

From: [REDACTED] [LT USCG MARINE SAFETY CENTER \(USA\)](#)
To: [Young Brian](#); [REDACTED] [.CDR USCG \(USA\)](#); [REDACTED] [.LT USCG \(USA\)](#)
Subject: RE: EMMY ROSE Stability Analysis Summary
Date: Thursday, April 14, 2022 11:30:47 AM
Attachments: [SUBC_INTACT_FLOOD.pdf](#)
[SUBC_INTACT_WITH_FLOODING.pdf](#)

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Good morning Brian,

Attached are the analysis results for the time of incident load condition with the laz hatch and fish hold hatch designated as downflooding points, see "SUBC_INTACT_FLOOD". The sizing and locations of the hatches were based on estimates from investigators and photo evidence since the drawings did not contain any exact dimensions. The laz hatch was estimated to be 2' by 2' with a 6" coaming height and the fish hold hatch was estimated to be 4' by 3' with a 36" coaming height.

A quick look at the results shows the vessel still fails the 28.570 Intact criteria as expected. The critical points are designated as flood points and the stability program recognizes the lowest point throughout the righting arm creation process. The aft end of the laz hatch is the dominate flood point with downflooding occurring at 55 degrees. However, the angle of vanishing stability occurs much sooner at 42 degrees thus stability seems to be the limiting factor rather than downflooding.

To build on previous flooding analyses, if those hatches were open with water on deck flooding down into those spaces, stability would degrade. I attached PDF "SUBC_INTACT_WITH_FLOODING" to demonstrate how stability is degraded due to 25% & 40% laz flooding and 20% & 35% fish hold flooding.

Please let me know if you have any questions or would like me to look at anything else.

[REDACTED]

Very Respectfully,
LT [REDACTED], P.E.
Small Vessel Branch (H1)
USCG Marine Safety Center

[REDACTED]
[REDACTED]

[REDACTED] Young Brian [REDACTED]

Sent: Tuesday, April 12, 2022 10:16 AM

To: [REDACTED] LT USCG MARINE SAFETY CENTER (USA) [REDACTED]
[REDACTED] CDR USCG (USA) [REDACTED] >; [REDACTED] LT USCG (USA)
[REDACTED]

Subject: [URL Verdict: Neutral][Non-DoD Source] RE: EMMY ROSE Stability Analysis Summary

Good morning [REDACTED],

Thank you again for all your help with the stability analysis and further questions. As you I may have told you, our deputy director, Eric Stolzenberg is a naval architect, and has been asking deeper questions as he reviews the stability emails.

He has requested, if possible, (hope it's not too late in the game) can the downflooding scenarios be run with a) the lazarette hatch removed – allowing that space to be downflooded, and b) can the same downflooding scenario be run for the fish hold with the cover removed? We are aware that the fish hold and laz hatch covers were not able to be latched/dogged down, so we would like to discuss the downflooding scenarios in our report for these 2 spaces.

Thank you very much, again, sorry for such late requests.

Thanks,
Brian

Brian Young
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From: Young Brian

Sent: Thursday, April 7, 2022 4:36 PM

To: [REDACTED] LT USCG MARINE SAFETY CENTER (USA) [REDACTED],
[REDACTED] CDR USCG (USA) [REDACTED] LT USCG (USA)
[REDACTED]

Subject: RE: EMMY ROSE Stability Analysis Summary

Good afternoon [REDACTED]

Thank you very much for your hard work on this analysis. I will review with my (naval arc) boss tomorrow. We really appreciate all of your assistance.

Thanks again,
Brian