

CRITICAL EQUIPMENT SAILING LIMITATIONS MATRIX

| Scenario | Sailing Decision | Reference | Control Measures (risk mitigation) | Notes |
|--|------------------------|---|---|--|
| Sailing Decision Legend: RED Indicates 'do not commence a sailing, Inform as approp', AMBER Indicates 'consult prior to commencing a sailing, Inform as approp', and GREEN Indicates 'commence a sailing, Inform as approp' | | | | |
| Weather - refer to Heavy Weather Matrix article | See Wx Matrix | Lead Operator to use Heavy Weather Matrix | Heavy Weather Matrix, Crew weather Meeting | Contact Marine Superintendent and OSC, Lead Operator retains the final authority in determining vessel is safe to sail. |
| Crewing - refer to Chapter 6 VSM... | see Safe Manning Cert. | | Call Crewing: (250) <input type="text"/> Crewing Closes at 8:30pm Sections 15 and 19 | Consider OFA & Safe Manning requirements (Lead Operator, Operator and 2 x Deckhands) Make every effort to call crew from the callout list after 8:30pm |
| Propulsion: | | | | |
| Bull Wheel | | | Regular Maintenance and inspection | Inform OSC and Lloyds, TM onsite for repairs; do not sail |
| Hydraulic System 1 | | | System 2 Operational, Brake release system onboard | Contact TM, Inform OSC as soon as practicable(Do not delay departure), inform Lloyds |
| Hydraulic System 2 | | | System 1 Operational, Brake release system onboard | Contact TM, Inform OSC as soon as practicable(Do not delay departure), inform Lloyds |
| Main Engine 1 | | | Main Engine 2 Operational with Brake release system onboard | Contact TM, Inform OSC as soon as practicable(Do not delay departure), inform Lloyds |
| Main Engine 2 | | | Main Engine 1 Operational with Brake release system onboard | Contact TM, Inform OSC as soon as practicable(Do not delay departure), inform Lloyds |
| PTO Generator 1 | | | UPS & Generator #2, Consider portable generator on deck | Contact TM, Inform OSC as soon as practicable(Do not delay departure), inform Lloyds |
| PTO Generator 2 | | | UPS & Generator #1, Consider portable generator on deck | Contact TM, Inform OSC as soon as practicable(Do not delay departure), inform Lloyds |
| Cables | | | | |
| Drive Cable | | | Consider use of a tug alongside to continue service | OSC Conferencing; Permission from Marine Superintendent & Permission from Lloyds required to sail |
| Guide Cable 1 | | | Standby Tug crewed in Baynes Sound, Anchor Standby | Contact TM, Inform OSC as soon as practicable(Do not delay departure), inform Lloyds |
| Guide Cable 2 | | | Standby Tug crewed in Baynes Sound, Anchor Standby | Contact TM, Inform OSC as soon as practicable(Do not delay departure), inform Lloyds |
| Both Guide Cables | | | Standby Tug crewed in Baynes Sound, Anchor Standby | OSC Conferencing; Permission from Marine Superintendent & Permission from Lloyds required to sail |
| Hull Integrity: | | | | |
| Hull breach (below the car deck) | | | Emergency Response. Temporary repairs should be made to the satisfaction of Lloyds | Inform OSC and Lloyds, TM onsite for repairs; do not sail |
| Superstructure Integrity: | | | | |
| Passenge Lounge doors | | | Post a sentry for security or fire watch; Call in additional crew if required, continue sailing until crew arrives | Contact TM, Inform OSC as soon as practicable(Do not delay departure), inform Lloyds if door can't be rectified in 24hrs |
| Machinery Rooms doors | | | Post a sentry for security or fire watch; Call in additional crew if required, continue sailing until crew arrives | Contact TM, Inform OSC as soon as practicable(Do not delay departure), inform Lloyds if door can't be rectified in 24hrs |
| Electronic Navigational Equipment | | | | |
| Magnetic Compass | | Navigation Safety Regulations Part II, Sect. 24(1). | unable to divert from intended track | Contact Dan Scott, Inform OSC as soon as practicable(Do not delay departure), inform Lloyds |
| Satellite Compass | | Navigation Safety Regulations Part II, Sect. 24(1). | unable to divert from intended track | Contact Dan Scott, Inform OSC as soon as practicable(Do not delay departure), inform Lloyds |
| Vessel has 0 operational radars | | Navigation Safety Regulations Part II, Sect. 28(2). | Visibility (You must be able to see across Baynes Sound, Do not sail in hours of darkness); During the summer months, herring fishing season or times when there are more than 5 vessels in Baynes Sound do not sail without radar. | OSC Conferencing; Permission from Marine Superintendent & Permission from Lloyds required to sail. Dan Scott for repairs |

