



KONGSBERG

TASK FOCUS DESIGN APPROACHES

Safety in automation and remote operations

18/10/2021

Capt. Jaquelyn Burton, Head of Creative Design,
Integrated Solutions, Research and Innovation

KONGSBERG PROPRIETARY: This document contains KONGSBERG information which is proprietary and confidential. Any disclosure, copying, distribution or use is prohibited if not otherwise explicitly agreed with KONGSBERG in writing. Any authorised reproduction in whole or in part, must include this legend.
© 2021 KONGSBERG – All rights reserved.



What is driving the future for control systems?



KONGSBERG

CPA	TCPA	COG	DT	BT	
CPA	026°	COG	30831°	BT	271°
TCPA	026°	COG	30831°	BT	271°
COG	026°	COG	30831°	BT	271°
DT	30831°	COG	30831°	BT	271°
BT	271°	COG	30831°	BT	271°

WORLD CLASS — Through people, technology and dedication

KONGSBERG PROPRIETARY - See Statement of Proprietary information



KONGSBERG

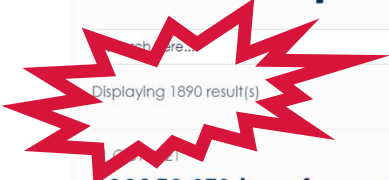
Evolution of maritime safety

MARS



Membership Bookshop Dynamic Positioning NI Academy Technic

MARS Reports



Search here...

Displaying 1890 result(s)

202152 STS transfer ends with a touch of bows

[MARS 2021](#)

30 SEP 2021

202151 Collision in fog

[MARS 2021](#)

29 SEP 2021

202150 Welding job ignites nearby combustible, causing injury

[MARS 2021](#)

Date

- 2021 (51)
- 2020 (71)
- 2019 (80)
- 2018 (79)
- 2017 (76)
- 2016 (74)
- 2015 (72)
- 2014 (72)
- 2013 (72)
- 2012 (90)
- 2011 (143)
- 2010 (68)
- 2009 (73)
- 2008 (85)

<https://www.nautinst.org/resource-library/mars/mars-reports.html>

Maritime Accident Investigation and Temporal Determinants of Maritime Accidents: A Case Study

Detlef Nielsen

Department of Maritime Studies, The Hong Kong Polytechnic University

Dietmar Jungnickel

Department of Philosophy and Social Science, University of Hamburg

Abstract

This paper presents the results of an investigation into temporal determinants of maritime accidents based on a data-set obtained from the proceedings of formal inquiries in the former German Democratic Republic (GDR). The results show that there is no statistically significant outcome between the probability for an accident and the time of watch. Thus the results do not confirm previous studies, which reported significant time of day effects.

The outcome of this study indicates that marine inquiries can provide useful data for an analysis of underlying causes of maritime accidents. It is suggested that accident inquiries should be extended into the area of watch systems employed and should record the hours of work and of rest of the officers on the watch involved in a maritime accident.

1 Introduction

Shipping accidents, in particular groundings and collisions can have catastrophic consequences for the environment. Recent examples of such events are the groundings of EXXON VALDEZ, BRAER and SEA EMPRESS as well as the collision involving the tanker HAVEN. It is then often speculated that 80% of such accidents are caused by unspecified "human error".



A wireframe globe with a grid overlay, centered on a dark background. The globe is composed of a grid of lines forming a sphere, with a larger, fainter grid of lines surrounding it. The text "SITUATIONAL AWARENESS" is overlaid on the globe.

SITUATIONAL AWARENESS



What do operators need?

- Mental model
- Future behaviour
- Interactions with the environment



KONGSBERG

Beyond Individual Operations

- Future control and monitoring
- Human control location and contexts



KONGSBERG

Thank you

Jaquelyn.Burton@km.Kongsberg.com

