



Prediction of Loads due to Wind and Wave Impacts

Glostén has extensive experience with the prediction of wind and wave loads on fixed or floating structures, and the resulting structural and motion responses. We maintain an extensive suite of computer programs for wave-structure interaction, as well as wave climatology prediction, dynamic analysis, structural analysis, hydrostatics, and stability. While some of these are available commercially or from governments or universities, much of the code we use has been developed in-house, for the specific problems faced by our clients.



Storm conditions on the first of Lake Washington's floating bridges.

Project Description:

Glostén continues to perform a variety of analyses of Washington State's floating bridges, which have included work on the Lacey V. Murrow and Homer Hadley Bridges at the Interstate-90 crossing, the Evergreen Point SR-520 crossing and the original and replacement Hood Canal bridges. Types of analysis performed includes dynamic wave loading, first order wave induced loads, wind loads, unsteady wave drift forces, unsteady wind excitation, current loads, flooding damage, anchor system failure, and model testing.