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Set on finding the right stuff

Not all of us would be good seamen, according to Maritime Psychologist Bengt Schager. By finding the right person for the right position he wants to reduce the number of accidents caused by human error.

"The taxi drivers are a problem", Bengt Schager says. "They scare our clients while driving them to our office, telling them rumour has it that we are terrible."

The clients coming to Marine Profile AB in Halmstad, Sweden, are ship's officers from all over the world, many of them working on cruise ships or passenger ferries. At Bengt Schager's office they complete some psychological tests, after which they get to sit in one of the brown leather chairs while the psychologist sits in the other, asking questions and stud-

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huge, it is important to find the right people; the steady and cool with a serious attitude. Some people can make a mistake and fix it the day after. But if

ying the client's body language to find out what this person is like and if he or she is suited for working at sea or not.

"For every job where the consequences of an incident can be

you work at a nuclear industry or at sea you can't do that", Bengt Schager says.

A few years ago, he proposed to the Swedish maritime academies that students applying to these educations should be ranked from interviews and psychological testing, instead of from grades like in today's system. According to Bengt Schager the personnel at the schools liked the idea, but the heads of the organizations did not and therefore the idea came to nothing.

"It is not reasonable that just anyone can be the master of a super-

PHOTO: KILVA MANNESON

»Some of my clients have told me that they wouldn't want to work in a crew together with some of their old classmates«

ping companies let their crews train regularly in simulators, but not all.

"In a simulator you can expose yourself to an accident and see how you cope with it. Not only do you learn how to handle the situation, but also how you and the other crew members react", he says.

It all started in the 1980s, when Bengt Schager worked as a management consultant and got a shipping company as his client. The shipping industry interested him; he had earlier been at sea as a cabin boy and a radio officer.

While helping the client to choose good and safe personnel to its fleet, he found out that the shipping industry was way behind other industries in its attitude to humans. When the Scandinavian Star accident occurred, there were a lot of discussions about whether the master had behaved correctly during and after the rescue operation. The head of the Swedish Maritime Safety Inspectorate said in the news that more research on the human factor was needed.

"The next day I called him and said no, I don't think we need more research. We already have the knowledge, but we have to connect the psychologists and the seafarers", Bengt Schager says.

He started to read everything written on the subject but was not impressed of what he found.

"The problem was that those who made research and wrote about human error were mostly engineers who didn't focus on the human being, but on technical solutions. It was said that accidents occurred because of bad

MARITIME PSYCHOLOGY

→ Combines consultants with experience in human resources and consultants with experience in the maritime industry. Four Maritime Psychologists are employed at Marine Profile AB.

regulations or navigation instruments that gave the wrong information. No one mentioned our human shortages; the fact that we can misunderstand or stick to a thought that is false but that we still strive to verify."

He thinks that technical systems today are often built after what can be achieved, and the human must adapt to the system. A better idea would be to take it from the human and her built-in shortages, and then create technical systems that can do things that the human cannot.


"The Estonia accident is a good example; when the bow visor fell off, there were engineers screaming 'we can fix that, we can make a system that automatically stops the engines if the bow visor falls off'. But that is to short-circuit the human being. If a person is not needed, if her decisions are not important, she will extinct. An alarm system that informs the crew that something is wrong would be better, so that the human makes the decisions."

Too much help can be dangerous, he says, referring to the accidents at sea that are caused by lacking attention. He wants safety systems that take over only if the situation has gone completely out of hands.

"I can't sit here and say that we shouldn't have alarm systems at all, but you can make those alarms so annoying that you never trust it as a routine, or you can connect it directly to the master's cabin or to the passenger to hear it, so that everyone knows that a person made a mistake."

So according to you, finding someone accountable is important?

"Yes. You are responsible for what you do. No one blames the state of the road at a car accident, but unfortunately that happens at sea. There was an incident with a passenger ferry in Sundsvall; it couldn't come to quay because the crew was surprised ♦



tanker! Anyone can be accepted at the schools and if you don't fail completely you will sooner or later be a master, since the merchant fleet is short of officers. Some of my clients have told me that they wouldn't want to work in a crew together with some of their old classmates."

He compares with the flying industry, where pilots have to pass both entrance tests and annual tests in order to keep a high security. Some ship-

Bengt Schager on ...

