

= Gol Transportes Aéreos Flight 1907 =

Gol Transportes Aéreos Flight 1907 ( ICAO : GLO 1907 ) was a Boeing 737 @-@ 8EH , registration PR @-@ GTD , on a scheduled domestic passenger flight from Manaus , Brazil , to Rio de Janeiro . On 29 September 2006 , Local time 16 : 48 BRT , it collided in midair with an Embraer Legacy 600 business jet over the Brazilian state of Mato Grosso . All 154 passengers and crew aboard the Boeing 737 died when the aircraft broke up in midair and crashed into an area of dense jungle , while the Embraer Legacy , despite sustaining serious damage to its left wing and tail , landed safely with its seven occupants uninjured .

The accident , which triggered a crisis in Brazilian civil aviation , was the deadliest in that country 's aviation history at the time , surpassing VASP Flight 168 , which crashed in 1982 with 137 fatalities near Fortaleza . It was subsequently surpassed by TAM Airlines Flight 3054 , which crashed on 17 July 2007 with 199 fatalities . It was also the first crash of a Boeing 737 @-@ 800 , and the deadliest aviation accident involving a Boeing 737 ( all series ) aircraft at that time , eventually surpassed by Air India Express Flight 812 , which crashed at Mangalore , India , on 22 May 2010 with 158 fatalities .

The accident was investigated by both the Brazilian Air Force 's Aeronautical Accidents Investigation and Prevention Center ( Portuguese : Centro de Investigação e Prevenção de Acidentes Aeronáuticos ( CENIPA ) ) and the U.S. National Transportation Safety Board ( NTSB ) , with a final report issued on 10 December 2008 . CENIPA concluded that the accident was caused by errors committed both by air traffic controllers and by the American pilots on the delivery flight of the Embraer Legacy , while the NTSB determined that all pilots acted properly and were placed on a collision course by a variety of " individual and institutional " air traffic control errors .

= = Boeing aircraft and crew = =

The Gol Transportes Aéreos twin turbofan Boeing 737 @-@ 8EH aircraft , was a new Short Field Performance variant . It had made its first flight on August 22 , 2006 and been delivered to Gol on 12 September 2006 , less than 3 weeks before the accident , with 186 seats ( 36 Economy Plus and 150 Economy seats ) . Gol Flight 1907 ( ICAO code " GLO 1907 " ) departed Eduardo Gomes International Airport in Manaus on 29 September 2006 , at 15 : 35 Brazil Standard Time ( BST ) ( 18 : 35 UTC ) , en route to Rio de Janeiro @-@ Galeão International Airport , with a planned intermediate stop at Brasília International Airport .

There were 148 passengers and six crew members on board the Boeing airliner . The crew consisted of Captain Decio Chaves Jr . , 44 , First Officer Thiago Jordão Cruso , 29 , and four flight attendants . The captain , who had also been serving as a Boeing 737 flight instructor for Gol , had 15 @,@ 498 total flight hours , with 13 @,@ 521 in Boeing 737 aircraft . The first officer had 3 @,@ 981 total flight hours , with 3 @,@ 081 in Boeing 737 aircraft .

There were 6 American , 3 Colombian , 4 French , 10 Argentine , 3 Australian , 2 South African , 5 Mexican , 4 Venezuelan , 1 Japanese , 2 Portuguese and 3 Canadian passengers on board . The remaining 111 occupants , including the 6 crew members , were Brazilian .

= = Embraer aircraft and crew = =

The twin turbofan Embraer Legacy 600 business jet , serial number 965 and registration N600XL , newly built by Embraer and purchased by ExcelAire Service Inc. of Ronkonkoma , New York , was on a delivery flight by ExcelAire from the Embraer factory to the U.S. It departed from São José dos Campos @-@ Professor Urbano Ernesto Stumpf Airport ( SJK ) , near São Paulo , at 14 : 51 BST , and was on its way to Eduardo Gomes International Airport ( MAO ) in Manaus as a planned en route stop .

