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14. ABSTRACT The Discovery of Sound in the Sea (DOSITS) website ( <a href="http://www.dosits.org/">http://www.dosits.org/</a> ) was developed to help fill the critical need for scientifically sound, objective information on sound in the sea, given the controversy concerning the potential effects of anthropogenic sound on marine life. It includes information on the science of sound in the sea, on how people and marine life use sound in the sea, and on the effects of anthropogenic sound on marine life. The DOSITS site, which was launched in November 2002, has been remarkably successful, with 54.9 million "hits" from 01 January 2003 to 25 September 2012, which is the latest date for which information is currently available.						
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March 4, 2013

Dr. Robert Headrick  
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875 North Randolph Street  
Arlington, VA 22203-1995

RE: Final Technical Report for ONR Grant N00014-05-1-0297

Dear Bob:

The Final Technical Report for ONR Grant N00014-05-1-0297, "Discovery of Sound in the Sea (DOSITS) Website Development," is enclosed. Please do not hesitate to contact me should you have any questions or need further information.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "Peter Worchester", is written over a horizontal line.

Peter Worchester  
Research Oceanographer

Enclosure

March 4, 2013

## FINAL TECHNICAL REPORT

### Discovery of Sound in the Sea (DOSITS) Website Development

ONR Grant N00014-05-1-0297  
01 February 2005 – 31 December 2012

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The Discovery of Sound in the Sea (DOSITS) website (<http://www.dosits.org/>) was developed to help fill the critical need for scientifically sound, objective information on sound in the sea, given the controversy concerning the potential effects of anthropogenic sound on marine life. It includes information on the science of sound in the sea, on how people and marine life use sound in the sea, and on the effects of anthropogenic sound on marine life. The DOSITS site, which was launched in November 2002, has been remarkably successful, with 54.9 million "hits" from 01 January 2003 to 25 September 2012, which is the latest date for which information is currently available (Fig. 1). From 01 January 2012 to 25 September 2012, DOSITS had 6.7 million "hits," 455,000 page views, and served 120 GB of data. In 2012, visitors to the DOSITS website primarily came from North America (58.6%). Europe (20.9%) accounted for one fifth of all visitors, with Asia (10.3%) and Australia and Oceania (6.0%) rounding out the other significant regions. The web traffic numbers exclude all known search engines and other spiders, as well as traffic from the University of Rhode Island Graduate School of Oceanography DOSITS team.

I am a Core Member of the DOSITS Scientific Advisory Panel, which meets for three days twice a year (spring and fall) to review all new material before it is included on the site. In addition, I play an active role in generating new material, working closely with Dr. Kathleen Vigness-Raposa (Marine Acoustics Inc.) to prepare some of the more technically advanced sections, including, for example:

- Science of Sound > Sounds in the Sea > How does shipping affect ocean sound levels?
- Science of Sound > Sounds in the Sea > How does marine life affect ocean sound levels?
- Science of Sound > Sounds in the Sea > How will ocean acidification affect ocean sound levels?
- Science of Sound > Advanced Topics > How does sound move? Wave propagation and Huygens' Principle
- Science of Sound > Advanced Topics > Statistical uncertainty

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Figure 1. DOSITS monthly “hits” and page views from 01 January 2003 through 25 September 2012. The unusually high traffic during March-April-May 2010 corresponded with the launch of a redesigned website in March 2010, along with a promotional push to make potential users aware of the newly redesigned site.

