

Safety@Sea Community Conversations



What Can We Learn From Past Marine Accidents?

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Introduction and Objectives



What is **Safety Investigation** about?

To find out -

What had happened?

How could it have happened?

Why did it happen?

Analysing holistically – individual and organisational, procedures and practices, regulations and guidelines, software and hardware, etc.

NOT to apportion blame

NOT to determine liability

Independent / Objective
Safety Investigation



Why did these accidents happen?

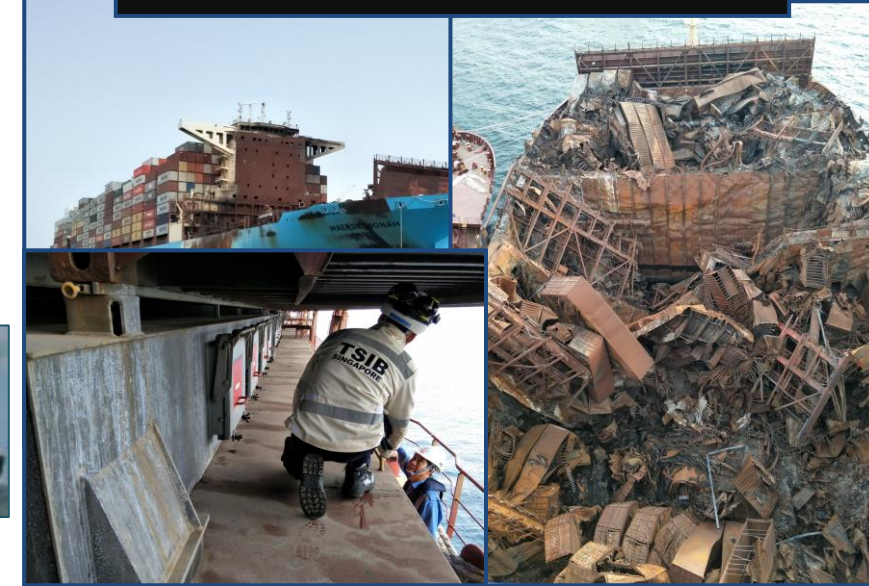
Capsize of sand dredger on 13 Mar 2017



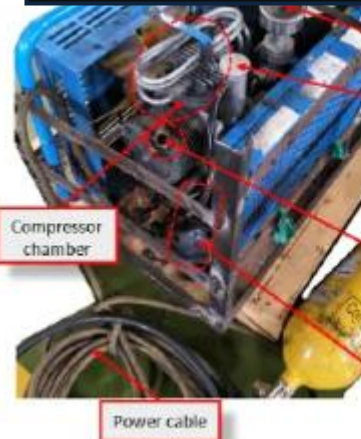
Collision of navy ship and oil tanker on 21 Aug 2017



Container ship fire on 6 Mar 2018



Fatal injury while charging air cylinders on 28 Oct 2019



Side view of the RA compressor from Case Event 1

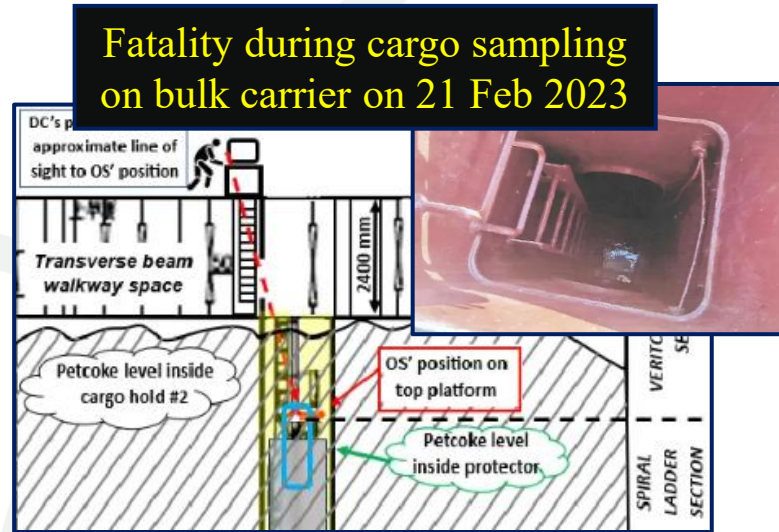
Fatal injury during main engine repair work on 25 Sep 2020



Container ship fire on 20 May 2021



Why did these accidents happen?



