

Award-winning DUKC® technology safely guides deepest draft ship ever into Melbourne

November 24, 2014

OMC International's (OMC) award-winning DUKC® software navigation technology helped safely guide the deepest draft oil tanker through Melbourne's challenging Port Phillip Heads, Executive Director Dr Terry O'Brien OAM announced today.

DUKC® innovator Dr O'Brien, who was last week inducted into the Australian Maritime Hall of Fame for "making an outstanding contribution to Australia's maritime industry," today revealed his company's e-Navigation technology played a vital safety role in the deepest draft oil tanker visit to Melbourne.

On November 3, the Exxon chartered Ice Transporter tanker vessel (274m long and 48m beam) with a draft of 14.3 metres – the deepest vessel to visit Melbourne – safely docked at Gellibrand berth after a 5 hour 20 minute transit into port under DUKC® advice.

The tanker, piloted by Port Phillip Sea Pilots (PPSP), sailed without incident following months of rigorous planning between OMC, the Port of Melbourne Corporation (PoMC) and the PPSP. This included a visit by the three parties in May this year to the Australian Maritime College (AMC) in Launceston to perform tanker simulations.

OMC also performed extensive DUKC® configuration work ahead of time, focusing on appropriate ship speeds and transit options to ensure this large tanker could sail with sufficient UKC from The Heads to Gellibrand dock or anchorage as needed.

Swell conditions during the actual sailing through the Port Phillip Heads were significant with swells exceeding 2m however the DUKC® calculations demonstrated that there would be sufficient UKC available during the actual sailing time. OMC joined the Harbour Master in the VTS tower monitoring the transit throughout whilst the pilot also had onboard DUKC® monitoring on his Portable Pilot Unit (PPU). OMC engineers were also onboard the Ice Transporter performing GPS measurements.

It is envisaged that even deeper Exxon tanker vessels, up to 14.7m, may access the Port of Melbourne utilising DUKC® advice in the near future.

DUKC® is the only dynamic e-Navigation system worldwide that has proven capacity to predict in real-time the critical vertical component of navigation (what you can't see under the water) during the actual transit.

OMC's customised DUKC® systems are already operating in most major Australian ports, and in New Zealand, Europe and North America. This technology is installed in some of the world's most important waterways, including the ecologically sensitive waters of Torres Strait. A system is currently being deployed in the St Lawrence River (one of the world's busiest inland waterways) from Montreal to Quebec City.

OMC continues to receive international industry recognition for its DUKC® technology, including being named as a finalist for the prestigious 2014 IBJ 'Safety in Bulk Handling (Marine)' Award. The 2014 IBJ international shipping awards gala dinner was held in Rotterdam last week. (November 17)



"OMC's reputation is built on our impressive safety record and these latest accolades are further proof that our scientific-based DUKC® technology is the world leader in under keel clearance (UKC) management," Dr O'Brien said.

"This is why OMC will continue working towards our goal that DUKC® one day becomes a standard safety requirement for UKC management around the world."

*** On 19 November 2014** at the Lloyds List Australia 19th Australian Shipping Awards, OMC Founder and Executive Director Dr O'Brien is inducted into the Australian Maritime Hall of Fame for "making an outstanding contribution to Australia's maritime industry" during an impressive career spanning more than 50 years.

*** On 14 June 2010**, in the Queen's Birthday Honours List, Dr O'Brien is awarded a Medal of the Order of Australia (OAM) for services to the maritime transport industry.

Other OMC award wins:

*** On 19 November 2012**, at an awards ceremony dinner in Hamburg, OMC International wins the 2012 IBJ 'Innovative Technology' Award for ship motion measurement instrument OMC iHeave®.

*** On 14 June 2012**, at a dinner on the HMS Belfast in London, OMC's web-based DUKC® Series 5 system is announced 1st Runner-Up 'Engineering Excellence' in the 2012 IHS Safety at Sea Awards.

*** On 15 November 2010**, at a dinner in London, Dr O'Brien is announced 'Personality of the Year' at the International Bulk Journal (IBJ) Awards.

*** On 24 November 2009**, at a dinner in Sydney, OMC wins the Lloyd's List DCN Maritime Services Award "for its work in developing under keel clearance systems, which it has taken to international markets". Judges praise OMC for being "an outstanding leader in its field".

*** In June 2009**, OMC wins the 'Marine Civil Engineering and Construction' category of the Seawork 2009 Innovation Showcase Awards in the UK for real-time DUKC® monitoring.