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To: [National Command Center](#)
Cc: [REDACTED] [USCG SEC. COL. RIVER \(USA\)](#); [REDACTED] [USCG \(USA\)](#); [REDACTED] [CDR USCG D13 \(USA\)](#); [REDACTED] [CDR USCG MSU PORTLAND \(USA\)](#); [REDACTED] [USCG D13 \(USA\)](#); [REDACTED] [CDR USCG D13 \(USA\)](#); [REDACTED] [USCG D13 \(USA\)](#); [REDACTED] [USCG MSU PORTLAND \(USA\)](#); [REDACTED] [USCG \(USA\)](#); [REDACTED] [USCG MSU PORTLAND \(USA\)](#)
Subject: Major Marine Casualty: M/V MAUNALEI - Follow-up Brief
Attachments: [image001.png](#)
[MV MAUNALEI TIME 04AUG2022-29AUG2022.msg](#)
[MAUNALEI PPT.pptx](#)

Good evening National Command Center,

BLUF: On 29 August 2022, the M/V MAUNALEI (IMO# 9273686 / O.N. 1181627), a 645.6 ft. US flagged container ship, reported an initial damage estimate of \$854,000 to their controllable pitch propeller (CPP) system, qualifying the casualty as a **Major Marine Casualty** (property damage initially estimated at \$500,00 or more) IAW MSM Volume V and a **Serious Marine Incident** (property damage in excess of \$200,000) IAW 46 CFR §4.03-2. The vessel suffered a Loss of Propulsion (LOP) on 11 August as a result of a lube oil leak from their CPP system approximately 245 NM off shore of the Columbia River entrance. Once vessel was dry-docked, fractures were identified in the No. 4 and No. 1 CPP blades. The cause of the fractures is unknown, but currently suspect either over or under-torqueing of blade bolts during a dry-docking six months prior to this occurrence. No human error during the voyage where the LOP occurred is suspected or reported. As such, this Major Marine Casualty was reported to the National Command Center IAW COMDTINST 3100.8A, Critical Incident Reporting.

Attachments:

- 1) M/V MAUNALEI Timeline – Inspections Division timeline of events from start of occurrence to current date, detailing attendance and findings. (provided by CWO4 J. Smith & ENS J. Guenther)
- 2) M/V MAUNALEI PowerPoint which includes detailed photographs of the fractures / damage to CPP system. (created by CWO4 J. Smith)

MISLE Activities:

Inspections Activity: 7539105

Incident Investigation Activity: 7531901

Brief Timeline:

04 – 05 August: Vessel discovered leak in CPP lube oil. They noted the CPP system was losing about one liter per hour at full speed and when they brought the throttle back to three quarters ahead the flow lessened to .45 liters an hour. Vessel reported leak in CPP to SECTOR Anchorage & SECTOR Puget Sound.

07 - 09 August: Vessel offloaded cargo in Anchorage, was unable to assess damage/cause, and made preparations to dry-dock at Vigor Shipyard in Portland, OR.

10 August: SECTOR Columbia River & MSU Portland were notified and vessel requested permission to transit through AOR to dry-dock. COTP Order #2022-080 was issued due to leaking CPP lube oil.

11 August: Vessel reported that the leak had worsened and they had to shut their engines down as a casualty control measure approximately 245 NM WNW of the Columbia River entrance, leaving the vessel DIW. Amendment 01 was made to COTP Order #2022-080 to include requirement of towing vessels for dead ship tow through the river system. Vessel's LOP was deemed a reportable marine casualty and required an informal investigation. An estimate of damage was unable to be provided with CG-2692, as the cause and extent of damage was unknown.

13 – 15 August: Vessel under tow through Columbia River and safely moored at Vigor Shipyard.

17 August: Vessel up on blocks at Vigor Shipyard. No. 4 CPP blade fracture was identified at the base/foot. Water from the CPP head tank was visibly draining from the No. 4 blade in the vicinity of blade bolt holes No. 6 and No. 7. (Please see pictures in attached PowerPoint) All remaining blades were subjected to dye-penetrant testing in the base/foot (Zone "A") area of the blades. A smaller fracture, approximately 4" long, was subsequently identified near the No. 7 blade hole on the No. 2 CPP blade. Both the No. 4 and the No. 2 CPP blades were removed from the CPP hub.

