



Fleet Incident Report and Lesson Learned

FIR # 4

Distribution Date: 2 July 2015

Action Item Due: YES

Incident Report: GX Prolonged Black Ship

What Went Wrong

On April 23, 2015, The GeoExplorer was transiting from Freeport, Texas to Kingston, Jamaica when the vessel experienced a complete loss of power. The loss of electric power resulted in loss of Internet and email access to the ship. Troubleshooting by the Chief Engineer and attempts to restart the generators were not successful. The ship was adrift and completely without power for three days.

What was done to correct it at the time

Emergency power was shut down to conserve batteries for communications and arrangements were made to send the Port Engineer to Cancun to find and board the ship to troubleshoot and repair on site if possible. A tug service was contacted and preparations were made for a tug if The Port Engineer was unsuccessful.

Complicating Factors

Management had requested a waiver of Minimum Safe Manning levels from the Flag State of Vanuatu, which was granted. Therefore, the vessel was inadequately manned to deal with an emergency situation. The crew was unfamiliar with the governor battery system that ultimately caused the blackout and unaware of equipment on board that could have been used to supply alternate power.

The Root Cause

- 1: The governor battery system was not identified as critical equipment
- 2: Insufficient manning to deal with emergency

Lessons Learned

There were quite a few lessons learned from this event and most require action at the management level. Since the incident investigation, a policy has been put in place that any request for a waiver of the minimum safe manning from the flag state requires completion of a Management of Change risk analysis.

Other Corrective Actions that we will be taking include a full reassessment of what constitutes critical equipment on our vessels and adding appropriate maintenance in NS5, ensuring each generator has an independent power source, developing ship specific procedures for issues such as emergency communications, energy conservation, emergency restart checklists, alternate restarting options and a viable form of two way communications should be developed for each vessel and included in **SMM Chapter 8 Emergency Preparedness**. Vessel specific Master's and Engineer's Handovers will be developed to include each vessel's unique aspects and include lessons learned from past incidents. TDI personnel both onshore and offshore need a better understanding of the towing/ salvage laws and potential consequences of asking for help in an emergency.

We were incredibly fortunate in that this happened relatively close to shore and in a location where we could get the Port Engineer to the ship with relative ease and acquire the necessary batteries to restore power. Had the vessel been further offshore or in less hospitable waters, the incident could have ended very differently.

We commend the vessel’s crew for their professionalism in an extremely difficult situation. Having no lights, no air conditioning, no hot food or working toilets, an understaffed and overworked crew and extremely limited communications for three days had to be incredibly frustrating and not a little unnerving. We will make every effort to prevent similar incidents in the future.

Actions you need to take to prevent a similar incident on your vessel:

Conduct a meeting with your crew to review this Fleet Incident Report. In your discussion, come up with an emergency response plan for a black ship on your vessel.

Identify your emergency comms equipment and what power source it relies on. Do you have a backup source of power? KVH phones? Sat phone? Come up with a plan on how to provide backup power to communications if the power fails.

Is there anything unique to your vessel that could cause a power outage if it failed? What are some other options for restarting the generators?

Actions you need to take

Department	Responsible Person	Action to Take	To be completed by date
All	Captain	<p>Conduct a safety meeting and review this Fleet Incident Report with the all persons on board.</p> <p>Have them come up with a plan for powering emergency communications during a black ship.</p>	<p>17 July 2015</p> <p>Send scan of the sign in sheet for this meeting and include your emergency comms plan in the meeting notes to HSE@tdi-bi.com.</p>

Prepared by: Shannon Smith, Assistant HSE Manager

Approvals



Pete Tatro, DPA



Dr. James Howell, HSE Manager