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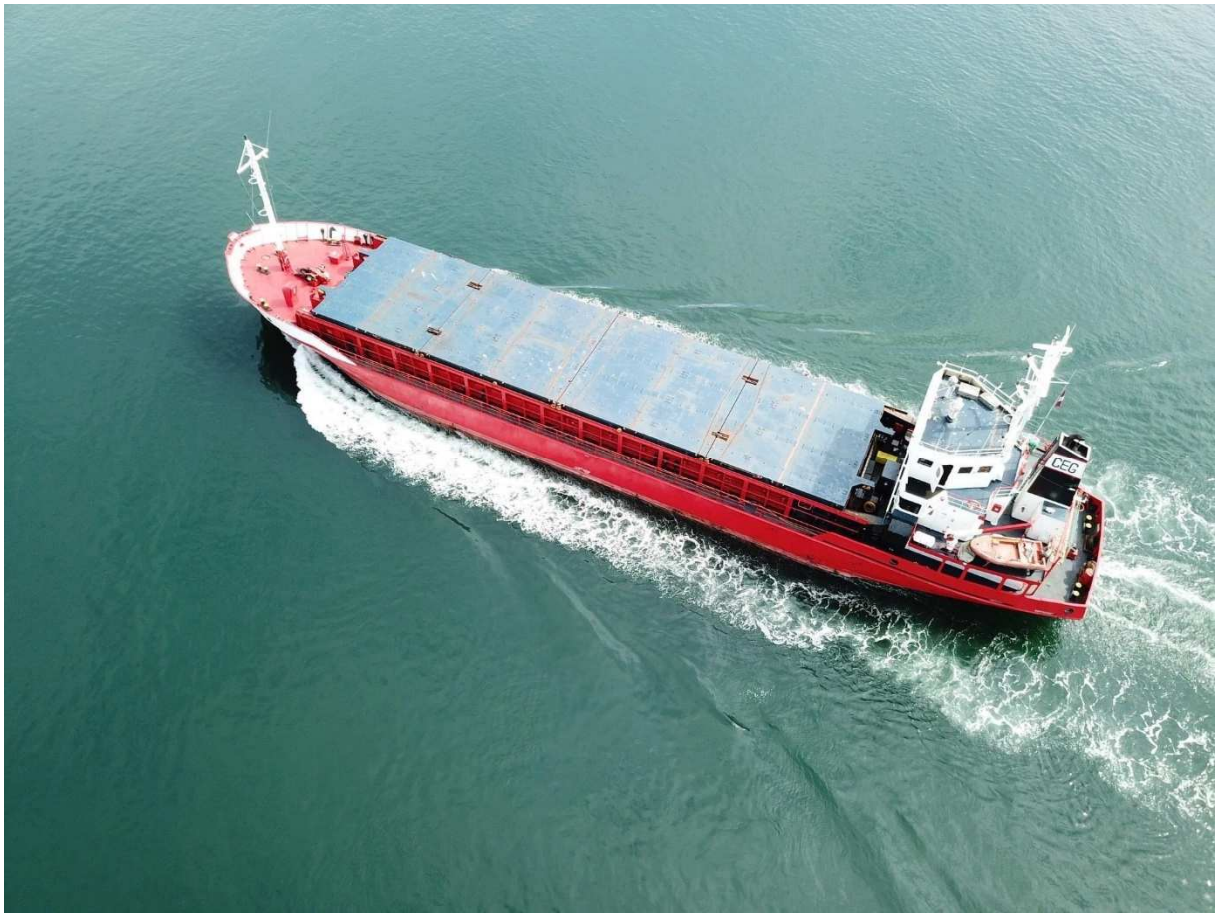
# Investigation report

