



# Tide Cycle Analysis & Underkeel Clearance (UKC) Verification

**Start Date:** Oct 2005

**POC:**

**Projected**

**End Date:** Sep 2007

[POC](#)

## Problem Addressed:

Underkeel clearance and evaluation of tide cycle characteristics are important considerations for analysis for most deep-draft or coastal harbor studies, especially those that address needs for increased depth. Understanding requirements for vessel clearance and scheduling of vessel movements to take advantage of tidal elevation to provide marginal waterway depth helps to explain the limitations for fleet or vessel service imposed by waterway specifications. Requirements for clearance and use of tides have direct impact on the needs for increased depths and related improvements and often represent considerable marginal costs for plan formulation.

## Objective:

Development of a computerized application to allow for consistent and cost-efficient assessment of vessel clearance based on input of data for actual operating conditions respective to timing of vessel movement or transit, tidal elevation, and waterway specifications.

## Benefits:

Computerized application will enable planners to more objectively and efficiently assess valid allowances or requirements for vessel clearance as a critical input for economic analysis and design specifications for planning of coastal waterway system improvements. Applied Products: Computerized and downloadable application for analysis of commonly available data to assess vessel management practices for transit and clearance as an input to economic analysis and plan formulation of waterway systems.

## Status:

In Progress

## Contract Data:

130465, E5074

## Progress:

## Products (Bookshelf/Toolbox):

## Related Links:

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US Army Corps  
of Engineers

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Page 2 of 2