



Australian Government
Civil Aviation Safety Authority



Generating aviation safety by generating aviation wellbeing

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Disclaimer

I have no financial interests to declare

I will not be discussing use of medicines or therapeutic agents

This presentation represents policy direction and intent for CASA, but have not been formalized in regulations.

Introduction

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Introduction



Introduction



Aviation safety through wellbeing

The nature of the problem

Is there a problem?

“Planes aren’t dropping out of the sky...”

“Cockpits aren’t full of drunk pilots...”

“We don’t have people with those issues in our Company...”

“I’m just going through a rough patch...”

“It’s not like I’m flying the plane...”

The nature of the problem

If there was, we'd know about it because...

Pilots are honest people

Medical examiners are honest people

Medical certification is a fair and reasonable process

Mental health and substance is treated as fairly and reasonably as every other illness

Aviation workplaces are excellent for health and wellbeing

Aviation companies are fair and reasonable employers

30 opportunities with CASA to be honest, fair and reasonable

Have you (the applicant) been recommended or received treatment for any of the following medical issues with a health professional?

Mood:

- Anxiety, panic attacks, attention problems/ADHD, bipolar disorder, autism or Asperger's, hallucinations, psychotic episode, schizophrenia

Do or did any members of your immediate family have (ie mother, father, brother, sister):

- Depression or other mental illness
- Alcohol / substance abuse

Have you (the applicant) ever been referred to, or attended a:

- Emergency department
- Psychologist/psychiatrist
- Other medical practitioner

Have you (the applicant)...

...been off work for a week or more due to medical reasons?

...often been bothered by having little interest or pleasure in doing things?

...been feeling down depressed or hopeless in the last month?

FAST score (3+)

- 8 or more drinks on one occasion
- Unable to remember what happened
- Unable to do what was expected of you
- Told to cut down (< 1 year ago >)

Have you (the applicant) ever had:

- Any drug or alcohol related traffic or criminal convictions?
- Any positive drug / alcohol test?
- Any drug/alcohol treatment or counselling?
- Have you used any drugs / recreational substances within the last 5 years?

Is there any clinical evidence of alcohol, drug or other substance abuse?

Is there anything in the applicant's personality or appearance that causes concern?

Are there any other clinical indicators of significance?

Do you have any doubt that the applicant is fit to exercise the privileges of the license held/sought?

Do you require CASA advice or clarification before the medical certificate is issued?

Do you want to revalidate the applicant's medical certificate?

How is that working out for us?

CASA: pilots and ATCs who say “yes” to our questions

0.0*

AMEs who say: “yes” there is a problem

0.1*



The EXTENT of the problem

Prevalence of medical avoidance in aviation?

Hoffman et al 2022:

...at least one type of healthcare avoidance behavior due to concerns related to their risk of aeromedical certificate loss...

