



FLIGHT DECK CRM SEMINAR SYLLABUS

CRM definition

Statistics

- Human Error and Safety in aviation
- Human Error in Flight Operations

The SHELL model

Case based studies analysis

- Eastern Air Lines - Florida Everglades 29/12/72.
- KLM and PanAm - Tenerife 27/3/1977.
- United Airlines - Portland 28/12/1978.
- Air Florida - Washington D.C. 13/1/1982.
- United Airlines - Sioux City 19/7/1989.
- American International Airways - Guantanamo 18/8/1992

A case based study analysed with the Systemic Approach

- The Dryden Accident

Company safety culture, SOPs, organizational factors

The Reason model of unsafe acts:

- Types of errors
- Human Error and reliability
- Error chain.

The Reason failure model:

- Error prevention and detection

Judgement and Decision Making:

- The judgement and the decision process
- Risk management in aviation
- Aeronautical decision making
- Decision making in the cockpit



Communication:

- Basic CRM concepts
- Communication: language and speech
- Communication and Crew Resource Management
- Communication and briefings
- Challenge & response
- Communication and co-ordination inside and outside the cockpit

Leadership and Personality:

- Leadership and personality
- Leadership styles
- Attitudes and skills
- Authority and assertiveness
- Motivation and leadership
- Attitudes and Persuasion
- Leadership and team behaviour synergy

Perception, Fatigue and workload

- Stress, stress management, fatigue and nutrition
- Fatigue, fatigue and vigilance, body rhythms and sleep
- Fitness and performance
- Vision and visual illusion
- Basic flight physiology
- The physical environment and the psychology of flight
- Information acquisition and processing
- Situational awareness
- Workload management

Automation

- Philosophy of the use of automation
- Specific type-related differences
- Potential risks introduced by automation
- An accident analysis: American Airlines, Flight 965, Boeing 757, Cali, Columbia, December 20 1995.