FCC OET ELS Application

Form 442 Question 7: Experimentation Description

Confirmation No. EL365430

File No: 0275-EX-CN-2016

Submitted by: Mark Amend, Sales Engineer, Kongsberg Underwater Technology, Inc.

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To Whom It May Concern:

Kongsberg Underwater Technology, Inc. kindly requests an additional experimental license to demonstrate to the US Government and commercial entities the Kongsberg Seatex A/S Maritime Broadband Radio, a phased-array antenna technology that serves as a network link between two or more units. The MBR is primarily designed for use by the coastal and offshore government and commercial sectors. We will demonstrate multiple ship to ship vessel network operations, including remote desktop, file transfer, voice and video over IP. Photos of mobile installations (MBR 189, on ship; MBR 179 on small boat) are included as exhibits with this application.

This application is built upon approved and active FCC licenses for the same equipment and intended purpose:

FCC File No. 0272-EX-RR-2015 Call Sign WG2XTC

FCC File No. 0036-EX-PL-2016 Call Sign WI2XFF

FCC File No. 0037-EX-CN-2016 Call Sign WI2XNT

Hardware connected to the MBR units includes ethernet switches on each end, two or more computers, and video/voice devices. Power will be provided by available ship power. Experimental outcomes will consist of network and user experience performance statistics.

The 50km-radius area centered offshore Pensacola, Florida was selected for the purposes of deployment flexibility for vessels out of the Pensacola region. The large distance is for pushing the communications beyond line of sight with minimal to no overlap with the terrestrial domain. It is anticipated that a host ship (100-200ft in length) will carry two MBR 189 units, and two small boats will each carry a MBR 179 unit. Within that geographic area the vessels will perform operational maneuvers for bandwidth and dynamic reliability tests.

Demonstrations are expected to run over weekdays, typically a 5 day interval.

Many thanks for your prompt consideration.

Mark Amend

Kongsberg Underwater Technology, Inc.