



**Australian Government**  
**Civil Aviation Safety Authority**

# Integrating HFP/NTS & SMS Training: Enhancing Safety Culture & Organisational Efficiency

Cherie Love, Safety Performance Specialist  
Civil Aviation Safety Authority



# Overview



The Regulations



HF Principles & NTS Training



SMS Training



Similarities & Integration



Creating Efficiencies

# Australia's Regulations

- CASR Part 119: Air Transport Operations
  - **119.175:** Program for training and assessment in human factors principles and non-technical skills
  - **119.180:** Training in human factors principles and non-technical skills for flight crew etc.
  - **119.185:** Training in human factors principles and non-technical skills for other operational safety-critical personnel
  - **119.190:** Safety management system requirements



# HFP & NTS Training

**119.175:** An Australian air transport operator must have a program for **training** and **assessing** operational safety-critical personnel in **human factors principles** and **non-technical skills**.

**119.180:** For flight crew etc. *Who are:*

- Flight crew
- Cabin crew
- Air crew
- Medical transport specialist
- Flight dispatcher

**119.185:** For other operational safety-critical personnel. *Who are:*

- Personnel carrying out **safety-related work** including roles with direct contact with physical operation of aircraft, or roles with operational contact with personnel who operate the aircraft, and any personnel as described by operator.



# SMS Training

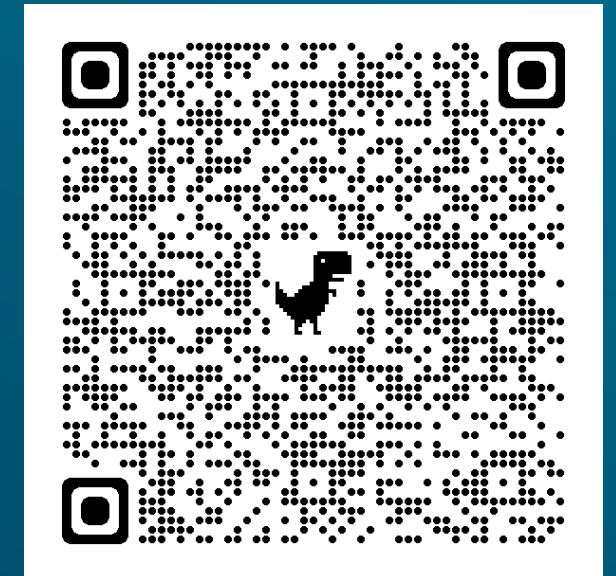
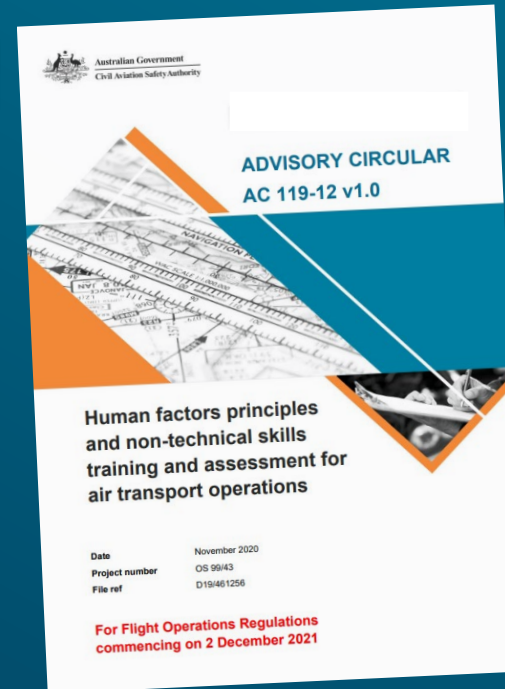
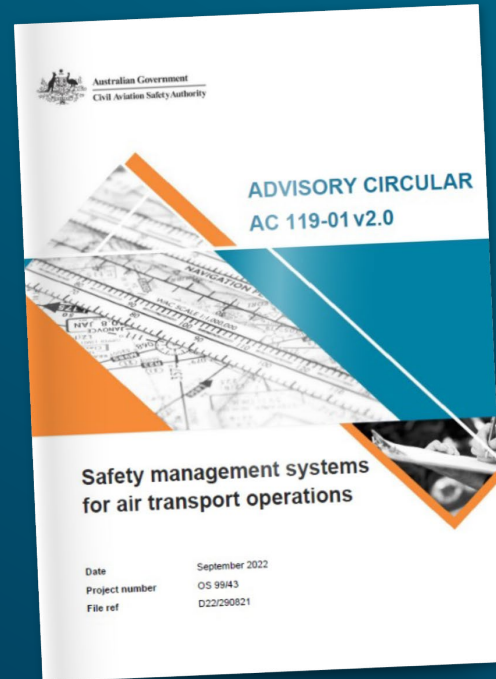
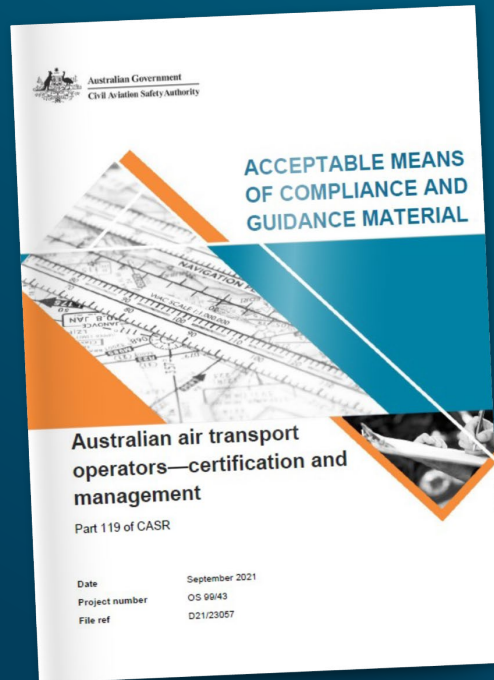
**119.190:** An Australian air transport operator must have a **safety management system** that is appropriate for the size, nature and complexity of the operator's Australian transport operations.

