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An Old Salt Retires

By Ray Schmitt

In September and October 2012, R/V Knorr operated in the North Atlantic to deploy autonomous platforms that would collect measurements over the following year for the first phase of the Salinity Processes in the Upper-ocean Regional Study (SPURS-1). When the ship was retired in late 2014, after 44 years of oceanographic service, a plaque on the bridge (see above, right) still displayed the vessel's motto, "Sal sume sub sole," which was provided by Emerson Hiller, the first captain.

Hiller had also been captain of R/V Chain, whose stack sported a logo of a strong arm and a chain along with the Latin motto "Laboramus," or "We work." He thought that was a bit presumptuous, and for the Knorr he wanted the less somber motto "More fun under the Sun," and searched for someone to put it into Latin. Townsend Hornor, President of the Associates of the Woods Hole Oceanographic Institution (WHOI), gave the project to his wife Betsy, who was trustee of a girls' school in New York. According to the WHOI oral history archives, Hiller says: "I got a long letter from the school explaining how they spent a whole month on this project to put into Latin 'more fun under the Sun.' In their research, the students found that early Roman soldiers were paid in salt, a very valuable commodity, and the soldiers exchanged it for fun and entertainment. The students thought it reasonable to employ salt or sal to mean the same as 'fun and entertainment' and came up with the slogan Sal summi sub sole-more fun under the Sunmore salt, actually. '

We noticed the plaque during the September/October 2012 deployment cruise, and decided it was an excellent motto for SPURS as well. However, my high school Latin nagged at me a bit; something did not seem quite right. Google Translate tells us that the motto as actually printed means to "Take salt under the sun." "Take salt" reminded me of the salt tablet dispensers common on ships when I first started going to sea, before people

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worried about their blood pressure. Perhaps the inscriber misunderstood what the schoolgirls actually conveyed.

The originally intended Sal summi sub sole is well suited to SPURS. Actually, Sal summa sub sole or "highest salt under the sun" would be even better. We enjoyed wonderfully sunny skies at the center of the subtropical high during the cruise. We also measured the highest surface salinities ever reported for this area, just reaching 37.8 psu. Higher salinities are found in the Mediterranean and Red Seas, but the North Atlantic salinity maximum is the saltiest spot in the open ocean. It was saltier than ever when we were there in 2012, consistent with the trend of "salty getting saltier, fresh getting fresher" associated with the intensifying water cycle over the ocean (see Durack, 2015, in this issue).

While we were at sea, we got word that the Navy had decided to name Knorr's replacement ship R/V Neil Armstrong after the Navy pilot who first walked on the moon. He had passed away a few weeks before we sailed, and his ashes were scattered at sea off the Atlantic coast of Florida, at the same time and latitude that we were working, though well to our west. This event provided even more connection of the Knorr with the NASA-funded SPURS project. NASA had named the space shuttles for oceanographic research vessels and now an oceanographic ship was to be named after a NASA hero. In recognition of the occasion, we managed to make a call to the International Space Station and

discussed the commonalities of ocean and space exploration with Commander "Suni" Williams as she whizzed by overhead.

It was sad to see the Knorr retire in 2014. The ship had a hand in many of the most significant oceanographic discoveries of the last 44 years, including the first samples of the Mid-Atlantic Ridge, the GEOSECS (Geochemical Ocean Sections Study) surveys, new life forms at deepsea hydrothermal vents, finding RMS Titanic, doing many long sections for the World Ocean Circulation Experiment (WOCE), and probing the ice-bound Arctic. Knorr logged more than 1.36 million miles for science (the equivalent of more than two round trips to the Moon or 55 trips around Earth), visited 46 countries, crossed the equator 58 times, and made it as far north as 80°13.0'N, as far south as 68°41.3'S. From the start, Captain Hiller instilled a strong ethic of service to science throughout the crew, from deck hands to oilers, engineers, and officers, and this continued through last fall. It is a very capable ship and will be sorely missed from the US oceanographic fleet. Fortunately, its crew will transfer to the Armstrong when it arrives at WHOI, and there they will carry on the tradition of can-do service for science. They are going to need a motto for the new ship, and I have one to suggest...

REFERENCE

Durack, P.J. 2015. Ocean salinity and the global water cycle. Oceanography 28(1):20–31, http://dx.doi.org/ 10.5670/oceanog.2015.03.

AUTHOR. Ray Schmitt (rschmitt@whoi.edu) is Senior Scientist, Department of Physical Oceanography, Woods Hole Oceanographic Institution, Woods Hole, MA, USA.

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