Offshore Engineering Model Basin Testing

WOLFSON UNIT

FOR MARINE TECHNOLOGY AND INDUSTRIAL AERODYNAMICS

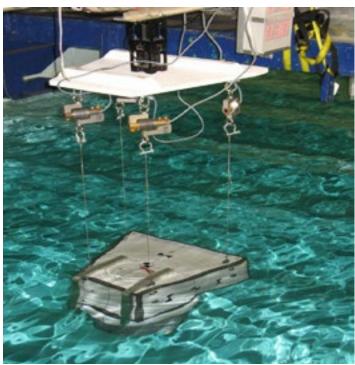
Background

Since its inception in 1967 the Wolfson Unit for Marine Technology and Industrial Aerodynamics has undertaken commercial consultancy and testing in the field of offshore engineering

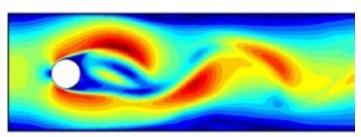
The Wolfson Unit uses model basins in the UK to carry out testing for a wide variety of organisations operating in offshore engineering.

The Wolfson Unit engineers, who are employed full time on consulting work, have built up a wealth of experience in overcoming aerodynamic and hydrodynamic problems for their clients. This experience helps them to adapt test techniques or design special tests to match the specifications and budgets of the client.

All work is carried out in secure conditions and full confidentiality is maintained at all times. No details of, or results from, any test programme are ever published without the express permission of the client.



Study of diffuser head movement during installation - Fugro Seacore



Detached Eddy Simulation (DES) CFD study of vortex inducted vibrations (VIVs)

Areas of Expertise

- Study of Vortex Induced Vibrations (VIV's)
- Feasibility studies of different towing arrangements for underwater bodies
- Hydrodynamic performance prediction for surface, towed and sea bed sensor packages, via experimental testing or
- Monopile installation loads and motions in different sea
- Installation of sub sea pipelines including cooling water inlet /outlet housings
- Deployment of inflatable liferafts and their stability during launch in high winds.
- Tests on buoyancy bags for TEMPSC's to reduce roll motions and allow recovery by helicopter.
- Study of burial methods for submarine cables.
- Stability calculations for heavy lift vessels.
- Seakeeping computer studies and measurement of ship motions, both model and full scale.



Installation of monopiles