The ExcelAire flight crew consisted of Captain Joseph Lepore , 42 , and First Officer Jan Paul Paladino , 34 , both U.S. citizens . Lepore had been a commercial pilot for more than 20 years and had logged 9 @,@ 388 total flight hours , with 5 @.@ 5 hours in the Legacy 600 . Paladino had

been a commercial pilot for a decade and had accumulated more than 6 @, @ 400 flight hours , including 317 hours flying as captain of Embraer ERJ @-@ 145 and ERJ @-@ 135 jet aircraft for American Eagle Airlines . ( The ERJ @-@ 145 and ERJ @-@ 135 aircraft are regional jets of the same family as the Legacy . ) Paladino had also served as first officer for American Airlines , flying MD @-@ 82 , MD @-@ 83 and Boeing 737 @-@ 800 aircraft between the U.S. and Canada . Both pilots were legally qualified to fly the Embraer Legacy as captain .

The five passengers consisted of two Embraer employees , two ExcelAire executives , and The New York Times business travel columnist Joe Sharkey , who was writing a special report for Business Jet Traveler .

= = Collision = =

Just before 17 : 00 BST , the Boeing airliner and the Embraer business jet collided almost head @-@ on at 37 @, @ 000 feet ( 11 @, @ 000 m ) , approximately midway between Brasilia and Manaus , near the town of Matupá , 750 kilometers ( 470 mi ) southeast of Manaus . The left winglet of the Embraer cut off about half of the Gol plane 's left wing . This caused the Boeing to nosedive and enter an uncontrollable spin , which quickly led to an in @-@ flight breakup and crash into an area of dense rainforest , 200 kilometres ( 120 mi ) east of the municipality of Peixoto de Azevedo . All 154 passengers and crew on board died and the aircraft was destroyed , with the wreckage scattered in pieces around the crash site .

The Embraer jet , despite serious damage to the left horizontal stabilizer and left winglet , was able to continue flying , though its autopilot disengaged and it required an unusual amount of force on the yoke to keep the wings level .

With radio relay assistance from Polar Air Cargo Flight 71 , a Boeing 747 cargo aircraft flying in the area at the time , the Embraer 's crew successfully landed the crippled jet at Cachimbo Airport , part of Campo de Provas Brigadeiro Velloso , a large military complex of the Brazilian Air Force at about 160 kilometers ( 100 mi ) from the collision point .

Passenger and journalist Joe Sharkey described his experience aboard the Embraer in an article for The New York Times , titled " Colliding With Death at 37 @, @ 000 Feet , and Living " , filed on 1 October 2006 :

And it had been a nice ride . Minutes before we were hit , I had wandered up to the cockpit to chat with the pilots , who said the plane was flying beautifully . I saw the readout that showed our altitude : 37 @, @ 000 feet . I returned to my seat . Minutes later came the strike ( it sheared off part of the plane 's tail , too , we later learned ) .

= = Detention and charging of Embraer crew = =

Immediately after the Embraer 's emergency landing at the Cachimbo Airport , BAF and Agência Nacional de Aviação Civil ( ANAC ) officials detained and interviewed its flight crew . The officials also removed the two " black boxes " ? Cockpit Voice Recorder ( CVR ) and Flight Data Recorder ( FDR ) ? from the Embraer , and sent them to São José dos Campos , São Paulo , and from there to Ottawa , Canada , for analysis .

In an initial deposition , the Embraer flight crew testified that they were cleared to flight level 370 , approximately 37 @, @ 000 feet ( 11 @, @ 000 m ) above mean sea level , by Brasilia ATC , and were level at that assigned altitude when the collision occurred . They also asserted that at the time of the collision they had lost contact with Brasilia ATC , and their anti @-@ collision system did not alert them to any oncoming traffic .

