



# Emergency landing of Air Transat Flight TS 236 on August 24, 2001

## Background document for journalists

In August 2001, an Air Transat aircraft flying from Toronto to Lisbon, carrying 293 passengers and a crew of 13, suffered a serious fuel leak. With its tanks empty, the plane glided for approximately 19 minutes above the Atlantic Ocean before making a successful emergency landing in the Azores. The investigation into the causes of the accident, conducted by Portugal, took more than three years to complete, and shed light on what had happened. The investigation report was made public on October 18, 2004.

The event received significant media coverage at the time. In light of the investigation report findings, it emerged that many of those initial press articles and reports were inaccurate and in some cases erroneous. Journalists wishing to write about the incident are encouraged to refer to the investigation report, which is the only objective reference in the case. Following is a summary of events, prepared by Transat. Journalists seeking further information or verifications may contact the Transat media department by phone or in writing. Any publication of inaccurate information will result in a request for a correction.

The full accident investigation report is available for download at:  
<http://www.fss.aero/accident-reports/dvdfiles/PT/2001-08-24-PT.pdf>

## Summary of the facts

1. Flight TS 236 took off from Toronto at 8.52 pm EST on Thursday, August 23, 2001, bound for Lisbon, Portugal. It made an emergency landing at 6.45 am UTC on August 24, 2001, at Lajes Airport, Terceira, Azores, Portugal. There were 293 passengers and 13 crewmembers on board.
2. The aircraft was an Airbus A330 manufactured in 1999, configured with 362 seats and put into service by Air Transat in April of 1999. The plane is still operated by Air Transat.
3. When it left the gate in Toronto, the aircraft had 47.9 tonnes of fuel on board, 5.5 metric tons more than the amount required by regulations.
4. It was determined that a fuel leak began at 4:38 a.m. UTC, approximately four hours into the flight, following the rupture of a fuel line in the right engine (not in a fuel tank). The leak was practically undetectable for nearly an hour, and became progressively worse.
5. At 5:45 a.m. UTC, facing an obviously abnormal situation, but having been unable to diagnose the fuel leak, the pilots made the decision to divert to the Azores Islands as a precaution. At that point the aircraft's position was to the northeast of the islands; the crew therefore had to change direction and head southwest.
6. At 6:13 a.m. UTC, with fuel having run out, the right engine flamed out, followed 13 minutes later by the left engine. The engines did not catch fire. The aircraft then glided for 19 minutes over a distance of 65 nautical miles (approximately 120 km) to reach Lajes. The Airbus A330 is a wide-body aircraft that weighs approximately 120 metric tonnes when empty. It is believed that during the glide, the plane's total weight was some 150 to 160 metric tonnes. The quantity of fuel lost can be estimated at 15 metric tonnes.
7. At 6:45 a.m. UTC, or 2:45 a.m. EST, on August 24, the aircraft landed at Lajes, at an estimated speed of 200 knots (approximately 370 km/h), which is faster than the normal touchdown speed. The passengers were then evacuated within approximately 90 seconds; 16 of them, along with two crew members, were injured at this time. The injuries were minor or very minor, except in the case of two passengers who sustained serious but not life-threatening injuries.
8. The accident investigation was led by the Aviation Accidents Prevention and Investigation Department of Portugal, the country in which the event occurred, per the framework established in Annex 13 of the Convention on International Civil Aviation Organization, The Transportation Safety Board and Transport Canada (Canada), the Bureau d'Enquêtes et d'Analyses pour la Sécurité de l'Aviation Civile and the Direction Générale de l'Aviation Civile (France), the Air Accidents Investigation Branch (United Kingdom), Air Transat, Airbus and Rolls-Royce also took part. Under Section 3.1 of Annex 13, the sole objective of such investigations is the prevention of accidents and incidents, not the apportioning of blame or liability; as a result, no blame was established.
9. As is often the case, the accident was shown to have resulted from several different factors, including a maintenance error committed by Air Transat, which the company immediately acknowledged. The principal recommendations emerging from the investigation report concerned improvements to the leak detection

systems on board all Airbus A330 aircraft, to checklists, to pilot training and flight manuals, as well to procedures and regulations governing the planning and execution of replacement of major components. None of the recommendations was aimed specifically and exclusively at Air Transat.

10. The crew members demonstrated composure and professionalism. The performance of the pilots, Robert Piché and Dirk De Jager, was recognized by their peers. All 11 members of the cabin crew performed their duty by following the captain's instructions and acting in accordance with their training. Their exemplary conduct was publicly acknowledged by several of the passengers.