**Must** include details of the following:

- SMS **training** and education.

SMS training for all staff, tailored to their roles & responsibilities.

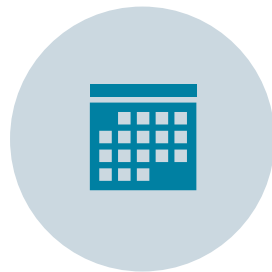
# Regulatory guidance materials



# Training Program Similarities



AUDIENCE



FREQUENCY



COURSEWARE



ASSESSMENT

# Training Program Similarities



AUDIENCE



FREQUENCY



**COURSEWARE**



ASSESSMENT



# HFP & NTS Training Courseware

## HF Principles

Human performance knowledge, understanding human performance limitations & influences when working within a broader system.

- safety culture
- human performance principles basics
- stress/stress management
- fatigue/fatigue management
- workload management.

## NTS

Applied human factors competencies that ensure individuals can function effectively as team members to mitigate or prevent threats & errors within the operating environment.

- communication
- teamwork
- situational awareness
- decision making
- threat and error management
- human information processing.



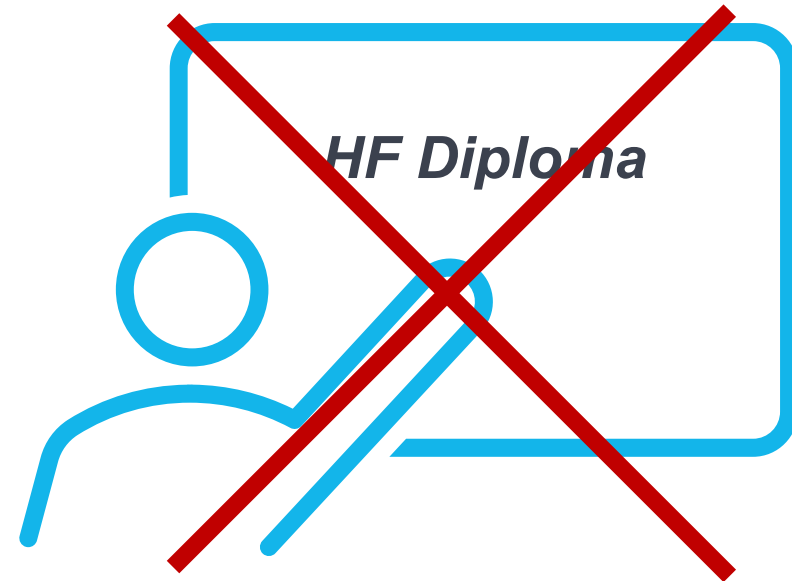
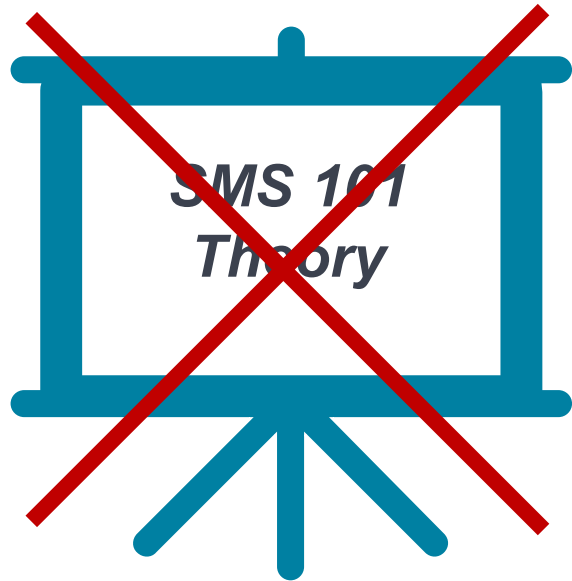
# SMS Training Courseware

The SMS training covers:

- Individual safety duties - *roles, responsibilities, & accountabilities*
- How the organisation's SMS operates
- Human & organisational factors, including:
  - **Safety culture / Just culture**
  - **HF & NTS** elements with the intent of reducing **human error**.

