



ROYAL  
ASSOCIATION OF  
NETHERLANDS  
SHIPOWNERS

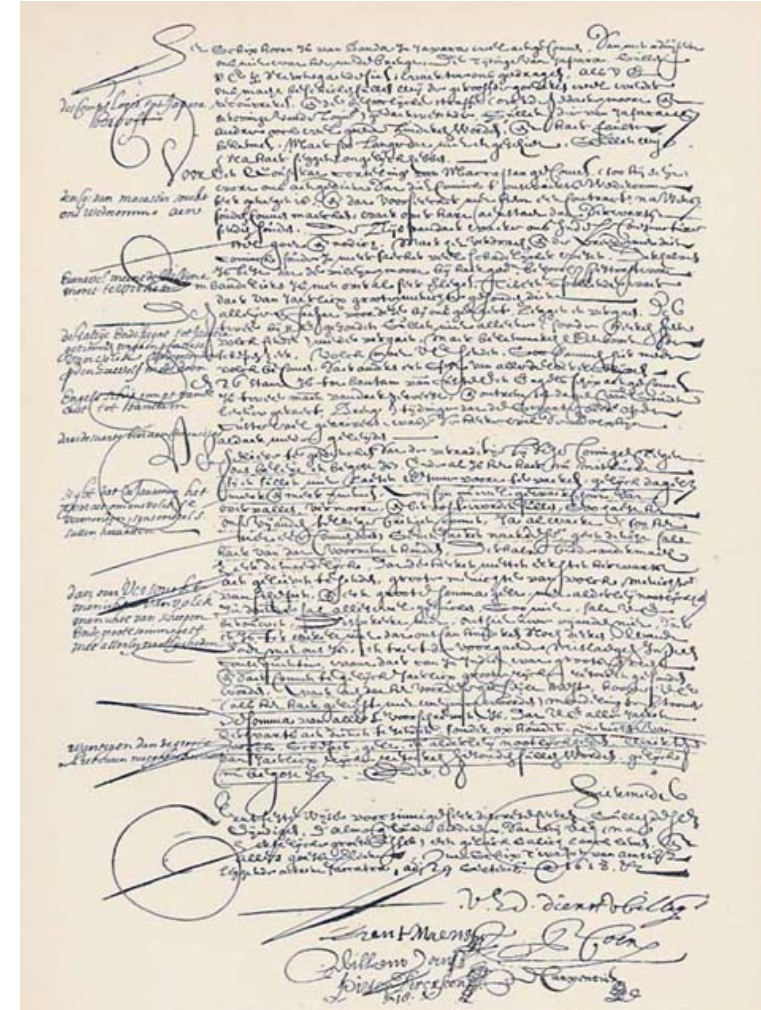
# Are seafarers trained for the future?

The human element aspect seen from an  
international perspective

# Topics of the presentation



- ▶ The roll of soft skills onboard ship
- ▶ Recent developments in shipping
- ▶ Consequences for crew competences
- ▶ Soft skills in the STCW Convention
- ▶ Are improvements possible?
- ▶ Recommendations to improve maritime education



# The roll of soft skills onboard ship



EMPATHY



SOFT SKILLS

TRUSTWORTHINESS

COMMUNICATION



INQUISITIVENESS + CREATIVITY

## Crash: a Tragic Misunderstanding? Language Barrier Seen As Factor in Collision

Santa Cruz de Tenerife, Spain (UPI)—Spanish officials said yesterday that a misunderstanding involving the pilots of two jumbo jetliners and the control tower may have caused the fiery crash that took at least 574 lives in history's worst air disaster.

The number of reported dead fluctuated during the day but both airlines—Pan American and KLM issued revised casualty lists late yesterday putting the death toll at 574, with 70 survivors. Survivors described scenes of heroism and horror amid the tangled mass of wreckage.

KLM, the Dutch national airline, said that all 248 persons aboard its jet were killed, including four residents of Rochester, N.Y. Mr. and Mrs. Don Gillis and Mrs. Terry Twist and her 18-month-old daughter Melissa. All lived in the Netherlands.

The KLM Boeing 747, resting down the runway at 180 miles an hour, ripped through the Pan Am Boeing 747 on Sunday during a period of fog.

Pan Am said that 230 persons aboard its plane died, and that 70 survived.

Preliminary findings left in doubt who was at fault in the crash, but Spanish officials said the Pan Am plane, laden with tourists from the Los Angeles area, turned into the path of the KLM plane.

