

Communicatio optima

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A Special CRM Collection

Exciting Crew Resource Management Topics

Examples From Aviation and Emergency Medicine

The Topics of the Third Volume

Maintenance Resource Management Was Derived From CRM

About twenty per cent of all air accidents are due to errors made during maintenance. Aircraft maintenance is a highly complex field in which technicians work under demanding circumstances. Economic pressure adds to the difficulties. In the 1980s and 1990s, airlines, authorities, and universities from several countries collaborated to create maintenance resource management (MRM). We will elucidate how MRM is trained and used today. We will also highlight crucial safety aspects.

What Influence Does Team Behaviour Exert on Safety?

What are the interrelations between submissive, assertive, and aggressive behaviours in teams, the authority gradient within a team, and leadership styles? How do these three components influence teamwork, achievements, and, ultimately, safety? We will discuss this pivotal topic in-depth.

Our Expertise and Skills in These Times of Automation

We will look at the worth and the relevance of our expertise in times in which automated systems take over more and more work. In what areas is real human expertise still superior? After having addressed important facets of this theme, we will turn our attention to the crash of Air France flight 447 into the Atlantic Ocean on June 1st, 2009. We will examine the pilots' communication and actions using CRM concepts. What role did automation and degraded manual flying skills play?

The Two Crashes of the Boeing 737 MAX 8 in Light of Crew Resource Management

The two crashes of Boeing 737 MAX 8 aeroplanes were not only due to a technical innovation that malfunctioned. There were other contributing factors, starting with how the innovation was communicated to the authorities and the pilots. In addition, human errors occurred during both of these doomed flights. We will look at these in the light of CRM.

Two Chapters About Air Traffic Control and One About the Überlingen Mid-Air Collision

Air traffic control officers (ATCOs) handle tightly scheduled flights in busy airspaces. We will reveal what abilities they have to possess and how they execute their work. Following that, we will discuss the Überlingen mid-air collision. We will pay particular attention to the circumstances in which the ATCO had to work that night.

Has Anyone Thought About These Hazards?

What can happen if unauthorised people simply enter an airport and even paste themselves onto the runways? Such careless behaviour can involve tremendous hazards that cannot be neglected.

Runway Incursions and the Collision on the Runway at LAX in 1991

Last but not least, we will explore what runway incursions and their potential consequences are and what is done around the world to prevent them. Then, we will discuss the disastrous collision on the runway at Los Angeles International Airport (LAX), California, USA, on February 1st, 1991. Multiple factors added to a fatal error, as we will see. Apart from this, problems that should have been addressed much earlier contributed to this accident.

