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Office fédéral de l'aviation civile OFAC
Ufficio federale dell'aviazione civile UFAC
Federal Office of Civil Aviation FOCA



Update Safety & Risk Management

Marc Keusch, Head SRM
3. May 2024, Zentrum Paul Klee (ZPK) Bern



Agenda



A. Data – Information – Knowledge

► Evidence-based oversight



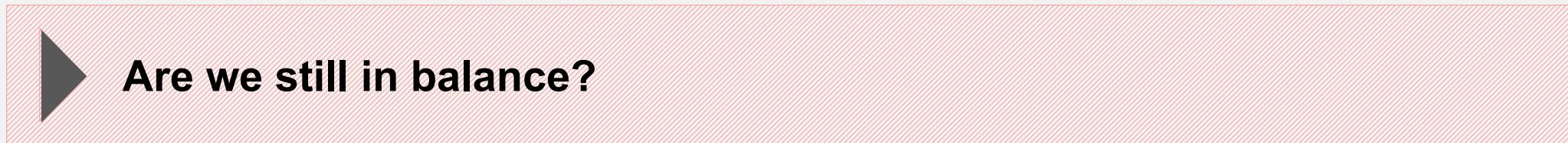
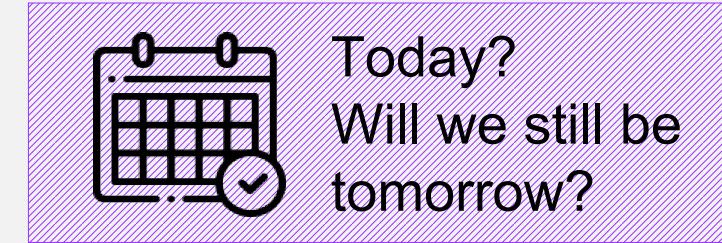
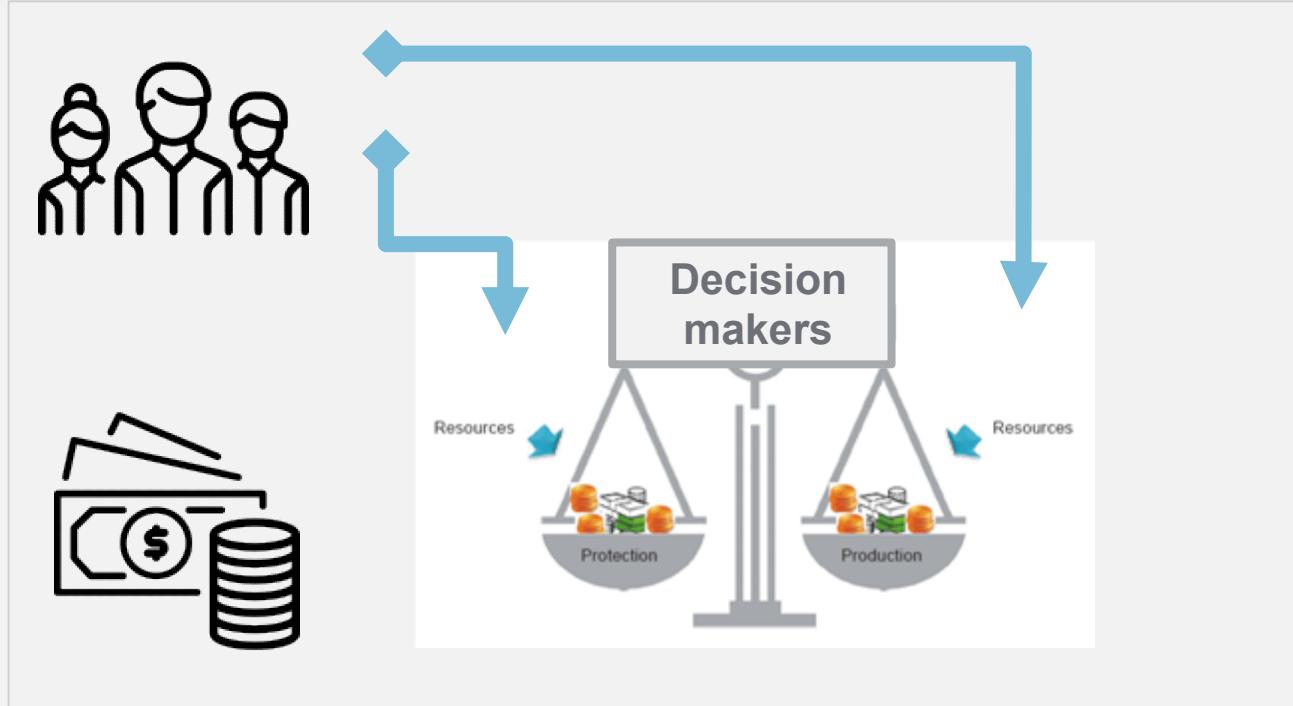
B. Safety Culture