# Grounding MV “CEG Galaxy” on 01.08.2023 at Isle of Jura, Scotland, UK




**By**

**Fehn Ship Management GmbH & Co. KG**

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## 1. Ships data

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|---|---|
| Ships name | CEG Galaxy |
| Type | general cargo ship, gearless, single deck |
| Built | 1986 Kroeger-Werft, Yard-No. 1520 |
| Class | BV I +Hull +MACH general cargo ship, unrestricted navigation limited to 100nm for winter zone, 200nm for summer zone and 300nm for tropical zone +AUT-UMS |
| IMO-No. | 8516263 |
| Flag | Latvia |
| Port of registry | Riga |
| Call sign | YLPF |
| L.o.a. | 63,0 |
| L.p.p | 58,50m |
| Breadth | 11,30m |
| draught | 3,69m |
| Owners | MS „CEG Galaxy“ GmbH & Co. KG |
| ISM-Managers | Fehn Ship Management GmbH & Co. KG |
| TDW | Abt. 1318t |
| Main engine | Deutz MWM TBD 440-6, 558kW |
| Auxiliary engine | 1x74kW + 1x 34kW |
| Cargo | Ballast |

## 2. Narrative

On 31.07.2023 the vessel sailed from port of Ardcastle after having discharged a full cargo of logs. She sailed in ballast with destination Corpach in Scotland.

All pre-departure checks, voyage planning etc. have been caried out and vessel found fit to commence its passage to destination port.

On the morning of 01.08.2023 at 0450 local time the Chiefmate as sole navigator on the bridge fell asleep and the vessel ran aground at the southcoast of Isle of Jura in approx. position 55°47.6´N 006°01.1´W.
The grounding occurred at a speed of abt. 7,3knots without hard impact due to soft sand bottom in this area.

After assessing the situation, guided by companies emergency procedure EMP-OV-05, the vessel freed itself at around 0605 local time same day.

No injuries or pollution was reported at any time.

## 3. Detailed event description

The vessel arrived to port Ardcastle on Sunday, 31.07.2023 0630 local time. Discharging her cargo commenced on 31.07. at 0600 local time and was completed at 1600 the same day.

The vessel sailed from Ardcastle at 1625 local time and expected time of arrival to Corpach was 01.08. around 1300 local time.

At midnight the Captain passed on his watch to Chiefmate who should do the watch from 00:00 until 06:00. Handover was done quickly as vessel is regularly trading these waters and officers are familiar in general. No specific night order was given for the coming watch of the Chiefmate. It was also found that no additional lookout during hours of darkness was appointed to accompany the Chiefmate as required.

According voyage plan a turn to portside had to be done in approx. position 55°46.4´N 006°01.2´W to enter the Sound between the Isle of Jura and the Isle of Islay. According available data this turn was not done, instead the vessel continued to run on heading of approx. 354° for some 1,6nm after the indicated turning-point. It is obvious that the Chiefmate on watch fell asleep in between the last two waypoints prior the grounding. According interviews with Chiefmate and Captain, the Bridge Navigational Watch Alarm System (BNWAS) was in use, but seemed to have not worked/been set correctly.

At around 0450 local time on 01.08.2023 the vessel ran aground at the Southcoast of Jura in Scotland where she came to rest on sandy ground.

At around 0605 local time the vessel freed itself by working her main engine half astern. Damage assessments were carried out throughout the time vessel remained aground and also during and after she freed herself. No damage or pollution was found.

The vessel then resumed her voyage towards port of destination Corpach where class, and MCA boarded her for an inspection and to confirm her class. No damages were identified at all.

# 4. Investigation

After vessels managers have been informed an investigation had to be launched.
After first countermeasures to safeguard and free the vessel were taken, company attended on board on 24.08.2023 for interviews and info-collection.

## 4.1 Manning + Rest hours

During time of the incident the vessel was manned with total 5 crew, consisting of two deck officers, one engine officer and two deck ratings. Officers and ratings forming part of a navigational watch held all necessary certificates of competency and others (medical etc.) as per STCW. The vessel was manned according her minimum safe manning certificate. Both deck ratings on board had a watch license.

Voyage plan found made up according STCW-requirements, also indicating waypoints to alter course before approaches to the Sound between Islay and Jura.

During time of incident at 0450 local time only the Chiefmate was present on the bridge. Although twilight started already it was foggy and restricted visibility was encountered.

The Captain states that an add. Lookout was not nominated for hours of darkness this time as both ratings were engaged in cargo operations and galley work at the day prior to the incident.

