

PROFESSIONAL COOL



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A Captain with a History

Captain Robert Piché became a hero when he managed to land his Airbus 330 safely at the Lajes Airbase on a small island in the middle of the North Atlantic on Aug. 24, 2001.

Having learned to fly in a remote area of Canada, Captain Piché first became a pilot for a regional airline. But, after the airline went bankrupt and he struggled to find a new flying job, Piché ended up trafficking drugs in small aircrafts and into difficult makeshift airfields. He, then, got arrested right after landing in the US and served a prison term. Upon his release from prison, Captain Piché started a whole new life as a commercial pilot. The criminal past lay behind him and he even settled into family life. However, the experience of flying literally under fire and in extremely challenging situations has strengthened his cool-headedness, helping him develop into a rather taciturn and straightforward commander.

Engine Power Loss Creeping In

HERO Captain Robert Piché was hailed as a hero for his landing of an Airbus 330 in 2001.

In his second year as Airbus 330 captain he flew Air Transat flight TSC236, an A330-243 aircraft with 293 passengers and 13 crew on board, on a routine North Atlantic crossing from Toronto (CYYZ), Canada, to Lisbon (LPPT), Portugal.



At 04:38, while still in Mid Atlantic at FL390, the flight crew became aware of abnormal engine oil parameters. The Electronic Centralized Aircraft Monitor (ECAM) engine page showed high oil pressure, low oil temperature and low oil quantity. The values were within operating limits, but abnormal. Without a checklist for these indications the crew relayed the readings to their Maintenance Control Centre (MCC) via HF radio. MCC could not provide any explanation and did not provide any advice.

Little did the pilots know that the abnormal engine oil indications were caused by excessive fuel flow through the fuel/oil heat exchanger.

It took almost another hour before the ECAM displayed the Fuel Imbalance advisory message at 05:33.

By heart and without consulting their abnormal checklist the flight crew initiated the fuel balancing procedure. They opened the fuel cross-feed valve and turned the right-wing fuel pumps off. However, they had not analysed the root cause for the fuel imbalance. With hindsight some observers commented that the flight crew contributed to aggravate the situation. By opening the fuel cross-feed valve they remove the redundancy of the two separate fuel systems.

From here on the events unfolded in a rather quick succession. The flight crew realized that the remaining fuel on-board would not be sufficient to reach Lisbon.

At 05:45 they initiated a diversion to Lajes airport on Terceira Island on the Azores.



At 06:13 the right engine flamed out due to fuel exhaustion, followed at 06:26 by the left engine. By this time the aircraft was 65 NM from Lajes at FL390. The crew followed the ALL ENG FLAME OUT procedure.

The accident investigation later revealed organisational and performance errors in maintenance to be the root cause of the fuel leak in engine number two. Hydraulic tubes were not properly installed. The hydraulic tubes came into contact with the fuel lines which resulted in the fracture of the fuel line and the fuel leak. This was the initiating event that led to the fuel exhaustion.

The Airbus had now become a glider.

Cold Blood and Tense Nerves

Until now, despite knowing that fuel was critical and that reaching destination was out of question, the pilots were convinced they could still divert to Lajes with power. With the loss of all engines they had to reassess their mental model.

In this new mental model, energy management and sound decision making became vital.

There was no doubt that a runway within gliding distance was available.

Aeroplanes are designed to fly. Emergency systems feed the main flight controls. But having lost most of its electrical power, it was now solely up to the pilots to aviate, navigate and communicate.

It is probably not wrong to say that here Captain Piché's experience and,

for lack of a better word, flying instincts kicked in.

The accident report concludes: "Assisted by radar vectors from Lajes air traffic control, the crew carried out an all engines-out, visual approach, at night and in good visual weather conditions."

The Pilot - A Hero?

Captain Piché was celebrated as a hero in Canada. He had saved hundreds of people, leaving just a few with minor injuries resulting from the emergency evacuation. The aircraft suffered some damage, but the hull was not lost.

Back in Canada four days after the accident Captain Piché answered questions by reporters: "When you don't have that other engine, sooner or later you're going to go down, you know. That's just about it. You don't have time to think about anything else than taking care of the safety of the passengers. You do as you've been taught. – There was not much to play with. We didn't have a second chance to make the landing, so we did manage to guide the aircraft all the way down."

He has always asked not to be called a hero.

Once the dust had settled down, details of Captain Piché's maverick past became public. He had difficulties coping with the accident experience. Alcohol became his analgesic. Luckily before destroying his family and his career, he succeeded to quit his drinking habit.

Without knowledge of the clinical details it is safe to assume that the Lajes landing must have been a stressful if not traumatic experience.

Such an event leaves traces in any human being. Anxiety, depression, panic attacks, sleep disturbances and a host of other symptoms are to be expected following a perceived life-threatening trauma to an individual or persons close to an individual.

It is a mean trick of nature that symptoms may not always occur immediately following the event. Sometimes they may manifest themselves months and years later.

Pilots are at risk of this condition particularly following an aircraft mishap or near mishap, death of a fellow aviator or participation in a mishap investigation.

Considering the impact of an accident on the psyche of the persons involved is therefore very important.

As Captain Piché himself repeatedly stated, he was not a hero.

He is a human being and traumatic events affected him as they would affect any of us. In the context of the emergency response plan operators are strongly advised to provide care services to all those involved in or affected by an accident or serious incident.

Captain Piché was strong enough to come to terms with what he had experienced, partly aided by his previous experiences in life. He continued flying as a respected and trusted commander at Air Transat.



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URGENT
Air Transat flight TSC236 in Lajes following the emergency landing.