



USCG

MARINE SAFETY CENTER

BULLETIN

Damaged Stability Requirements for OSVs Regulated under Subchapter L

BULLETIN #04-97

The purpose of this bulletin is to clarify the damaged stability requirements for Offshore Supply Vessels (OSVs) regulated under Subchapter L. Recently, there have been a number of questions from industry on this subject, with two main areas of concern: (1) applied extent of damage, and (2) treatment of damaged engine exhaust piping. Clarification of these areas of concern is as follows:

Applied Extent of Damage Damage is applied as stated in 46 CFR, Table 174.205(b). Transverse damage extends 30 inches inboard from the side of the vessel, applied at the deepest load waterline. Vertical damage extends from the baseline upward without limit, and the longitudinal extents are applied along the sides of the vessel, in increments dependent on the vessel's length. OSVs carrying more than 16 offshore workers are required to apply the damage along the entire sides of the vessel, while OSVs carrying 16 or fewer offshore workers are only required to apply the damage along the sides which lie between the forward and after watertight bulkheads of the main propulsion machinery space(s). See Figures 1 and 2.

Treatment of Damaged Engine Exhausts As with any piping, exhaust piping that passes within the boundaries of applied damage must be assumed to permit progressive flooding to all spaces with which that piping connects. See Title 46 CFR 174.205(e)(4). Essentially, the entire length of exhaust piping is considered damaged and any penetration of a watertight bulkhead must be assumed to allow progressive flooding. See Figures 3 and 4.

The range of stability requirements of 46 CFR 174.205(e)(3) must also be met through 20 degrees of additional heel beyond initial damaged equilibrium heel and trim. Progressive flooding through the damaged piping must also be considered throughout this additional heel. See Figures 4 and 5.

