

BELGIUM BRANCH

Pioneering Spirit

→ Almost 50 students from Antwerp Maritime Academy attended the Belgium branch's final MARS debate for the 2015-2016 academic year, held at the Royal Yacht Club. The branch maintains a very good relationship with the local maritime college and students. Each year a student champion is nominated to promote the branch and its events, mainly through social media, and judging by the number of enthusiastic attendees, it is an effective recruitment method. The topic of the debate was chosen by the branch's student champion, Eline Schillewaert, a young woman who will later join the branch's committee and help maintain the branch's resilient relationship with the younger generation.

Frans Doomen MNI, a former student at Antwerp Maritime Academy, was invited to the Royal Yacht Club to speak about his experience as a dynamic positioning operator (DPO) on board *Pioneering Spirit*, the largest vessel in the world.

Frans explained that as vessels and technology are becoming more capable, students are more likely to spend their future careers on board a large vessel. Despite this, the full scale and capability of the 400,000gt *Pioneering Spirit* is hard to grasp. The vessel is 382m long and 124m wide, can work accurately in any water depth or condition and so far, has cost 2.6 billion euros. After 20 years in development, it was formally launched in early 2015. However the vessel is still undergoing trials for DP operations and an additional lifting system. The jacket lift system that is due to be installed will be able to lift the equivalent of the Eiffel Tower, and

carry up to two and a half times its weight.

The vessel is able to lift, install and remove large offshore oil and gas platforms. Despite appearances, *Pioneering Spirit* is not a catamaran, but was designed with a 122m x 59m slot at the bow, which allows the vessel to straddle a platform, cut the rig legs and lift the entire topside in a single nine-second lift manoeuvre with eight sets of horizontal lifting beams. There are 478 platforms to be dismantled in the North Sea alone. However, bad weather means that installation and dismantling of rigs will only be possible for a couple of months every year. The vessel also has pipe-laying capabilities to maximise employment possibilities.

Frans finished by describing life aboard *Pioneering Spirit*, where he is one of more than 500 members of staff. The organisation of *Pioneering Spirit* is considerably more complex than a normal vessel, with staff consisting

of safety officers, engineers, deck staff, electricians, electro-technical, catering, cleaning and nautical staff.

The ship handling skills required to manage such a vessel are considerable, especially during heavy lift operations when there are at least 20 people on the bridge. Crew are currently experimenting with communication systems, to allow them to speak to one another across the two bridges.

This is not the only challenge nautical staff face – when the vessel is carrying a rig, it is impossible to see ahead. Eight ECDIS systems and eight radar systems compensate for restricted vision, but the system is still very much a prototype – in fact, Frans said, 'The whole vessel is a prototype.'

This was an eye-opening topic for attendees, and certainly got the attention of students considering their future careers.

Laura Nicholls

