# Self-Sufficient Workgroups in Aviation

**Correlation to Organisational Attachment & Mental Health**

By CPT Cordula Pflaum, EUROCONTROL Safety Forum Brussels , 06.06.2025

# Focus on Self–Sufficient Workgroups



- Rotating and local autonomous teams
- Risk of isolation and disconnection
- Need for rapid trust-building

# Organisational Attachment



Psychological Meaningfulness → Psychological Safety → Psychological Availability

May, D.R., Gilson, R.L., Sandstrom, Harter, L.M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work *Journal of Occupational and Organizational Psychology (2004),77, 11-37*.

# Organisational Attachment

Derived from job enrichment, task significance, and workrole fit, meaningfulness is essential for engagement

The perception of being able to express oneself without fear of negative consequences. Enhanced through supportive leadership and collegial relationships

Refers to the readiness – both physical and emotional – of individuals to engage at work. Influenced by personal energy and role security

- May, D.R., Gilson, R.L., Sandstrom, Harter, L.M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work *Journal of Occupational and Organizational Psychology (2004),77, 11-37.*

# Organisational Attachment



- Feeling connected produces stronger engagement
- Enabled by Psychological safety
- Shared identity reduces detachment

# Evidence & Outcomes on Psychological Safety

**What is Psychological Safety?**

The shared belief it's safe to speak up,
         No fear of embarrassment or retribution
                     And the foundation for trust and collaboration

Therefore…

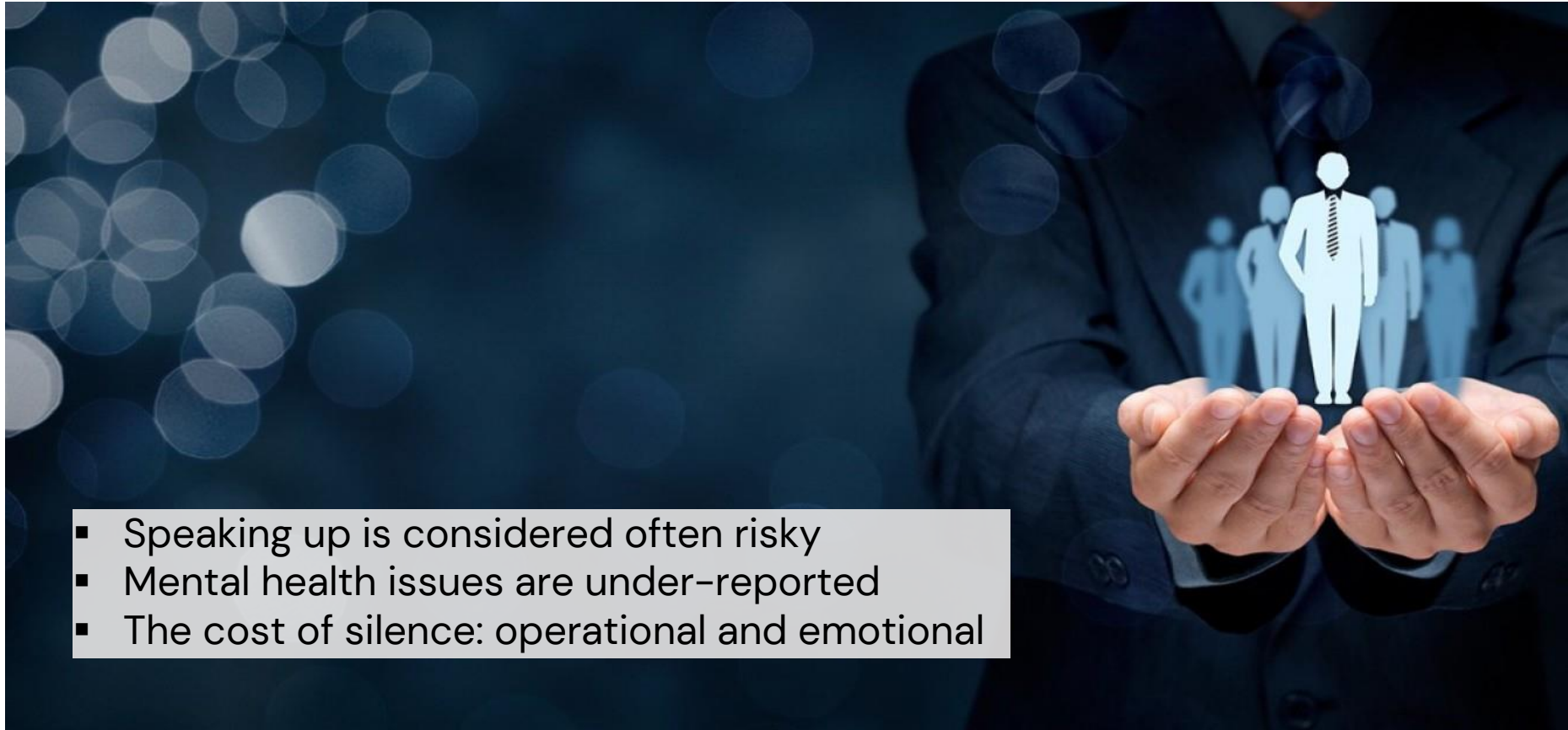**Safe teams = more errors reported + better resilience**