56.1%

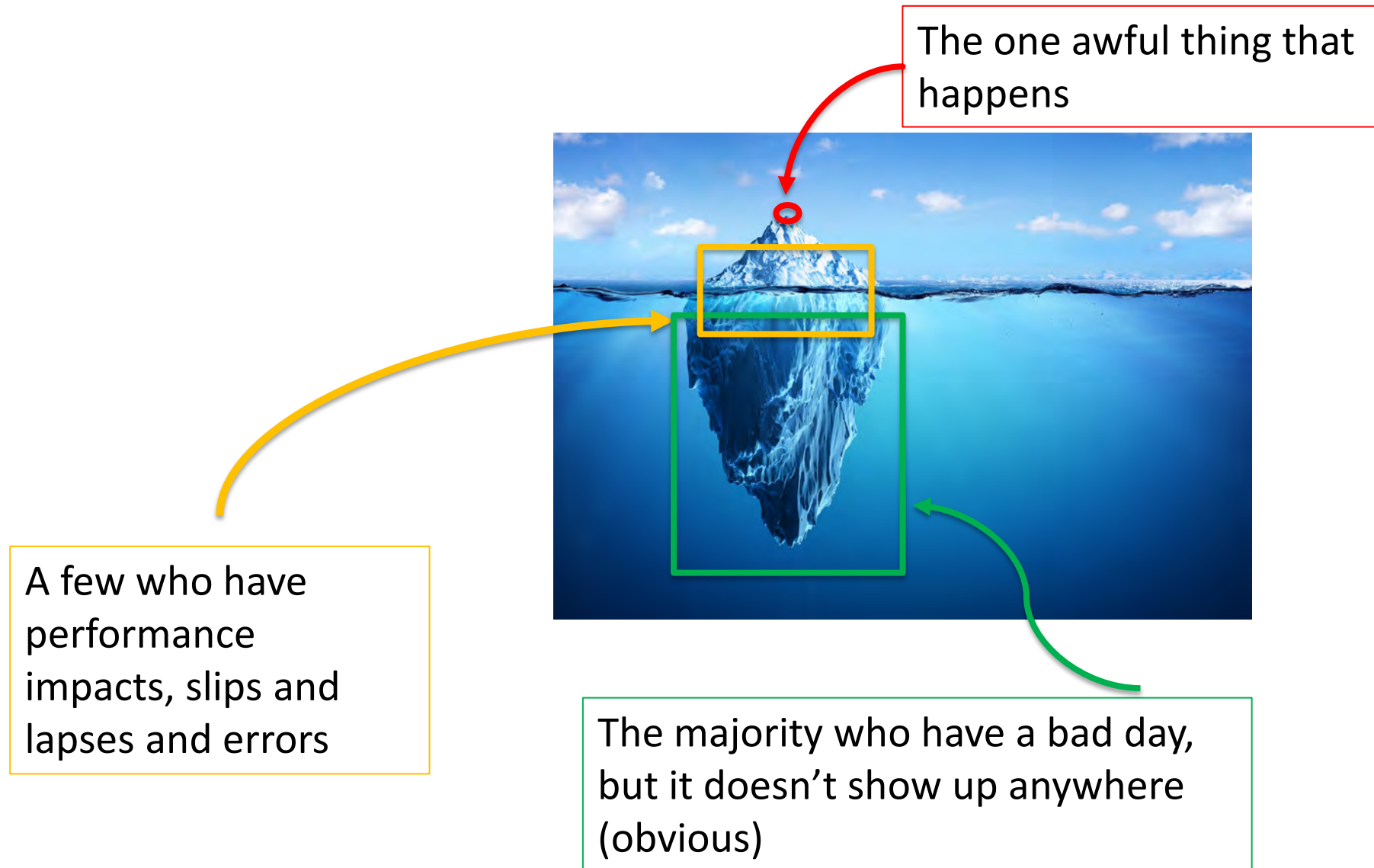
The EXTENT of the problem

Prevalence of mental health issues in aviation

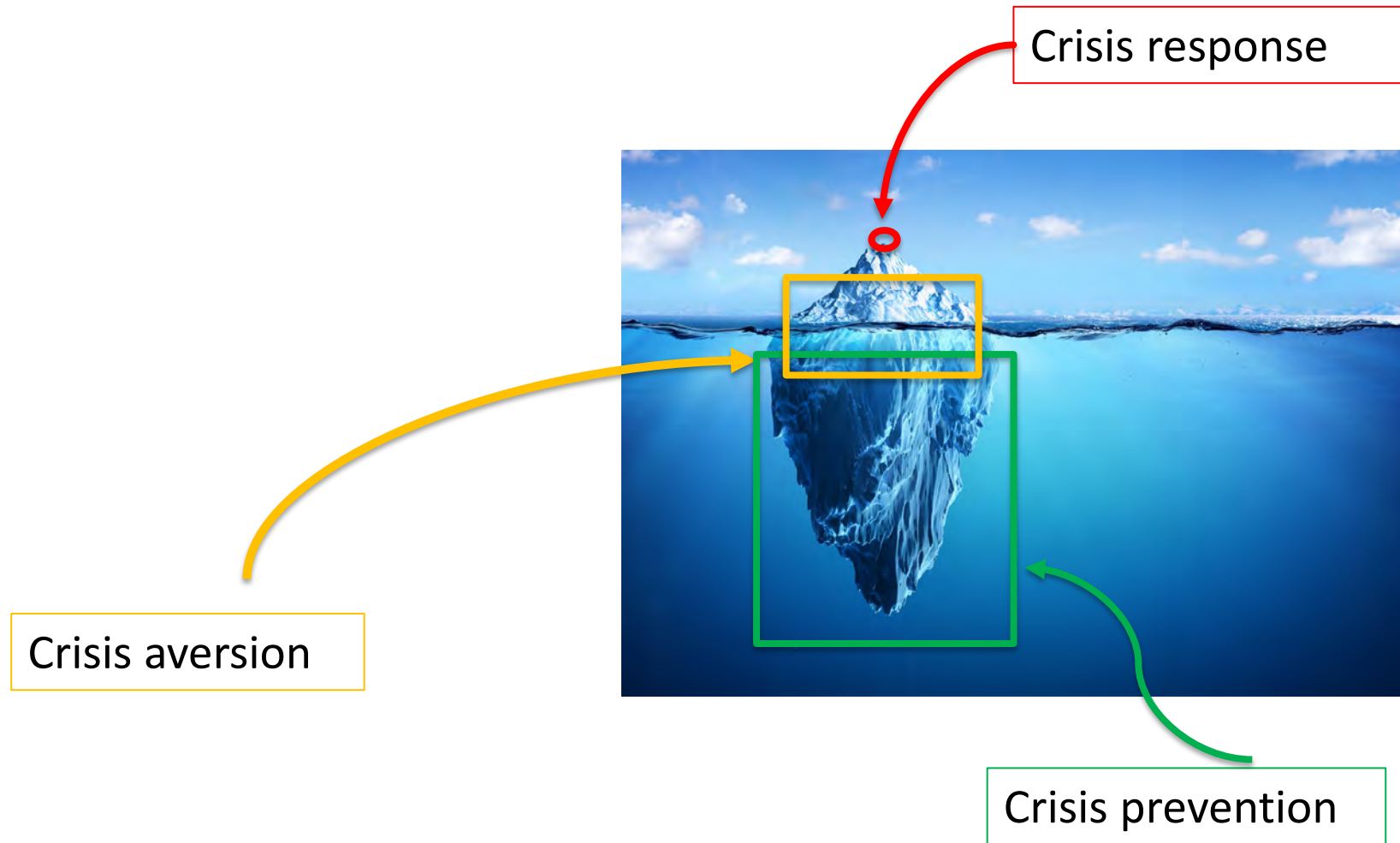
- » Sykes et al 2012 (NZ) – 1.9% **not anonymous
- » Feijo et al 2012 (Brazil) – 6.7%
- » Wu et al 2016 (International) – 12.1%
- » Widhayening et al 2007 (Indonesia) – 39.4%

Flynn et al 2022: 40-66% agree that their mental health/wellbeing worsened due to COVID19 (Cahill et al, Charmin et al, Alaminos-Torres et al)

