Lone Watchkeeping – Grounding at Night

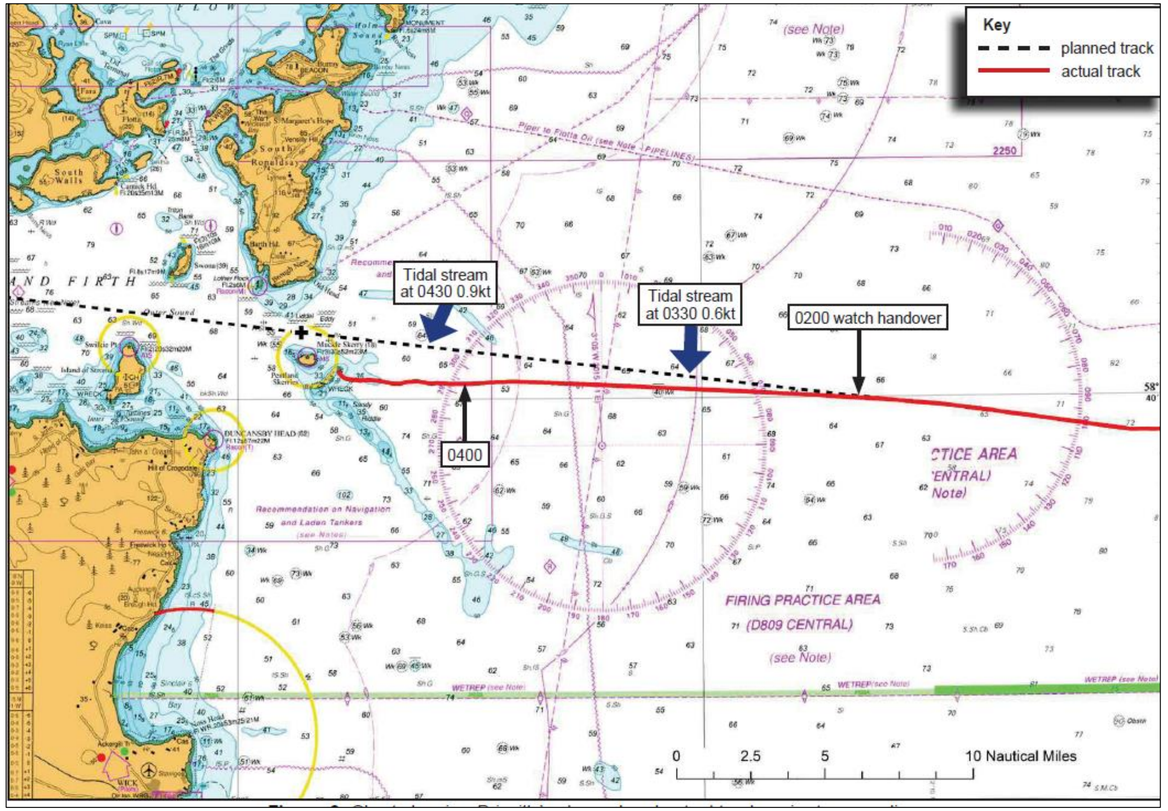
BACKGROUND

- **A 2281GT General Cargo Ship – was en route from Klaipeda, Lithuania to Silloth, England.**
- **The ship's route was planned north of Scotland transiting the Pentland Firth.**
- **Before transiting Pentland Firth a bridge team meeting was held to discuss the forthcoming passage as it is notorious for extreme tidal and sea conditions.**
- **The Master decided to adjust the bridge watchkeeping schedule in order to make the transit in favourable tidal conditions. The cadet was directed to keep watch from 2300 to 0200, with the transit of the Pentland Firth due to begin at about 0500.**
- **At 0200 a Maritime officer had taken over the watch (OOW), he decided to deselected track mode steering and switched to autopilot.**
- **He then sat down in the bridge chair watching music videos on his mobile phone.**
- **The Bridge Navigation Watch Alarm System (BNWAS) was not activated.**

THE INCIDENT

- **At about 0400, the OOW realised that the ship was south of its planned track.**

- **Noticing two small islands on his radar, the OOW decided to proceed between the islands (Pentland Skerries) and thereafter alter course to starboard to regain the planned track.**



