CAST Walk Through flydubai CFIT

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Information

This is template for practicing CAST analysis
Flight Track and Holding Positions

Proximate Events

One attempt to land
*Wind shear warning*
Go Around Initiated
Climbed to holding point

Holding for XX hours due to weather

Second attempt to land
*Wind shear warning*
Go Around Initiated
*Aircraft Pitches Nose-down*
  - *Controlled Flight Into Terrain (CFIT)*
To offset the aerodynamic forces created by a combination of the plane’s attitude and speed, the horizontal stabilizer is trimmed by rotating around the pivot point. Electric motors or a manual hand-cranked trim wheel make these adjustments and reduce the force needed by the pilots to move the controls. If the stabilizer is tilted too high, this is called a mistrim and can create a dangerous situation that can paralyze manual control.

Pilot’s control column moves the elevator for short term pitch changes

Stabilizer moved UP or DOWN by Pilot’s Trim Switch (Electrical)
The pitch control surfaces consist of hydraulically powered elevators and an electrically powered stabilizer. The elevators are controlled by forward or aft movement of the control column. The stabilizer is controlled by the manual trim thumb switch.
Its not possible to play the accident animation video on this meeting application and meet all of the IT specifications globally.

I have taken several screen shots to demonstrate the salient points of the Go Around and subsequent accident.
FDR Animation Screen Capture
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Wreckage and Evidence Collection/FDR
Readout
Rostov-on-Don (Russia)

Moscow
Crew Duty Hours/ Fatigue Analysis

- All of the crew where within the companies specified fatigue limitations to Operate the flight.

- No finding for fatigue
IDENTIFY THE
SYSTEM LEVEL HAZARDS
CONTROL STRUCTURE

This is NOT the organisation structure
PROXIMATE EVENTS

TIMELINE AND CHRONOLOGY
Analyze the loss at the Physical System Level

- Identify the physical controls and equipment involved
- Identify any physical safety requirements and constraints meant to prevent this accident
- Identify any failures or inadequate controls in the physical equipment
- Identify contextual factors that explain the physical failures or inadequate controls
Analyze higher levels of control to determine how and why each successive higher level contributed to inadequate control at the current level.

- Identify the unsafe decisions and control actions
- Identify process model flaws (beliefs) that explain the unsafe decisions and control actions
- Identify contextual factors that explain why the behaviour seemed appropriate at the time
- Identify the safety-related responsibilities for the next higher level of control
Look at factors that involve the interaction among system components and not just individual components.

- Identify communication and coordination deficiencies that contributed to the events.
- Identify dynamics and changes over time that led to the behaviors and events.
- Identify safety culture flaws contributing to the events.
Conclusions

- Findings

- Contributing Factors
Additional Sections for Annex 13
ICAO Annex 13 Compliance

Safety Recommendations

1. SR XX-2020
2. SR XX-2020
3. SR XX-2020
The End