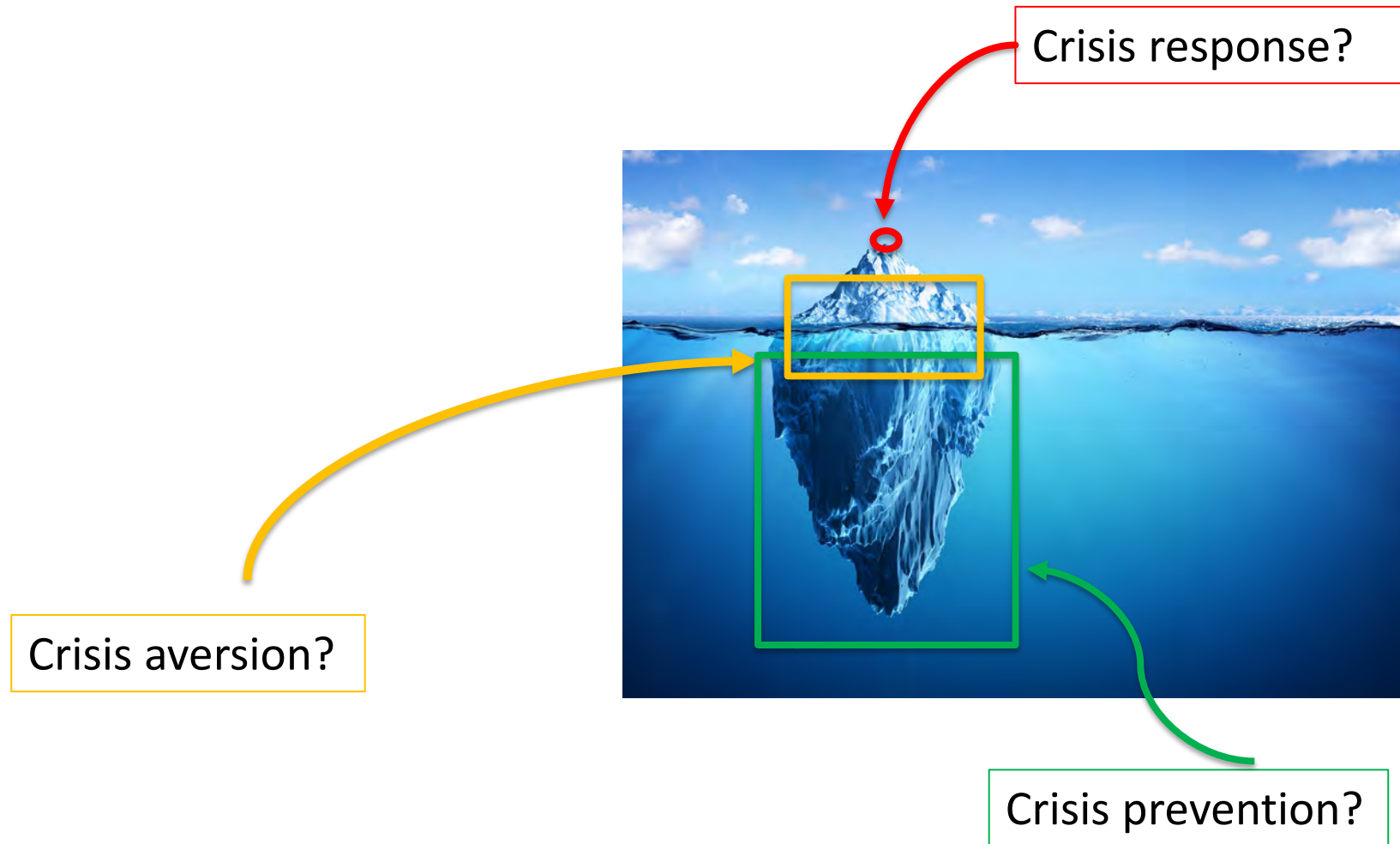
The SCOPE of the problem



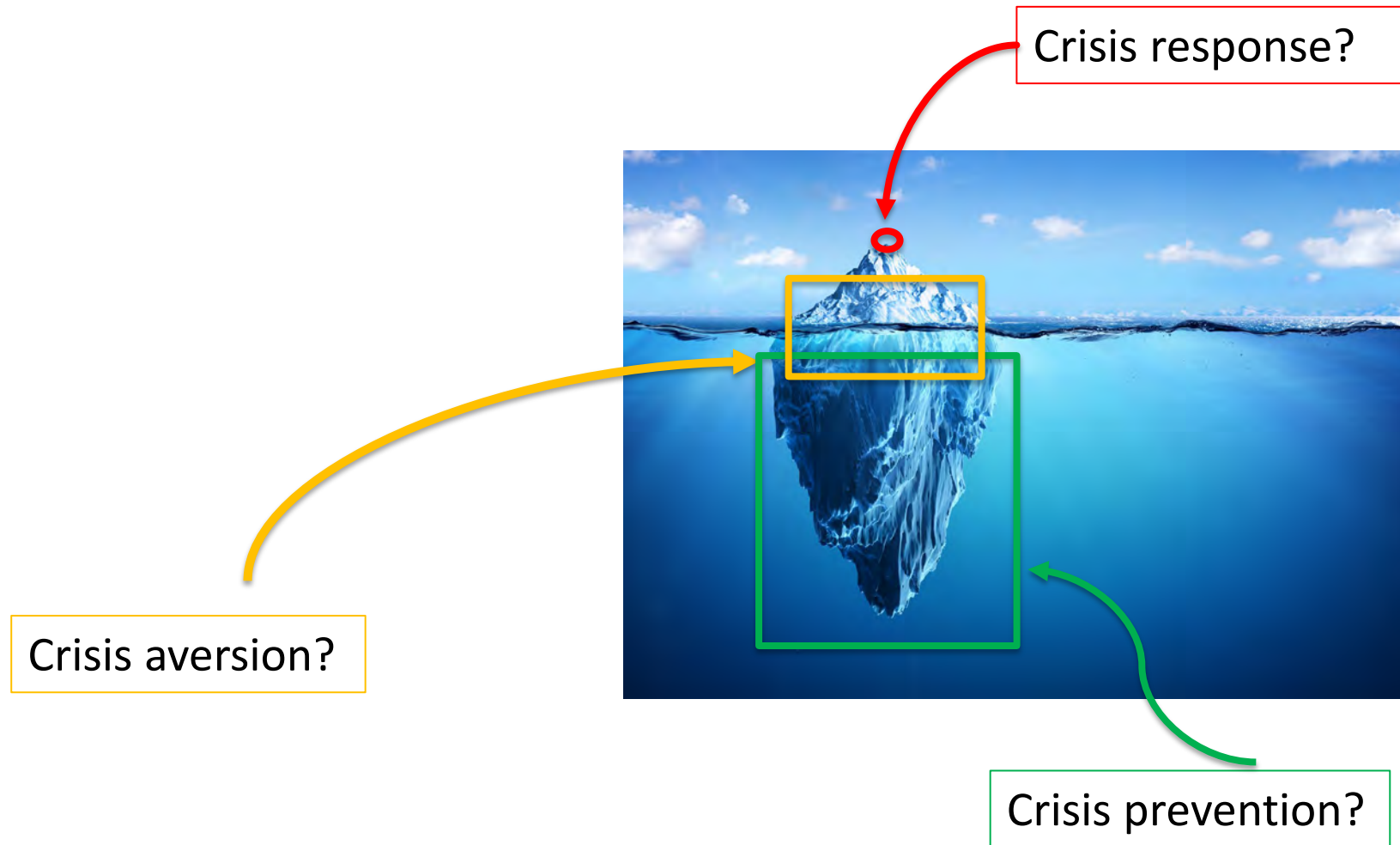
The SCOPE of the SOLUTION



Where does peer support fit in?



Where does ~~peer support~~ SALUTOGENESIS fit in?



Where does SALUTOGENESIS fit in?

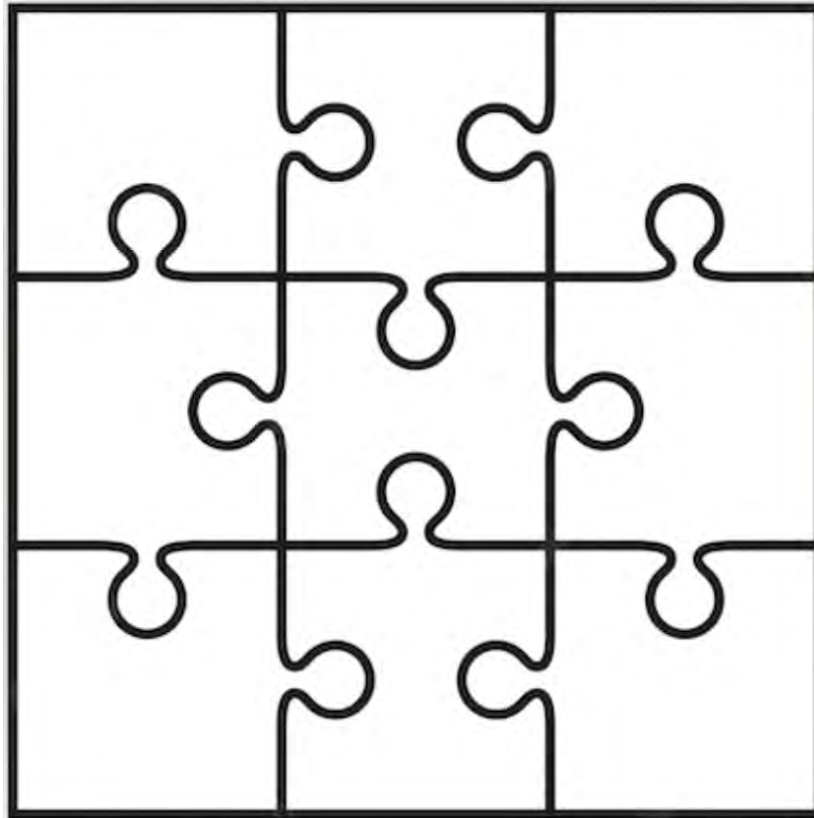
EVERYWHERE



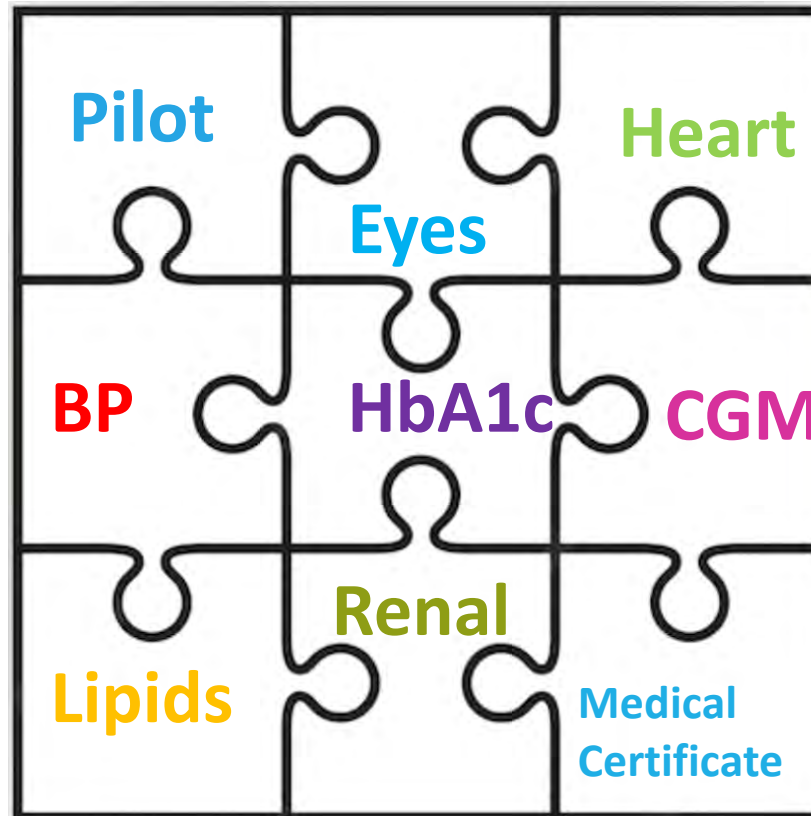
Take a breath, Dr Kate

... and introducing Dr Susan Northrup, Federal Air Surgeon, US FAA.

