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# Milan Linate runway incursion, October 2001





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- Linate - Milan “city” airport
- Accommodates GA and Commercial Air Traffic

## Aircrafts involved:

MD-87 (SAS FLT 686), 110 occupants

Cessna Citation CJ2, 4 occupants

## 118 Fatalities





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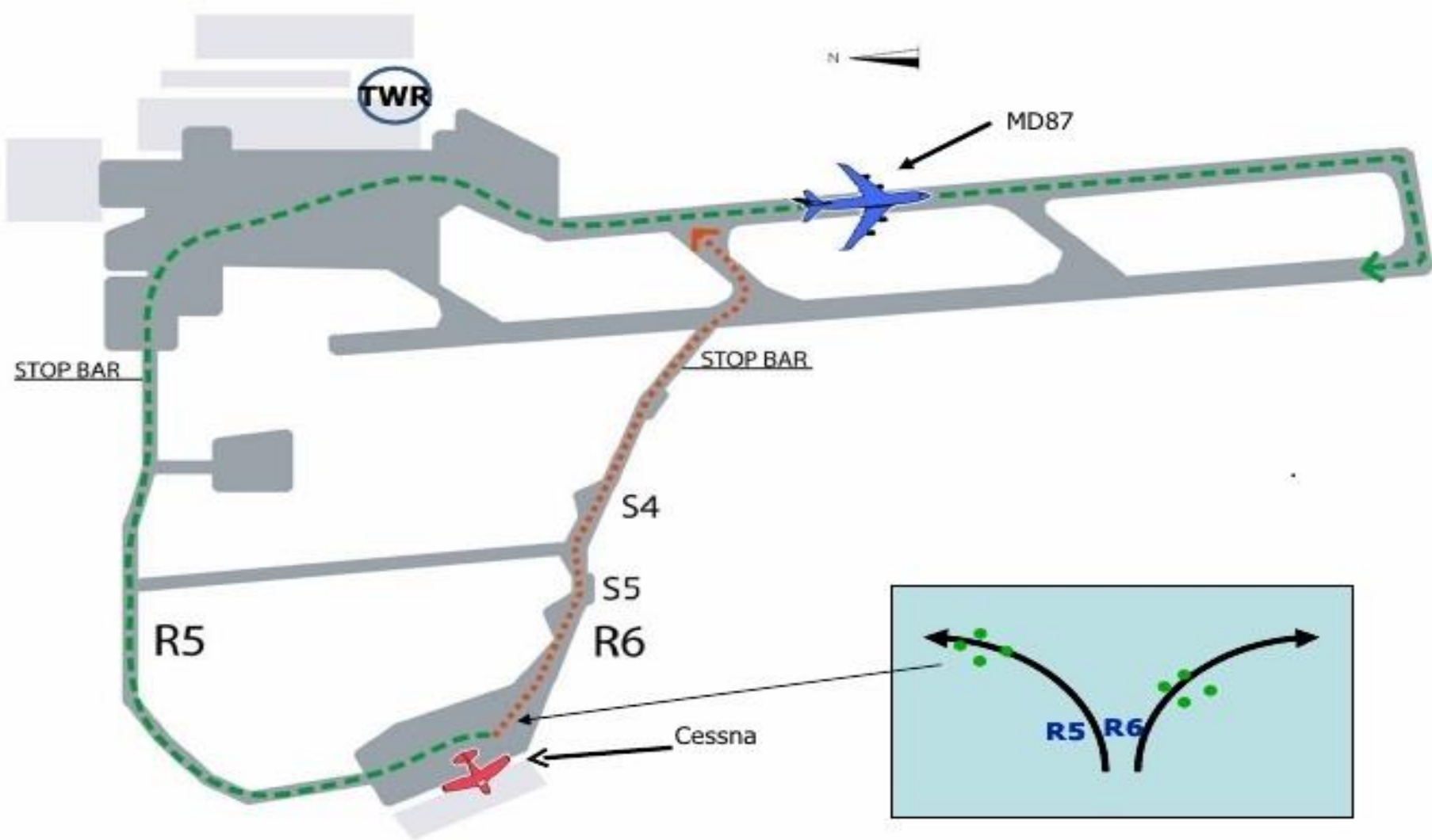
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## On the day of the accident:

