



# PRESS RELEASE

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<b>SUBJECT:</b>	<b>Acoustically Quieted Ship NOAA FRV, Oscar Dyson Delivered</b>
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The First-in-Class Fisheries Research Vessel (FRV), *OSCAR DYSON* was delivered to NOAA on January 5, 2005. The *OSCAR DYSON* was designed and built by VT Halter Marine, Moss Point (a subsidiary of Vision Technologies Systems, Inc.). According to NOAA, “this is the first newly constructed fisheries research vessel in more than 25 years.” It is outfitted with state-of-the-art sonar technology, but its most significant feature is that it has been designed to be “acoustically” quiet underwater. The underwater radiated noise requirements were those specified by the International Cooperative for the Exploration of the Seas (ICES).

NOAA FRV *OSCAR DYSON* during underwater noise survey in the Gulf of Mexico. Hydrophones were suspended from the red buoy in the foreground. (Photograph by Michael Bahtiarian).

VT Halter Marine subcontracted all the acoustical engineering efforts to Noise Control Engineering (NCE) of Billerica Massachusetts. NCE is an engineering consulting firm which specializes in shipboard noise & vibration control and marine acoustics. It was started by Mr. Raymond Fischer in 1991. NCE has worked with VT Halter Marine on numerous new-construction projects including the Alaska Marine Highway Systems Ferry, Kennecott, T-AGOS 23, US Navy AGOR Class Oceanographic Research Vessels and the Army’s Logistical Support Vessels (LSV).

NCE performed all noise prediction calculations, recommended the treatments necessary to meet the stringent underwater noise requirements and conducted an extensive sound and vibration testing program. NCE used *Designer Noise*, a new 3-D acoustic modeling program developed by NCE with Proteus Engineering (Annapolis, MD) under a Navy SBIR grant, now commercially available. NCE engineers worked closely with engineers from VT Halter Marine and NOAA to optimize all of the noise treatments. In one case, aluminum was recommended over steel for damping cover plates, saving 20 tons. NCE engineers participated in seven sea trial events, conducting compartment noise, equipment vibration, ship-wide vibration and sonar self-noise surveys. As part of the final proof of performance, NCE conducted what may have been the first non-military underwater radiated noise survey in the Gulf of Mexico.