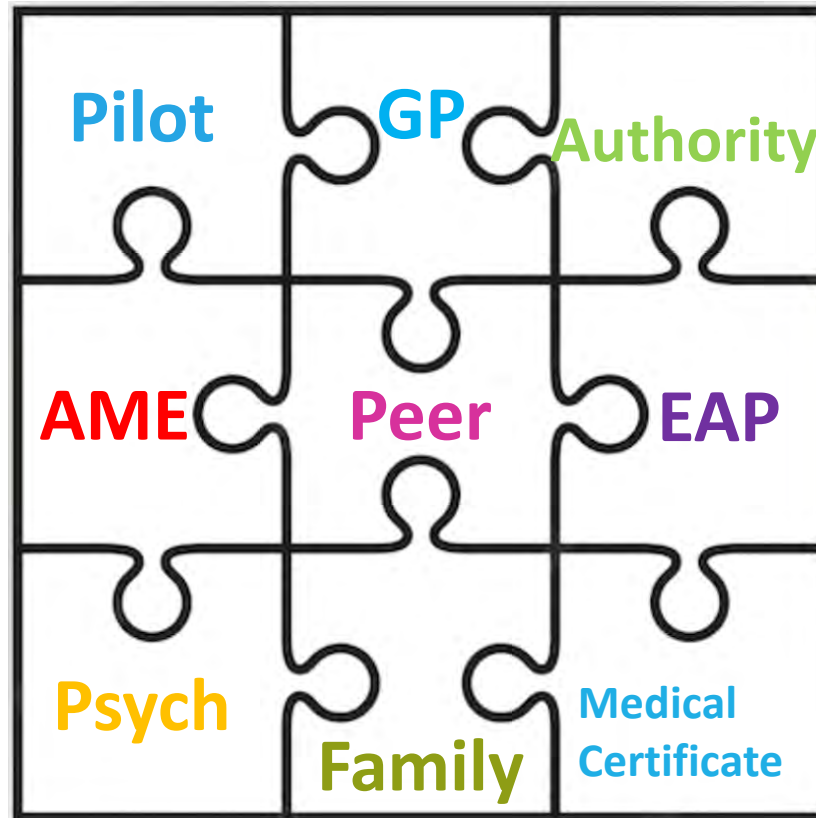
The aviation safety game



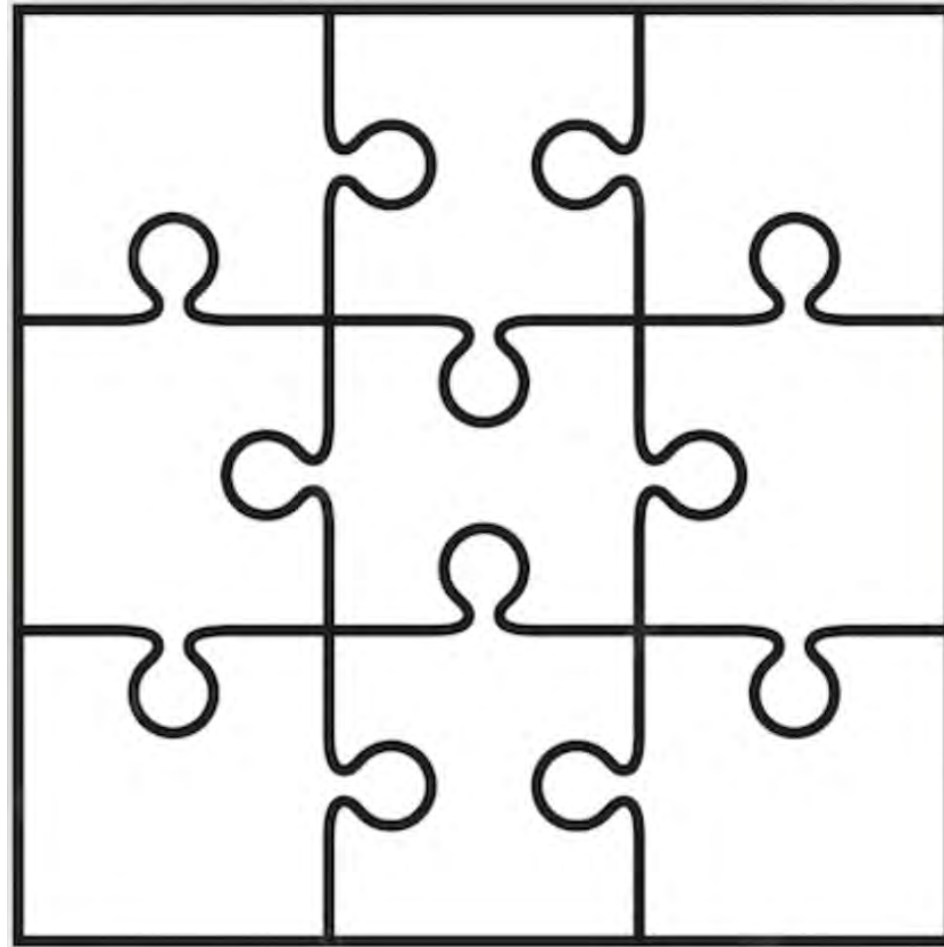
The aviation safety game: Diabetes edition



The aviation safety game: Mental health edition



The aviation safety game: Salutogenesis edition



Salutogenesis – the generation of wellbeing (Thank you, Dr Sanjiv Sharma)

A salutogenic approach to health promotion directs “efforts to encompass all persons, wherever they are on the continuum, and to focus on salutary factors”

Salutary factors are those factors which actively promote health.

Three traits that form the “sense of coherence” that underpins salutogenesis:

- Comprehensibility: I understand my stressors and the demands on me
- Manageability: I have the **resources** to respond to these stressors and demands
- Meaningfulness: these challenges are worthy of investment and engagement

(Antonovsky, 1996).

Salutogenesis - resources

If my resources are overwhelmed by the challenge, I become less well.

If my resources are up to the challenge, I remain well or become more well.

Salutogenesis - resources

...professional pilots who used **proactive coping techniques** had lower levels of depression scores and anxiety scores (Guo et al, 2012).

Proactive coping is defined as seeking social support and developing other **coping resources** prior to a potentially stressful event (Flynn et al, 2022).

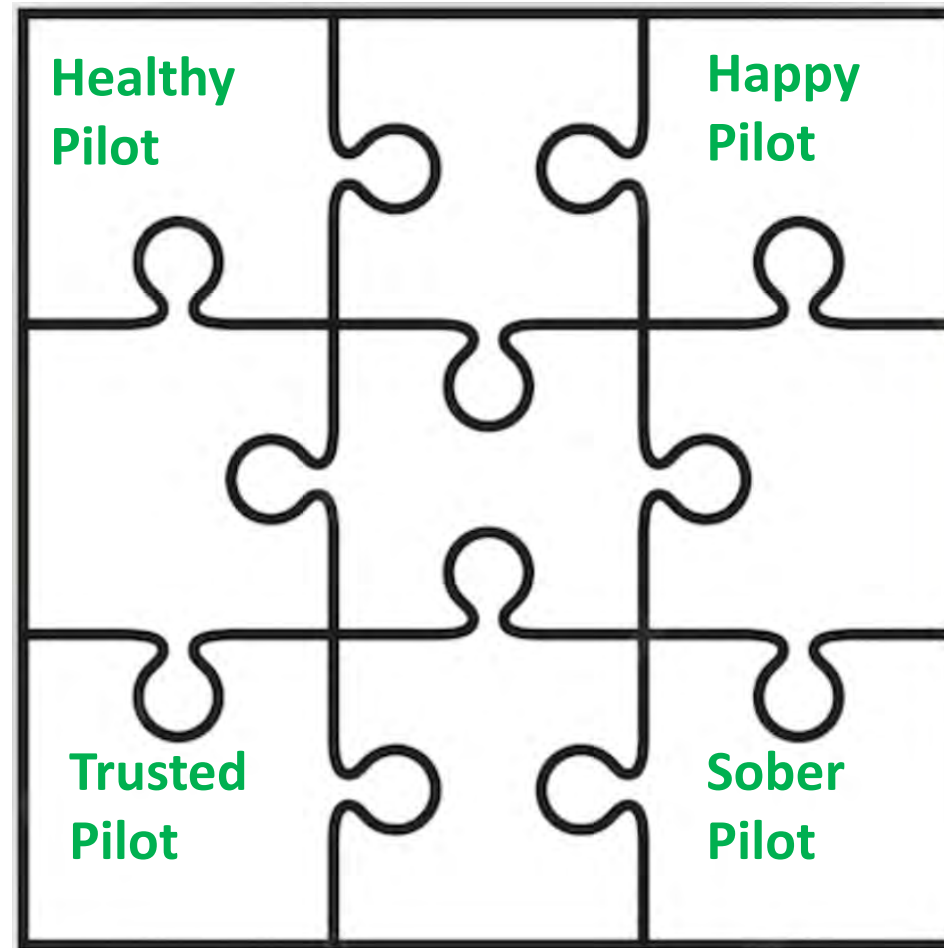
Salutogenesis – Peers as resources

Airlines with an established peer support program have lower levels of aircrew absenteeism, higher on-time performance, reduced fuel usage, reduced maintenance and engineering costs ...