- Thick fog
- Visibility of 50 meters (at the time of the collision)
- Busy Traffic
- Disrupted ATC communication



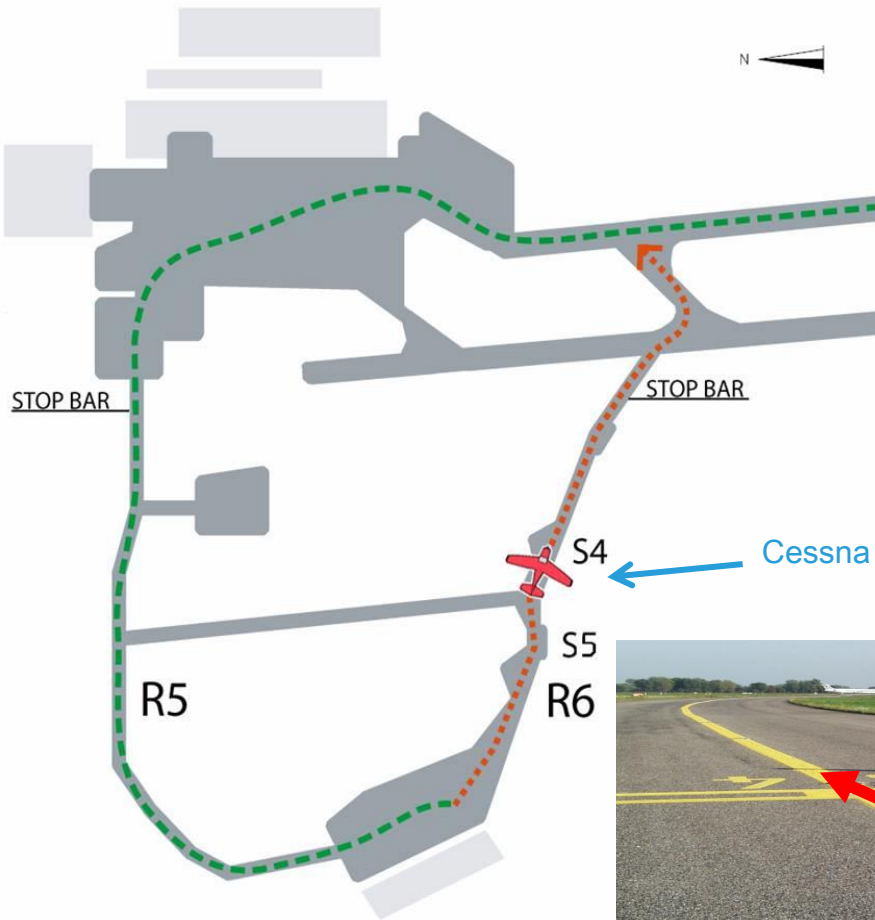




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# BREAKDOWN OF THE ACCIDENT



D-VX

- D-VX approaching S4. (8.08.23)

gnd

- D-Vx Roger confirm position? (8.08.28)

D-VX

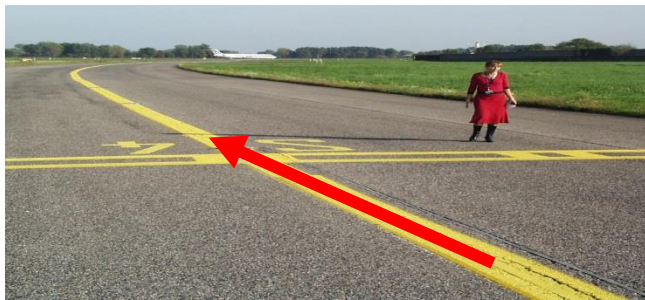
- D-Vx approaching the runway..... S4. (8.08.32)

gnd

- DIEVX roger maintain stop bar, I'll call you back. (8.08.36)

D-VX

- Roger, ... hold position (8.08.40)

