

Press Release

Tuesday, September 13, 2011

## Russian Tall Ship to Search for Missing Tsunami Debris

Shortly after the devastating tsunami in Japan on March 11, 2011, aerial photographs and satellite images captured massive islands of lumber and other debris floating in the sea. Less than a month later the debris had mysteriously disappeared from view and virtually nothing has been heard of it since. Is it still swimming dispersed in the ocean the way the now famous animation has the debris travelling across the North Pacific, some washing first up on the shores of the Hawaiian Islands, then on the shores of the west coast of Canada and the US?

Released by the International Pacific Research Center at the University of Hawaii at Manoa on April 5, that animation, broadcast on such stations as CNN and CBS, caught the attention of the media worldwide. Senior Researcher Dr. Nikolai Maximenko and Scientific Computer Programmer Dr. Jan Hafner, the developers of the animation, have been inundated with questions about where the debris is now in real time. Although based on present-day scientific knowledge, the model animation is a best guess. Eager to validate their projections, the two scientists have tried to get the assistance of the relevant federal agencies, but none is ready to deal with such an unknown threat or danger.



From left: Jan Hafner, Captain Vasily Sviridenko, and Nikolai Maximenko on board the *STS Pallada*. Photo courtesy Beatrix Hu.



Some of the young cadets who will be on the look-out for the debris. Photo courtesy *Pallada*.

Now help is on the way in the form of the Russian three-master sailing ship, the *STS Pallada*, which docked at the Aloha Market Place pier in Honolulu on September 11. The *Pallada* with 102 cadets on board is on a 3 1/2 month training voyage that has taken its young crew from their homeport in Vladivostok to Kodiak, Vancouver, San Francisco, Los Angeles, and now Honolulu. On its homeward journey, perhaps via Tokyo, the ship is likely to pass through some of the now widely scattered debris.

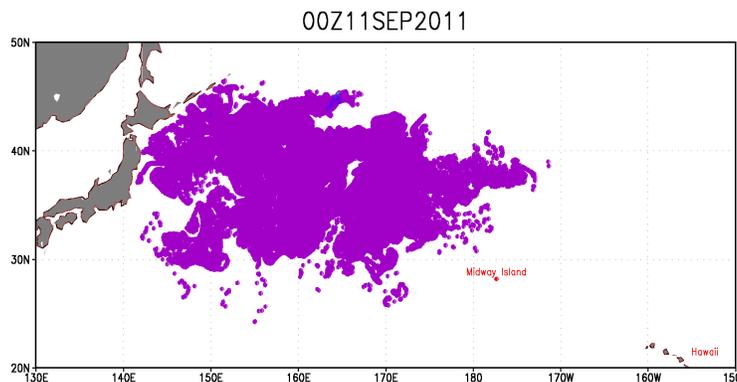
On the ship's arrival, Maximenko and Hafner met with Captain Vasily Sviridenko and Natalia V. Borodina, information and education mate. Maximenko, a native of Russia, described in fluent Russian where the debris might be found, pointing to the September 11 map of the estimated locations.

The captain is seriously concerned about the debris, according to translation by Borodina. “The reason the huge commercial vessels travelling the North Pacific have not reported anything,” the captain said, “is because they cut through such stuff like through butter.” For the *Pallada*, however, although it is one of the largest tall ships plying the sea, the debris is very dangerous. With its 300-foot length, it is a small ship by today’s standards. “It is especially vulnerable as its hull is thin,” the captain explained. When asked whether he will help, he replied, “Sure! I will have our eager young cadets be on the look-out for debris 24 hours a day.” The safety of his crew is of primary concern.

“What we need are verbal descriptions of what you see floating in the ocean,” said Maximenko. “Take photos, and if possible, even take samples. Objects might be hard to see as they might be camouflaged, covered with algae and other marine life. Negative data, that is regions free of debris,” he said, “is also useful information and helps to determine the edge of the field.”

The ship has Geiger counters to measure radio activity. Although Maximenko thinks the debris will likely not be radioactive as it washed into the ocean nearly two weeks before the leakage of water from the Fukushima nuclear plant, no theorizing can substitute for direct measurements.

The *Pallada* will be back in its homeport in mid-October. What will she find? Will the tsunami debris be detected and its existence be realized?



Map of the debris scatter as of September 11. The model which generated this image is updated with the daily winds and sea level height since March 11, the day of the tsunami.

[Click her for original statistical model animation.](#)

[Click here for maps of the model that is updated every day with current winds and sea level.](#)

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**The International Pacific Research Center (IPRC)** of the School of Ocean and Earth Science and Technology (SOEST) at the University of Hawai`i at Mānoa, is a climate research center founded to gain greater understanding of the climate system and the nature and causes of climate variation in the Asia-Pacific region and how global climate changes may affect the region. Established under the “U.S.-Japan Common Agenda for Cooperation in Global Perspective” in October 1997, the IPRC is a collaborative effort between agencies in Japan and the United States.

