

## PRESS RELEASE

**Subsea 7 delivers first of seven technical papers at OTC 2012**

Subsea 7, a global leader in seabed-to-surface engineering, construction and services to the offshore energy industry, will kick-off this year's Offshore Technology Conference (OTC), in Houston, USA, with the first of its seven technical conference papers on 30 April.

Jean-Francois Saint-Marcoux, Subsea 7's Global Engineering Manager, will present a paper on 'Accounting for Vortex-Induced Vibrations (VIV) in Wake Induced Motion Risers in Tandem at High Reynolds Number' with Robert D Blevins.

As part of the conference's session on Advances in Deepwater Risers, Jean-Francois Saint-Marcoux's paper will cover the following:

**Paper Ref OTC 22951**

*As production of oil and gas from deepwater and ultra deepwater increases, riser interference becomes critical for engineering design and analysis. The use of seafloor space must be optimised and the size of the floating units reduced. For example SCRs are closely spaced at the FPU and lay in close range at the seafloor. Similarly for decoupled riser systems, jumpers are located at short distances at the FPU level.*

*Blevins provided the seminal paper on the forces and stability of a cylinder in a wake. One of the major conclusions of his paper was that accounting for drag as per Huse should be refined to be able to assess the potential instability of a downstream cylinder in a wake.*

*To be complete it was necessary to expand the theory to the case of an upstream cylinder in cross vibration about its steady position. This took more time because the wake behind a vibrating cylinder does not follow the classical bell shape curve.*

**PRESS RELEASE**

*Obtaining reliable experimental data to be able to describe it was difficult, especially at high Reynolds number ( $10^5$ ).*

*The paper presents experimental data for a wake behind a vibrating (and - for benchmarking - a fixed) cylinder from 2D downstream to 50D downstream. A relatively simple extension of the Blevins original theory allows accounting for the modified shape of the wake.*

ENDS

26 April 2012

**For further information contact:**

Achilleas Georgiou  
+44 20 8210 5544  
[achilleas.georgiou@subsea7.com](mailto:achilleas.georgiou@subsea7.com)

For contact at OTC, Houston  
Jackie Doyle  
mb +447880 700044  
[jackie.doyle@subsea7.com](mailto:jackie.doyle@subsea7.com)

## Notes to editors:

1. Subsea 7 will have a major presence at this year's event. As well as presenting conference papers, it will be exhibiting at stand 1641. On display will be examples of the Company's deepwater and ultra-deepwater technical expertise and its investment in its fleet.
2. Subsea 7 S.A. is a seabed-to-surface engineering, construction and services contractor to the offshore energy industry worldwide. We provide integrated services, and we plan, design and deliver complex projects in harsh and challenging environments.
3. For further information visit [www.subsea7.com](http://www.subsea7.com)