



Evolution

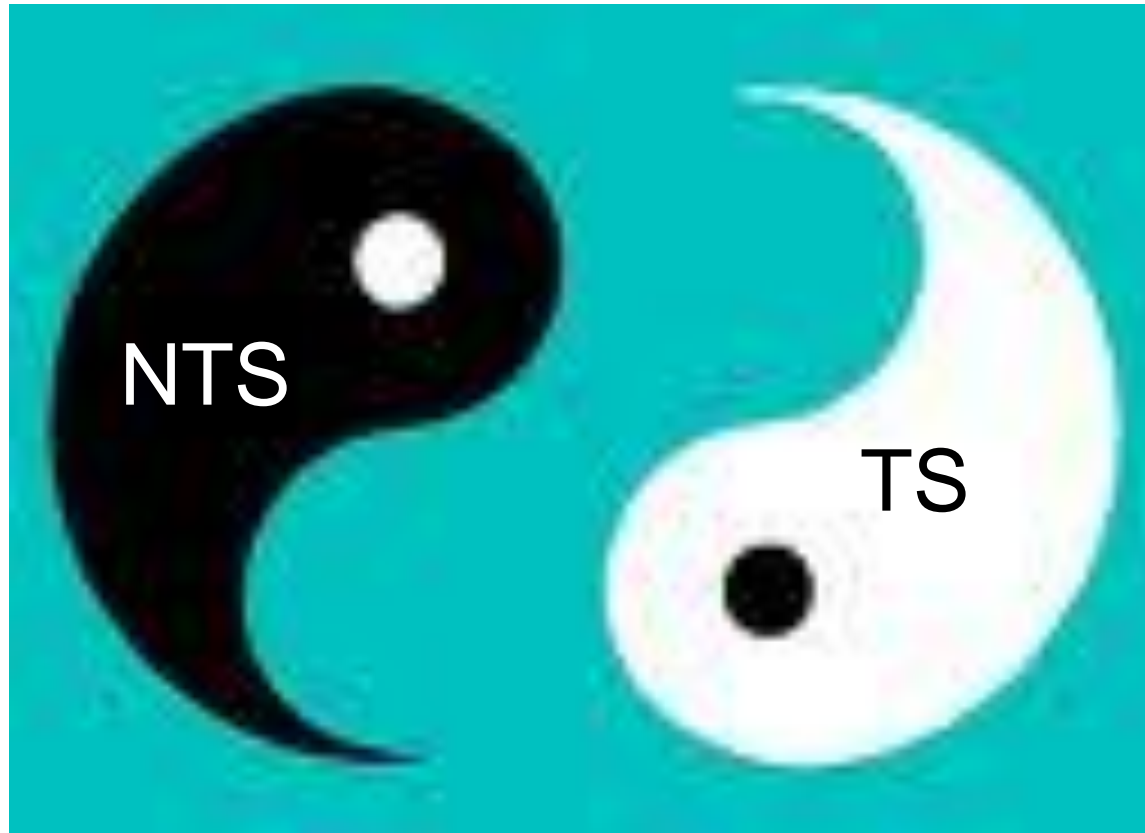
Cabin Crew Training & Assessment for the Future

## Objective

- Current Training Practices
- Vision
- Moving Toward Skill Assessment
- Behavioural Marker System
- NTS Rating Scale
- Challenges



# Training



# Integration

Technical Skills + Non Technical Skills = Skills for Crew Proficiency



## Current Training

	Virgin Blue	Qantas
Initial	1 Day	5 Hrs
Recurrent	1 Day CC Focus+ Safety	2 Hrs Part of Eps
Conversion		1.5 Hrs
Command	2.5 Hrs	1 Day



# Integrating Human Factors training

- Common concepts and terminology through different types of training and different aircrew roles.