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| Weather - refer to Heavy Weather Matrix article | See Wx Matrix | Lead Operator to use Heavy Weather Matrix | Heavy Weather Matrix, Crew weather Meeting | Contact Marine Superintendent and OSC, Lead Operator retains the final authority in determining vessel is safe to sail. |
| Vessel has 1 operational radar | | Navigation Safety Regulations Part II, Sect. 28(2). | Visibility (Consult if you can not see across Baynes Sound, Consult to sail in hours of darkness); During the summer months, herring fishing season or times when there are more than 5 vessels in Baynes Sound consult the marine superintendent. | Contact Dan Scott, inform OSC as soon as practicable(Do not delay departure), inform Lloyds |
| GPS | | Navigation Safety Regulations Part IV, Sect. 63 (1). | Vessel has 2 GPS receivers, unable to divert from intended track, able to determine range by radar in restricted visibility | Contact Dan Scott, inform OSC as soon as practicable(Do not delay departure), inform Lloyds |
| AIS | | Navigation Safety Regulations Part IV, Sect. 65 (3). | Normal vessel traffic in Baynes Sound do not have equipment to receive or transmit AIS information. | Contact Dan Scott, inform OSC as soon as practicable(Do not delay departure), inform Lloyds |
| Internal communications | | Navigation Safety Regulations Part IV, Sect. 75 (1). | Replace use in the following order 1. Hand held radios 2. Loudhailers 3. Hand signals | Contact Dan Scott, inform OSC as soon as practicable(Do not delay departure), inform Lloyds |
| PA | | Navigation Safety Regulations Part IV, Sect. 75 (1). | Replace use in the following order 1. Loudhailers 2. Hand signals 3. Hand held radios | Contact Dan Scott, inform OSC as soon as practicable(Do not delay departure), inform Lloyds |
| Searchlights | | | 2 Searchlights, if all searchlights not functioning, consider additional lookout. Docking lights and deck lights intact | Contact Dan Scott, inform OSC as soon as practicable(Do not delay departure), inform Lloyds |
| VDR | | Voyage Data Recorder Regulations (SOR/2011-203) | "If the voyage data recorder ceases to be in good working order, the vessel's master must restore it to good working order as soon as feasible." | Contact Dan Scott, inform OSC as soon as practicable(Do not delay departure), inform Lloyds |
| VHF & DSC | | | Portable GMDSS radios & Portable VHF | Contact Dan Scott, inform OSC as soon as practicable(Do not delay departure), inform Lloyds |
| Sound powered phone to WH or MCR not operational | | Navigation Safety Regulations Part IV, Sect. 75 (4). | In order replace use with the following; Portable Radios, talk back system, line of sight hand signals | Contact Dan Scott, inform OSC as soon as practicable(Do not delay departure), inform Lloyds |
| General Alarm system | | | Use the following to replace in order Ships Whistle, PA System, hand-held radio, talkback system, runner | OSC Conferencing; Permission from Marine Superintendent & Permission from Lloyds required to sail. Dan Scott for repairs |
| Whistle | | | ensure mechanical back-up whistle available | Contact Dan Scott, inform OSC as soon as practicable(Do not delay departure), inform Lloyds |
| Alarm panel | | | An additional crewmember is required for continuous rounds and fire watch to sail. | OSC Conferencing; Permission from Marine Superintendent & Permission from Lloyds required to sail. Dan Scott for repairs |
| Transit lights | | Cable ferry regulations | VL traffic lights can all be turned red when VL is underway, radio broadcasts and sound signals, inform MCTS. | These lights are treated as any aid to navigation light; In the event of a light out we have time to repair. We must ensure MCTS and OSC is informed and we are taking every action to repair. (Do not delay departure) |
| Navigation lights | | Collision regulations | Do not sail at night if you do not have navigation lights. Our Navigation lights are 100,000hr LED's with redundancy. If you have nav light alarms contact Dan Scott immediately | Contact Dan Scott, inform OSC as soon as practicable(Do not delay departure), inform Lloyds |
| Fixed fire fighting equipment, LSA | | | | |
| 1 of 4 Fire Monitors | | | Do not park vehicles in the vessels quadrant under the faulty monitors. Increased maintenance and daily testing | Contact TM, inform OSC as soon as practicable(Do not delay departure), inform Lloyds |
| 2 of 4 Fire Monitors | | | Do not park vehicles in the vessels quadrant under the faulty monitors. Increased maintenance and daily testing | Contact TM, inform OSC as soon as practicable(Do not delay departure), inform Lloyds |
| 3 of 4 Fire Monitors | | | Increased maintenance and daily testing | Inform OSC and Lloyds, TM onsite for repairs |
| 4 of 4 Fire Monitors | | | Increased maintenance and daily testing | Inform OSC and Lloyds, TM onsite for repairs |
| Fire suppression equipment (HIFOG system) | | | provided all portable extinguishers are available, that all fire monitors are operable, and that all A60 doors and bulkheads are intact, then we can continue operations. | OSC Conferencing; Permission from Marine Superintendent & Permission from Lloyds required to sail |
| Fire suppression equipment (FMU200 system) | | | provided all portable extinguishers are available, that all fire monitors are operable, and that all A60 doors and bulkheads are intact, then we can continue operations. | OSC Conferencing; Permission from Marine Superintendent & Permission from Lloyds required to sail |