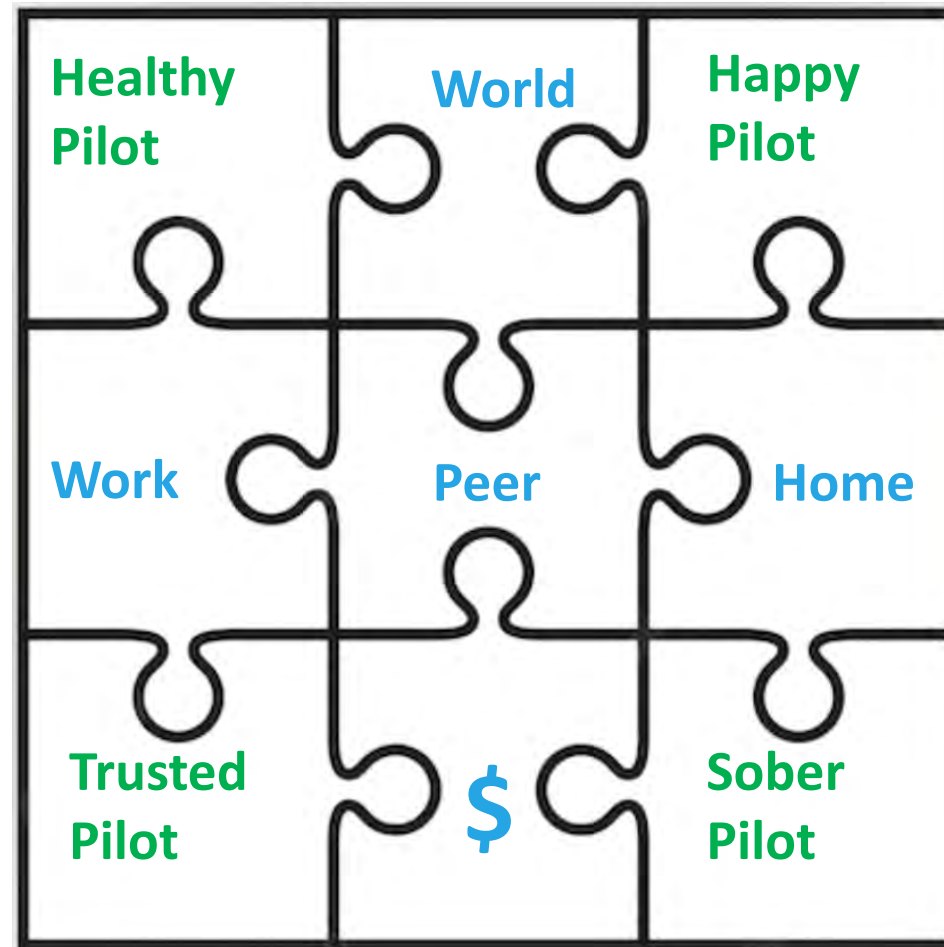
... and have more unicorns, and they p00p rainbows and p33 glitter...

(sorry)

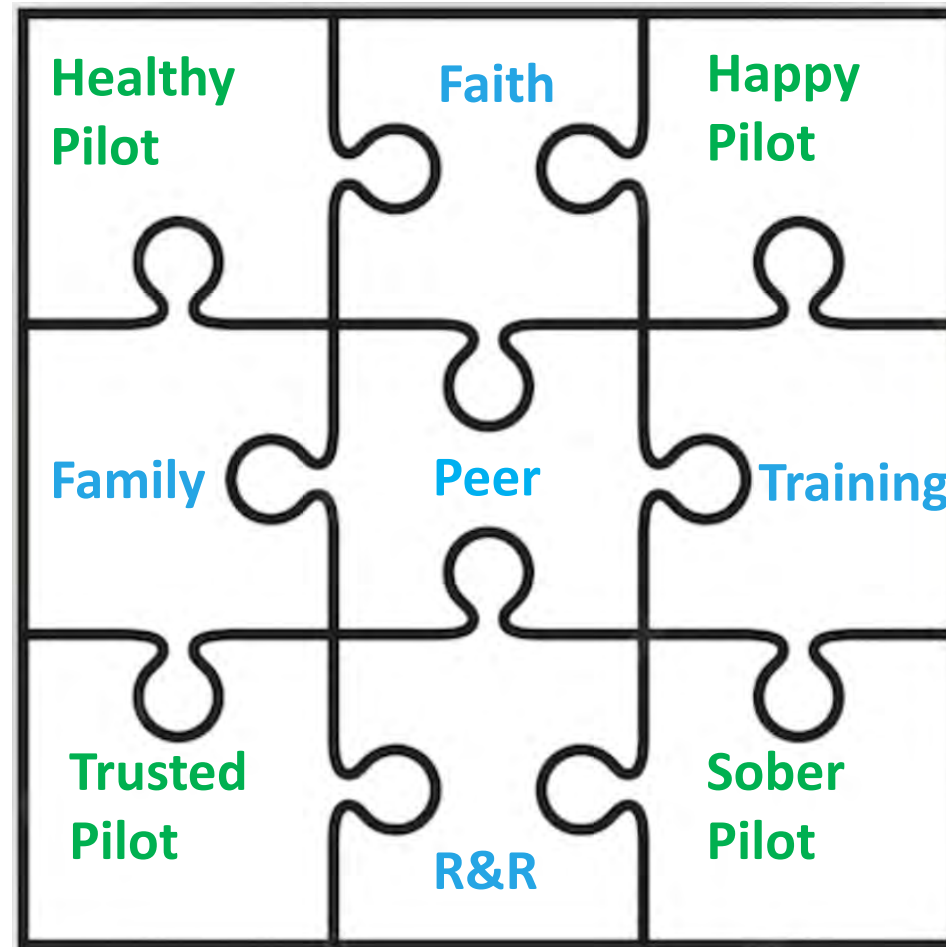
The aviation safety game: Salutogenesis edition



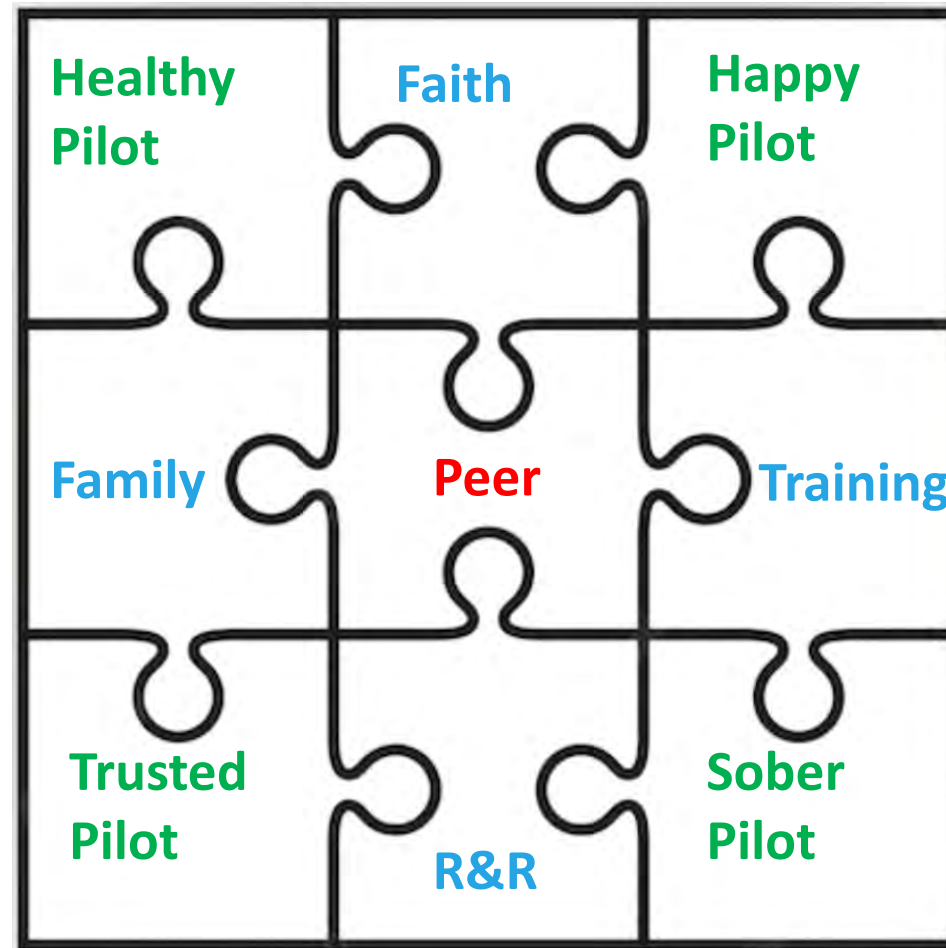
The aviation safety game: Salutogenesis edition