The Captain was on his 2nd contract on CEG Galaxy and the Chiefmate joined the vessel on 01.06.2023 for his very first contract for Fehn/CEG.

Rest Hour records and shipboard working arrangement were checked, and no abnormality was noted. All crew had sufficient rest in the days prior to the incident. Shipboard working arrangement did not show that any crew had to work more than what is legally allowed.

Shipboard working arrangement on board was made up basis 6/6 watchkeeping. As it is commonly known a 6/6 watch will hardly guarantee compliance with rest hours, however there is simply not more capacity for more crew on board this ship.

Night order book with specific night orders for each voyage have been found not maintained over longer period. Permanent standing night orders were posted in the wheelhouse and including e.g. intervals and methods of position fixing.

A pilot was not on board.

## 4.2 Technical factors

The vessel sailed on autopilot during time of incident. According to the master the BNWAS was switched on, but did not work.

The vessels BNWAS does not automatically activate when engaging the autopilot, but has to be switched on manually.

The vessel is not equipped with an electronic chart display (ECDIS).

All navigational aids were properly functioning including radars and BNWAS. However it was found that BNWAS does not automatically activates when autopilot is engaged. This is not as required by IMO Circular MSC.128(75).
The IMO requires BNWAS to be able to be activated by three means:
- Automatic (Automatically brought into operation whenever the ships heading or track control system is activated and inhibited when this system is not activated)
- Manual ON (In operation constantly)
- Manual OFF (Does not operate under any circumstances)

At the time of the incident only two functions were given and verified by companies superintendent during physical attendance end of August: Manual ON and manual OFF.
The most important feature of the IMO performance standards is, that the BNWAS must automatically activate whenever autopilot is in use.

Finally it could not be concluded if the BNWAS was really switched on as intended. This could have been a major contributing factor.

## 4.3 Weather + external factors

The weather at the time of incident was calm. There were literally no waves and no swell and wind speeds nearing Zero knots.

Nautical twilight on 01.08.2023 started at 0320 local time, civil twilight at 0432 local time and sunrise was around 0520 local time.

According master there was no traffic or any other disturbing external factor.

It was foggy with poor visibility of around 0,5nm only.

## 5. Conclusion

It appears that the incident was the result of human error and technical discrepancies.

Although clearly required by law an additional lookout during restricted visibility was not present on the bridge. Twilight started already, but as per masters info visibility was restricted by fog to 0,5nm only. Also during midnight watch-change no lookout was appointed.
As per masters standing night orders position fixing near coasts shall be done at intervals of 15minutes. No indication or evidence was found that this was done (no observed position entries in charts).

The BNWAS was said to be switched on during time of incident, but did not give an alarm at pre-set interval. This could finally not be verified and system found working as required by class (when manually activated) on 02.08. and by Superintendent on 24.08.2023. It is therefore assumed that the BNWAS was not activated.

## 6. Recommendations

An add. Lookout due to restricted visibility might not have detected the nearing land earlier, but likely would have avoided that the Chiefmate in charge fell asleep for a period of time allowing the vessel to sail off course and subsequently ground.

Fatigue or insufficient rest was not identified as a main contributing factor here Instead poor resource management where no additional lookout was appointed is clearly a factor that had an influence. Two watchmen are much more unlikely to fall asleep at the same time, but usually keep each other alert.

Another recommendation towards owners/managers is to install a BNWAS or autopilot or both which fully complies with the performance standards as set out by IMO. By doing so, it will be ensured that the BNWAS is always switched on whenever the autopilot is activated. The crew will then not have a choice to deactivate it by themselves like now and at least every 12 minutes the watchkeeper will be alerted.

Installation of an ECDIS may also contribute to an increase in safety, but is the least beneficial compared to above recommendations. That is simply because of the ECDIS being able to be adjusted by crew, so in general all alarms can be muted and so on. ECDIS would require an additional training and even then the use of ECDIS can also lead to an increase in stress levels, reference is also

made to the joint study on the use of ECDIS as published by DMAIB and MAIB in 2021 accordingly.