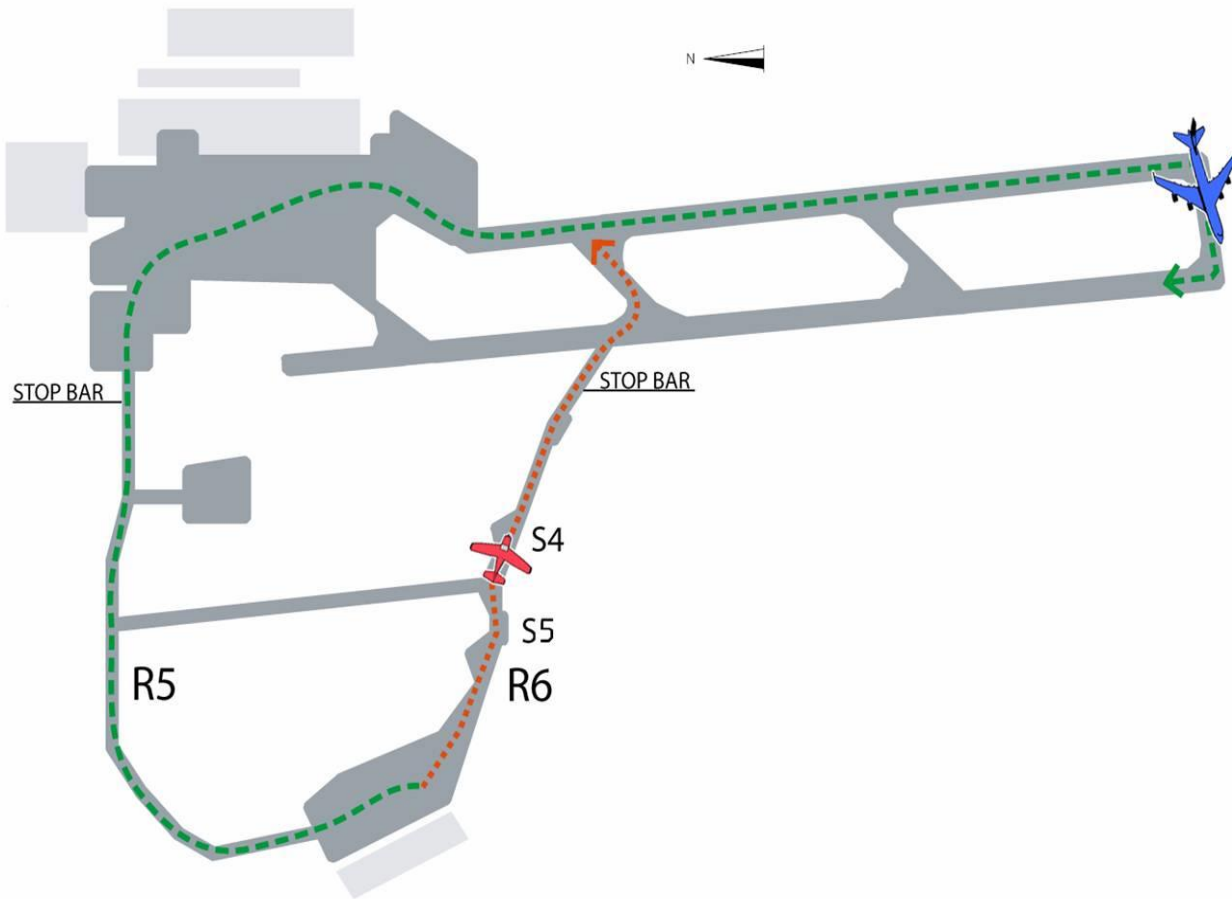






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gnd

- DVX continue your taxi on the main apron, follow the Alpha Line. (8.09.19)

D-VX

- Roger continue the taxi in main apron, Alpha Line the... DVX. (8.09.28)