The aviation safety game: Salutogenesis edition

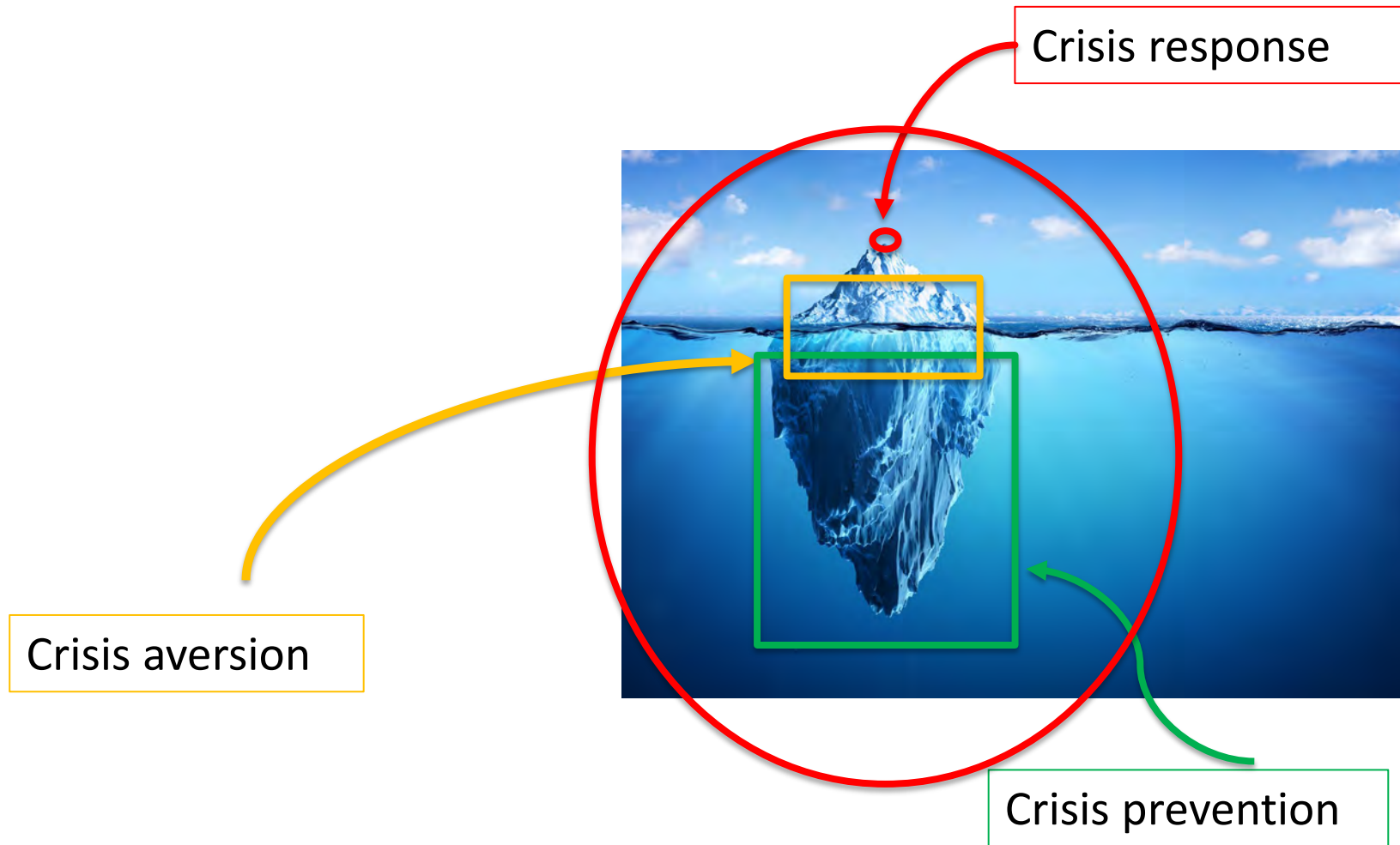


The aviation safety game: Salutogenesis edition



Peer

Where does peer support fit in?



What is a Peer?

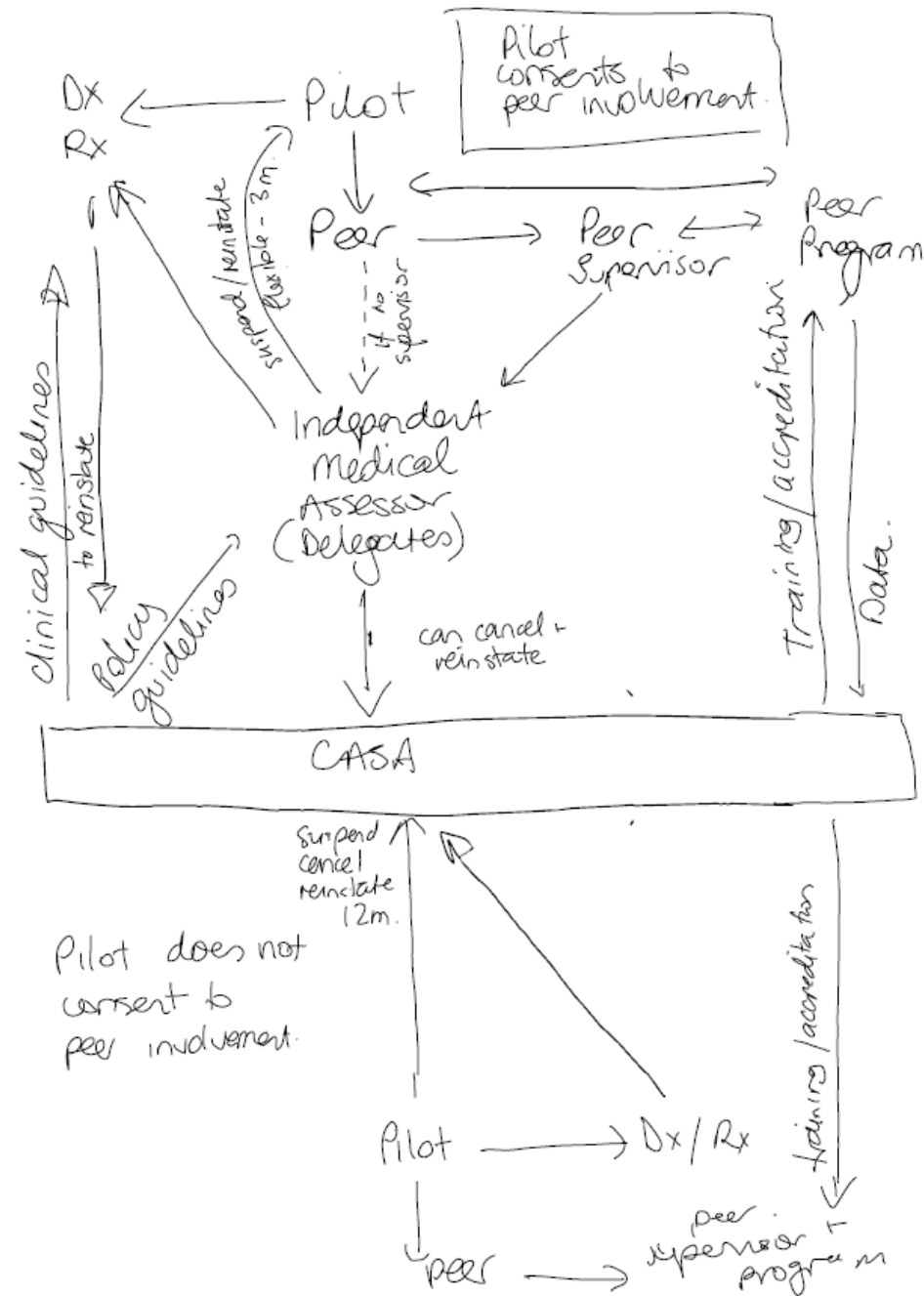
Peers are ***well-trained and skilled*** colleagues, who are ***trustworthy***, share common professional qualifications and experiences, may have encountered similar situations, usually works within the same or similar operational context and can relate to his or her colleague's situation.

(ICAO EB 20-55)

What is CASA doing with peers?

Trusting them, and the pilots and ATCs they are working with.

(Trust... but verify)



What is a CASA Peer?

Completed a course of training in peer support that

- Covers the CASA-approved syllabus
- Delivered by a CASA-approved provider

Can support the certificate-holder within the CASA SafeSpace program

TRUSTED, and VERIFIED.

What is a CASA Peer ... NOT?

Mandatory.

Certificate-holders have pathways to certification without needing a peer

Peers can help without being required to work with SafeSpace

Peers can train and help without being recognized by CASA

What's next at CASA for Peers

Draft the syllabus

Working party to review and finalise the syllabus

Publish the syllabus

Accredit the courses and providers

Train the DAMEs, psychologists and psychiatrists

.... Some legal stuff

TRUST



TRUST

A word on trust from Aotearoa NZ

Folly or a new role for PAN....?



