

CURRICULUM VITAE

STEVEN R NEUBECKER
Director

DATE OF BIRTH: 16 April 1969

NATIONALITY: Australian

ACADEMIC BACKGROUND: PhD, The University of Western Australia, (1995)
BE(Civil) (1st Class Honours), The University of Western Australia, (1990)

PROFESSIONAL AFFILIATIONS: Chartered Professional Engineer
Member, Institution of Engineers, Australia

COUNTRIES WORKED IN: Australia, Indonesia, Vietnam, Malaysia, UAE, New Zealand.

EXPERTISE: Offshore Geomechanics, Calcareous Sediments, Anchors, Foundation Installation.

MAJOR PROJECT EXPERIENCE:

- Gorgon Development subsea FEED design for GUJV. Studies for site characterization, pipeline stabilization, subsea structure foundations, deepwater geohazard assessment, site investigation specification.
- Site supervision / client representation for offshore geotechnical site investigations:
 - Blacktip, offshore Darwin.
 - Kupe, New Zealand.
 - Mutineer, North West Shelf
 - Rong Doi, Vietnam
 - Laminaria/Corallina, Timor Sea
 - North Gorgon, North West Shelf
- Site representation / client representation for offshore foundation installations
 - Yolla platform, self installing gravity base, Bass Strait.
 - Bayu-Undan central processing platforms, gravity base foundations, Timor Sea
 - Bayu-Undan wellhead platform, drilled and grouted piles, Timor Sea
 - Umm Shaif, TA platform pile installation, offshore Abu Dahbi
- Otway development geotechnical support, Victoria.
- Suction pile design and design review, West Africa.
- Yoho FSO drag anchor study, Nigeria.

- North Rankin B shallow foundation studies.
- Bayu-Undan detailed design covering site investigation, soil parameterisation, design of footings and piles for four steel jackets, FSO mooring assessment.
- Rang Dong piled jackets, detailed design geotechnical advice.
- Bayu-Undan Darwin pipeline Wye detailed design.
- Girassol suction anchor design verification/back-analysis.
- Buffalo riser base clump weight detailed design.
- Torsional stabilisation evaluation for Lambert manifold support pile.
- Drag anchor design verification, Triton FPSO Project, North Sea.
- Preliminary foundation engineering for the Bayu-Undan Upstream Project. Seconded to Melbourne project office to undertake analysis for three steel jacket structures and a permanently moored floating facility.
- Detailed design of the CALM Buoy anchor piles for the Stag Development.
- Foundation screening studies for the Bayu-Undan Development in the Timor Sea.
- Detailed design of drag anchors for the Wandoo Field Development CALM Buoy.
- Anchor studies for Wanaea/Cossack, Laminaria and Wandoo fields, North West Shelf, Western Australia.
- Preliminary geotechnical design for Gorgon Field Development, including cyclic axial pile design, finite element modelling of drilled shaft stability and limit equilibrium analysis of shallow foundations.
- Appraisal of creep behaviour of tension piles for proposed TLP at the Malampaya field, Philippines for SIEP.
- Evaluation of stiffness matrices for the North Rankin A platform foundations for pushover analyses.
- Detail design of revetments and breakwaters for the Tanjung Lesung Marina Development, Indonesia.
- Design review of SEART road embankment, New Zealand.
- Supervision of undergraduate honors projects in centrifuge modelling of anchor piles and anchor chains.
- Construction engineering and vessel motion studies using ISAAC for the Griffin Development.

EMPLOYMENT HISTORY:

Advanced Geomechanics	
Director	2003- present
Principal Engineer	2001 - 2003
Associate	1998 - 2001
Senior Geotechnical Engineer	1995 – 1998
The University of Western Australia	
PhD Research Student	1992 - 1995
Clough Engineering Group, Perth	
Structural Design Engineer	1991 - 1992

PUBLICATIONS LIST:

Journal Papers

Neubecker, S.R. & Randolph, M.F. (1996) "The static equilibrium of drag anchors in sand", *Canadian Geotechnical Journal*, Vol 33, No. 4, August, pp. 574-583.

Neubecker, S.R. & Randolph, M.F. (1996) "The kinematic behaviour of drag anchors in sand", *Canadian Geotechnical Journal*, Vol. 33, No. 4, August, pp. 584-594.

Neubecker, S.R. & Randolph, M.F. (1996) "The performance of drag anchor and chain systems in cohesive soil", *Journal of Marine Geotechnology*, 14:77-96.

Neubecker, S.R. & Randolph, M.F. (1995) "Profile and frictional capacity of embedded anchor chains", *Journal of Geotechnical Engineering, ASCE*, Vol. 121, No. 11, 797-803.

Conference Papers

Neubecker, S.R., O'Neill, M.P. and Erbrich, C.E. (2005) "Preloading of drag anchors in carbonate sediments", International Symposium on Frontiers in Offshore Geotechnics, ISFOG, Perth.

Neubecker, S.R. and O'Neill, M.P. (2004) "Study of chain slippage for embedded anchors", Offshore Technology Conference, OTC 16445, 2004.

Neubecker, S.R. and Erbrich, C.T. (2004) "Bayu-Undan substructure foundations: geotechnical design and analysis", Offshore Technology Conference, OTC 16157, 2004.

Erbrich C. and Neubecker S.R (1999) "Geotechnical design of a grillage and berm anchor", Offshore Technology Conference, OTC 10993, 1999.

O'Neill, M.P., Randolph, M.F., and Neubecker, S.R. (1997) "A novel procedure for testing model drag anchors", *ISOPE '97 Conference*, Hawaii.

Neubecker, S.R. & Randolph, M.F. (1995) "Behaviour of embedded anchor chains and influence on anchor design" *Offshore Technology Conference*, Houston, OTC 7712, 191-200.

Neubecker, S.R. & Randolph, M.F. (1994). "Model testing and theoretical analysis of drag anchors in sand", *Centrifuge '94 Conference Proceedings*, Singapore, 765-770.

Theses

Neubecker, S.R. (1995) "Behaviour of drag anchor and chain systems", PhD thesis, The University of Western Australia.

Neubecker, S.R. (1990) "Three dimensional truss analogy in reinforced concrete beams", Honours thesis, The University of Western Australia.