THE INCIDENT (continued)

- **Orkney Vessel Traffic Service (VTS) became concerned about the ship heading towards the shallow waters at Pentland Skerries and contacted the Shetland Coastguard Operations Centre (CGOC).**
- **CGOC contacted the ship by VHF and requested the OOW to stay clear of the Pentland Skerries.**
- **The OOW acknowledged but his reply was vague and no visible actions were taken.**
- **Increasingly concerned by the lack of response, VTS intervened at 0440 and initiated a VHF call with the ship, requesting a southern course alteration immediately.**
- **The OOW responded in a confused way and seemed to have difficulty in understanding the VTS.**
- **VTS kept repeating that there was clear water to the south (to port).**
- **The OOW decided to add a chart overlay to the radar display. He then realised the danger, switching to hand-steering and the rudder hard to starboard to steer away from the reef.**
- **At about 0443 the ship grounded on Pentland Skerries at a speed of 7 knots.**

THE INCIDENT (continued)

- **The ship sustained extensive damage to its hull.**
- **Unable to be refloated until seven days after the incident.**

REFLECTIVE LEARNING

The questions below are intended to be used to help review the incident case study either individually or in small groups:

- **What do you believe was the immediate cause of the incident?**
- **What other factors do you think contributed to the incident?**
- **What do you believe were the barriers that should have prevented this incident from occurring?**
- **Why do you think these barriers might not have been effective on this occasion?**
- **What is your company policy for conducting watchkeeping alone during the voyage?**
- **What is the legal requirement for when the BNWAS is to be activated?**
- **What is your company requirement for when the BNWAS is to be activated?**
- **What is your company's policy on the use of personal electronical devices during a watch?**
- **What was problematic with the master's decision to change the watchkeeping schedule?**

LESSONS LEARNED

The following lessons learned have been identified based on the available information in the investigation report and are not intended to apportion blame on the individuals or company involved:

- **Insufficient watchkeeping –** The OOW did not monitor the ship's progress for about 2 hours, while sitting in the bridge chair and watching videos on his mobile phone. This allowed the ship to drift to the south of its planned track due to the tidal stream while on autopilot.

- **Primary means of navigation** – The ECDIS was not fully utilised and a number of navigational alarms could have been used to warn the OOW of the danger. If the BNWAS had been switched on, this would have assisted the OOW to keep alert and monitor the vessel's position.

- **Additional lookout** – The posting of an additional lookout would have further assisted the OOW by providing navigational support, as well as acting as a stimulus to the OOW to remain alert.

- **Risk assessment** – An effective risk assessment taking into account the proximity of navigational hazards while operating at night would have identified the need to retain an additional lookout.