The Spanish officials said it was not known whether the KLM jet had been cleared for takeoff, but both planes were on the runway with the KLM at its head and the Pan Am plane on a section used for taxiing.

"Under certain circumstances this is allowed," a Spanish official said.

"The summary (investigation) will answer whether these circumstances existed at the time."

Language Problem?

Some foreign pilots speculated that a language barrier may have been a factor.

The provincial governor, Antonio Oyarzabal, said that in the last minutes before the disaster the control tower told the KLM 747 to go to the head of the runway and ordered the Pan Am jet to taxi to a standby position.

"Both planes took to the runway," Oyarzabal told a press conference on this Atlantic island off the North African coast. "The key point is whether the KLM plane crew had been given orders to take off."

Some survivors said the KLM jet

struck the Pan Am jet broadside, just aft of the first-class section. Momentum carried the huge plane—Tolly laden 747s weigh more than 200 tons—right through the American jet and several hundred yards farther down the runway.

One survivor, Jordan Tarkiff of San Francisco, said that the KLM jet already had lifted off the ground when it struck the Pan Am jet.

"The other plane was off the ground," he said. "If it had not been, we would all have been hamburger."

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The tail section of one of two 747 jumbo jets litters runway along with other debris. Among 70 known survivors (photo top) is Larry Walker, Laguna Beach, Calif., in hospital on island with extensive burns.

## 'Survival of the Fittest' on Flaming Plane



Shown in wedding photo taken in 1973, Ronald (Rn) Bruce, 25, and wife, Terri, 25, are among survivors.

grabbed her other arm and we started discussing her across the field to put the fire out.

The Bruscos and other survivors, including John C. Amador, 25, a United States Immigration Service hearing officer from Marina Del Rey, Calif., said that the Dutch plane that rammed them had attempted to take off to avoid the crash. Amador was X-rayed at the hospital and released. He went shopping yesterday for new clothes. His best friend, seated next to him, was killed in the crash.

Amador told his father, Charles, by phone in Los Angeles, that he escaped by jumping 12 feet through flames, and that the Pan Am captain prevented him from returning to the burning plane to save his best friend and roommate, Harry Harper, a pharmacist, because of fear of another explosion.

The senior Amador said that his son told him that he saw the KLM plane coming down the runway right towards him. He said he ducked down to put his

got... My mother was looking at me. She was on fire. I got one hand on her, dragged her out and my wife

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# Recent developments in shipping