..... ➤
Dr Tim Sprott – CAA NZ CMO

Dr Kate Manderson – CASA PMO

Cologne

7 November 2023

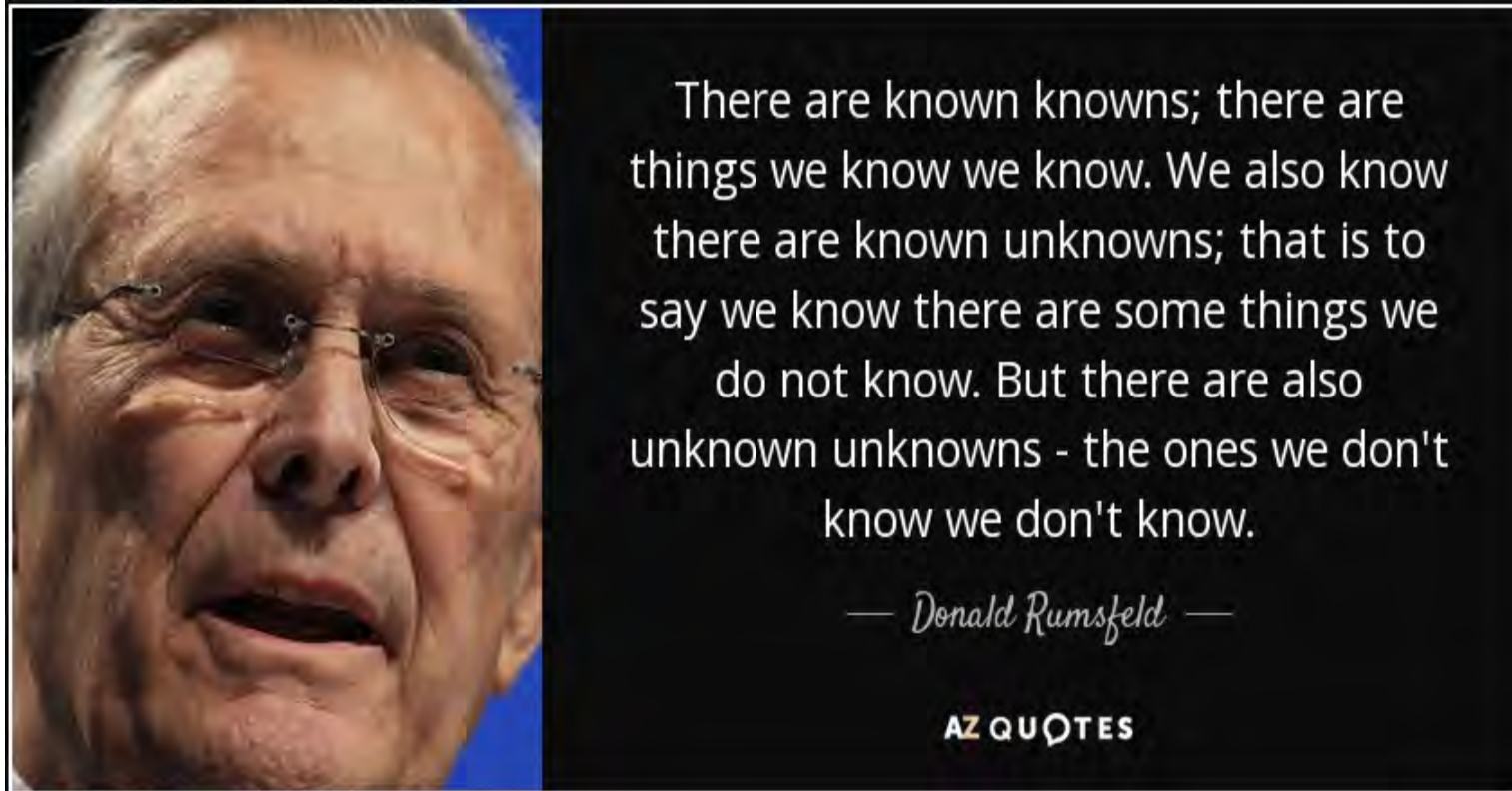
Concept regarding risks with pilot & ATC

- Non-disclosure of health concerns
- Healthcare avoidance and well being

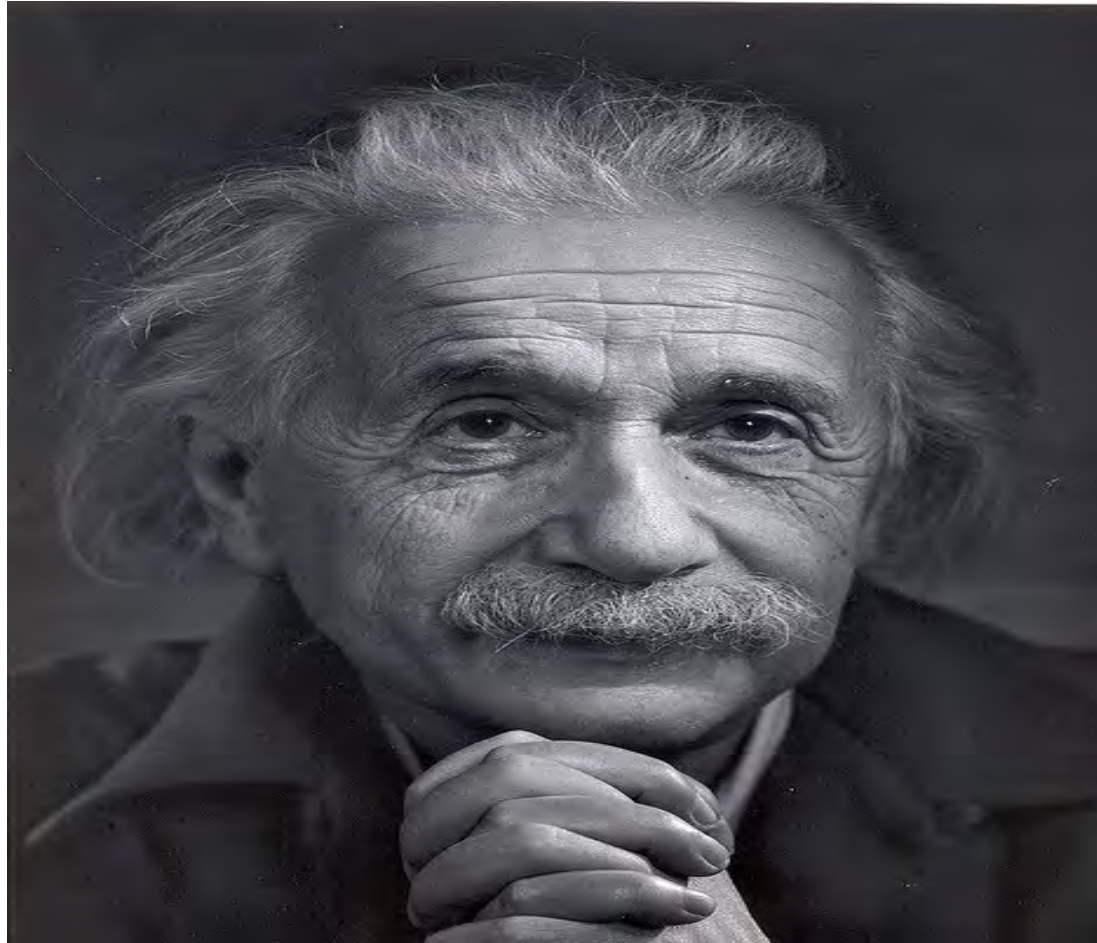
Acknowledgements...

- All the brave pilots and ATCs who have disclosed health conditions despite the regulatory gambit
- Laurie Shaw - Australia
- Billy Hoffmann – USA
- Kate Manderson – Australia
- David Powell – NZ
- Herwin Bongers – NZ
- Colleagues @ PAN NZ and HIMS NZ
- CAA NZ management and colleagues

Current Regulatory State...



No point doing the same thing...