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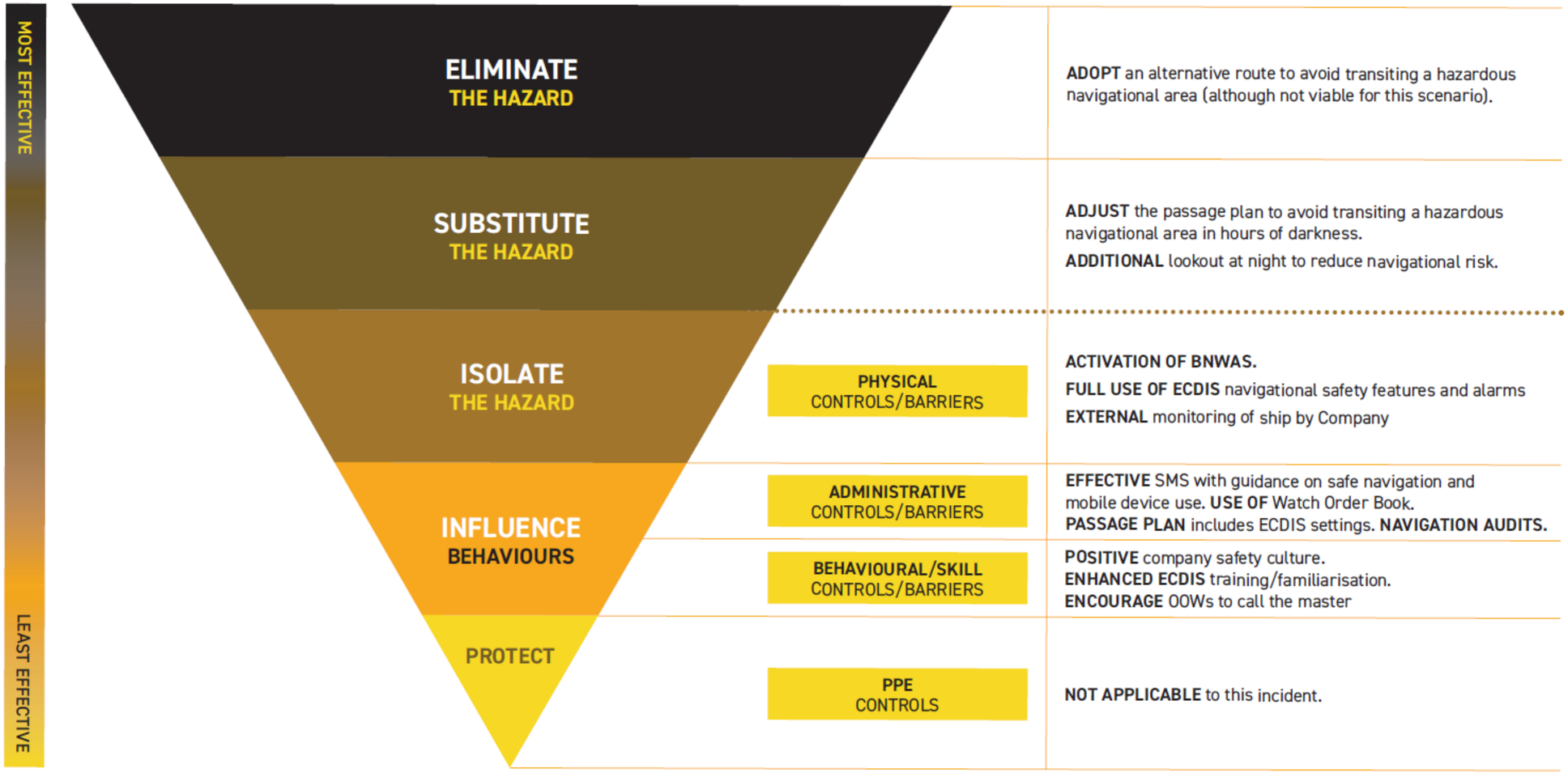
HIERARCHY OF BARRIER CONTROLS



EXAMPLES OF POSSIBLE RISK MITIGATION CONTROL MEASURES RELATED TO THE CASE STUDY

ADOPT an alternative route to avoid transiting a hazardous navigational area (although not viable for this scenario).

ADJUST the passage plan to avoid transiting a hazardous navigational area in hours of darkness.

ADDITIONAL lookout at night to reduce navigational risk.

ACTIVATION OF BNWAS.

FULL USE OF ECDIS navigational safety features and alarms

EXTERNAL monitoring of ship by Company

EFFECTIVE SMS with guidance on safe navigation and mobile device use. **USE OF** Watch Order Book.
PASSAGE PLAN includes ECDIS settings. **NAVIGATION AUDITS.**

POSITIVE company safety culture.
ENHANCED ECDIS training/familiarisation.
ENCOURAGE OOWs to call the master

NOT APPLICABLE to this incident.

The suggested barriers/controls above are provided to help generate reflective discussions, and should not be considered as conclusive/definitive or comprehensive for the provided case study.
The risk and control measures relating to any similar scenario or activity must always be appropriately assessed based on the specific onboard arrangement and circumstances.

CONCLUSIONS

Groundings involving the use of a lone watchkeeper are unfortunately not an unusual event. Often these incidents could easily have been prevented had the decision to allow a single watchkeeper been based on a solid assessment of the associated risks.

Though it might be tempting to use the resource elsewhere, it should be remembered that an additional lookout serves several purposes to ensure the safety of the ship:

- **To assist the OOW with reporting all sightings, including navigation marks.**
- **Act promptly should the OOW became incapacitated.**
- **Act as a stimulus to prevent fatigue during watchkeeping.**

In any case, the BNWAS shall always be activated during voyage!!

QUESTIONS