► Safety as an Attitude





Production vs. Protection

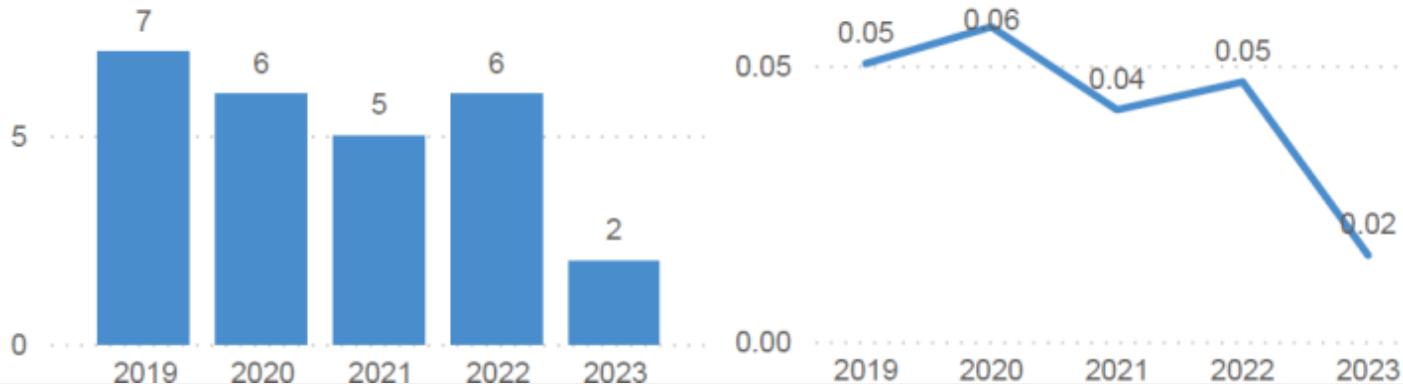




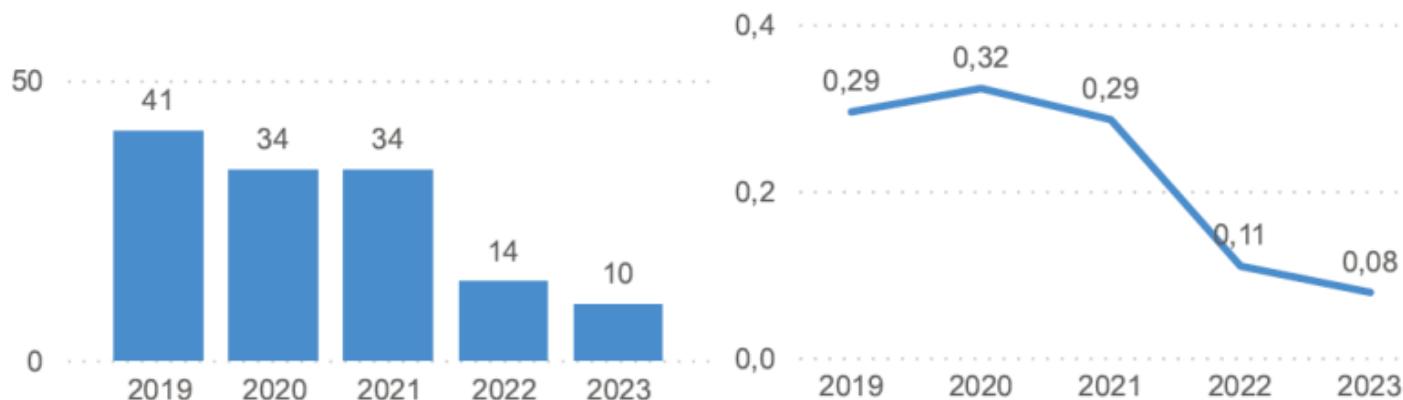
Accidents / serious incidents 2019-2023



Number of fatal Accidents / fatal Accidents per 10'000 Movements CH



Number of serious incidents / serious incidents per 10'000 Movements



See ASR2023

Are we doing better?

