



RECORD OF CONVERSATION

[REDACTED]
Aerospace Engineer- Powerplants
Office of Aviation Safety (AS-40)
Washington, DC

Date: January 9, 2014
Location: Spirit Airlines Headquarters- Miramar, FL
NTSB Investigation Number: ENG14IA001
Interviewees- [REDACTED]

Other Parties Present:

[REDACTED]

Narrative:

An interview was conducted with the Spirit Airlines Flight 165 crew in order to better understand the series of events during the incident flight on October 15, 2013. In the time since the event, the digital flight data recorder parameters have been plotted and the No. 1 engine has been disassembled.

[REDACTED] stated that following takeoff there was mild to moderate turbulence as they navigated around storms. As the airplane reached FL195 a noticeable vibration was felt in the cockpit and throughout the cabin that progressively intensified. Shortly after the start of the vibration the ECAM displayed an EPR mode fault. [REDACTED] then stated "I pushed to level off the V/S push button on the FCU but I realized the autopilot had been disconnected and there was no FMA AP1 or AP2 indications, and no other noticeable audible cavalry charge, or red warning "AUTOPILOT AP OFF" or flashing red master warning. I attempted to reengaged autopilot (AP1), then I bid for autopilot2 (AP2) by pressing the corresponding push button on the FCU, but again to no avail." [REDACTED] stated that she was aware that autothrust had disconnected because losing EPR mode fault causes that but was unaware that autopilot had disconnected until much later in the flight due a lack of audible or visible indications.

██████████ stated that during the troubleshooting process he manually flew the airplane while ██████████ went through the procedures on the ECAM display. At the time of the event the airplane was between two lines of thunderstorms which added additional burden. ██████████ stated that multiple ECAM faults were shown on the display including EPR, EGT Overlimit and N2 Overlimit and the top item (priority) changed throughout the incident sequence, making the troubleshooting process difficult. Both crew members stated that Spirit pilots are trained to troubleshoot multiple ECAM messages but not trained for situations where ECAM messages repeatedly switch priority. The rated A320 pilots in the room all agreed with this assessment.

Both crew members stated that as they were going through the troubleshooting procedures they noted that smoke began entering the cockpit at which point they both donned oxygen masks. ██████████ stated that a short time after the EPR mode fault indication a white smoke with strong fumes began pouring in to the cockpit and adversely affected the crews' ability to read the instrument. The smoke coupled with the IMC conditions outside the airplane made flying the airplane difficult.

██████████ was asked if he any recollection of advancing the throttles on both engines to takeoff/go around (TOGA) position. He stated he did not recall advancing the throttles to TOGA but may have advanced the throttles to maximum continuous thrust (MCT) setting.

The crew members were asked if they had any recollection of an audible "bang" type sound coinciding with the vibration and ECAM faults. They did not recall a bang but stated they could feel the vibration in their seat which was the indication that something was wrong.

██████████ recalled there was a stall on the No. 1 engine but stated there was not a traditional stall sound as he would have expected but rather a muffled "poof" sound which he may have originated from the left engine.