On 2 October 2006 , the Embraer 's captain and first officer were ordered by the Mato Grosso Justice Tribunal to surrender their passports pending further investigation . The request , made by the Peixoto de Azevedo prosecutor , was granted by judge Tiago Sousa Nogueira e Abreu , who stated that the possibility of pilot error on the part of the Embraer crew could not be ruled out . The Embraer crew were forced to remain in Brazil until their passports were released to them on 5 December 2006 , more than two months after the accident , after federal judge Candido Ribeiro

ruled there were no legal grounds for " restricting the freedom of motion of the foreigners . "

Prior to their scheduled departure to the United States , the crew were formally charged by Brazilian Federal Police with " endangering an aircraft " , which carries a penalty of up to twelve years in prison . The pilots had to explain why they did not turn on the transponder . The two pilots were allowed to leave the country after signing a document promising to return to Brazil for their trial or when required by Brazilian authorities . They picked up their passports and flew back to the United States .

= = Search and recovery operation = =

The Brazilian Air Force sent five fixed @-@ wing aircraft and three helicopters to the region for an extensive search and rescue ( SAR ) operation . As many as 200 personnel were reported to be involved in the operation , among them a group of Kayapo people familiar with the forest . The crash site of Gol Flight 1907 was spotted on 30 September by the BAF , at coordinates 10 ° 29 ' S 53 ° 15 ' W , 200 km ( 120 mi ) east of Peixoto de Azevedo , near Fazenda Jarinã , a cattle ranch . It was reported that rescue personnel had difficulty reaching the crash site due to the dense forest . The Brazilian airport administrator Infraero at first indicated the possibility of five survivors , but a later statement from the Brazilian Air Force , based on data collected by BAF personnel who rappelled ( abseiled ) to the crash site and local police who assisted in the SAR effort , confirmed that there were no survivors . Brazilian President Luiz Inácio Lula da Silva declared three days of national mourning .

The Flight Data Recorder and a non @-@ data part of the Cockpit Voice Recorder from the Boeing 737 were found on 2 October 2006 and handed over to the investigators , who sent them to the Transportation Safety Board of Canada ( TSB ) in Gatineau , Quebec , Canada , for analysis . On 25 October 2006 , after nearly four weeks of intensive searching in the jungle by about 200 Brazilian Army troops equipped with metal detectors , the memory module of the Boeing 's Cockpit Voice Recorder was finally found . The module was discovered intact , separated from other wreckage pieces , embedded in about 20 centimetres ( 8 in ) of soil , and was also sent for analysis by the TSB in Canada .

On 4 October , the recovery crews began moving the bodies to the temporary base established at the nearby Jarinã ranch . The BAF deployed a C @-@ 115 Buffalo aircraft to transport the bodies to Brasília for identification .

The recovery teams worked intensively for nearly seven weeks in a dense jungle environment , searching for and identifying the victims ' remains . The final victim was recovered and identified by DNA testing by 22 November 2006 .

= = Investigation = =

The accident was investigated by the Brazilian Air Force Aeronautical Accidents Investigation and Prevention Center ( CENIPA ) and the U.S. National Transportation Safety Board ( NTSB ) . The NTSB , in accordance with the provisions of ICAO Annex 13 , participated in the investigation representing the state of manufacture of the Boeing , state of registry and operator of the Embraer , and state of manufacture of the Honeywell avionics equipment installed in both planes .

Once the black boxes and communication transcripts were obtained , the investigators interviewed the ExcelAire 's flight crew and the air traffic controllers , trying to piece together the scenario which allowed two modern jet aircraft , equipped with the latest anti @-@ collision gear , to collide with each other while on instrument flights in positive control airspace .

The Embraer 's flight plan consisted of flying at FL370 up to Brasilia , on airway UW2 , followed by a planned descent at Brasilia to FL360 , proceeding outbound from Brasilia northwest @-@ bound along airway UZ6 to the Teres fix , an aeronautical waypoint located 282 nmi ( 324 mi , 522 km ) northwest of Brasilia , where a climb to FL380 was planned . According to the filed flight plan , the Embraer was scheduled to have been level at FL380 , proceeding towards Manaus , while passing the eventual collision point , which was about 307 kilometres ( 191 mi ) northwest of Teres .