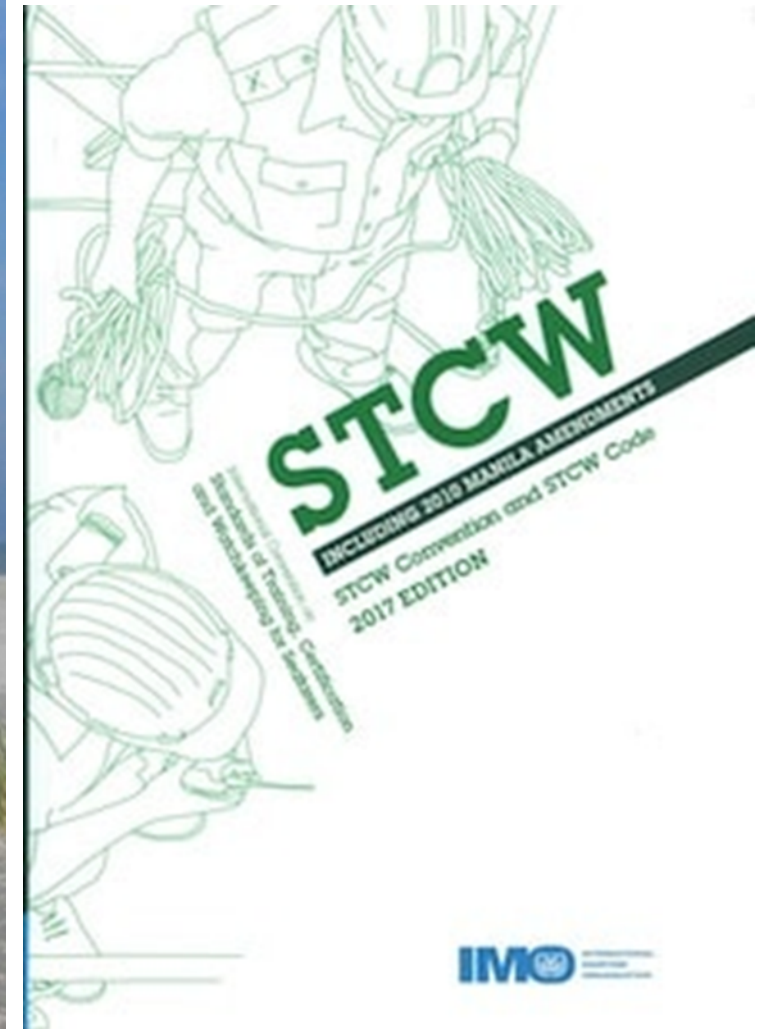




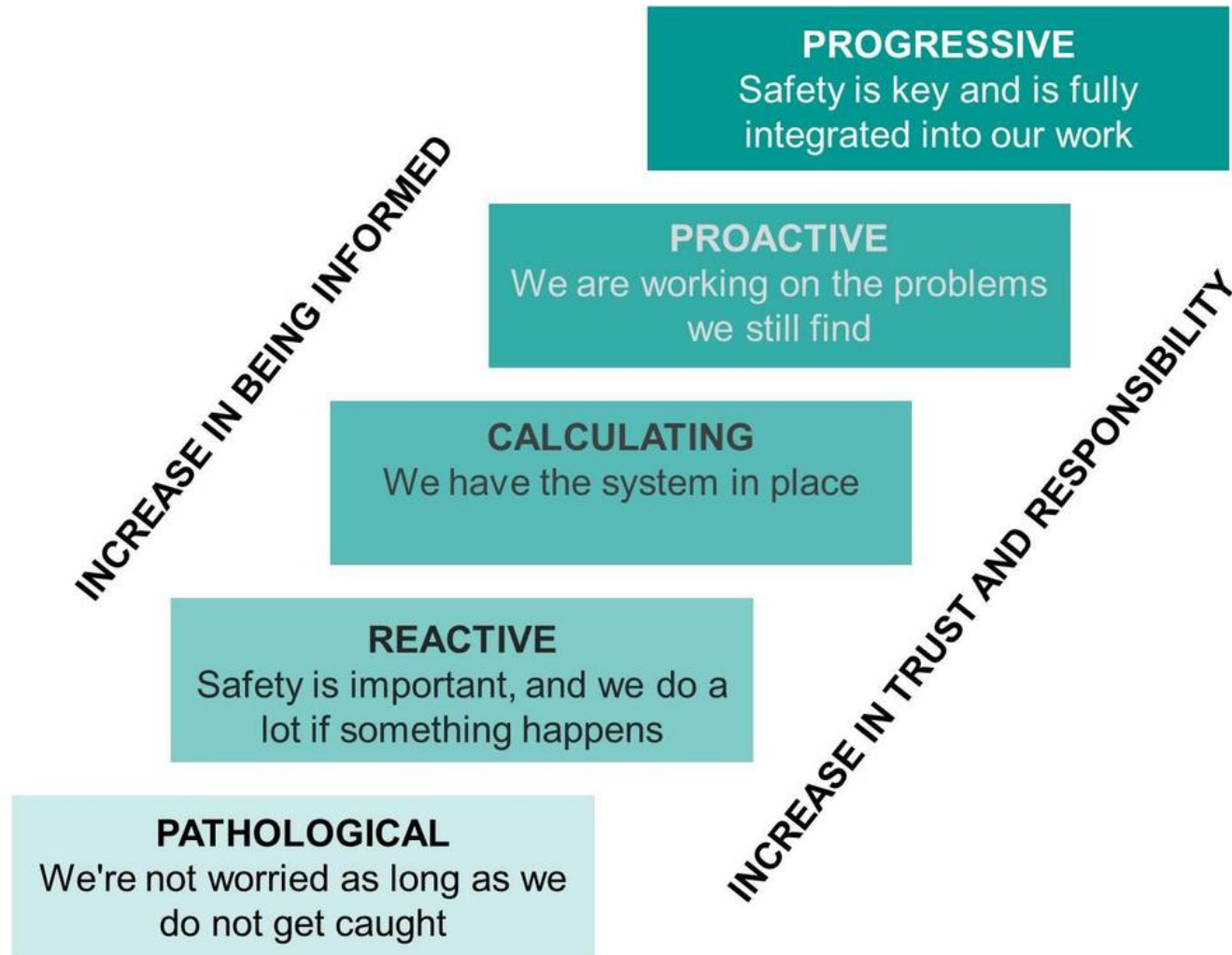
# Consequences for crew competences



# Soft skills in the STCW Convention



# Are improvements possible? (strengthening safety culture)



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