**Safe Teams support one another in high–stake moments**



*Psychological Safety: A Foundation for Speaking Up, Collaboration, and Experimentation in Organizations*
*Ingrid M. Nembhard, Amy C. Edmondson, 2012*
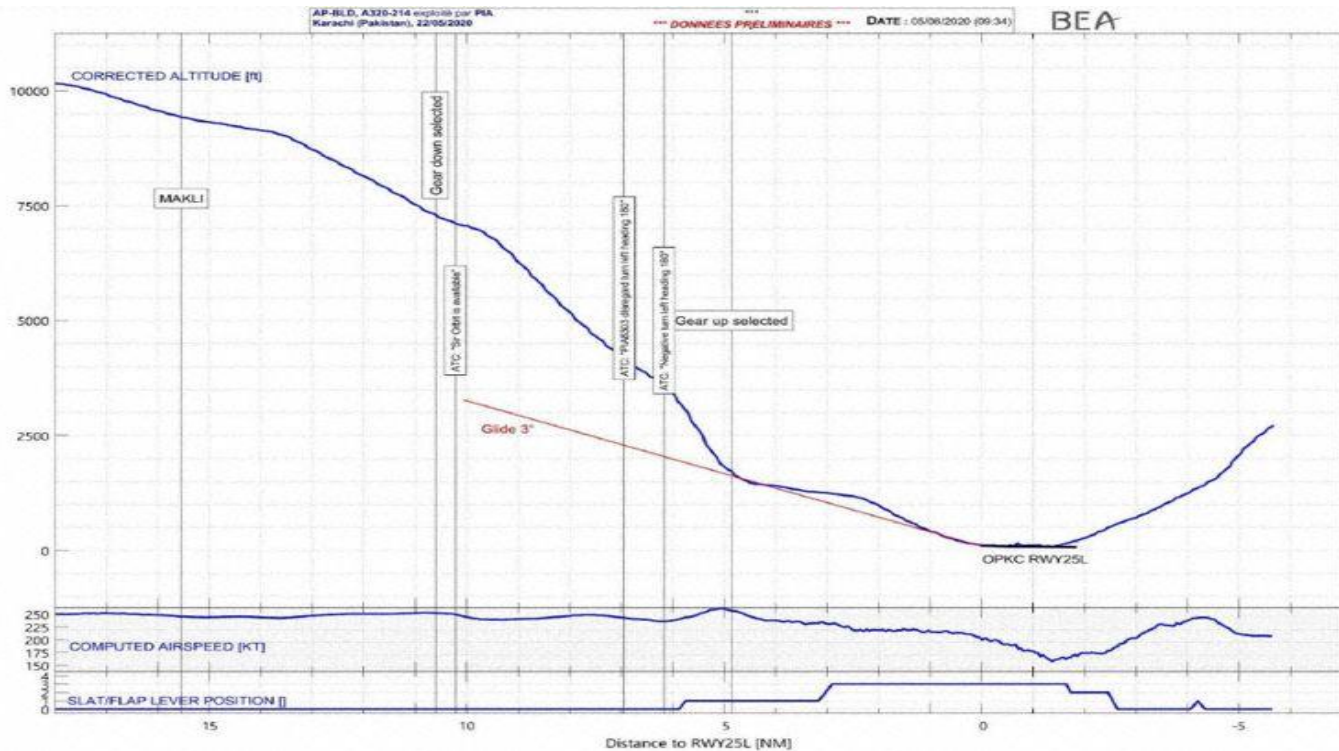
# Why This Matters