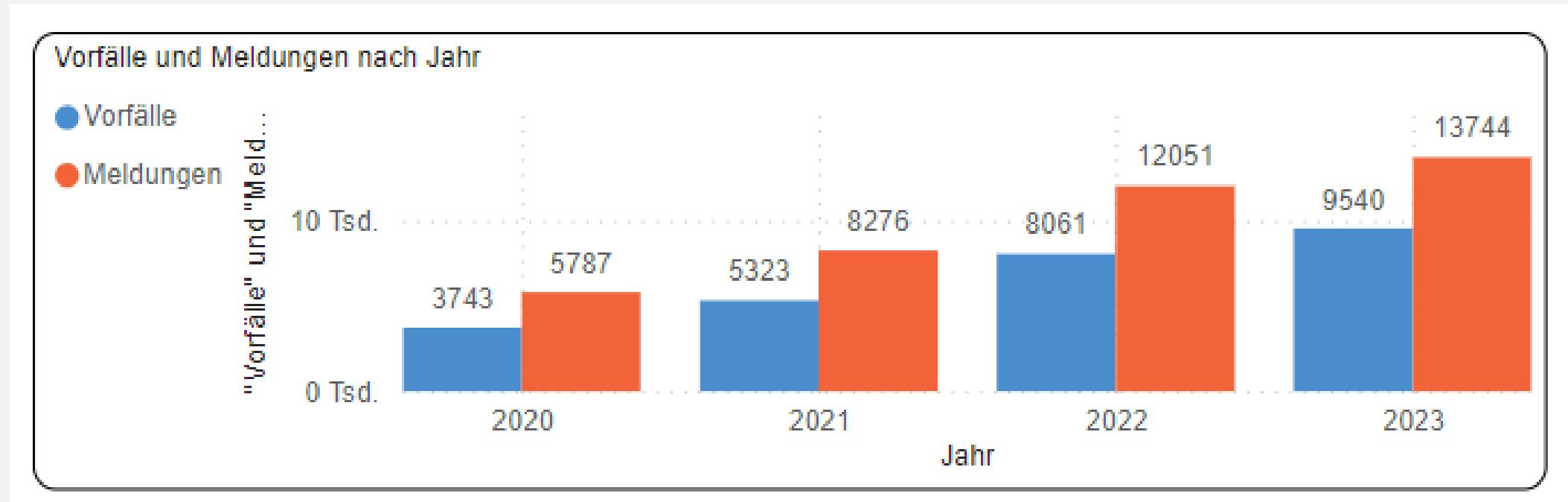
- Just coincidence?
- The law of small numbers
- Results of efforts?



Occurrence Reporting System 376/2014



- Almost 14'000 occurrence reports in 2023
- More occurrences: less safe or just an improved reporting culture or both?



