

U.S. Department of
Homeland Security

United States
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MEMORANDUM

From: J. J. Scott, LT
CG MSD Lafayette

To: B. E. Welborn, CAPT
CG MSU Houma

Thru: H.R. Mattern, CDR
CG MSU Morgan City

Subj: RECOMMENDED INSPECTION PROCEDURES FOR SINGLE AND DOUBLE-
RACKED LIFTBOATS

Ref: (a) CG-543 Policy Letter 07-02 – Guidance on the Inspection, Repair, and
Maintenance of Liftboats

1. Enclosure (2) of reference (a) contains the minimum recommended inspection and maintenance requirement for liftboats operated on exposed water routes. The recommendations were developed with input from the Offshore Marine Service Association (OMSA) Liftboat Subcommittee.
2. Double-racked liftboat legs and towers have presented a challenge when applying reference (a) during Five (5) Year and Ten (10) Year leg inspections. Specifically, reference (a) lacks clear guidance regarding the disassembly and inspection of the lowermost gearbox of double-racked liftboat legs which have two lower-most gearboxes on either side of each leg tower.
3. I consulted with the Chiefs of Inspection Houma and Morgan City, MSD Lafayette inspectors, shipyard representatives, and vessel stakeholders, to review reference (a) and proffer solutions to bring consistency to its application across the Houma OCMZ Zone. Based on those discussions, I recommend adopting the following procedures, to be used in conjunction with reference (a), for liftboat inspection activities in the Houma OCMZ Zone.
4. Action
 - a. Gearbox Oil
 - (1) Inspectors should require gearbox oil analysis results prior to witnessing inspections of the gearboxes. Upon reviewing the gearbox oil analyses, inspectors should identify any gearboxes noted with "critical" (or abnormal) values (e.g. abnormal levels of iron indicate possible water contamination and rust).
 - (2) Critical (or abnormal) values for oil content indicate that there has been a significant change in the gearbox or oil condition, or both. Those gearboxes should be considered for disassembly and inspection.

(3) Inspectors should pay particular attention to the recommendations and comments provided on the laboratory report which may indicate the cause of contaminations and additional mitigating measures.

b. Gearbox Disassembly and Inspection

(1) Reference (a) requires disassembly and inspection of the lowermost gearbox per leg with additional inspections based on the results. Specifically, the Ten (10) year leg inspection requires disassembly and inspection of both the lowermost and uppermost gearboxes. The Five (5) year leg inspection only requires the lowermost gearbox per leg to be inspected.

(2) For double-racked liftboat legs, one of the lowermost and/or one of the uppermost gearboxes should be selected for disassembly and inspection depending on the Ten (10) or Five (5) year interval. The location of the selected gearbox should then be noted in MISLE. During subsequent gearbox inspections, the lowermost and/or uppermost gearbox opposite the last selected should be inspected.

(a) Most operators use an experienced shipyard or hydraulic shop to inspect and service gearboxes. Inspectors should be present to witness the inspection of the gearboxes.

(b) While witnessing the gearbox inspection, inspectors should note any excessive rust, broken planetary gear teeth, pinion gear teeth, and/or sheered pinions.

(c) When evaluating the necessity to inspect additional gearboxes inspectors should consider the following: Gearbox Oil Analysis, planetary and pinion gear condition, saltwater intrusion, and excessive rust.

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