

VENLYS

Maritime Specialisation Services

Changing the Human Performance
for the Future

Editorial

Katerina Skourtanioti
Managing Director

Dear all,

We are delighted to start the communication campaign titled "**GET TO KNOW THE HUMAN FACTORS**" with a targeted article on Situational Awareness written from our esteem new colleague and expert on Human Factors, Mr Gerasimos Kontos*.

We start with a case study from aviation as a formulated example of how other transport industries tackle this issue and what kind of solutions they have adopted.

Every article will be disseminated to our clients and the maritime community and you can also find it at our website for everybody to download it for any use of further publication. Our goal is to promote the role and capabilities of the human element, the most valuable asset within our industry.

*Gerasimos leverages hands-on expertise and broad cross functional knowledge across the aerospace industry. Strongly believing in people and their potential, Gerasimos currently works as an advisor for a major airline in UAE for simulating unexpected flight events and scripting the applicable training scenarios. Before joining VENLYS Maritime Specialisation Services, he was a Fulbright Visiting Professor at San Jose State University (CA, USA), department of Aerospace Engineering.

Get To know the Human Factors

“Situational awareness. A Tribute to human ELEMENT”

By

Mr Gerasimos Kontos

OPENING:

“We're going to crash!.. What have we done wrong!.. This can't be happening!”

These were the last words of the Pilot in Command, as Air France Flight 447, an Airbus A330, crashed into the Atlantic Ocean on June 1, 2009, not allowing 228 people ever see the light again. During the final minutes of the flight, cockpit voice recorders painted a picture of confusion and frustration in the cockpit, mainly due to the crew's inability to understand what was happening and what they needed to do. In the minute that followed autopilot disconnection, the failure of attempts to understand the situation and the de-structuring of crew cooperation fed on each other until the total loss of cognitive control of the situation.

In simple terms, The crew's loss of Situational Awareness (SA) began a chain of events resulting in the accident.

But what is SA anyway?

Situational awareness is defined as an understanding of what has happened, what is happening and what might happen. Put simply, SA means appreciating all you need to know about what is going on when the full scope of your task is consideration. More specifically and in the context of complex operational environments – (e.g Bridge, Engine Control Room) – SA is concerned with the person's knowledge of task-related events and phenomena.

Humans are essentially limited-capacity, single-channel operators, which means that we cannot perform independent activities simultaneously without suffering a performance loss on these tasks. Human judgements of course, are never made in a vacuum. Either in the sea or in the air, humans are part of a complex system that can either increase or reduce the probability that they will make a mistake. After any accident, the million-dollar question is whether training, instrumentation and cockpit / bridge procedures can be modified all around the world so that no one will ever make this mistake again – or whether the inclusion of the human element will always entail the possibility of an accident.

Ironically though, in the majority of maritime and aviation accidents, people in command, were highly trained, with countless hours of experience and were operating the most prestigious and technically sophisticated vessels and airliners in the world. Like the unsinkable Titanic, these vessels and airliners were not supposed to sink or fall out of the sky.

Over the last decades, vessels have been built with increasingly automated control functions. These have been potential to remove a great deal of uncertainty and danger and even reduce the risk of human errors due to overload, fatigue, and fallibility and even prevent manoeuvres that might stress the frame. But they have also removed important information from the commanding crew.

Thus, while human beings can pay attention to something else, when trouble suddenly springs up and the computer decides that it can no longer cope – commanding crew might find themselves with a very incomplete notion of what's going on.

You will be confused and startled. You will wonder: What instruments are reliable, and which can't be trusted? What's the most pressing threat? What's going on? What shall I do?

Fortunately, you are able to find the answers.

CLOSURE:

You can develop your ability to develop Situational Awareness through preparation and planning. Always think what you want to happen, what can happen, and what you don't want to happen. What does that mean? It means that you are very aware of what your next action is going to be, so if something else pops up, you have the capacity to identify it and take action against it.

That's what Situational Awareness is really all about. Not only knowing where you are, but mainly how well you are doing, every day.

THE END



Maritime Specialisation Services

7thIkrou str., Kifissia, 14564, Greece

Tel: +30 210-6207758 (4 lines)

Mail: info@venlys.com

Representative Navigate Response

www.navigateresponse.com

24/7 INCIDENT LINE: +44 (0)207 283 9915

The previous versions of our newsletter can be found in our website: www.venlys.com

To unsubscribe from our list please email at:

info@venlys.com