- Speaking up is considered often risky
- Mental health issues are under-reported
- The cost of silence: operational and emotional

# Why Now?



- From acute events to chronic fatigue
- Stiftung Mayday trends: Correlation of rising fatigue
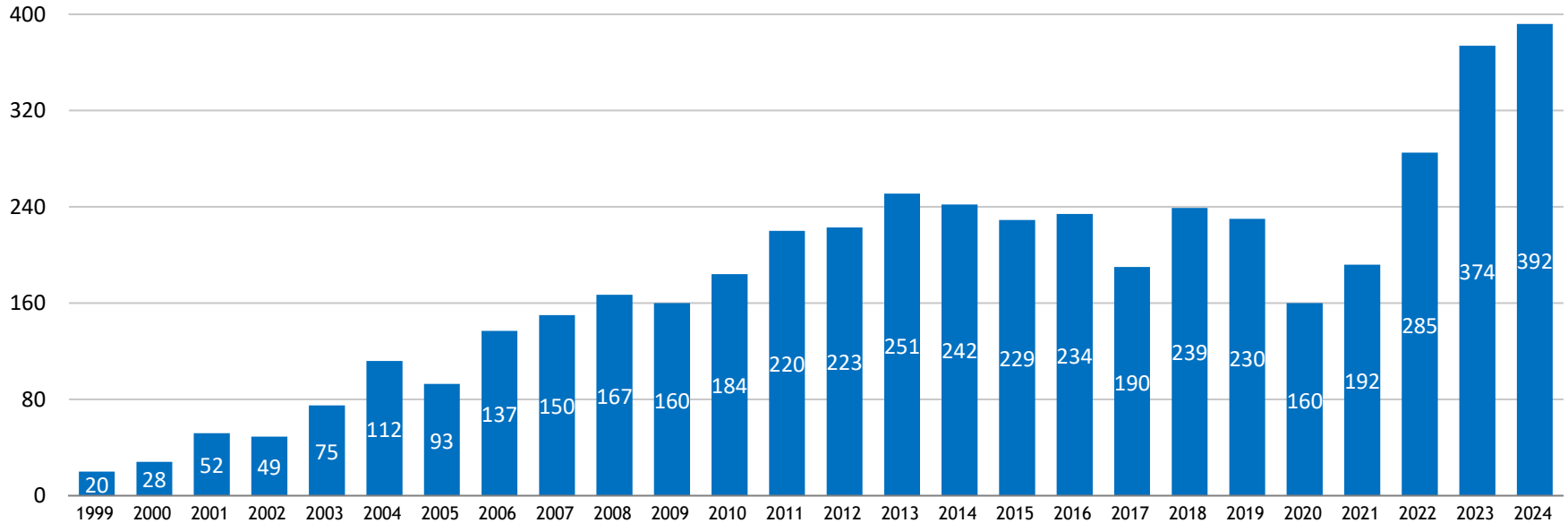- „Micro–tensions" add up and matter

**Pakistan plane crash 22 May 2020:**

PIA Flight 8303 pilots were discussing corona virus before landing attempt, finds CVR…