“Safe Haven” Concept

A **safe zone** at arms length from the Regulator

For **any** health issues that are concerning to pilots or ATCs

Portals of entry – self referral

- peer supported
- health professionals
- AMEs

Health and well being issues managed by

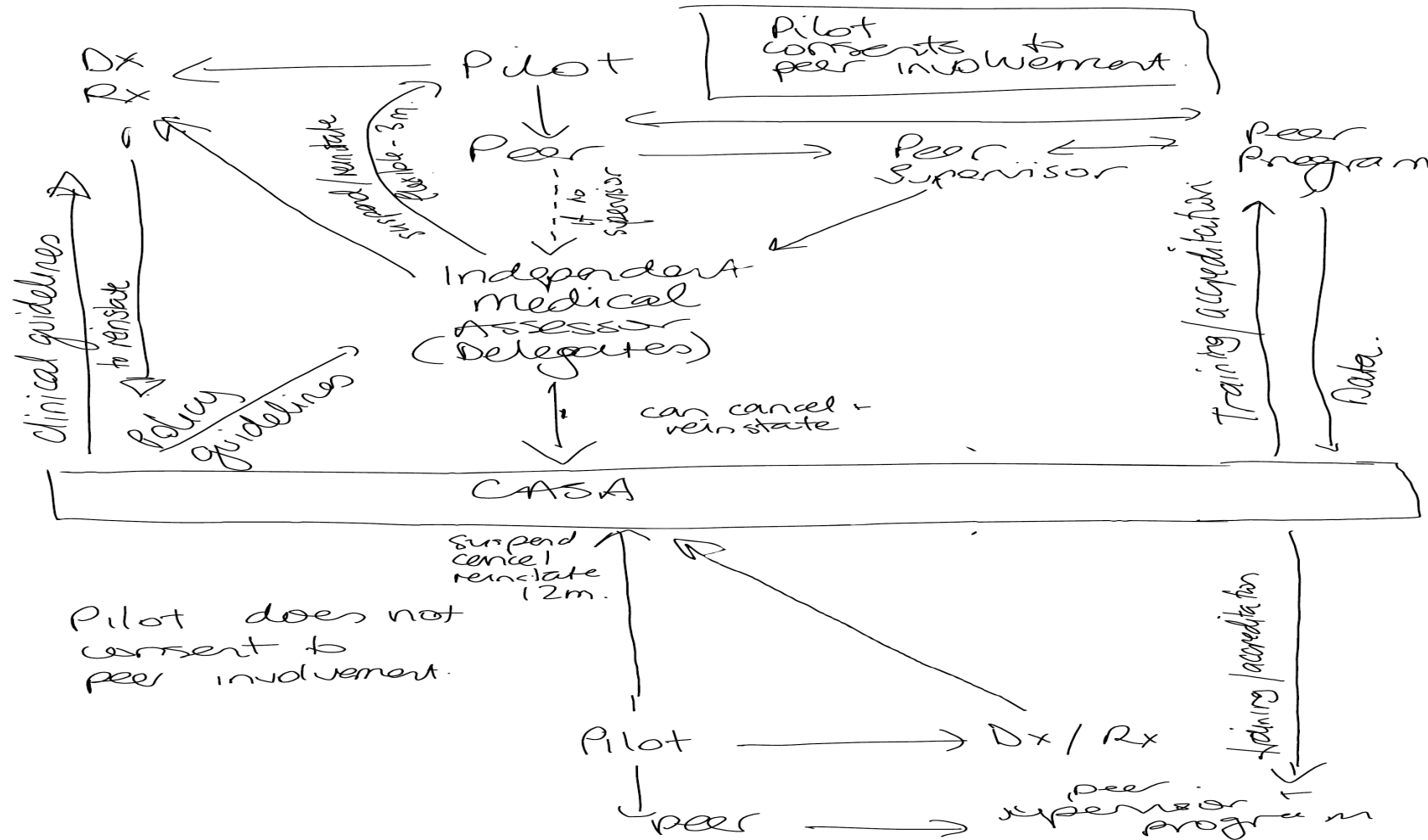
- access to experienced AMEs and health professionals with aviation system awareness

Pathway to inform the Regulator after issues are resolved

How can safety concerns be addressed?

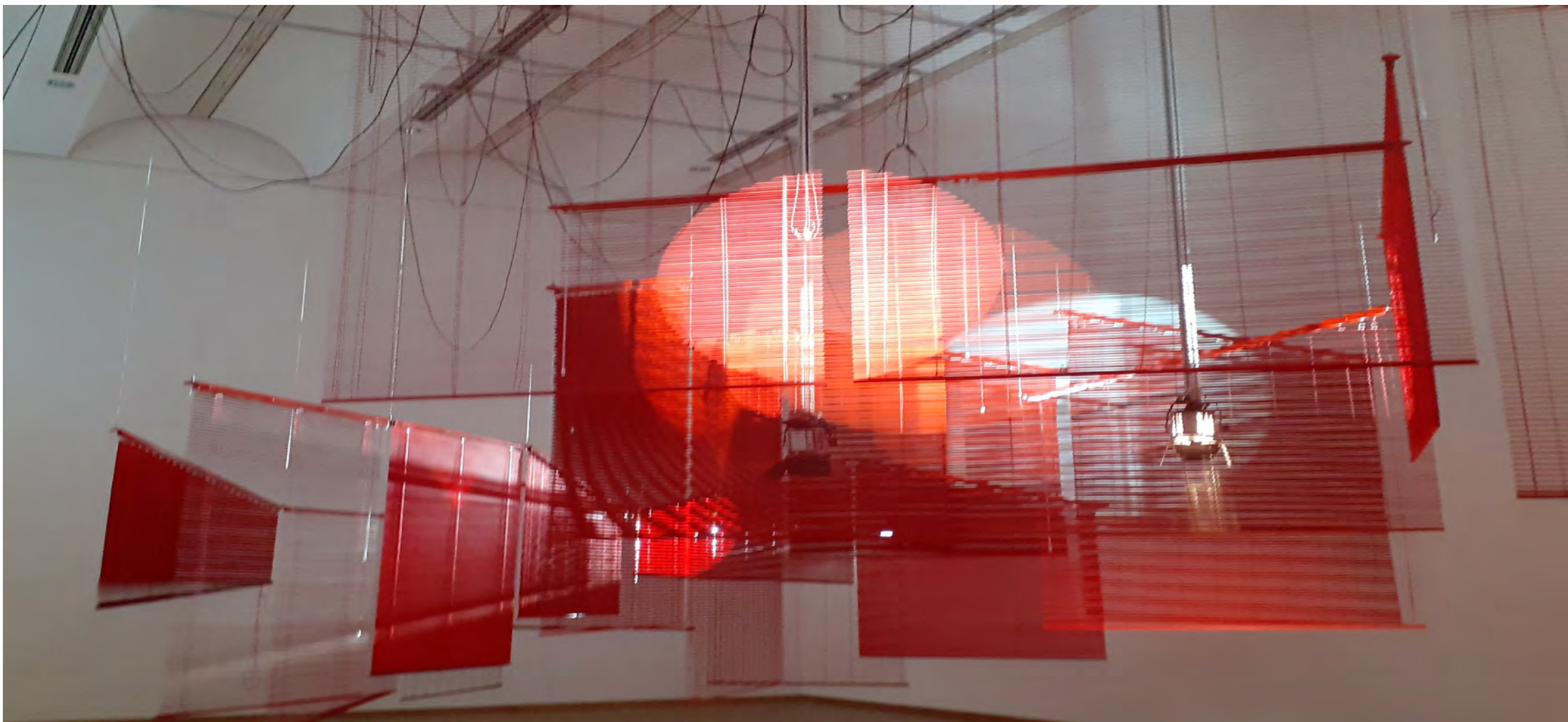
- Driving a safety culture change
- Experience from well established models of HIMS and PAN
- Governance structures
- Selection and training for independent AME assessors
- Training for PAN PSVs and clinicians
- Independent AMEs - Specific delegations for Part 67 requirements
- Development of well understood management pathways
- “Hypothetical” discussions
- Regulatory oversight and “safety drift”
- Disclosure pathway for situations of immediate and critical risk

Framework sketch...



What are some of the challenges?

- Regulatory, industry and public acceptance
- New system or part of existing PANs?
- Resourcing and funding
- Legislation and legal liability
- Developing and maintaining strong partnerships
- Developing Trust
- Perceived or actual system failure





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Summary

Mental illness, problematic substance use and individual wellbeing are challenges for aviation safety

Salutogenesis is the pathway to respond to those challenges

The solutions are multi-layered, interdependent and synergistic

Peer support has a pivotal role in an effectively salutogenic aviation industry

Critical to all solutions is TRUST

Dr Kate has a lot of work to do

Questions and discussion

Resources

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