J. G. LANTZ
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Commanding Officer

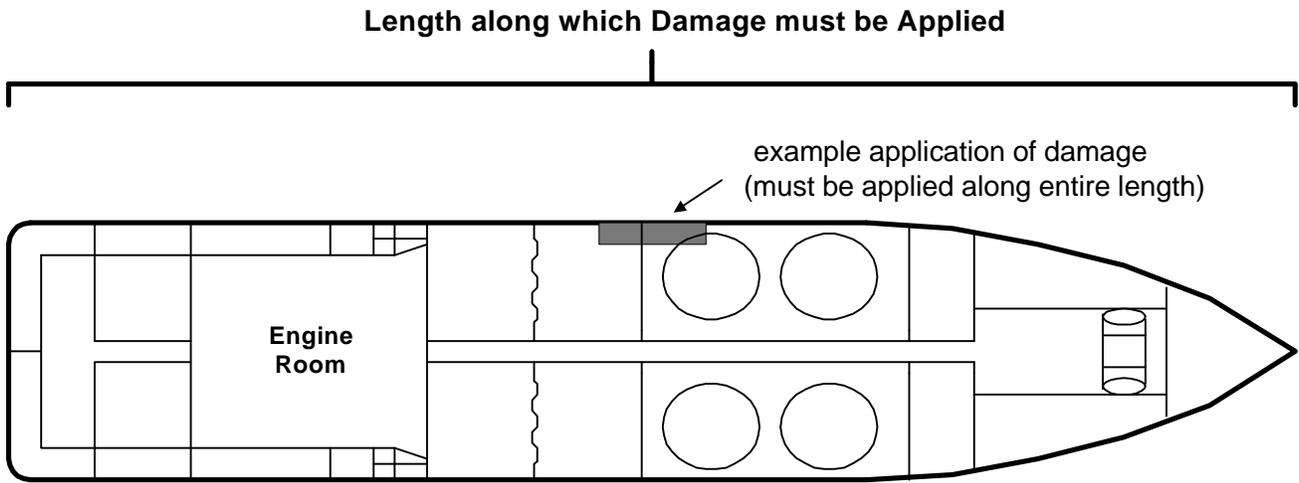


Figure 1: OSV Carrying More than 16 Offshore Workers

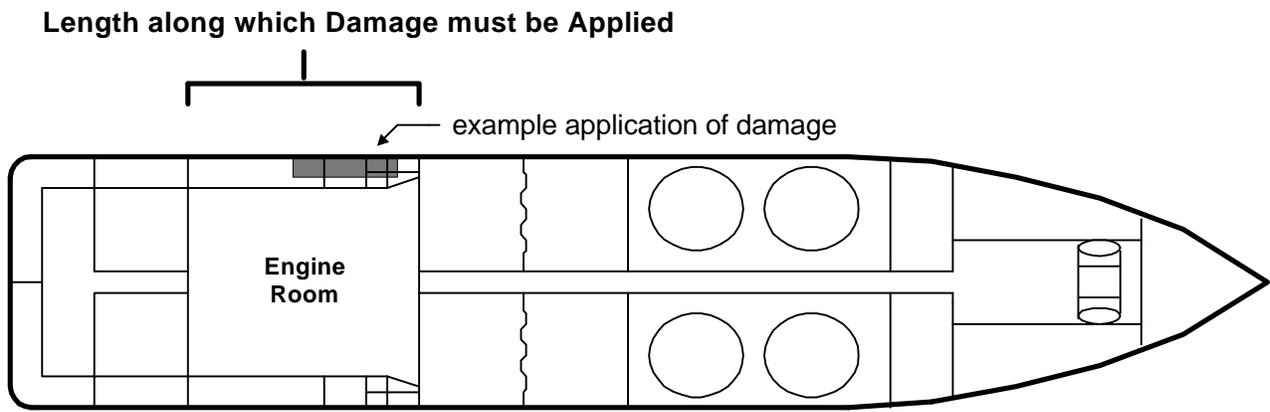


Figure 2: OSV Carrying 16 or Fewer Offshore Workers

Key:

	— extent of damage as defined by Table 174.205(b)
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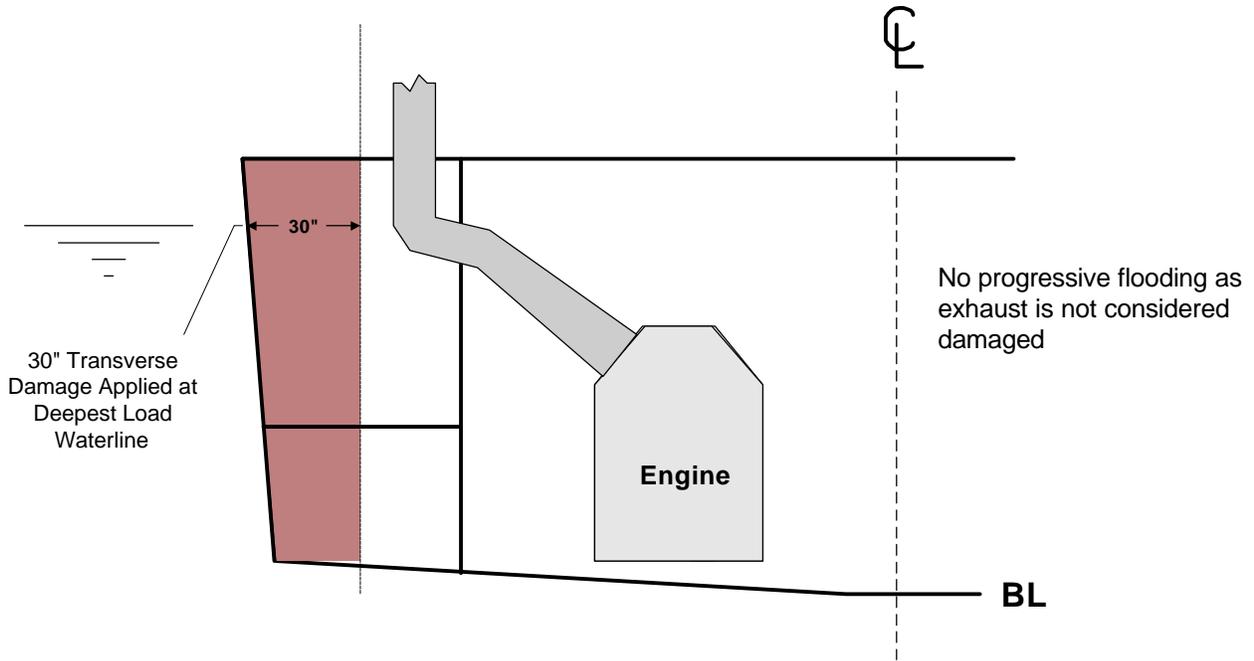


