

2004: CRJ200 Jefferson City

■ General context

- Regional Jet
- Ferry / repositioning flight Little Rock to Minneapolis
- During climb



2004: CRJ200 Jefferson City (con'd)

■ Situation context

- Pilots decide "to have a little fun" (CVR)
- Request climb to FL410
 - Flight plan FL330,
 - Manufacturer max FL380
- Performed aggressive flight manoeuvres at FL150
 - including a pitch-up at 2.3g
- Switched seats during the flight
- In the attempt to reach FL410, the plane was pushed at over 1.2g,
- Experienced several stalls...
- Both engine stalled.

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■ Emergency context

- The crew declared an emergency, informing ATC of **one** engine failure (not 2...)
- They made **four** unsuccessful attempts to restart the engines
- But didn't follow the proper **procedures** to restart
- The crew also continued to try to restart the engines after the controller asked if they wanted to land...

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■ Analysis

- Ignored repeated cockpit warnings that the plane was about to stall.
- A post-crash examination of the Pinnacle jet's engines indicated that they could have restarted

■ Consequences

- The crew
 - Attempted to make an emergency landing
 - But crashed in a residential area 3 miles south of the airport.
- The airplane was destroyed by impact forces and a post crash fire
- The 2 crewmembers were fatally injured.

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■ Causes (NTSB)

- Pilots' **inappropriate** and **unprofessional** behavior,
- Behavior was not consistent with the degree of **discipline**, **maturity** and **responsibility** required of professional pilots,
- **Deviation** from company SOP,
- **Poor** airmanship,
- **Inadequate** training regarding:
 - How to fly at high altitudes
 - How to handle emergencies
- **Failure** to prepare for an emergency landing in a timely manner, including:
 - Communicating with air traffic controllers immediately after the emergency about the loss of **both** engines
 - The availability of landing sites.

2004: CRJ200 Jefferson City (end)

■ Causes (NTSB) (end)

- Failure to achieve and maintain the target **airspeed** in the double engine failure checklist, which:
 - Caused the engine cores to stop rotating
 - Resulted in the core lock engine condition
(Core lock is essentially a jam after a jet engine stops and cools suddenly)

■ Contributing to the causes

- GE jet engines core lock condition (engine froze)
- Which prevented at least one engine from being restarted
- AFM did not communicate to pilots the importance of maintaining a minimum airspeed to keep the engine cores rotating.