... the concept of human error: "Human error is when you try to make it right but it goes wrong. Not to be mixed up with when people don't try to make it right; that is mistakes by purpose or simply breaking of rules."

... fatigue: "Fatigue can never be a human factor since it can always be predicted. If the manning and the timetable of a vessel are good, the crew won't be too tired. You don't have to be a psychologist to understand that. Fatigue is not a human error."

... the company Marine Profile AB: "We make the psychology of human beings and groups accessible to the shipping world. Our clients are often interested in ways to increase safety on board. Sometimes we are contacted after an accident,

when the company involved decides that it should never happen again. Many of our clients are international cruise companies, often from the US and Germany. We meet the officers, interview them and then advice the client on who to employ."

Report Maritime psychology



PHOTO: KILARA MAMUNSSON

Maritime Psychologist Bengt Schager is one of the company's three senior consultants.

by wind and snow. How can snow be a surprise in Sundsvall in the winter? Shouldn't the crew have been prepared for that to happen?"

He adds that in a situation where a crewmember is overworked and

therefore makes mistakes, you must make the person who manages the vessel accountable, or the person who plans the time schedule.

Another human shortage is the tendency to trade-off instead of in-

creasing the safety margin, for example at so-called radar aided collisions. Instead of slowing down when the visibility is poor - in order to reduce the risk for accident - the ship keeps its speed and those on the bridge trust that the radar will inform them of meeting traffic.

According to Bengt Schager, human beings tend to think in risks rather than in consequences. But even if the risk of an accident is small, the consequences can be enormous.

"On some of the large cruise ships the officers give way to all meeting traffic, even if the cruise ship has priority. The officers know that the consequences of an accident - with 6,000 passengers on board - would be huge. There are no helicopters able to rescue 6,000 people; therefore they give way to everything."

Last year, his book Human error in the maritime industry was published. It is written for seafarers and other personnel in the shipping industry, and Bengt Schager would like it to be used at the maritime academies. In the book he deals with the human senses and their influence, showing a number of case studies.

"It is hard to predict how someone will react in a critical situation. To be responsible for others may increase one's capacity, like a mother defending her child. An authoritarian master gets a passive crew", he says.

In a critical situation, a group will function as long as the leader communicates with the others so that they can understand and follow him.

"It is important that the master on board understands that if he is reliable and respected, the crew will team up. Some masters believe that they need to act authoritarian from the beginning to make people obey in case of an accident. They are wrong."*

Bengt Schager and the Estonia commission

Maritime Psychologist Bengt Schager was one of the members of the Estonia commission, which was appointed after the disaster. He left the group shortly before its report was published, strongly criticizing the commissions' way of working.

Bengt Schager quit in December 1997, three years after the Estonia commission started. A few days later

he published an article in the Swedish daily Dagens Nyheter, where he gave his view of the commission's work. In the article he listed things that he believed had been seriously mistreated by the commission.

He criticized it for having had a too excusing and explaining attitude to the crew's shortages. According to

Bengt Schager, facts and information disadvantageous for the crew was given little space or were simply left out in the report.

"Another reason to quit was that I had been promised by the chairman to publish an appendix with a reservation together with the report. But when the chairman was changed, the new one refused to let

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me do this. I told her to either let me publish it, or everyone would be able to read it in the news the day after”, Bengt Schager says.

He does not regret taking part in the commission, even if he found it hard at the time.

“I was very proud when I was asked to join the group. And I did some good stuff; it was good to have a psychologist among all the engineers and nautical experts in the group”, he says.

Today, he does not believe that commissions are good for investigating accidents. It might be a good way for making proposals, but not for investigations like the Estonia disaster.

“There is a great risk for a false unity in a commission. The members bring their various opinions into line with each other and don’t deal with questions that might infect the spirit in the group, and that is really bad for the investigation work.”

According to Bengt Schager, that is exactly what happened in the Estonia commission. The group was divided into three parts - the Swedish, the Finnish and the Estonian - and instead of investigating the accident as good as possible, much of the time was spent trying to make the three countries to agree.

“I learned a lot from taking part in the Estonia commission. I have never seen such exceptional incompetence gathered in one place. I would never want to deliver a report like that - it wouldn’t even be good enough to be a student’s essay”, he says.

To take the edge off the statement, he adds that the commission of course comprised highly competent technicians, legal experts, nautical engineers and so on, but that the members lacked the knowledge of making investigations. *



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