Towards 100

Royal Flying Doctor Service
QUEENSLAND SECTION

PACDEFF 2026
Aeromedical Human Factors Collaboration

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Collaboration

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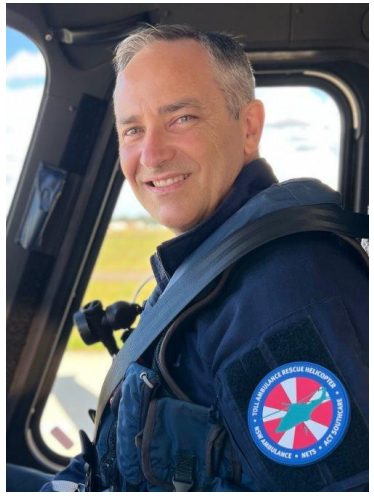
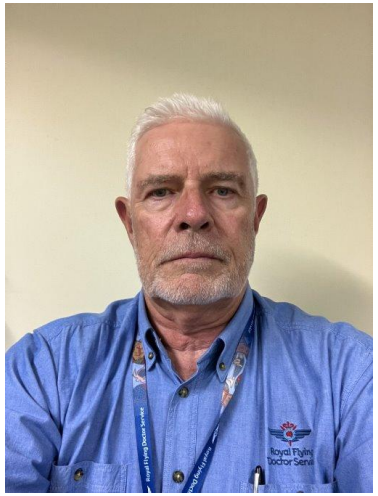
Participants





What makes aeromedical HF/NTS distinctive?

Aviation risk meets clinical urgency in a changing environment.

Competing goals
Patient urgency and clinical priorities sit alongside safe flight, weather, fuel and crew limits

Remote & uncertain operations
Limited alternatives, variable strips, communications gaps and delayed support can increase decision pressure

Dynamic workload
Single-pilot IFR, interruptions, patient changes and flight tasks can compete for attention

Mixed professional cultures
Different training, authority structures, languages and mental models must work as one team

Emotional exposure
High-stakes outcomes, family concerns and repeated exposure to distress can affect performance and recovery

Mission pressure
The desire to help can make delaying, decligning, diverting or stopping a mission psychologically difficult

The clinical-aviation interface

Make the handover between priorities explicit for every:

Clinical picture

- What is changing with the patient?
- What does the clinical team need now?

Flight picture

- What phase of flight are we in?
- What aviation constraints or threats are emerging?

Shared plan

- What needs to happen next?
- Who is doing what—and what must wait?

Build a shared operating picture

- Agree roles, priorities and communication triggers before workload peaks.
- Define how patient deterioration, turbulence, approach/landing and cabin-security needs are communicated.
- Clarify when clinical activity may need to pause or change to protect flight safety, consistent with approved procedures.

The Aeromedical Collaboration model

Every operator was dealing with the same HF issues but we were all solving them separately.

Monthly meetings

- Case Study Presentation
- Incident Reviews
- Shared training considerations
- Shared training materials

Common questions

- How do you do?
- Have you come across?
- What do you do when?
- How do you teach?
- What does your?

Key lessons from cross-section case studies

Across shared case studies themes appear again and again:

- Communication breakdowns
- TEM strategies
- Starle and surprise events
- Human performance issues
- Fatigue

How shared HF training improves safety

When multiple operators align their HF/NTS approach, safety improves in four clear ways.

Consistency

Reduced variability

Stronger non-technical skills

Better onboarding

A shared framework - without forcing uniformity

The goal is a consistent learning method—not the assumption that every operator faces the same risks or needs identical controls.

Shared across operators

- Core HF/NTS concepts and terminology
- Case-study review questions
- Observable behaviour examples
- Learning and action-tracking method
- Principles for anonymisation and sharing

Tailored locally

- Aircraft and crew configuration
- Clinical task and mission profile
- Approved procedures and regulations
- Local risks, equipment and operating environment
- Role-specific standards and assessment

Future Steps

- Case study data base
- Joint workshops
- Shared Safety Culture Metrics

Questions?

In memory of Phil Dodd

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Training and checking Pilot RFDS WA