , Lubitz had locked the door . The captain had a code to unlock the door , but the lock 's code panel can be disabled from the cockpit controls . The captain requested re @-@ entry using the intercom ; he knocked and then banged on the door , but received no response . The captain then tried to break down the door . During the descent , the co @-@ pilot did not respond to questions from air traffic control and did not transmit a distress call . Robin said contact from the Marseille air traffic control tower , the captain 's attempts to break in , and Lubitz 's steady breathing were audible on the cockpit voice recording . The screams of passengers in the last moments before impact were also heard on the recording .

After their initial analysis of the aircraft 's flight data recorder , the BEA concluded that Lubitz deliberately crashed the aircraft . He had set the autopilot to descend to 100 feet ( 30 m ) and accelerated the speed of the descending aircraft several times thereafter . The aircraft was travelling at 700 kilometres per hour ( 430 mph ) when it crashed into the mountain . The BEA preliminary report into the crash was published on 6 May 2015 , six weeks later . It confirmed the initial analysis of the aircraft 's flight data recorder and revealed that during the earlier outbound Flight 9524 from Düsseldorf to Barcelona , Lubitz had practised setting the autopilot altitude dial to 100 feet several times while the captain was out of the cockpit .

#### = = = Investigation of Lubitz = = =

Three days after the crash , German detectives searched Lubitz 's Montabaur properties and removed a computer and other items for testing . They did not find a suicide note nor any evidence his actions had been motivated by " a political or religious background " . During their search of Lubitz 's apartment , detectives found a letter in a waste bin indicating he had been declared unfit to work by a doctor . Germanwings stated it had not received a sick note from Lubitz for the day of the flight . News accounts said Lubitz was " hiding an illness from his employers " ; under German law , employers do not have access to employees ' medical records , and sick notes excusing a person from work do not give information about medical conditions .

The following day , authorities again searched Lubitz 's home , where they found evidence he was taking prescription drugs and suffered from a psychosomatic illness . Criminal investigators said Lubitz 's web searches on his tablet computer in the days leading up to the crash included " ways to commit suicide " and " cockpit doors and their security provisions " . Prosecutor Brice Robin said doctors had told him Lubitz should not have been flying , but " medical secrecy requirements " prevented this information from being made available to Germanwings .

In the weeks before the BEA 's preliminary report, the investigation into Lubitz found he had been treated for suicidal tendencies prior to his training as a commercial pilot and had been temporarily denied a US pilot 's license because of these treatments for depression. The final report of the BEA confirmed the preliminary report 's findings, saying the co @-@ pilot began showing symptoms of

psychotic depression . For five years , Lubitz had frequently been unable to sleep because of what he believed were vision problems ; he consulted over forty doctors and feared he was going blind . Motivated by the fear that blindness would cause him to lose his pilot 's licence , he began conducting online research about methods of committing suicide before deciding to crash Flight 9525 .

= = Aftermath = =

= = = Political = = =

French Minister of the Interior Bernard Cazeneuve announced that due to the "violence of the impact "there was "little hope "any survivors would be found. Prime Minister Manuel Valls dispatched Cazeneuve to the scene and set up a ministerial task force to coordinate the response to the incident.

German Foreign Minister Frank @-@ Walter Steinmeier flew over the crash site; he described it as "a picture of horror ". German Chancellor Angela Merkel and the minister @-@ president of North Rhine @-@ Westphalia Hannelore Kraft travelled to the crash site the following day. Merkel, Valls, and Spanish Prime Minister Mariano Rajoy visited the recovery operations base at Seyne @-@ les @-@ Alpes. Bodo Klimpel, mayor of Haltern am See, reacting to the deaths of sixteen students and two teachers from the town, said that people were shocked by the crash.

= = = Commercial = = =

Lufthansa chief executive officer Carsten Spohr visited the crash location the day following the crash; he said it was "the darkest day for Lufthansa in its 60 @-@ year history ". Several Germanwings flights were cancelled on 24 and 25 March due to the pilots 'grief at the loss of their colleagues. Germanwings retired the flight number 4U9525, changing it to 4U9441; the outbound flight number was changed from 4U9524 to 4U9440. In the days following the crash, Lufthansa at first said it saw no reason to change its procedures, then reversed its earlier statement by introducing a new policy across its airlines requiring the presence of two crew members in the cockpit at all times.

= = = Regulatory = = =

In response to the incident and the circumstances of Lubitz 's involvement in it , aviation authorities in Australia , Canada , Germany , New Zealand , Norway , and the UK implemented new regulations that require two authorized personnel to be present in the cockpit of large passenger aircraft at all times . While the United States Federal Aviation Administration , the Civil Aviation Administration of China , and some European airlines already had a similar " rule of two " requirement , the European Aviation Safety Agency recommended the introduction of similar legal changes . Other airlines announced similar changes to their policies .

The British Psychological Society issued a statement offering to provide expert support in psychological testing and monitoring of pilots. The European Federation of Psychologists 'Associations (EFPA) issued a statement supporting psychological testing in the selection of pilots, but also stated it could not forecast the life events and mental health problems of individual pilots, nor could it predict the unique ways pilots would cope with these. It said priority should be given to psychological help for relatives and friends of victims in the aftermath of a disaster.

In May 2015, Lufthansa CEO Carsten Spohr proposed random checks of pilots 'psychological fitness and a loosening of the extant physician? patient confidentiality laws. Politicians began echoing the call for a loosening of the laws in exceptional cases.

= = = Compensation = = =

Germanwings ' parent company Lufthansa offered victims ' families an initial aid payment of up to ? 50 @,@ 000 , separate from any legally @-@ required compensation for the disaster . Elmar Giemulla , a professor of aviation law at the Technical University of Berlin quoted by the Rheinische Post , said he expected the airline would pay ? 10 ? 30 million in compensation . The Montreal Convention sets a per @-@ victim cap of ? 143 @,@ 000 in the event an airline is held liable , unless negligence can be proved . Insurance specialists said although co @-@ pilot Andreas Lubitz hid a serious illness from his employer and deliberately crashed the passenger aircraft , these facts would not affect the issue of compensation nor be applicable to the exclusion clause in Lufthansa 's insurance policy . Lufthansa 's insurance company set aside US \$ 300 million ( ? 280 million ) for financial compensation to victims ' families and for the cost of the aircraft .

German law does not allow for punitive damages or the broad discovery generally available under the law of most American jurisdictions . A U.S. plaintiffs ' law firm , Kreindler & Kreindler , signed up families of about 80 of the crash victims as clients ; and filed a lawsuit on their behalf on April 13 , 2016 in the United States District Court for the District of Arizona against the Arizona @-@ based Lufthansa Airline Training Center that Lubitz had attended for his training as a commercial pilot .

## = = = Commemorative = = =

Shortly after the crash, a memorial stone in memory of the victims was erected near the crash site in Le Vernet. The following month, about 1 @,@ 400 relatives of victims, senior politicians, rescue workers, and airline employees attended a memorial service at Cologne Cathedral. The parents of Andreas Lubitz were invited to the service but did not attend.

The remains of fifteen of the sixteen school children and their two teachers arrived in their home town of Haltern for burial two months after the crash . Residents held white roses as the hearses passed the children 's school , where eighteen trees ? one for each victim ? had been planted as a memorial . In Düsseldorf on the same day , the remains of forty @-@ four of the seventy @-@ two German victims arrived for burial . Errors on the victims ' death certificates had caused a delay . A lawyer representing the families of thirty @-@ four victims said that burying the remains would help many relatives achieve closure .