



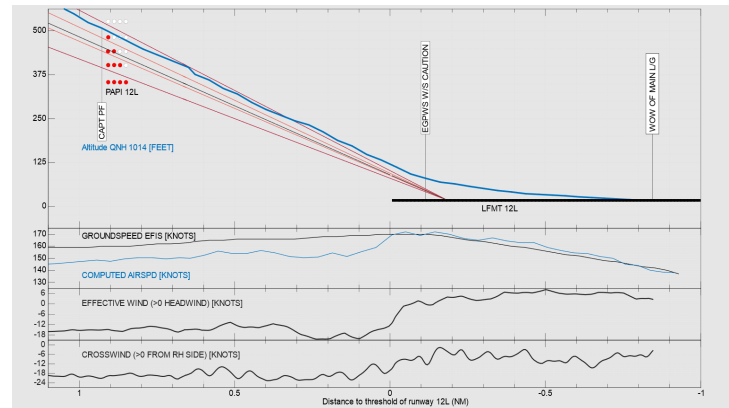
Accident to the Boeing 737 registered EC-NLS operated by Swiftair on 24/09/2022 at Montpellier-Méditerranée

The below summary focuses on flight crew operational procedures.

Windshear, long landing, runway overrun on landing

SCENARIO

- Runway change after approach briefing.
- VOR-DME approach to runway 12L, with a final approach path of 3.66°, conducted at night.
- Storm cell approaching the airport from the south-west, crew awareness of this threat was low.
- On final, the aircraft was slightly above the approach path.
- At around 500 ft on final, the captain (PM) and co-pilot (PF) agreed to change roles. The co-pilot, now acting as PM did not carry out his monitoring tasks.
- When flying over the threshold, in heavy rain, the aeroplane encountered windshear with a sudden reduction in the tailwind.
- The crew did not detect this phenomenon and did not perceive its impact on the flight parameters.
- Touch down beyond the TDZ at around 1,500 m from RWY 12L THR.
- The aeroplane overran the runway and finished its run in the lake after the RESA.



CONTRIBUTIVE FACTORS

to the low awareness of the weather conditions

- The crew focusing on the information of a runway change to the detriment of the information about wind changes and the presence of a storm cell close to the airport.
- Bias linked to earlier ATCO information that conditions were improving.
- Probable inappropriate use of the on-board radar.

to the absence of monitoring

- Unanticipated swapping of PM/PF roles.
- New PM keeping his focus on the external references he was using when he was PF.

to the non-detection of long landing

- No lights in the touchdown zone.
- Low situation awareness linked to environmental conditions (dark night, heavy rain).

SAFETY LESSONS

- **Importance of briefing after a runway change** to share action plan, to discuss the specificities of an approach, to anticipate and mitigate the threats and to prepare to deal with them. It would help to maintain an acceptable workload during the approach and increase the situational awareness with regard to stabilization criteria.
- **Swapping PF/PM roles** may lead to a situation where a crew member does not assume positively the new role. In particular, transitioning from PF to PM is a known challenge, for which the standard callout – usually focused on the PF role, may lack performative effect.