

Non Technical Skills in the Command Upgrade Process

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DISCLAIMER*

^{*}FOR THE LEGAL EAGLE OR THOSE WITH REALLY GOOD EYE SIGHT



- THE CHALLENGES...
- IMPORTANCE
- PERCEPTION
- IMPLEMENTATION
- BUY IN

australia IMPORTANCE

THE COLD, HARD FACTS:

'Flight crew coordination was less than effective. The PIC did not manage the task sharing; crew resource management practices were not followed.'

NATIONAL TRANSPORTATION SAFETY COMMITTEE MINISTRY OF TRANSPORTATION REPUBLIC OF INDONESIA, 2008.



Adam Air, Boeing 737-4Q8.

102 POB MISSING. THE ACCIDENT DEEMED NOT SURVIVABLE



'the captain's failure to effectively manage the flight'. NATIONAL TRANSPORT SAFETY BOARD 2009



Colgan Air, Bombardier DHC-8-400, N200WQ.

50 PEOPLE KILLED.



'The crew interaction and the PIC's CRM were unsatisfactory' INTERSTATE AVIATION COMMITTEE

AIR ACCIDENT INVESTIGATION COMMISSION 2010



Tupolev Tu-154M, tail number 101, at Smolensk "Severny".

96 KILLED



'This implies that pilots.... cannot readily assimilate, comprehend, and react to the hazards created by the rapidly changing nature of a thunderstorm.'





'the pilot in command's attention became channelized and was fixated on landing the aircraft.' NATIONAL TRANSPORTATION SAFETY COMMITTEE MINISTRY OF TRANSPORTATION REPUBLIC OF INDONESIA, 2008



Garuda Indonesia, Boeing 737–497, PK–GZC, YOGYAKARTA

21 KILLED



MORE THAN ONE CAUSAL FACTOR, BUT A COMMON RE-OCCURRING THEME...



Accident Timeline \rightarrow





IS NTS/ HF THE 'POOR COUSIN' IN THE SCHEME OF PILOT TRAINING...???

"oh yeah we need to do that too..."

Relatively, how much time is spend on the Technical training compared to NTS training?



SO WE RAISE THE RHETORICAL QUESTIONS....?

WHAT IS THE ROLE OF A CAPTAIN?

WHAT ATTRIBUTES MAKES A "GOOD" CAPTAIN? (WORK SHOP)

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Overview of the CMD Upgrade process at Virgin Australia:

- Possible candidates identified. Command Development flight rostered with Check or Senior Training Captainnon-jeopardy.
- Experience, technical proficiency and operational suitability of candidate accessed by Selections & Promotions Committee. Candidate advised.
- Command upgrade Ground school. 5 Days total.
 - 2 days of Command NTS (with senior NTS facilitator whom holds the rank of Captain)
 - 3 days of Command technical discussion (with a Check and Training Captain).

Overview of the CMD Upgrade process at Virgin Australia:

- 3 x standardised Training Simulator sessions
- Line Training- minimum of 30 sectors & not less than 50 hours
- 4 x Simulator sessions.
 - final Simulator check including a Line Oriented Evaluation (LOE) exercise and Operator Proficiency Check (OPC) with two Check Captains
 - Brief period of further Line Training
 - Line Check (Two Days)
 - Day 1 Check operating in RHS as First Officer
 - Day 2 Line F.O. with Check Capt. as Observer.

australia NTS syllabus in the CMD Course Ground School

- Introduction and a few questions
- The role of a Captain
- Feeling a bit Stressed?
- Communication / Conflict Resolution
- Cultural Factors
- Leadership and Managerial Skills
- Workload Management
- Decision Making
- Managing Threats and Errors
- Darwin Overrun.



WE PROVIDE FEW DIRECT ANSWERS, OFTEN JUST MORE QUESTIONS.

CONVERTING AWARENESS AND KNOWLEDGE INTO SKILLS.

BASIC CONCEPTS AND THEORIES WITH PRACTICAL EXAMPLES THAT CAN BE FURTHER EXPANDED WITH PRACTICE AND TECHNICAL SKILLS ON DAY THREE TO FIVE OF THE COMMAND UPGRADE COURSE



EXAMPLE: PRACTICAL DISCUSSION and EXERCISES

Do you feel stressed at the moment ?



EXAMPLE: PRACTICAL DISCUSSION and EXERCISES WHOM IS MOST LIKELY TO MAKE A SAFE DECISION? NTS CORE ELEMENTS OF STRESS, DECISION MAKING, INFORMATION PROCESSING AND WORKLOAD MANAGEMENT

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EXAMPLE: PRACTICAL DISCUSSION and EXERCISES

DECISION MAKING MODELS RISK MANAGEMENT

BUT IN PRACTICE

FURTHER DISCUSSIONS ON USING THIS NON-NORMAL MANAGEMENT MODEL ON DAYS 3 to 5 WITH PRACTICAL TECHNICAL COMPONENT

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- To delegate or not to delegate?
 - Monitor refuelling at a non-engineering port delegate to refueller
- Whether to accept an aircraft with a MEL delegate to engine work to the state of the state of
- Calculate the fuel load A long at to F/O
- Talking to the CS or pax during an emergency delegate to F/O
- Decision to offload a pax delegating to CS
- Leaving the aircraft with pax on board delegating to CS

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RE- ITERATING THE AIM:

CONVERT NTS KNOWLEDGE INTO SKILL

DEVELOP PRACTICAL TOOLS FOR THE CANDIDATE.

REMEMBER THAT THEY ARE OFTEN KNOWLEDGE AND RULE FOCUSED.







REGULATOR EXECUTIVE MANAGEMENT FLIGHT OPERATIONS STANDARDS DEPARTMENTS NTS DEPARTMENTS



TO RE-INTERATE-THE IMPORTANCE OF NTS IN AN ACCIDENT TIME LINE



Accident Timeline \rightarrow



WARNING: GRAPHIC PICTURE FOLLOWING. PLEASE FEEL FREE TO TURN AWAY OR LEAVE FOR LUNCH



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QUESTIONS?