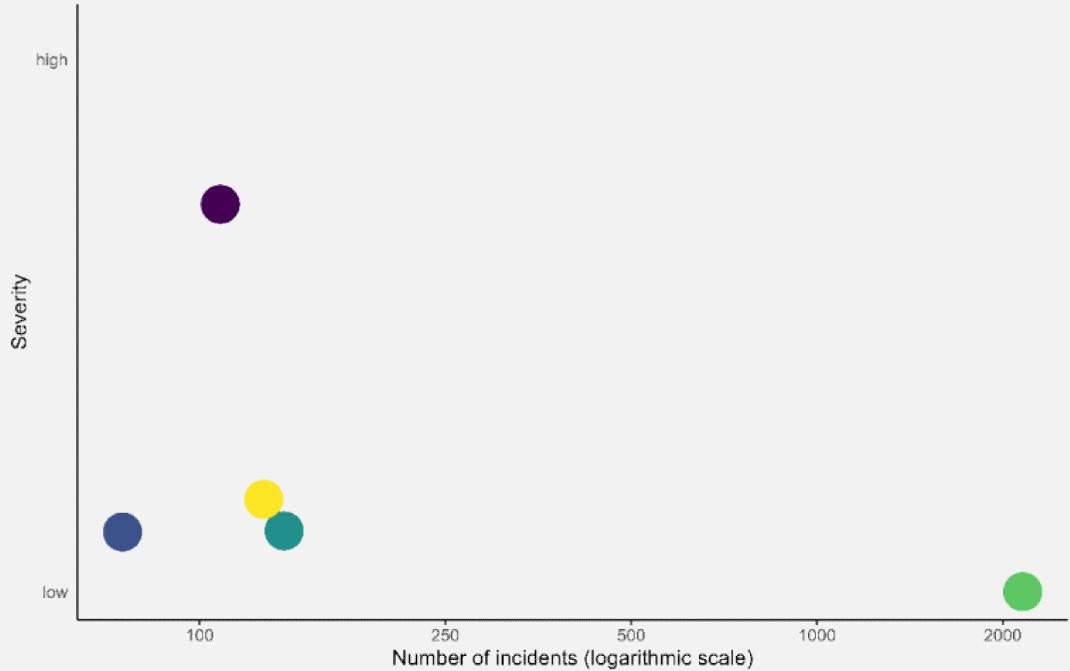


Safety issues with aeroplane ops



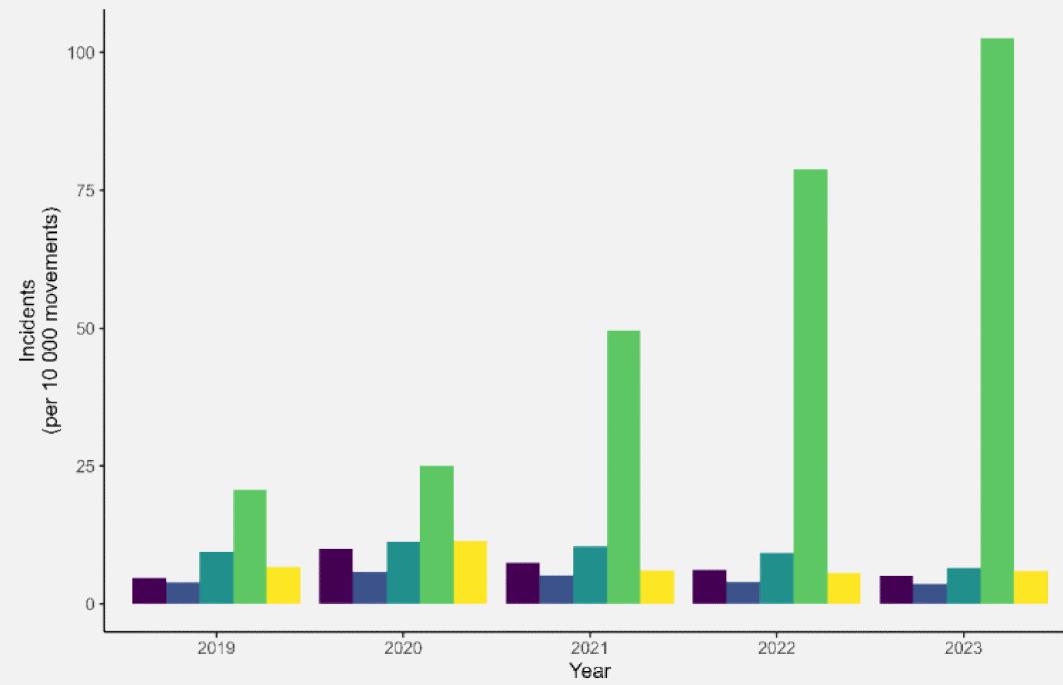
5 Top Safety Issues

Distribution 2023



● Abnormal RWY contact ● Deviation procedures & checklists ● Flight parameter exceedance ● GPS malfunction ● Windshears & turbulences

2019-2023



■ Abnormal RWY contact ■ Deviation procedures & checklists ■ Flight parameter exceedance ■ GPS malfunction ■ Windshears & turbulences

