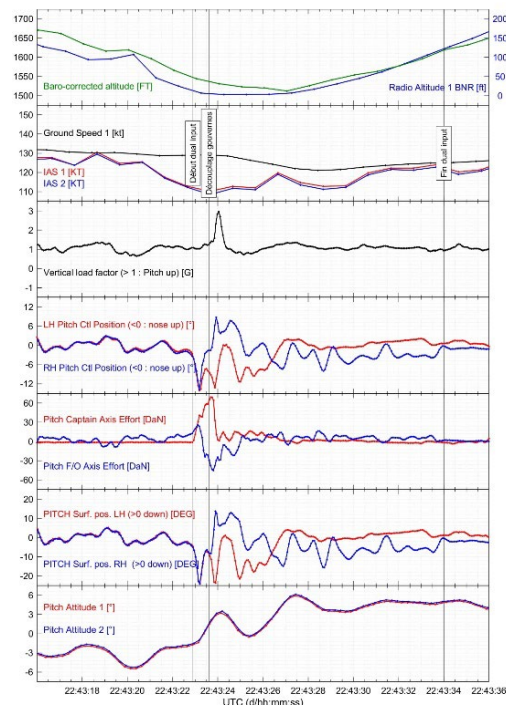




Non-stabilized approach, windshear, opposite dual inputs, hard landing, go around

SCENARIO

- Wind updated by AFIS: variable and tailwind component present on preferential RWY 02.
- RNP 20 approach, steep slope (4°), variable wind.
- VAPP increased due to expected turbulent air after crossing the coastline.
- Significant, high amplitude activity by the co-pilot on the power levers to control the flight path and the speed. Non-stabilized approach in IAS and Vz.
- Between 100 ft and the ground, unanticipated windshear causing the aircraft to sink.
- Uncoordinated action by the captain (PM), without a callout, leading to the elevators uncoupling.
- Hard landing, opposite dual inputs prior to flare and during the subsequent balked landing.



CONTRIBUTIVE FACTORS

Decision to use RWY 20 instead of using preferential RWY 02

- Wind information unavailable during flight preparation and inaccurate in flight.
- Lack of awareness of the potential presence of windshear.

Decision to continue approach

- Operator stabilization criteria inadequately adapted to steep approach slope.
- Absence of windshear detection means, on ground or on board.
- Acceptance of the destabilization of the approach, without renouncing, due to known and usual turbulent conditions on runway 20.

Opposite dual inputs

- The Captain's instinctive action, without making a callout, led to the undesired uncoupling of the elevators.
- No emphasis on the risks associated with opposite dual inputs, during training.

SAFETY LESSONS

- **Importance of stabilization criteria** that reflect the specificities of the operation (e.g., steep approach profiles), without deviating from the manufacturer's procedures.
- Several serious incidents or accidents have involved **opposite dual inputs on aircraft with conventional flight controls**, leading to flight controls uncoupling. These events highlight:
 - possible critical consequences: momentary loss of control, significant structural damage;
 - a tendency for captains to act reflexively even when they are the PM;
 - a lack of awareness among pilots and more broadly within the aviation community regarding this [issue](#).