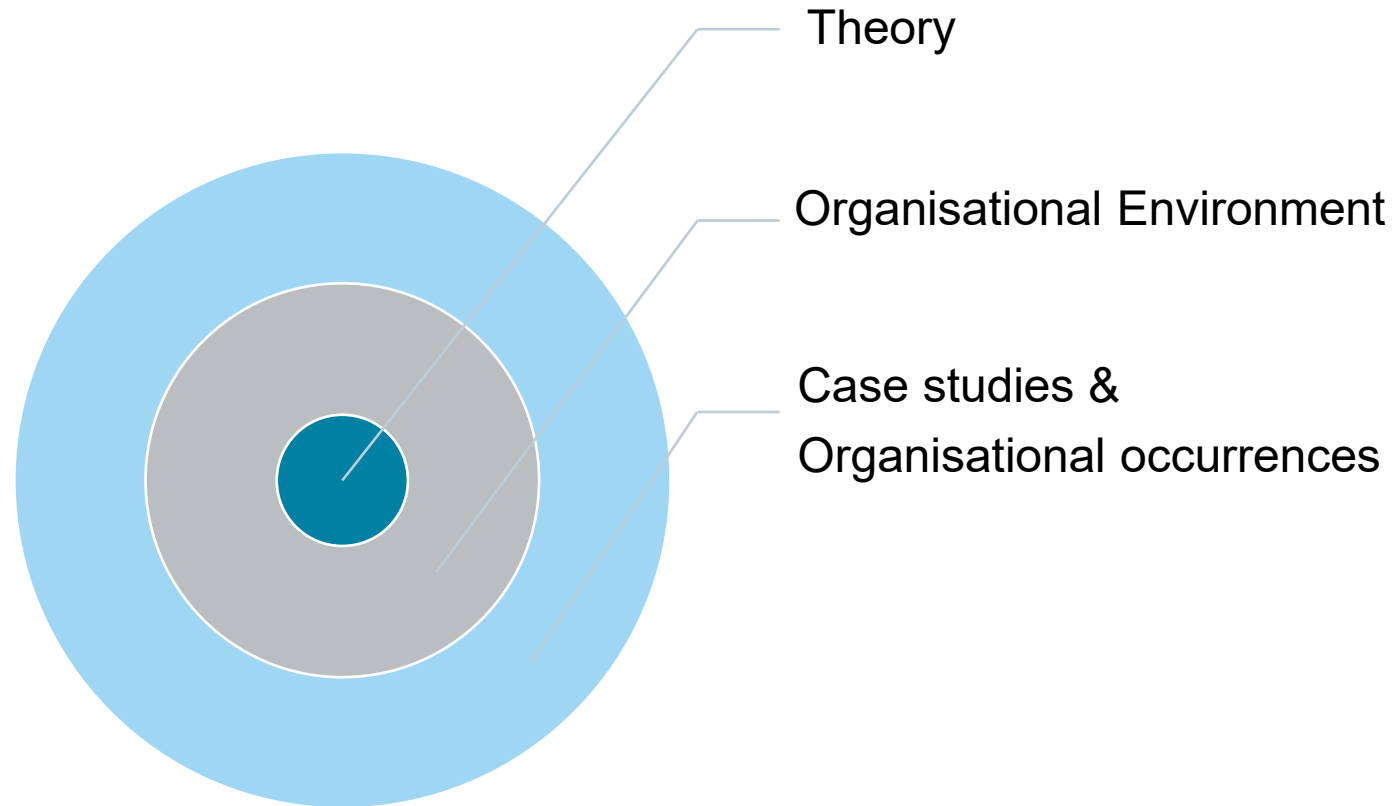
There is a process in place to measure the effectiveness of training.

# Syllabus: *Yays and Nays*



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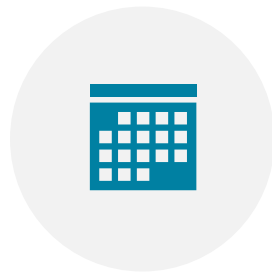
- Building basic foundational knowledge & awareness
- To develop skills & safety behaviors



# Training Program Similarities



AUDIENCE



FREQUENCY



COURSEWARE



**ASSESSMENT**

# Training Outcomes

- Management of human performance limitations & errors
- Identify, report & manage safety hazards
- Clear understanding of acceptable & unacceptable safety behaviors
- Monitor & adjust behaviors to take preventative or corrective actions to address hazards as part of their everyday functions.