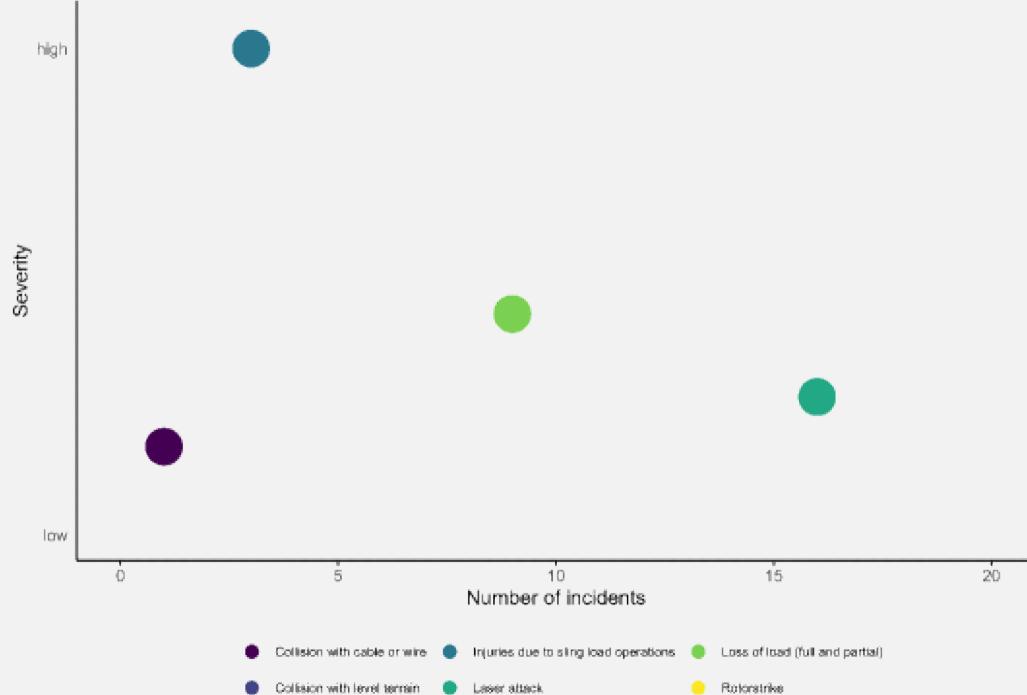


Safety issues with helicopter ops

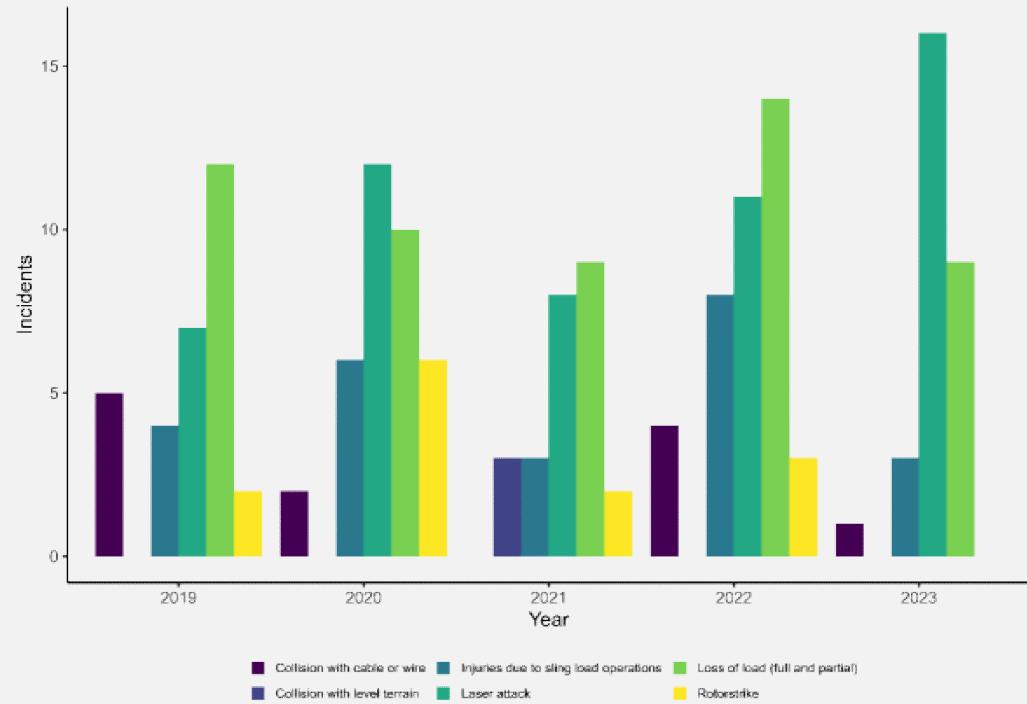


4 Top Safety Issues

Distribution 2023



No of incidents 2019-2023



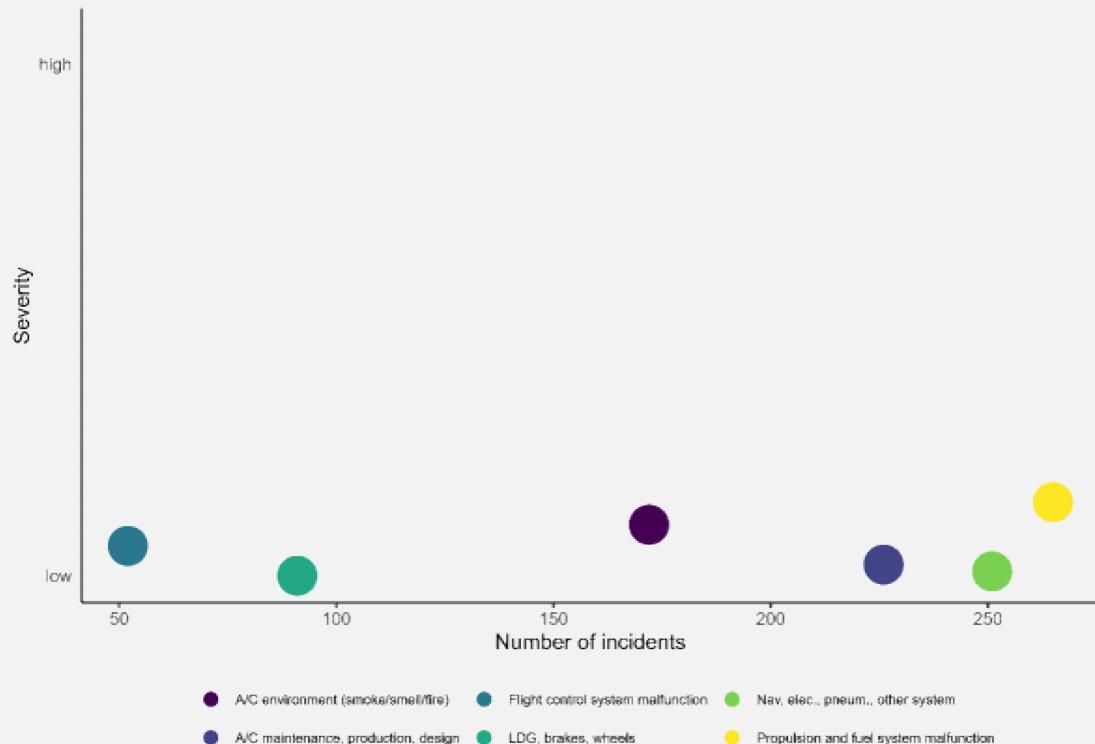


Safety issues with technical features

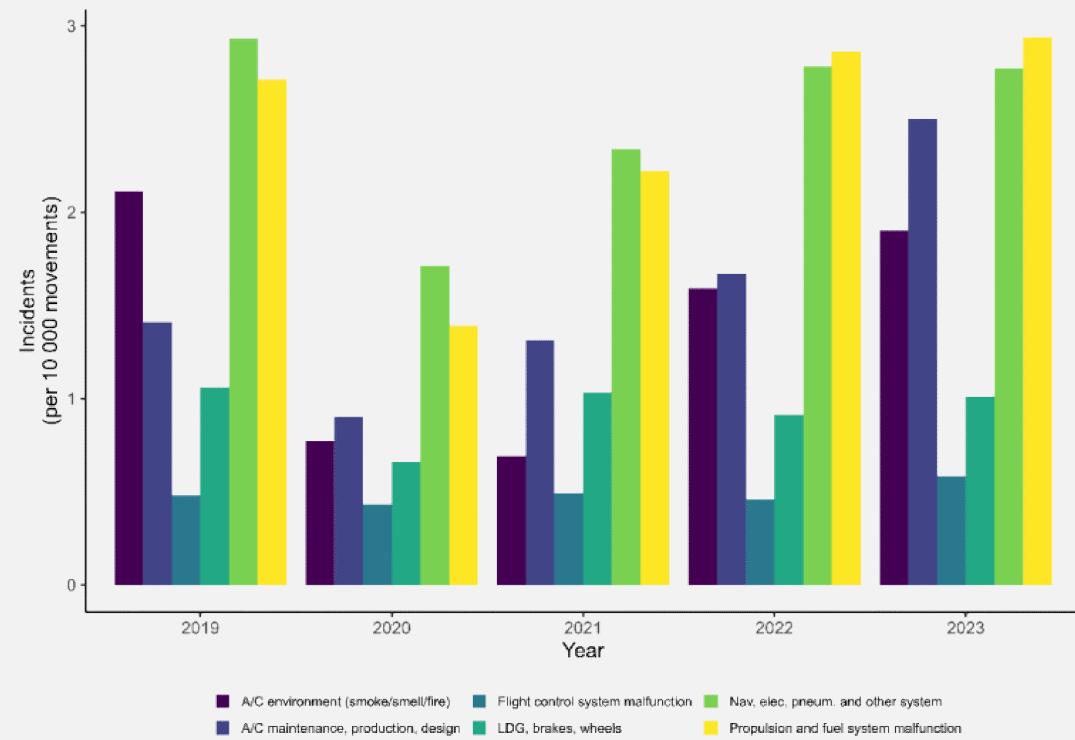


6 Top Safety Issues

Distribution 2023



2019-2023





Operational Safety Risks



-  Airprox incidents with low severity