*The **pilots** of Pakistan International Airlines Flight 8303, which crashed in Karachi, **were distracted and overconfident**, the country's aviation minister said quoting an interim probe report. The **pilots had the new coronavirus pandemic on their mind and were discussing the topic before the crash**, which took place due to human error, the minister said.*
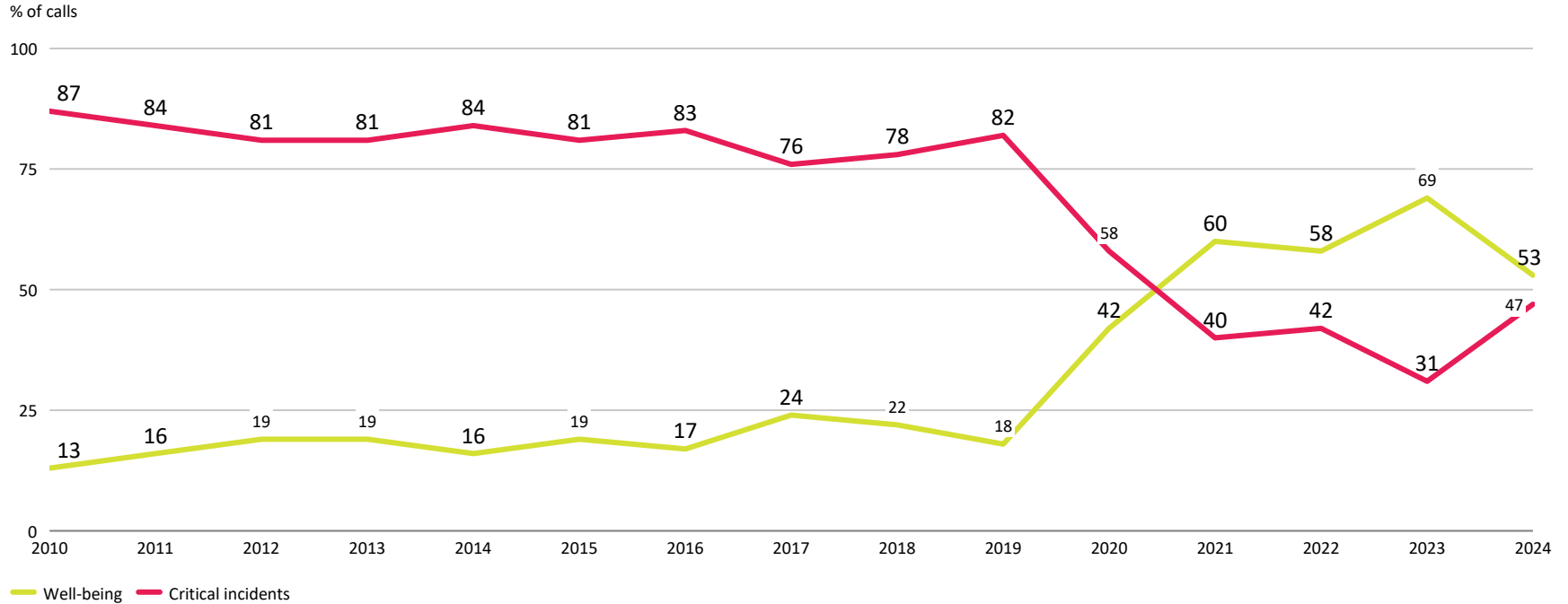
Number of cases covered

Human Factors GmbH, Annual Report about CISM

(Critical Incident Stress Management) Cases , Dr. Gerhard Fahnenbruck, April 2025

# What happend 2024? (2023, 2022, 2021, 2020)

- **47% aviation related incidents**(31%, 42%, 40%, 58%)

- Thereof:
  - 24% medical problems on board (15%, 19%, 21%, 14%)
  - 9% unruly pax (5%, 6%, 3%, 4%)
  - 8% Layover (5%, 5%, 7%, 7%)
  - 6% death on board(5%, 4%, 7%, 9%)
  - 4% turbulence (4%, 3%, <3%, 3%)
  - <3% total loss (<3%, 4%, 8%, 8%)