The ExcelAire 's crew asserted in their depositions and subsequent interviews that they were cleared by air traffic control ( ATC ) to FL370 for the entire trip , all the way to Manaus . The actual transcript of the clearance given to the Embraer 's crew prior to takeoff at São José dos Campos at 14 : 41 : 57 BST , as later released by CENIPA , was :

November Six Zero Zero X @-@ ray Lima , ATC clearance to Eduardo Gomes , flight level three seven zero direct Poços de Caldas , squawk transponder code four five seven four , after take @-@ off perform Oren departure .

The Embraer 's crew 's altitude clearance to FL370 was further confirmed after their handoff to Brasilia , during which they had the following radio exchange with ATC at 15 : 51 BST :

This was the last two @-@ way radio communication between the Embraer 's crew and ATC prior to the collision .

= = = Embraer flight and communication sequence = = =

The Embraer took off from São José dos Campos at 14 : 51 , reaching FL370 at 15 : 33 , 42 minutes later , where it remained until the collision .

ATC maintained normal two @-@ way radio contact with the Embraer up until 15 : 51 , when the last successful radio exchange with the Embraer was made on VHF frequency 125 @.@ 05 MHz with Brasilia Center . At that point the Embraer was just approaching the Brasilia VOR . The Embraer overflowed the Brasilia VOR at 15 : 55 , four minutes later , and proceeded northwest @-@ bound along UZ6 . At 16 : 02 , seven minutes after crossing the Brasilia VOR , secondary radar contact was lost with the Embraer , thus stopping the display of the Embraer 's reported altitude ( Mode C ) on the controller 's radar screen .

No attempt was made by either the Embraer or Brasilia Center to contact each other from 15 : 51 until 16 : 26 when , 24 minutes after the loss of secondary radar contact , Brasilia Center called the Embraer and received no reply .

Brasilia Center then unsuccessfully attempted to contact the Embraer six more times , between 16 : 30 and 16 : 34 . At 16 : 30 the Embraer 's primary radar target became intermittent , and disappeared completely from the radar screen by 16 : 38 , eight minutes later . Brasilia Center unsuccessfully attempted to effect a handoff of the Embraer to Amazonic Center at 16 : 53 , by calling the Embraer in the blind .

The Embraer , on the other hand , started calling Brasilia Center , also unsuccessfully , from 16 : 48 and continued with twelve more unsuccessful attempts until 16 : 53 . Some limited contact was made at that point , but the Embraer was unable to copy the Amazonic Center frequencies . The Embraer then continued its attempts to reach Brasilia Center , seven more times until the collision .

The collision occurred at 16 : 56 : 54 BST at FL370 , and it was confirmed that neither Traffic Collision Avoidance System ( TCAS ) system had activated or alerted its respective crew , nor did any crew see the oncoming traffic visually or initiate any evasive action prior to the collision . While both planes were equipped with TCAS , it was later determined that the Embraer 's transponder had ceased operating almost an hour earlier , at 16 : 02 , rendering both planes unable to automatically detect each other .

At 16 : 59 : 50 , about three minutes after the collision , Amazonic Center started to receive the Embraer 's secondary radar reply , with its correct altitude and last assigned code . At 17 : 00 : 30 Amazonic Center unsuccessfully attempted to contact the Embraer by radio .

The Embraer started calling on the emergency frequency , 121 @.@ 5 MHz , immediately after the collision , but as it was later determined in the CENIPA report , the emergency transceivers in the area were not operational and thus the crew was unable to reach ATC on that frequency .

At 17 : 01 : 06 the Embraer established contact on the emergency frequency with a Boeing 747 cargo aircraft , Polar 71 , which attempted to relay to ATC their request for an emergency landing , and continued to provide relay and translation assistance to the Embraer until its eventual landing .

At 17 : 18 : 03 the Embraer contacted the Cachimbo Airport ( SBCC ) tower directly to coordinate its emergency landing there , and landed safely at Cachimbo at 17 : 23 : 00 .

