The Rather Large Spacecraft That Could

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Just like that fabled little engine, this tenacious spacecraft just won't give up! But in this case, the "I-think-I-can's" are whistling from the team of mission operations engineers and technicians who continue to work their magic.

Despite numerous technical and mechanical challenges, the NASA/French Space Agency Topex/Poseidon spacecraft continues to chug along, measuring the height of the world's oceans to the incredible accuracy of less than 4 centimeters (under 2 inches) and is still delivering more than 80-percent of the science data.

And it is in no immediate danger of 'giving up!' The operations team has been able to keep Topex/Poseidon operational by substituting redundant components or designing operational alternatives for each potential set-back.

Launched August 10, 1992, and jointly operated by NASA and the French space agency, CNES, Topex/Poseidon is beginning its fourteenth year of continuously recording sea surface height.

It has proven to be an invaluable tool for the science team and other researchers for observing ocean circulation, seasonal cycles, year-to-year global climate events, and decade-long changes in global mean sea level. And since the launch of its follow-on, Jason, in 2001, the two spacecraft have flown in tandem formation, delivering fundamentally new science results with twice the data coverage.

The tandem mission has provided unprecedented opportunities for researchers to study smaller-scale ocean phenomena such as coastal tides, ocean eddies and their effect on ocean general circulation, and improved understanding of low-frequency waves in the ocean that transmit the signals of climate change.