-  GPS Jamming incidents
-  wrong baggage/cargo loading
-  IT-system relevant incidents with safety impact

No negative trend:

- Airprox between aircraft – Unmanned Aircraft System (UAS)
- Birdstrikes
- fatigue-related incidents with safety impact



Systemic Safety Risks



- Mid-Air Collision within or close to TMA ZRH or at specific hotspots (Delta/Echo airspace)
- Ground Collision at Zurich Airport between departing/landing aircraft and taxiing aircraft
- Various threats in crisis areas
- Know-How-loss (baby-boomer) in conjunction with reduced resilience of generation Z
- Fast-paced regulation environment





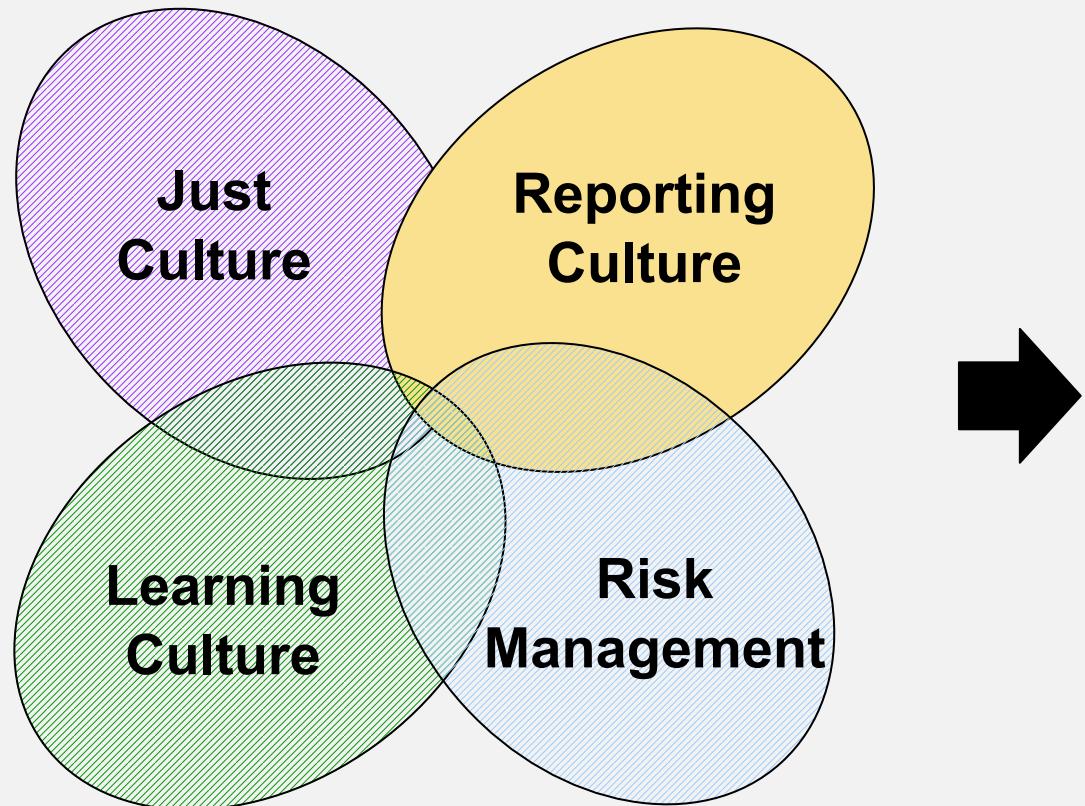
Conclusion



- No blind spots, weak signals are omnipresent
- No directional change with regards to main safety issues (RPBO)
- Systemic issues: mitigations measures last a long time
- Safety culture is paramount