= = = Gol 1907 flight and communication sequence = = =

Gol 1907 took off from Manaus at 15 : 35 , flying southeast @-@ bound along UZ6 and reaching FL370 at 15 : 58 , 23 minutes later , where it remained until the collision . There were no radio or radar contact problems with the flight until its handoff to Brasilia Center . There were no known attempts by ATC to warn Flight 1907 of the conflicting traffic .

= = = NTSB Safety Recommendation = = =

On 2 May 2007 , the National Transportation Safety Board ( NTSB ) issued a Safety Recommendation document that included an interim summary of the investigation to date , as well as some immediate safety recommendations that the NTSB believes should be implemented by the U.S. Federal Aviation Administration ( FAA ) to enhance flight safety . The NTSB reported that the Embraer apparently experienced a Traffic Collision Avoidance System ( TCAS ) outage , unknown to its flight crew prior to the collision , according to the Cockpit Voice Recorder ( CVR ) :

Preliminary findings in the ongoing investigation indicate that , for reasons yet to be determined , the collision avoidance system in the Legacy airplane was not functioning at the time of the accident , thereby disabling the system 's ability to detect and be detected by conflicting traffic . In addition , CVR data indicate that the flight crew was unaware that the collision avoidance system was not functioning until after the accident .

The NTSB added that the design of the Embraer 's avionics is such that the non @-@ functioning of the TCAS that apparently occurred is shown by a small static white text message , which may not be noticeable by the flight crew . The NTSB noted :

Using only static text messages to indicate a loss of collision avoidance system functionality is not a reliable means to capture pilots ' attention because these visual warnings can be easily overlooked if their attention is directed elsewhere in the flight environment .

Based on its observations , the NTSB recommended to the FAA that design changes be implemented to improve the noticeability of TCAS annunciation , and that the FAA advise pilots of all aircraft to become more familiar with the details of this accident , potential loss of transponder and / or TCAS function , and how to recognize them .

= = Final reports = =

= = = CENIPA = = =

On 10 December 2008 , more than two years after the accident , the Aeronautical Accidents Investigation and Prevention Center ( CENIPA ) issued its final report , describing its investigation , findings , conclusions and recommendations . The CENIPA report includes a " Conclusions " section that summarizes the known facts and lists a variety of contributing factors relating to both air traffic controllers and the ExcelAire 's flight crew . According to CENIPA , the air traffic controllers contributed to the accident by originally issuing an improper clearance to the Embraer , and not catching or correcting the mistake during the subsequent handoff to Brasilia Center or later on . CENIPA also found errors in the way the controllers handled the loss of radar and radio contact with the Embraer .

CENIPA concluded that the ExcelAire pilots also contributed to the accident with , among others , their failure to recognize that their transponder was inadvertently switched off , thereby disabling the collision avoidance system on both aircraft , as well as their overall insufficient training and preparation .

= = = NTSB = = =

The U.S. NTSB issued its own report on the accident , which was also appended to the CENIPA

report with the following Probable Cause statement :

The evidence collected during this investigation strongly supports the conclusion that this accident was caused by N600XL and GOL1907 following ATC clearances which directed them to operate in opposite directions on the same airway at the same altitude resulting in a midair collision . The loss of effective air traffic control was not the result of a single error , but of a combination of numerous individual and institutional ATC factors , which reflected systemic shortcomings in emphasis on positive air traffic control concepts .

The NTSB further added the following contributing factors :

Contributing to this accident was the undetected loss of functionality of the airborne collision avoidance system technology as a result of the inadvertent inactivation of the transponder on board N600XL . Further contributing to the accident was inadequate communication between ATC and the N600XL flight crew .

= = = Conflicting CENIPA and NTSB conclusions = = =

While agreeing on most basic facts and findings , CENIPA and NTSB , which collaborated in the accident investigation , arrived at disagreeing interpretations and conclusions . The CENIPA report concludes the accident was caused by mistakes made both by air traffic controllers and by the ExcelAire pilots , whereas the NTSB focuses on the controllers and the ATC system , concluding that both flight crews acted properly but were placed on a collision course by the air traffic controllers .

