Polarcus

Lean, Green & Ready to Survey

by Greg Trauthwein
By 2012 there will be 65 high-specification seismic survey vessels on the market, meaning that in just over four years from its founding, Dubai-based Polarcus will own nearly 15 percent of the market. The company is quickly amassing its fleet of $170m, ultra-modern seismic survey vessels in hopes of delivering a unique value proposition to the companies who employ them, according to Peter Zickerman, Executive Vice President.

To date Polarcus – which Zickerman calls “a pure-play Seismic 3D/4D marine geophysical company” – has ordered a series of eight vessels at a price tag of $170m per. Of this eight, the first six are being built down the road from Polarcus’ HQ at Dubai Drydocks (three of which are already delivered); and the additional pair will be built at Ulstein. The cumulative $1.36b total investment in new ships is significant, as is the varying capabilities of each: the first two vessels are equipped with 10 streamers; numbers 3 and 4 have 12 streamers; numbers 5 and 6 have eight streamers; and numbers 7 and 8 offer 14 streamers. Why the variety?

“We collect data, and it’s all about getting the best data. Larger vessels with more streamers are more expensive, and the vessels with smaller capability are more efficient on the smaller jobs,” said Zickerman.

The Fleet

Central to the Polarcus story is the incorporation of the latest technologies, leveraging emerging capabilities to help its clients maximize the potential of new and existing energy fields. The company brings to market ultra-modern seismic vessels, all incorporating advanced maritime and environmental features including the innovative Ulstein X-BOW design and capable of operating in the most challenging of conditions.

Perhaps the most challenging, the Arctic, presents an intriguing business opportunity, as the region potentially...
holds more than 27% of the world’s reserves, according to estimates from USGS. BP plc estimates that the Arctic Ocean may hold around 200 BOE, or between 25% and 50% of the world’s hydrocarbons still to be discovered. To help tap the power, half of Polarcus’ fleet will feature an ice-class notation from DNV to allow the ships full access to this resource rich arena. While the company has come out the gates strong to soon claim a significant portion of the global seismic survey capability, it has built its fleet astutely and is in no rush to go beyond the original order for eight vessels at the moment. “Right now we are not rushing to build more vessel,” said Zickerman. “That will be driven by day rates, and if the situation presented itself we would not hesitate to push the button. From where we sit, 65 vessels (the world fleet) is unsustainable on the low end. It’s a good number for now, but eventually – as the Arctic and Australia open up – there will be a need for more.”

“We don’t guide dayrates, but analysts expect day rates (in this sector) to rise 10 to 15 percent,” said Zickerman. “Day rates, on a weighted average, were about $350k/day in 2006. Honestly, we’re not hoping that it goes back to this height, because it would spark another building boom; a gradual rate increase (and a steady oil price) is preferred.”

A “Green” Pedigree from Birth

Many marine companies “talk the talk” when it comes to the marine environment, but few actually “walk the walk” as tightly as Polarcus. A point on the corporate Vision statement summarizes nicely:

We are investing in the latest new-build vessel designs from Ulstein Design AS and the most technologically advanced seismic and navigation systems available today from Sercel and ION to ensure that our seismic fleet is one of the most modern and advanced fleets in the world, able to meet the current and projected future needs of the industry. We believe that our operations will be amongst the cleanest in the offshore seismic industry, and capable of working in the broadest range of operating environments.

“Starting from scratch, we knew we could choose the best technologies and build them into the vessels from the start,” said Zickerman. According to Zickerman, the accrued technology – from diesel-electric propulsion, high specification catalytic converters, double hull and water treatment systems – means that Polarcus vessels produce five times less emissions than similar capability ships, and he noted: “we don’t (yet) get paid for it, but we are seeing more clients interested in this factor.

The company is dedicated to running clean ships and minimizing its operations impact on the environment, a fact proven in the high-spec design on its fleet of eight newbuilds, and confirmed via the DNV CLEAN DESIGN notation. The CLEAN-DESIGN notation recognizes that the company has systems in place to control and limit operational emissions and discharges to air and water, along with recognizing our investment in defensive design elements such as a double hull.

In addition, the company measures its emissions on a per vessel, per month basis. Reportedly, Polarcus is the
first and only seismic company to receive the Det Norske Veritas Vessel Emissions Qualification Statement, awarded to the Company in Q2 2010. This qualifies its emissions reporting methodology and accuracy of data, verifying our ability to predict the exhaust emissions footprint for any project and then, post-project, to subsequently provide actual emissions measurements. The results also provide us with a real-time ability to optimize operational performance during the course of a survey in order to reduce the overall emissions footprint.

The company has installed an Alfa Laval ballast water management system on its newest vessels, Polarcus Asima, which is the first IMO-type approved system in the world, that offers ballast water treatment that is 100% chemical free.

“It is in the Polarcus DNA to build and maintain ‘green’ vessels and operations, both for today and for the future,” Zickerman said. Testament to the green mandate is the new Polarcus Alima, which incorporates sophisticated seismic technology and is capable of towing 12 streamers, with a 100m lateral separation between streamers. It is a 3D/4D seismic vessel built to the Ulstein SX134 design and Ulstain X-BOW hull. While Polarcus is aggressive in its adoption of advanced technology, it does so with limits according to good business practice. “We considered LNG powered engines for about five minutes, and we decided it was not for us,” said Zickerman. “Simply put, as we operate globally, the infrastructure is not there to bunker the vessels. Plus, those engines cost about four times as much.”

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