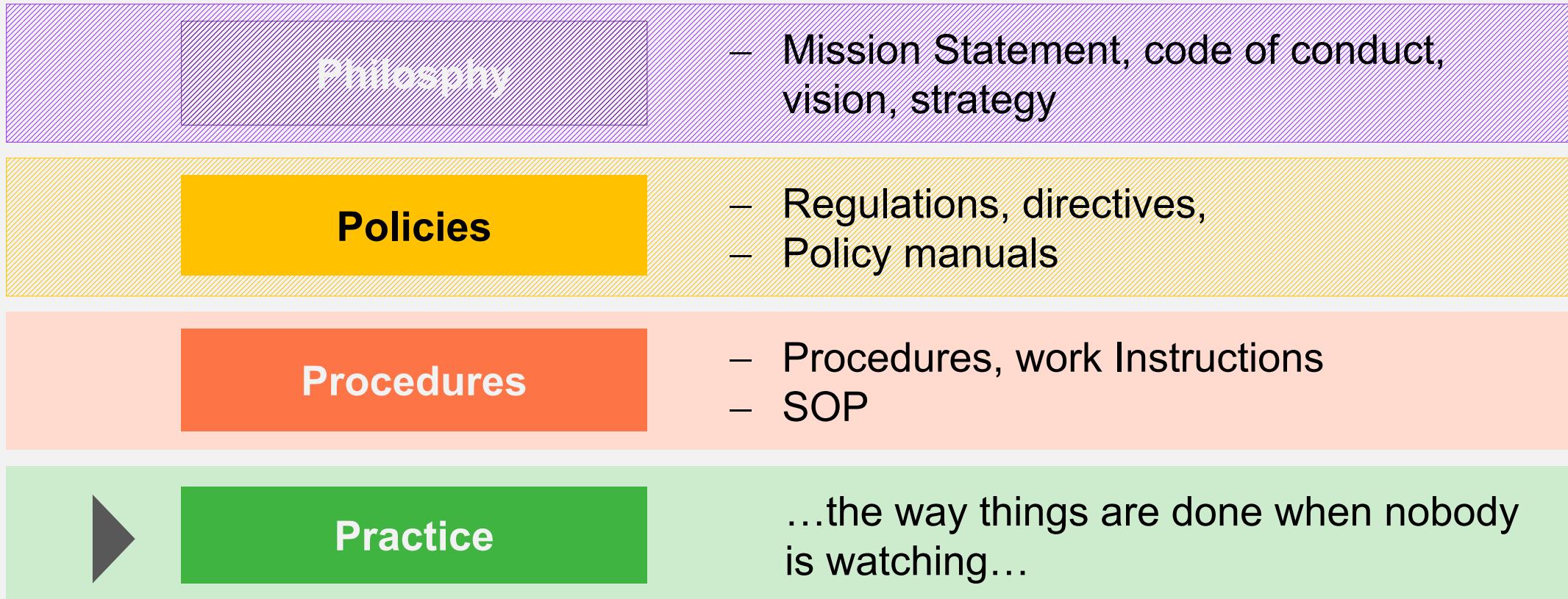
B – Elements of Safety Culture



- Dependencies between elements
- Slow and gradual development
- lasting impact on safety level
- **Personal conduct and behavior**



4 Ps - Culture in an organisational context





FAA – Boeing takeaways



- The trust is gone
- Maximum return
- Quality defects
- “Don’t care” mentality



Boeing 737 Max Maneuvering Characteristics Augmentation System

Activates automatically when:

- Angle of attack is high
- Autopilot is off
- Flaps are up
- Steeply turning

MCAS pushes the jet's nose down
to reduce the risk of stalling

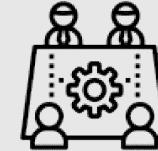




Afternoon workshop



Safety Culture – Boeing case study



Just Culture – Update and case studies