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| Weather - refer to Heavy Weather Matrix article | See Wx Matrix | Lead Operator to use Heavy Weather Matrix | Heavy Weather Matrix, Crew weather Meeting | Contact Marine Superintendent and OSC, Lead Operator retains the final authority in determining vessel is safe to sail. |
| LSA (MEC/MES) | | | Reduce passenger capacity to 100 and keep embarkation area of operable MEC station clear of vehicles. 100% of Vessel capacity is available in each MEC station | OSC Conferencing; Permission from Marine Superintendent & Permission from Lloyds required to sail |
| Anchor | | | Anchor is on a quick release system that is tested annually. | Contact TM, Inform OSC as soon as practicable(Do not delay departure), inform Lloyds |
| 1 Fire Pump | | | Operational fire pump tested successfully before every departure | Contact TM, Inform OSC as soon as practicable(Do not delay departure) |
| 2 Fire Pumps | | | Discussion of fire team with portable fire pumps to be arranged | OSC Conferencing; Permission from Marine Superintendent & Permission from Lloyds required to sail |
| Potable water | | | Isolate as appropriate, close washrooms; consider portable toilet on car deck | Inform OSC & Ticket Booth; inform passengers as they board in DW |

NOTES:

OSC: 1 — Sections 15 and 19

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|---|---|
| 1 | OSC: please contact OSC they will contact Marine Superintendent, Terminal Maintenance, Dan Scott, Tug assist for you. Do not attempt to contact people directly in an emergency situation; OSC is your switchboard and only point of contact. |
| 2 | Lloyds contact number: (604) <input type="text"/> they may not be available due to office hours; ask OSC to ensure they receive your information if you are having trouble getting through Sections 15, 19 and 21 |
| 3 | Terminal Maintenance: In order to contact terminal maintenance to assist you please call OSC they will get a terminal maintenance representative for you. Dan Isenor: (250) <input type="text"/> |
| 4 | Dan Scott: (250) <input type="text"/> emergency mobile number; for non-emergency contact by email Sections 15, 19 and 22 |
| 5 | Lead Operators requiring a tug should contact the OSC, who maintain a contact list of local tug assist service providers for each terminal and region. The nearest tug service for Route 21 is based in Campbell River. Gowland Towing Emergency 250- <input type="text"/> Danny; see tug contact sheet for more contacts Sections 15, 19 and 21 |
| 6 | Lead Operator retains the final authority in determining vessel is safe to sail |
| 7 | The "Scenario" column represents a scenario where equipment fails to operate and is no longer servicable in any way |
| 8 | Maintenance which requires taking an Engine, hydraulic system or generator offline during service is prohibited |
| 9 | Hydraulic System means: Main engine pumps, bullwheel motors, valves, storage tanks and associated piping systems |

Navigation Safety Regulations #86 - Operational Limitations.