According to Aviation Week , " the U.S. National Transportation Safety Board ( NTSB ) strongly disagreed with the Brazilian conclusions regarding the Legacy pilots ' actions as a causal factor , noting , ' The crew flew the route precisely as cleared and complied with all ATC instructions , ' as did the GOL airlines crew . " Aviation Week adds that " the Brazilian military operates that country 's air traffic control system , conducted the investigation and authored the report . "

= = Aftermath = =

= = = Aviation crisis = = =

The crash of Flight 1907 precipitated a major crisis in Brazil 's civil aviation system , which included massive flight delays and cancellations , air traffic controller work @-@ to @-@ rule slowdowns and strikes , and public safety concerns about Brazil 's airport and air traffic infrastructure .

Historically , Brazil was ruled by its armed forces from 1964 until 1985 . Since then , a civilian government has taken over , but the country 's airways ( as of 2009 ) continued to be controlled and operated by the Brazilian Air Force ( BAF ) and run by generals , overseen by a civilian defense minister . Most of Brazil 's air traffic controllers are military non @-@ commissioned officers , and all Area Control Centers are run by the BAF .

In October 2006 , as details surrounding the crash of Flight 1907 began to emerge , the investigation seemed to be at least partly focused on possible air traffic control errors . This led to increasing resentment by the controllers and exacerbated their already poor labor relations with their military superiors . The controllers complained about being overworked , underpaid , overstressed , and forced to work with outdated equipment . Many have poor English skills , limiting their ability to communicate with foreign pilots , which played a role in crash of Flight 1907 . In addition , the military 's complete control of the country 's aviation was criticized for its lack of public accountability .

Amid rising tensions , the air traffic controllers began staging a series of work actions , including slowdowns , walkouts , and even a hunger strike . This led to chaos in Brazil 's aviation industry : major delays and disruptions in domestic and international air service , stranded passengers , canceled flights , and public demonstrations . Those who blamed various civilian and military officials for the growing crisis called for their resignation .

On 26 July 2007 , after an even deadlier crash in Brazil ( TAM Airlines Flight 3054 on 17 July 2007 ) claimed the lives of 199 people , President Luiz Inácio Lula da Silva fired his defense minister , Waldir Pires , who had been in charge of the country 's aviation infrastructure and safety since March 2006 , and was widely criticized for their failures . On the same day , Lula appointed former Supreme Court president Nelson Jobim to replace Pires , and vowed to improve Brazil 's air traffic control system .

= = = Legal action = = =

= = = Civil litigation = = =

On 6 November 2006 , the families of ten of the deceased filed a lawsuit for negligence against ExcelAire and Honeywell , alleging that the ExcelAire pilots were flying at an " incorrect altitude " and that the Honeywell transponder was not functioning at the time of the collision . Other suits were subsequently filed on behalf of other victims , with similar allegations against ExcelAire and Honeywell . The victims ' families also filed suits against other U.S. based defendants , including the two Embraer pilots , as well as Raytheon , Lockheed Martin and Amazon Tech ( manufacturers of Brazil 's air traffic control equipment ) , and ACSS ( manufacturer of the Embraer 's TCAS ) .

The attorney representing the Embraer crew , Miami @-@ based Robert Torricella , responded to the allegation that the crew was flying at an " incorrect altitude " by stating that according to international regulations , clearances and directives issued by ATC supersede a previously filed flight plan , and in this case :

... the flight plan cleared by air traffic control at the time of departure required the Embraer to fly all the way to Manaus at 37 @,@ 000 feet and , absent contrary directives from air traffic control , the Embraer was obligated to follow its cleared flight plan . As the findings of the investigation are made public , we are confident that ExcelAire 's pilots will be exonerated .