- **53% well-being cases,** very often license-threatening and/or related to the death or significant illness of a next-of-kin (69%,58%, 60%, 42%, 18%)
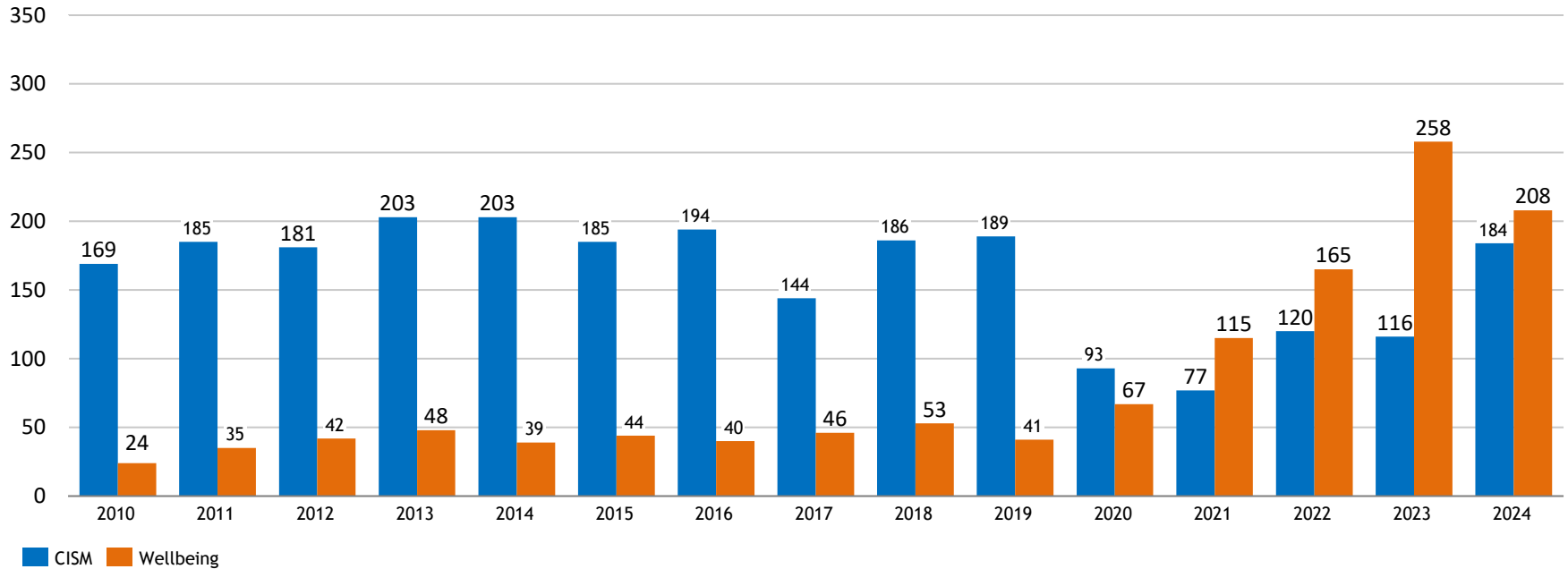
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# Significant Development



% of calls

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# Number of cases according categories



Legend: ■ CISM  ■ Wellbeing

| Year | CISM | Wellbeing |
|------|------|-----------|
| 2010 | 169 | 24 |
| 2011 | 185 | 35 |
| 2012 | 181 | 42 |
| 2013 | 203 | 48 |
| 2014 | 203 | 39 |
| 2015 | 185 | 44 |
| 2016 | 194 | 40 |
| 2017 | 144 | 46 |
| 2018 | 186 | 53 |
| 2019 | 189 | 41 |
| 2020 | 93 | 67 |
| 2021 | 77 | 115 |
| 2022 | 120 | 165 |
| 2023 | 116 | 258 |
| 2024 | 184 | 208 |

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# Going back to Psychological Safety…

- Shared belief it's safe to speak up
- No fear of embarrassment or retribution
- Foundation for trust and collaboration