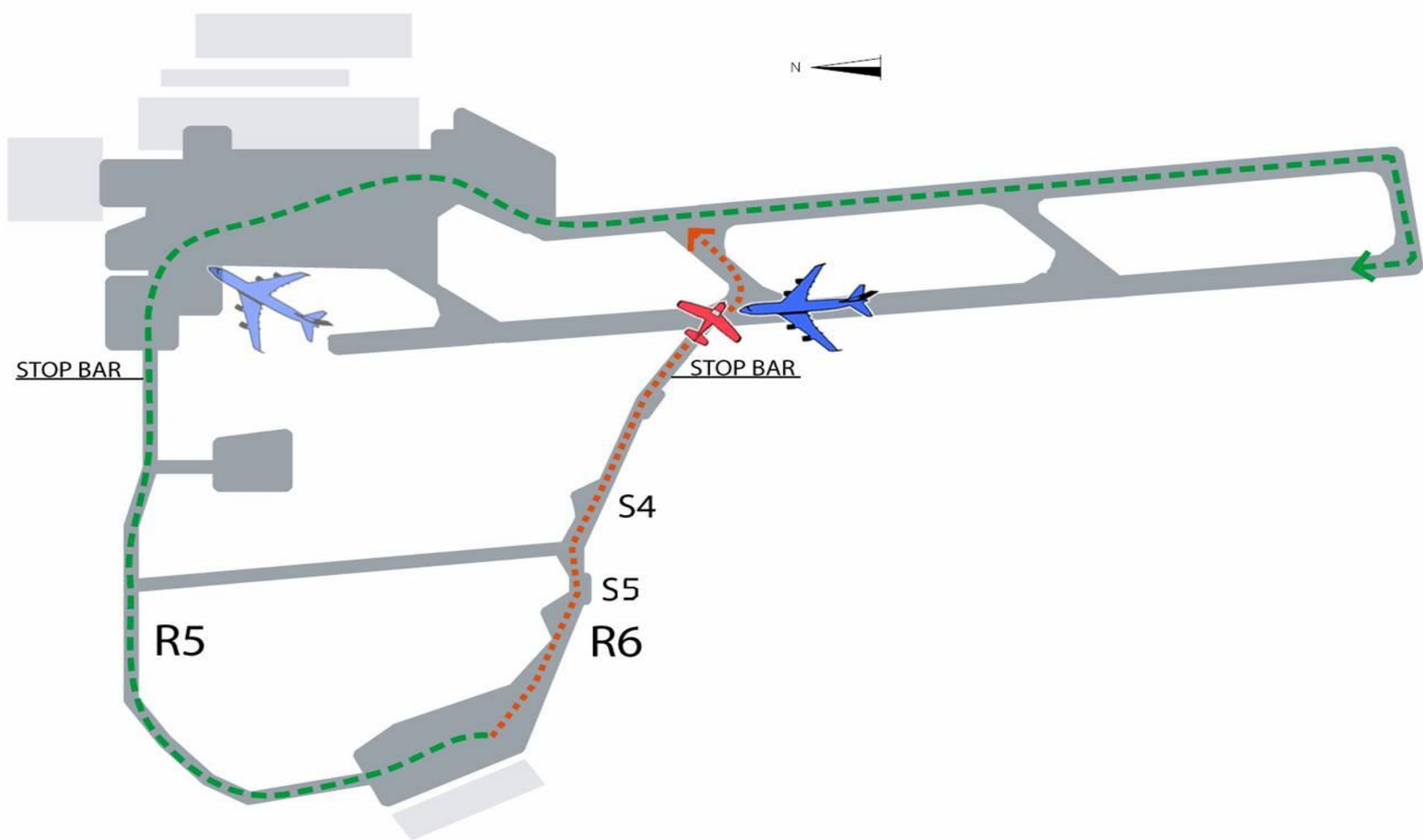
gnd

- That is correct and please call me back **entering the main taxiway.** (8.09.37)

D-VX

- DIEVX I'll call you **on the main taxiway.** (8.09.38)





