Consultancy for marine operations

**Challenge**

The Saipem 7000 (S7000), a large semi-submersible crane vessel, required a 12 hour window to install an air compressor on the Claymore oil platform in the North Sea.

While the S7000 was out at sea completing other projects, the long-range 15-day forecast for the Claymore project was looking poor and identified that waves would rise quickly. Coinciding with the vessel’s expected arrival, the weather was forecast to cause delays, with low pressure moving across the area.

**Solution**

We placed an offshore Met Office consultant meteorologist onboard the S7000 to monitor conditions and provide expert advice. The long-range forecast considered a wide range of factors including wind, wave, sea and site-specific conditions. Once a potential weather issue had been identified, it was relayed to Saipem as an early warning of possible delays. The situation was then monitored by the onboard Met Office meteorologist.

Three days before the Claymore project could begin, the S7000 installed a module on a nearby rig in UK waters then came back to Stavanger, Norway to pick up the Claymore module. The forecast at this point was for three days of delays when the S7000 was expected on-site. However, there was a possible weather window of 14 hours if the S7000 could arrive on-site earlier. This possibility was highlighted by the Met Office onboard meteorologist.

The onboard meteorologist compared Met Office model output to earlier model runs and also made comparisons with models from other meteorological centres to determine that the confidence in the forecast was high. This assessment of confidence was critical; a change in the weather pattern – even slightly – could have major consequences in the weather and sea conditions at Claymore.

The decision was made by Saipem to stop any non-essential work in Stavanger and arrive back at Claymore for the start of the weather window, ahead of the approaching area of low pressure.

**Benefits**

The S7000 arrived on-site ahead of the low pressure to take advantage of the forecast 14-hour weather window. With our weather forecast consultancy, the project was completed on budget and on time without any delays or incidents.