# Assessment

Clearly identified competencies for HFP, NTS and SMS.

Competencies achieved across:

- Awareness
- Knowledge
- Skills
- Attitudes & Behaviors.

# Creating Efficiencies



Reduced training courses



Reduced assessment requirements



Integration of safety concepts



Systems learning model



Organisational specific



# Creating Efficiencies

- Single course, multiple roles
- Enhancing teamwork & communication
- Shared mental model
- Enhancing safety culture





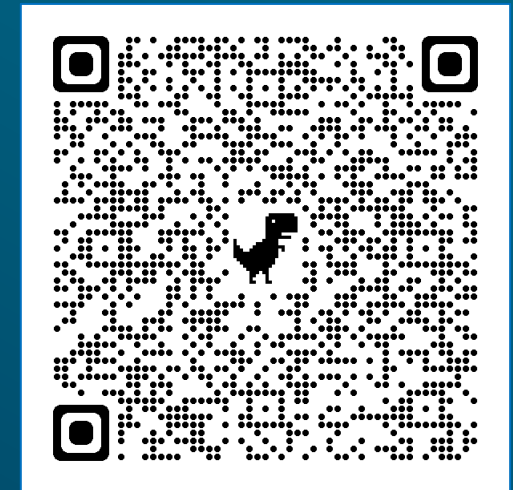
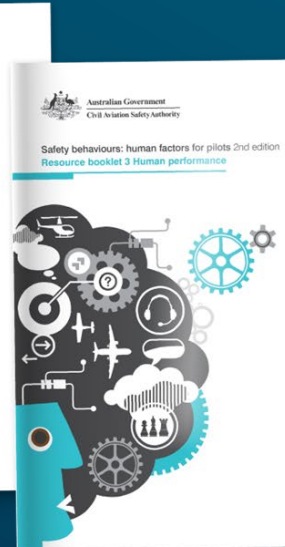
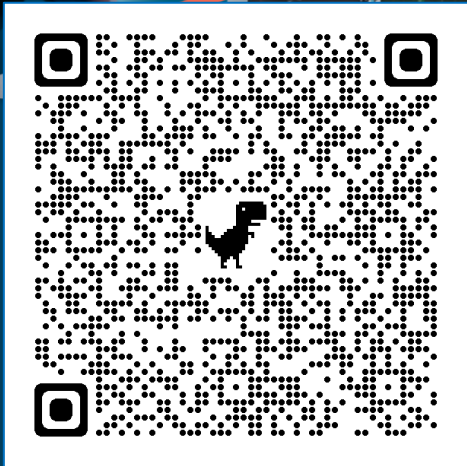
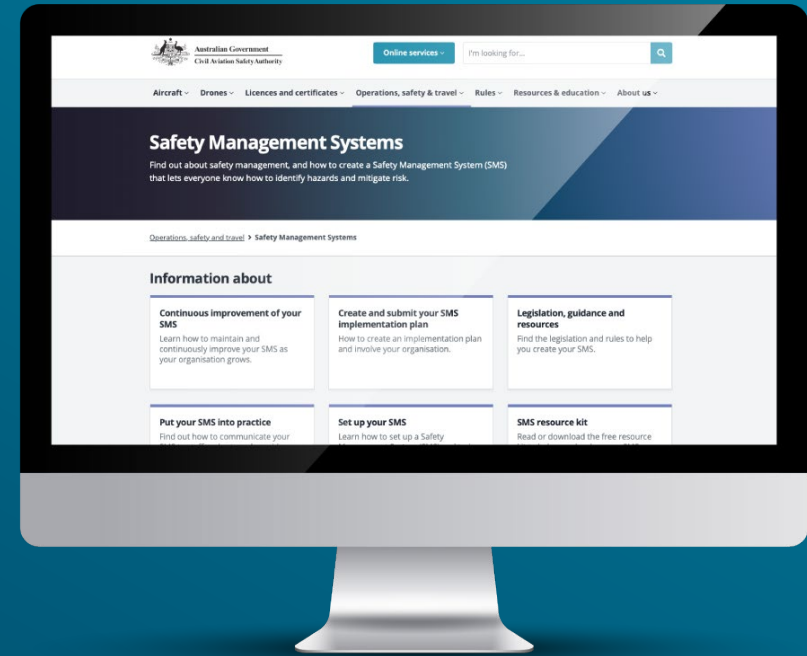
# Creating Efficiencies

## Trainers/Facilitators

Does the operator's manual incorporate a description of how facilitators are trained & assessed as suitably qualified to conduct HF/NTS training?

Is the competence of SMS trainers defined & assessed, and appropriate remedial action taken when necessary?

# CASA Resources for Industry



# Thank You



## QUESTIONS