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Offshore crew supply - Modern marine options challenge helicopters

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Abstract

The helicopter has long been regarded as the default choice for crew supply due to its speed, flexibility and passenger comfort. Marine crew transportation has until recently being regarded as slow and more hazardous. Three specific technological advancements, high speed hull design, DP2 automatic vessel station keeping and advances in transfer capsule design, now offers high speed marine crew supply, with levels of passenger safety and comfort that exceed helicopter transfers. Utilizing the „state of the art“ CrewZer Class vessel, this new crew supply solution is leading many operators to re-evaluate their crew supply options.

A good crew supply solution should provide high levels of safety, speed and reliability, as well as operational flexibility. As offshore development costs rise and other assets mature, there is increased pressure to reduce operating costs, whilst attending to crew welfare and morale. The CrewZer access solution can deliver up to 30% savings on logistical costs, whilst enhancing safety or passenger welfare.

The first CrewZer Class vessel, the Seacor Cheetah (the fastest offshore support vessel ever built) was introduced to the market in February 2008. Voted “American Ship of the Year” it has an aluminium catamaran hull, capacity for 149 passengers and a cruising speed in excess of 40 knots. It’s DP2 station-keeping and wide stable hull provide an ideal platform for personnel transfer operations. The vessel also utilizes a custom designed 9-passenger advanced transfer capsule. The entire system is expected to provide one of the safest crew transfer solutions in the industry. This integrated solution provides the following additional benefits:-



- An ideal emergency evacuation tool (e.g. hurricanes), capable of the rapid evacuation of large crews. This allows operators to delay evacuation decisions, possibly avoiding unnecessary shut downs, without compromise to safety.
- A high speed vessel suitable for early response to offshore fire, equipped with two large fire monitors.
- 150 ton of deck load optimized for fast track logistic support.
- Enhanced vessel stability which increases the operational weather window for transit and loading operations.

Figure 1 - Seacor Cheetah - Advanced crew supply with top speed over 40 knots. After over a year in operation and tens of thousands of successful transfers, the system has been thoroughly field proven. This paper describes the system in full, the experiences of the first year in operation and goes on to explore likely future developments in crew supply operations.