Ashtead Technology and CodaOctopus Solve BPâ€™s Positioning Problem

Faced with the problem of a failed obsolete GPS system on-board Schiehallion FPSO, BP recently chose the Octopus F180+ TM Precision Attitude and Positioning System. Located in the north east Atlantic Ocean, approximately 140km to the west of the Orkney Islands, the vessel normally relies on conventional GPS to measure the position of the turret towards the bow.

With up to 24 oil- and gas-carrying flexible risers connecting the FPSO to the sea-bed well-heads, it is imperative that the position of the turret, to which the risers are attached, is accurately known and maintained at all times. Being in a hazardous location close to volatile oil and gasses, the previous GPS system was certified and approved for such applications but being relatively old, a replacement was not available â€˜off the shelfâ€™. When this unit failed earlier this year, the Octopus F180+ was chosen as a replacement, being one of the few systems readily available that could accurately determine the position of the turret from a distance. Mounted at a remote, safe location near the bridge, some 160m back from the turret, the F180â€™s in-built lever-arm facility uses precision position and attitude information to calculate the position and motion at the remote position.The location of this F180 unit made it was impossible to calibrate it by sailing in figures of eight, so a custom pre-calibrated mounting was devised. The complete package continues to be supplied on long term rental by Ashtead Technology Rentals, Aberdeen (UK).