

HECSALV Salvage Response Features

Oil Outflow



Assessing the amount of oil lost is critical to mobilization decisions. **HECSALV** provides the capability to evaluate oil loss including the effects of density differences and tides.

Grounding

Many different kinds of grounding have been evaluated using **HECSALV**. These include rigid and penetrable shelves, and single and multiple pinnacles. Structural evaluation of the impact of ground reactions is built-in.



Intact Stability



There are many facets to Salvage Engineering. Intact stability calculations available in **HECSALV** include unusual loads and direct evaluation of free surface effects at large heel angles.

Free-Floating Damage

Evaluation of free-floating conditions including equilibrium and partial flooding is available in **HECSALV**.



Tide Cycle Evaluation



Tides play an important role in oil outflow, residual strength, force to free and many other factors. **HECSALV**'s tide cycle analysis lets one establish a time sequence of analyses that span one or more tide cycles.

Lightering Intact and Damaged Tanks



A key part of a salvage operation is often a lightering plan. **HECSALV** permits definition of lightering operations that include transfers within the vessel, to lightering barges, or if necessary into the sea.

Transfers from intact or damaged tanks can be modeled. A time sequence analysis, including tidal effects and lightering, provides the salvage engineer the ability to project the consequences of salvage activities.



Structural Damage



Will she break in two? Is she save to tow? These are common questions in salvage. **HECSALV's** structural damage assessment capabilities help answer these questions



Rapid and Towing Analyses

HECSALV's Rapid Analysis feature allows the salvage engineer to make quick, rational estimates of salvage issues. As more data becomes available it can be incorporated into the model so that the best available information is used.

Towing requirements can be evaluated including tow line tensions, towing speed and safety factors