Figure 3: Undamaged Engine Exhaust Piping

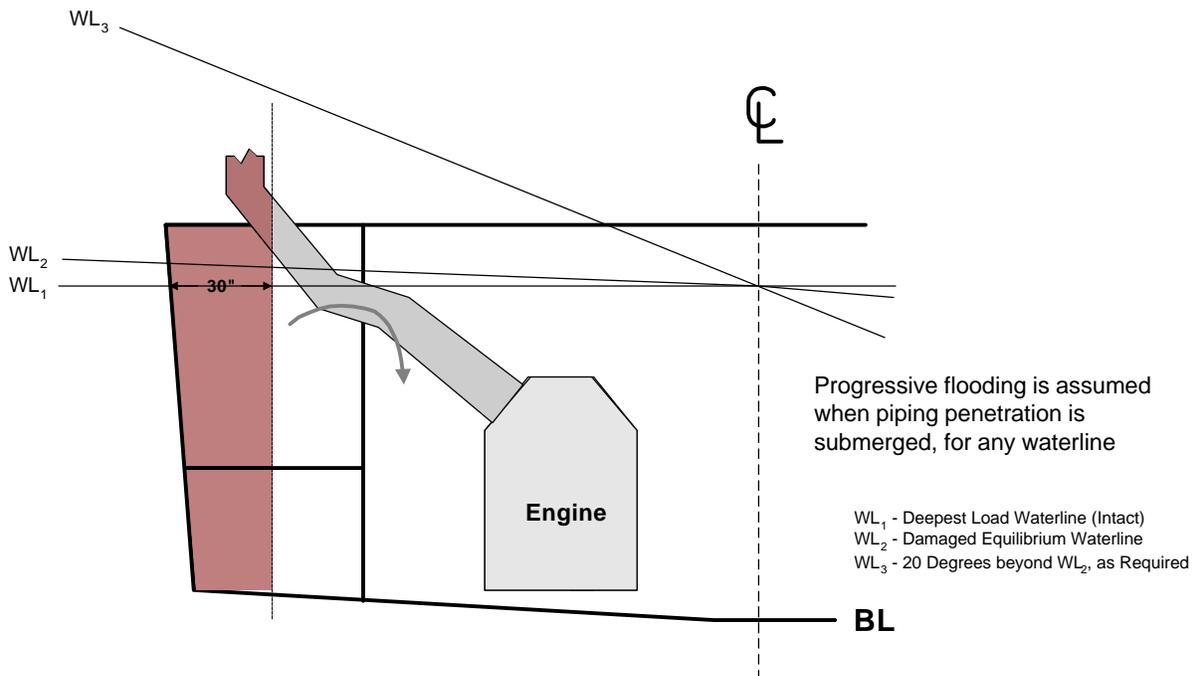


Figure 4: Damaged Engine Exhaust Piping

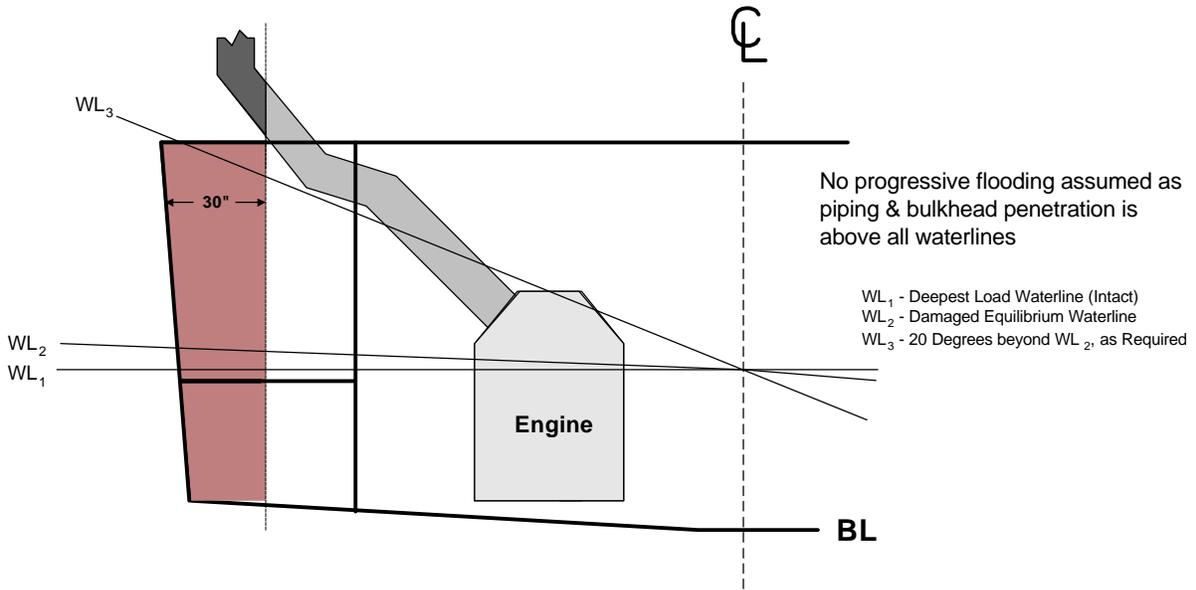


Figure 5: Damaged Engine Exhaust Piping