# The Human Factor in Flight

- Teams form on the fly (literally)
- Cultural, temporal and operational stressors
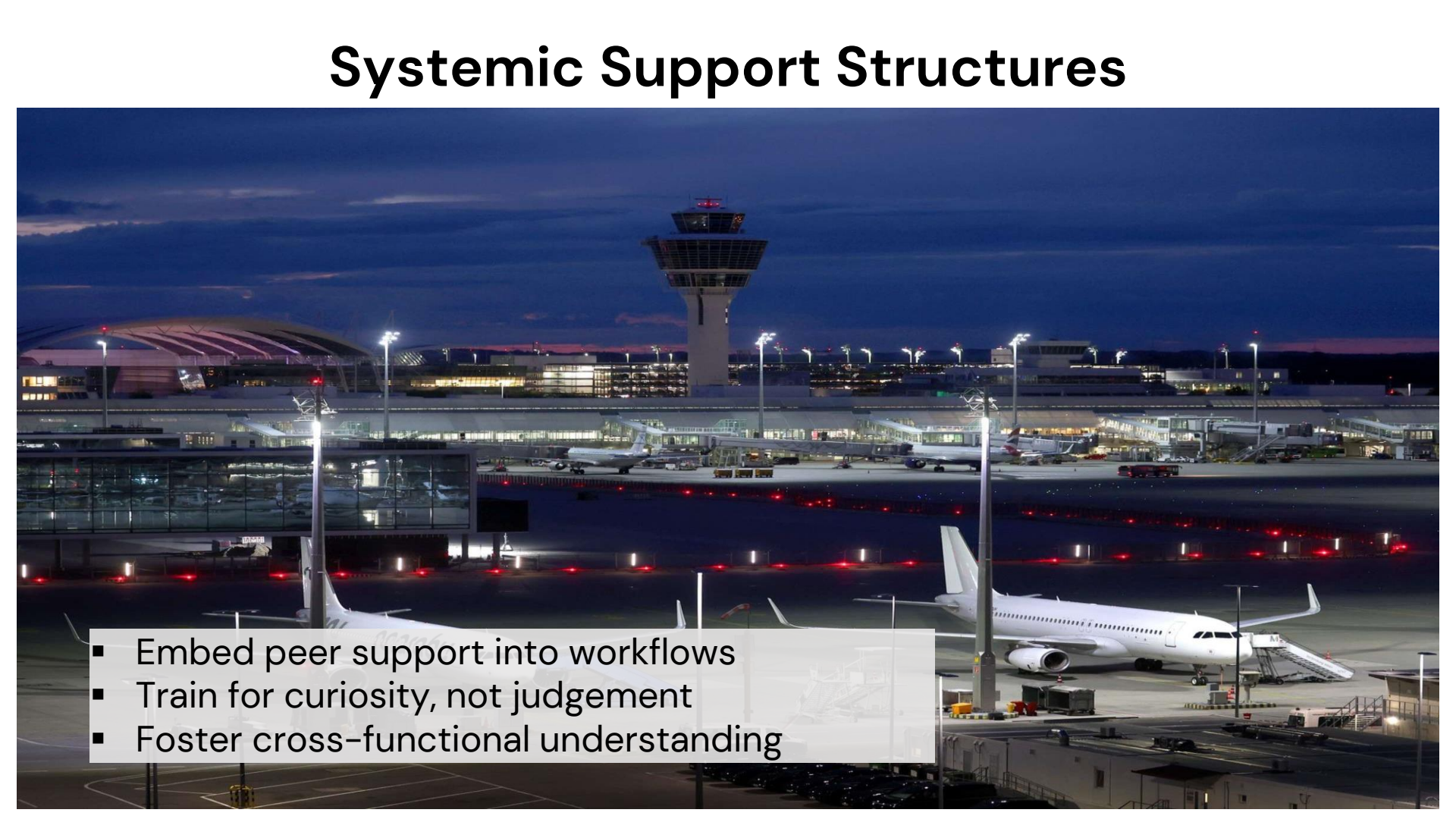- Silence can become the default

# Mental Health Outcomes



- Unsafe teams internalise stress
- Supportive culture leads to reduced burnout
- Mental health correlates to safety

# Systemic Support Structures

- Embed peer support into workflows
- Train for curiosity, not judgement
- Foster cross-functional understanding

# Lessons from the Field



- (De-) Briefing culture  / Threat-based
- Modelling vulnerability
- Peer support with low-threshhold (e.g., Stiftung Mayday )

# Key Takeaways



- Psychological safety must be embedded
- Self–sufficient workgroups need intentional support
- Mental health is an operational imperative

# Thank you!

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