Spector Lumenex: Case study

Oil & Gas

Life Safety PAGA Evacuation Systems

Hibernia Platform

Johnson Controls (formerly Tyco), were awarded the contract for the design, manufacture and supply of a leading edge Public Address General Alarm (PAGA) system for installation on the Hibernia platform which is located off Canada's East Coast, on the Grand Banks of Newfoundland. It is situated in relatively shallow water, approximately 80 meters deep. This project was jointly owned by Chevron, ExxonMobil, Murphy Oil, Statoil, Petro Canada.

Scope of Supply

The project scope comprised of duplicated PAGA system, explosion- proof loudspeakers, explosion-proof beacons & explosion-proof drillers intercom systems:

- Main amplified racks, MDF, SDMS and power marshalling
- Explosion-proof loudspeakers
- External connections to PABX, fire and gas, DCS and entertainment systems
- Explosion-proof drillers intercom system
- Explosion-proof beacons for high noise areas
- Explosion-proof zone 1 access unit

The Project

The Hibernia platform was the first fixed platform to be installed off the coast of Newfoundland. It consists of a concrete gravity base structure (GBS) with integrated topsides facilities accommodating all drilling, producing and utility equipment, and providing living quarters for the steady-state crew of approximately 185 people. The Topsides facilities have a design capacity of 200,000 barrels of crude oil production per day.

Safety is an integral part of the way Hibernia conducts its business. Lessons learned from other offshore developments, and recommendations contained in the Lord Cullen report on the piper Alpha accident,

were incorporated into the design and operability of the Hibernia production facilities.

What was unique about the Project?

Part of the Hibernia Management Company's vision for a world class platform was the requirement for a leading edge PAGA and intercom system. Utilising the highly successful SDMS system, a system was produced that not only built on the foundations of a proven offshore product, but introduced a versatile man-machine maintenance interface terminal. This provided a unique ability for the maintenance requirement to be deskilled while still providing the highest level of integrity.

The intercom system was also built on proven leading edge design. The flexibility of the standard equipment allowed for a complex Drillers intercom to be realised, all encapsulated within Zone 1 A protection concept.

Further Information

The completed platform was towed to the Hibernia oil field and positioned on the ocean floor in June of 1997 and began producing oil on November 17, 1997. The platform stands 224 metres high, which is half the height of New York's Empire State Building (449 metres) and 33 metres taller than the Calgary Tower (191 metres).

For further information on the solutions and services that we can provide visit: www.johnsoncontrols.co.uk