How could it have happened / Why did it happen?

Why?

Did he leave the bridge

Why?

did he not take a rest

Why?

was he afraid to question

Why?

did he increase the speed suddenly

Why?

was there no look-out

Why?

Was he on the port side of the fairway

Why?

did he give the wrong helm

Why?

did the pilot give hard to port helm

Why?

did he bypass the safety mechanism

Why?

Was he chosen to perform the job

Why?

did he not monitor the position

Why?

did he not alter course on time

Why?

did he not communicate

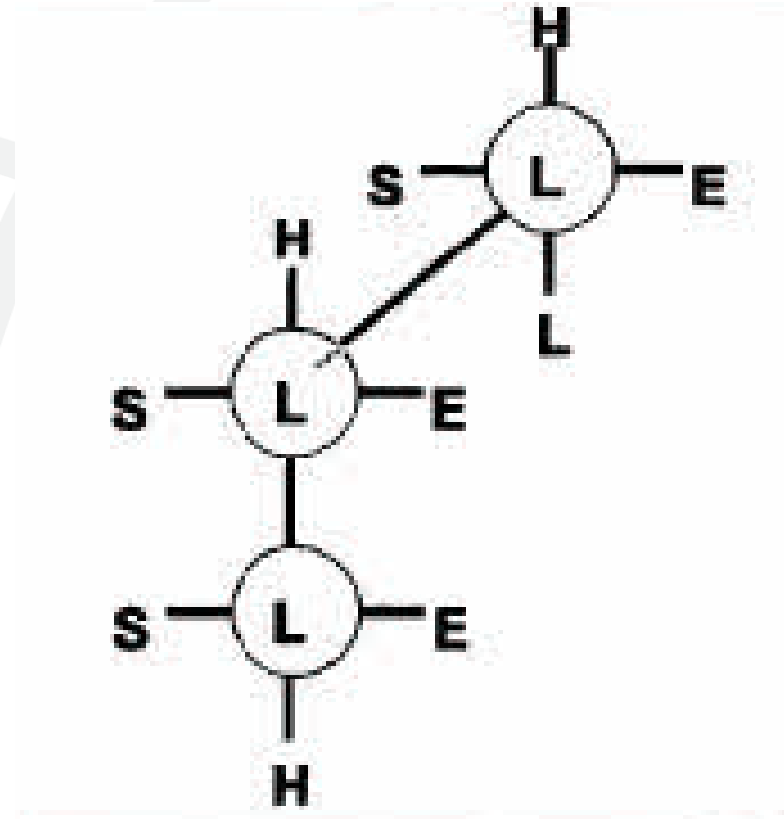
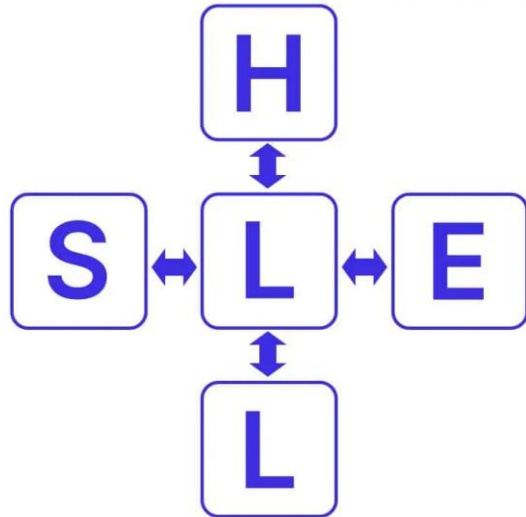
Why?

why did he not display the lights



Then, what should we **primarily** focus on ?

SHEL Model



S – Software

H – Hardware

E – Environment

**L – Liveware
(human)**

What are the **roles to play** in achieving a **safe ship**?