A Honeywell spokesperson stated that " Honeywell is not aware of any evidence that indicates that its transponder on the Embraer Legacy was not functioning as designed or that Honeywell was responsible for the accident . "

On 2 July 2008 , U.S. District Court judge Brian Cogan of the Eastern District of New York dismissed the families ' suits against all the U.S. based defendants under the premise of forum non @-@ conveniens . Without ruling on the merits of the cases , and while allowing discovery to continue , Cogan recommended the Brazilian court system as a more appropriate jurisdiction for the dispute .

= = = Criminal proceedings = = =

On 1 June 2007 , Murilo Mendes , a Brazilian federal judge in the small city of Sinop , Mato Grosso , near the crash site of the Boeing , indicted the two Embraer pilots and four Brasilia @-@ based air traffic controllers for " exposing an aircraft to danger . " On 8 December 2008 , he dismissed charges of negligence against the pilots , but left in place a charge of " imprudence " . He also dismissed all charges against two of the four Brasilia @-@ based controllers and reduced the charges against the other two , but supported bringing new charges against a fifth controller , based in São José dos Campos , the Embraer 's departure point . On 12 January 2010 , his ruling was overturned by Judge Candido Ribeiro in a federal court in Brasilia , reinstating the negligence charges against the pilots .

On 26 October 2010 , a military court convicted air traffic controller Sgt. Jomarcelo Fernandes dos Santos , sentencing him to 14 months in jail for failing to take action when he saw that the Embraer 's anti @-@ collision system had been turned off . Santos will remain free pending the outcome of the appeal process . Four other controllers were acquitted for lack of proof . On 17 May 2011 , Judge Mendes sentenced air traffic controller Lucivando Tiburcio de Alencar to a term of up to three years and four months but ruled he is eligible to do community service in Brazil instead and

acquitted Santos on charges of harming Brazil 's air transport safety .

On 16 May 2011 , Judge Mendes sentenced the two pilots to four years and four months of prison in a " semi @-@ open " facility for their role in the collision , but he commuted the sentences to community service to be served in the United States . Brazilian authorities accused the pilots of turning off the Legacy 's transponder moments before the accident and turning it on again only after the crash , but it was denied by the crew in a deposition via videoconference . Mendes said in his sentence that pilots had failed to verify the functioning of equipment for more than an hour , a length of time he called " an eternity " in aviation . On 9 October 2012 , Brazilian federal prosecutors announced that they had successfully appealed the sentence of the pilots , asking to increase their sentences by 17 months ( a total of 5 years and 9 months ) . The new trial was scheduled for 15 October , with the pilots again facing trial in absentia . On that date , the court upheld the prior convictions , but modified the sentences to 37 months for each , requiring that the pilots " report regularly to authorities and stay home at night . "

= = = Survivor aircraft = = =

N600XL remained impounded at Cachimbo for almost three years , but in mid @-@ 2009 American company General Aviation Services agreed to buy the aircraft . The company partnered with Gantt Aviation and Constant Aviation to check and prepare it for its ferry to the US . Constant completed the work and finally on 19 November 2010 ( more than 4 years after the accident ) the aircraft , now with the new registration of N965LL , arrived at Cleveland International Airport to be refurbished and put up for sale .

The plane was reported to be on sale in March 2011 , even though repairs to the left wingtip and stabilizer were still being completed in August 2011 . The plane was then sold to a private owner in 2013 registered XA @-@ MHA .

= = = Dramatization = = =

In 2007 Discovery Channel Brazil aired A Tragédia do Vôo 1907 ( " The Tragedy of Flight 1907 " ) , a documentary about the disaster . The Association Family and Friends of Victims in Flight 1907 stated that the documentary exhibited bias on behalf of the Legacy pilots .

The crash was the subject of a Season 5 episode of Mayday ( also known as Air Crash Investigation ) entitled Phantom Strike ( also titled Death Over the Amazon and Radio Silence ) .

The Smithsonian Channel 's " Air Disasters " documentary series , featured this accident in the second season 's third episode titled " System Breakdown " , released in 2011 . Available on Netflix as of Oct. 2015 .