**06:09:41**



**06:09:41**



**ANSV**



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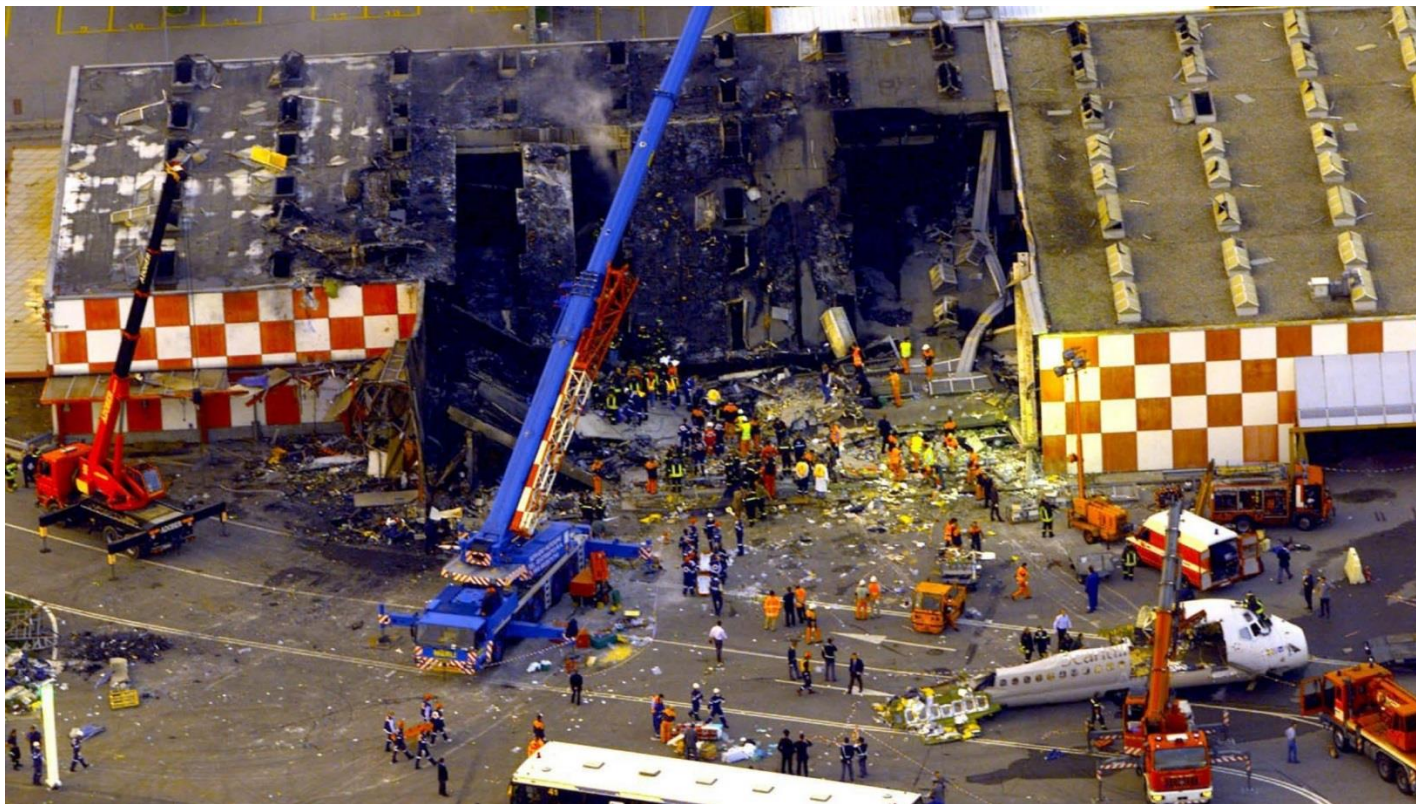
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## From the accident investigation report:

- Linate Airport had no Aerodrome manual.
- Aerodrome safety was not on the agenda for previous meetings for the Airport Technical Safety Committee (CASO).
- No effective performance agreements did exist between involved organizations regarding safety matters. Evidence of lack of coordinated efforts.



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## **From the accident investigation report (cont'd):**

- No functional Safety Management System was in operation.
- Aerodrome standards – especially with regards to visual aids (signs, markings) – did not comply with ICAO Annex 14.
- Safety audits resulted in poor communication between organizations on safety matters, late decisions and slow handling of safety issues with loss of important information with respect to incidents and deviations.





## **From the accident investigation report (cont'd):**

- No recurrent training program for ATC personnel had been provided.
- The competence, maintenance and requirements for recent experience for ATC personnel did not fully comply with ICAO Annex 1.
- Missing Runway Guard Lights; Surface Movement Radar was not operational for a long time.
- The punitive environment that existed and the fear of sanctions discouraged the self reporting of incidents and individual mistakes.



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## **From the accident investigation report (cont'd):**

- No quality System was established regarding, among other things, aeronautical data.
- No well functioning deviation reporting system was in operation.
- Runway 36 incursion alarms did not work as they were switched off for years before to avoid unnecessary alarms triggered by wildlife or other airport vehicles.

Video



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Southern African  
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**Thank You**