



*Above: While the Pacific Northwest boasts some spectacular shorelines, the steep rocks present a real challenge to crews trying to pluck an injured party off a cliff-face.*

*Below: The sight and sound of a Dolphin powering up or down during the hours of darkness is a reminder that crews and their helicopters have to be ready to go at a moment's notice, day or night.*

systems as part of the first phase of its 'Deepwater Program', which will see the type's conversion to that of Multi-Mission Cutter Helicopter (MCH). The goal of the engine upgrade is to provide the HH-65 with greater power, better manoeuvrability and higher safety standards. In April 2005, Coast Guard Air

Station Atlantic City was the first to receive the 'Charlie' model. For training purposes, North Bend received a C-model on loan from Los Angeles, on 3 January 2007. This gave the pilots an opportunity to make two flights each and become familiar with the upgraded helicopter.

The first of the unit's own upgraded Dolphins arrived fifteen days later. The last of its B-models (6569) rotated out on 16 February and, two days after that, the HH-65C transition was complete with the arrival of North Bend's fifth and final C-model (6502). During the transition period, the unit operated with just four aircraft as every Dolphin unit had to give up one or two helicopters to ensure there were sufficient numbers in the upgrade 'pipeline'. Deployments aboard

Coast Guard vessels were suspended during this period. Re-engining of last of the 95 aircraft in the national HH-65 fleet was completed in October 2007.

The new engines allow pilots to transition to a hoist operation immediately should the need arise during a SAR mission. The aircraft can also be flown safely out of a hover if one engine loses power; another margin of safety much appreciated by North Bend HH-65C aircrews who must fly over ice-cold waters every day. The unit is also finding the 'Charlie' to be less maintenance intensive and the Turbomeca Arriel 2C2-CG powerplant to be more reliable. The Full Authority Digital Engine Control (FADEC) runs the systems right where they need to be, with the pilot no longer having to think so much about engine management. The FADEC brings increased efficiency, a lower fuel-burn and an ability to accurately diagnose and troubleshoot engine problems.

In terms of aircraft capability, North Bend does not see an increase the way some other units are. The reason is simple. In the Pacific Northwest temperatures are generally quite low and the aircraft are thus more typically torque-limited rather than power-limited. This is in contrast to the experience of some 'warm-weather' units who find the Bravo more engine-temperature limited. The torque value did not change with the modification because the helicopter kept the same rotor head and gearbox. The moment the helicopter is requested to go inland, where temperatures rise quickly