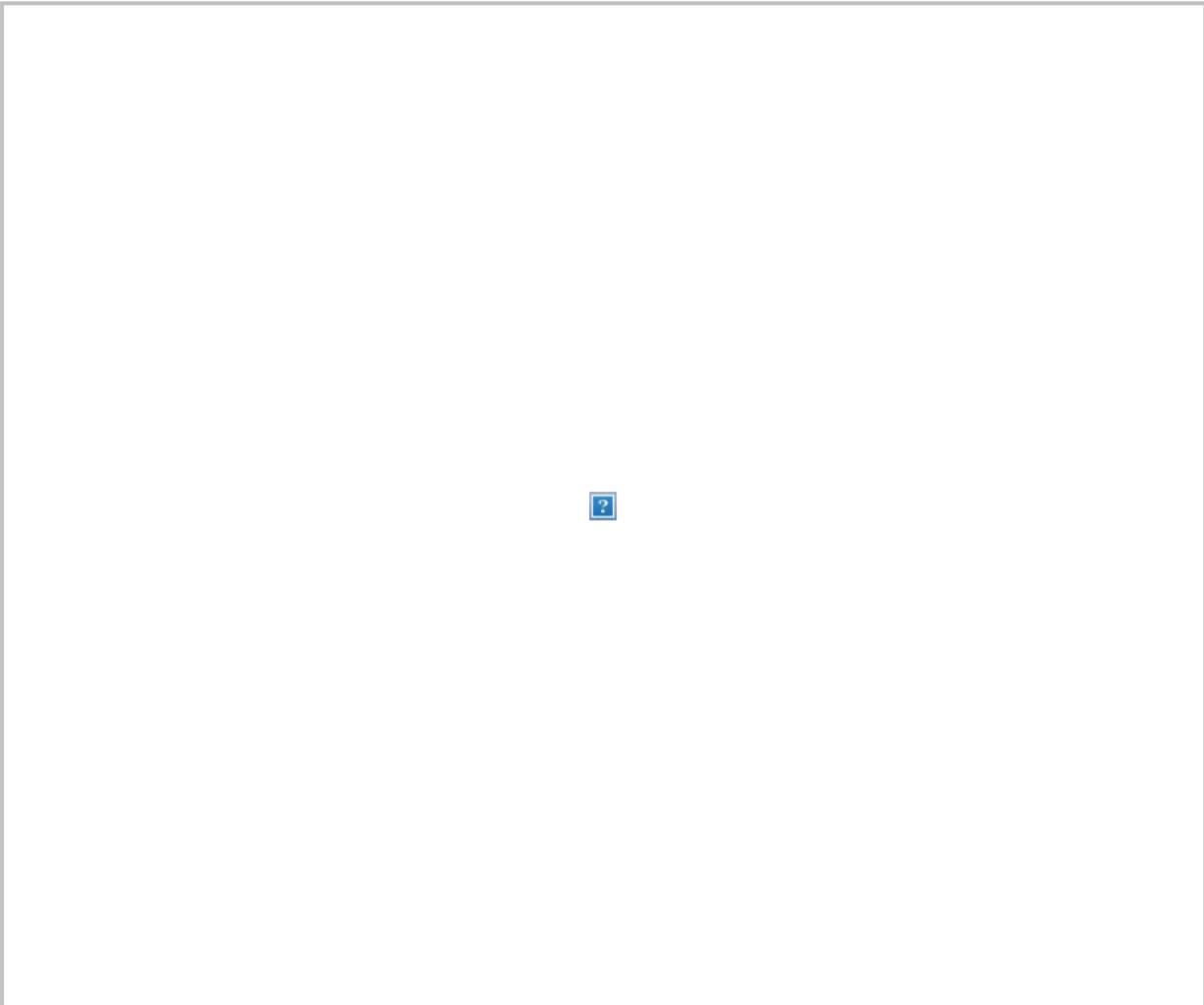
18 – 28 August: Further analysis and evaluation conducted by the vessel, CG Marine Inspectors, Sheffield Marine propeller representatives, and the manufacturer's engineers. (Please see attached inspections timeline for specific details.)

29 August: Vessel completed temporary repairs and was placed under an operational control with limitations to pitch,

engine rpm and speed to reduce pressure on face of blades until manufacturer can produce a re-engineered design and cast blades for the propulsion system. Vessel reported initial estimate of damage of \$854,000, including only the cost of labor and material to restore the property to its condition before the occurrence (not including the cost of salvage, cleaning, gas-freeing, dry-docking, or demurrage, IAW NVIC 01-15).

Estimate:

Below is the detailed damage/cost estimate and breakdown for the vessel. ***Please note, the total estimate \$1,704,580 includes costs that should not be factored into the damage estimate IAW NVIC-01-15. The total of \$854,000 is the estimated cost including only the cost of labor and material to restore the property to its condition before the occurrence.***



Please let me know if you have any additional questions or concerns. Thank you.

Respectfully,

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