

PIC SHOUTS # \$ @ & %! ALONG AND CRASHES

Every pilot should understand the basic concept of leadership and its underlying elements as it is a quality that can profoundly influence flight safety. The fatal crash of a Learjet 35A in 2017 illustrates this perfectly.

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Leadership is a key skill for pilots. This is often repeated in command courses and management seminars.

Leadership is the force that drives a pilot in command (PIC) to guide his team to act in the best way practicable.

The Forbes magazine, in its February 2018 online edition, suggests eight essential qualities that define great leadership: 1. Sincere enthusiasm, 2. Integrity, 3. Great communication skills, 4. Loyalty, 5. Decisiveness, 6. Managerial competence, 7. Empowerment, and finally 8. Charisma. In real life, we rarely face a leader who fully lives up to these qualities.

This particular fatal aircraft accident highlights the damage the lack of such leadership qualities may cause.

The Last Leg of the Day

The PIC and his second in command (SIC) started their working day in the morning of May 15th, 2017. The crew was required to fly three legs on that day, from Teterboro, New Jersey, to Bedford, Massachusetts, thereafter

to Philadelphia and then back to Teterboro. They were scheduled to land in Teterboro by mid-afternoon. The weather was good, with prevailing visual meteorological conditions. For the final leg, at around 3 pm, from Philadelphia (PHL) back to the starting point Teterboro (TEB) the crew filed an instrument flight rules plan under Part 91 as a positioning flight without passengers.

The aircraft flown was a Learjet 35A, N452DA, operated by Trans-Pacific Air Charter, LLC.

The Crew

The 53-year-old PIC held an ATP certificate with 353 flight hours as PIC on the Learjet 35. His training and professional records were not without stains. He was refused to be given certificate approvals on the first attempt repeatedly, and before working for Trans-Pacific, he had been unemployed as a pilot for about 6 months. Prior to being hired by Trans-Pacific as a PIC, he had served as a SIC only. Trans-Pacific had sent him to a 4-day recurrent training on

the Learjet. During the first simulator training session, the PIC was graded “not yet proficient – additional training required” for engine failure, circling approach and landing from a circling approach maneuver. After he had received additional training, the instructor stated in an email to the training center’s Learjet manager that the PIC was not recommended for a check ride and that he needed additional training on circling approaches. Additional training was delivered to the PIC. Finally, the PIC succeeded in passing his simulator check ride in July 2016.

The 33-year-old SIC had his own rather shaky training history. He too failed circle-to-land training during his 2016 simulator training. In addition, he struggled with normal procedures, and lacked basic flying skills leading to crashes during simulator training.

Circle to Crash

Circling approaches are indeed demanding. On the day of the accident, the crew did not properly plan

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The cockpit audio transcripts reveal dysfunctional cockpit operations between the pilots.

for the flight. The investigators based this conclusion on the fact that the filed IFR-Flight Plan was inaccurate and that the latest weather information was not checked prior to the flight.

The flight from PHL to TEB is short, it takes less than 30 minutes. During the flight it is not possible to reasonably prepare for the approach, unless the flight has been properly planned for and the approaches studied beforehand.

When the Learjet flew towards TEB, the crew got confused about the approach given by ATC. ATC wanted the crew to fly the ILS-approach towards Runway 06 to then circle to land on Runway 01.

The approach profile followed by the crew did not match the required altitude, and the break-off point to turn right to line up with Runway 01 was missed. Wrong setting of navigation equipment and confusion in the cockpit about the required course of action worsened the lack of situational awareness.

In addition, the SIC was the flying pilot, while company procedures prohibited the PIC to hand over the controls to the SIC.

During the final turns towards Runway 01 and being too high and too close to it, the pilot allowed the aircraft to decrease speed to below stall speed. The SIC shouted "airspeed, airspeed!" The PIC answered with "#". The aircraft stalled and impacted in a parking lot about 0.5 miles south of Runway 01 at TEB.

The crew perished, three buildings and 16 vehicles were damaged or destroyed by the impact forces and post-crash fire.

Improvising

The CVR transcript reveals how stressed the cockpit atmosphere must have been. The short flight to TEB did not provide for enough time to thoroughly prepare for a change of runway and the crew mishandled the approach.

Situational awareness was lost, and the designated break-off point was missed. Being so near to the landing runway without being properly aligned induced the pilot to execute a sharp bank maneuver at low altitude, and the speed was too low to avoid a stall.

Poor Leadership

Considering the Forbes leadership criteria, the PIC did not demonstrate that he was applying the leadership qualities proposed by the Forbes Magazine:

Sincere enthusiasm: The crew was merely performing a job. The PIC, also through the use of foul language and lack of flight planning, didn't show any sign of sincere enthusiasm for the flight.

Integrity: Operational procedures, such as the prohibition in the manual of letting the SIC fly this particular flight, were not followed.

Great communication skills: The conversations did not show good communication. At times, there was even no communication. While reading the Cockpit Voice Recorder transcript, one thing pops out prominently: the high frequency of expletives being used by the PIC. This is disturbing in a professional environment and suggests that pressure and stress had to be released by the PIC, while, at the same time, reinforcing himself by adopting foul language.

Decisiveness: Once it became clear that the ILS approach toward Runway 06 was not stabilized, the PIC should have decided against the continuation of the approach and opt for a missed approach.

Managerial competence: Managers plan the course of action before they engage in it. The flight plan details suggest that the PIC did not plan the flight as required by regulations, SOPs and good airmanship.

Empowerment: It could be argued that the PIC, by allowing and tutoring the SIC into flying the aircraft on that particular flight, tried to empower the SIC to perform as pilot flying. However, empowerment does not mean to allow unqualified personnel to perform high-risk activities.

Charisma: The PIC adopted frequent foul language and thus deteriorated the cockpit atmosphere to an informal level. In a cockpit, the appropriate level of communication and interpersonal exchange must be professional, particularly during critical phases of the flight such as approach and landing. The PIC displayed a charisma, which prevented him from promoting a professional conduct of the flight. Critical safety

information was not given its weight but was implicitly ridiculed by the foul language. This drew the attention away from fully appreciating the consequences that disregarding that information would have for the safety of the flight.

What to Learn?

Leadership is vital. No one in aviation would argue against that statement. However, it seems that in many organizations that idea is still not adopted at all levels. As the investigation results suggest, many stakeholders knew about the difficulties of that captain, but still it was possible that he could get away with such conduct in a commercial air operation. There may be multiple reasons why nobody took the necessary action – including good intentions combined with own leadership deficiencies.

As players in the "aviation game", what can we do about this?

As managers, we will have to put our focus on leadership training, coaching and monitoring.

As pilots, we will have to promote the leadership principles by adopting them ourselves and by taking appropriate action when we are confronted with unacceptable behavior. This includes addressing the issue directly in the cockpit as well as reporting such events when necessary.

Foul language is only an indicator for poor leadership – but it can be a valuable one.



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