**Practical EP  
Training**

**Audits, Investigations  
and Reporting**

**Classroom based  
HF training**

**Syllabus and  
Scenario Design**



## Structure of Topics





Situational Awareness

Decision Making

Leadership

Communication & Teamwork

Stress Management

Health

Fatigue Management

Case Based Studies

Workload Management

Vigilance

Human Error & Reliability

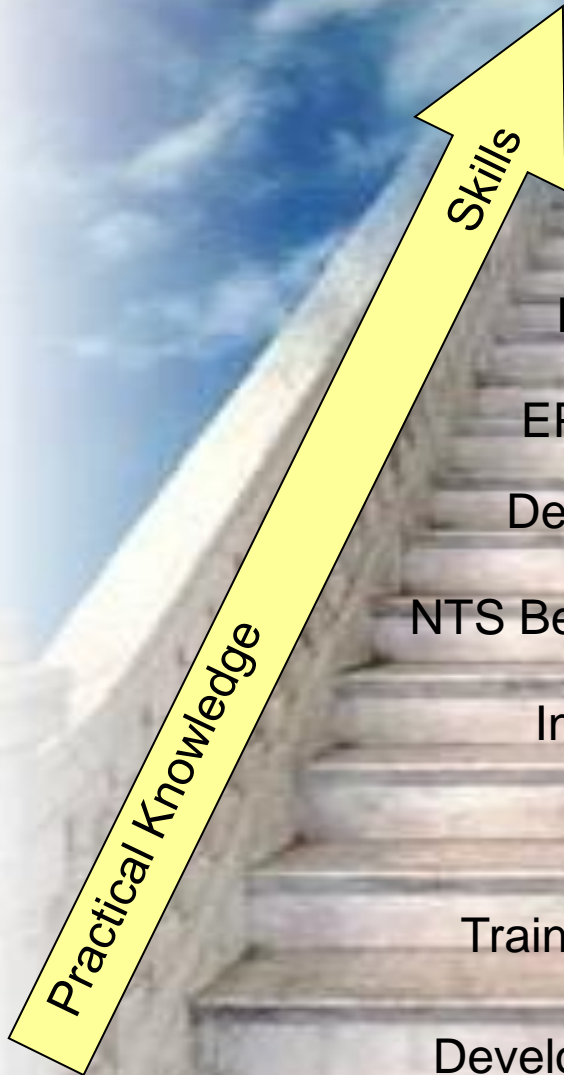
Cultural Factors

Threat & Error Management

Information Acquisition & Processing



# Moving toward Skill Assessment



Jeopardy Assessment?

Rating of NT Performance?

Re - Calibration of Facilitators

EP Sim Debrief - Standardisation

Development of Deficiencies Training

NTS Behaviours Incorporated in Ops Manual

Integration in all Phases of Training

Training Crew Members

Training Facilitators - Standardisation

Development of Behavioural Marker System

# Assessment

- NOTECHS
- University of Texas Model (LOSA)
- LMQCRM Standard



## Behavioural Marker

Specific observable, non-technical behaviours that contribute to superior or substandard performance within a work environment. Enactment of skills or knowledge is shown in behaviour.

- Has a causal relationship to performance outcome
  - It does not have to be present in all situations
  - Its appropriateness depends on context
- It employs simple phraseology
- It describes a clear concept



## NTS Category **Situational Awareness**

NTS Element	NTS Behaviour
<b>System Awareness</b>	<ul style="list-style-type: none"><li>• Demonstrates basic knowledge of aircraft systems</li><li>• Monitors and reports changes in system states</li></ul>
<b>Environmental Awareness</b>	<ul style="list-style-type: none"><li>• Maintains awareness of flight phase</li><li>• Gathers all available information about the environment and informs others in a timely manner</li><li>• Maintains awareness of whole picture - guards against tunnel vision</li><li>• Monitors behaviour /condition of passengers and crew</li></ul>
<b>Anticipation</b>	<ul style="list-style-type: none"><li>• Identifies possible/ future threats to the safety of the aircraft and occupants</li><li>• Discusses contingency strategies</li><li>• Thinks/plans ahead of current status</li></ul>

## NTS Rating Scale

1	2	3	4	5
<b>Observed behaviour directly endangers flight safety</b>	<b>Observed behaviour in other conditions could endanger flight safety</b>	<b>Observed behaviour does not endanger flight safety but could be improved</b>	<b>Observed behaviour enhances flight safety</b>	<b>Observed behaviour optimally enhances flight safety and serves as an example for other crew</b>



## NTS Principles

- Evaluations should be based only on observable behaviours
- Repetition of unacceptable behaviour must be observed
- The need for technical consequences from unacceptable NTS behaviour
- Explanation required for each category rated as unacceptable



# Challenges



- Lack of Experience
- CRM- Talk to the Flight Crew
- Intimidation
- Intangible – Non Jeopardy
- Company Culture
- Cost
- Facilitators
- Perceptions
- Time Constraints
- Back Training
- Inter-rater reliability
- Line Audit
- Non Jeopardy – Box Ticking Exercise

**To Infinity & Beyond!**

