

# Satellite failures threaten hurricane forecasts, Senate panel is told

December 17 2013, by Mark K. Matthews

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There's a storm brewing in the world of U.S. weather forecasting, and - much like the hurricanes that meteorologists are trained to predict - there's not much anyone can do about it.

The U.S. faces the likely prospect that a critical tool used in predicting the weather, a fleet of civilian satellites that orbit the poles, could fail completely in less than four years.

With no ready backup and a replacement satellite not expected to launch any earlier than 2017, experts warned Thursday that U.S. forecasters could face at least a 17-month gap in meteorological data vital to weather prediction, including hurricane forecasting.

"This is an unacceptable position for data so critical to lives, property and the economy," warned Thomas Young, a former NASA official who recently led a review of the National Oceanic and Atmospheric Administration's satellite program.

He was one of several witnesses who testified Thursday at a U.S. Senate hearing about the future of weather forecasting, though Young was the most vocal about the looming gap in satellite coverage.

"There's an unacceptably high probability of a gap in ... polar-orbiting data that could have a duration of months or years," he said.

Right now, NOAA relies on several polar satellites for weather data, but

most of them are beyond their "design life" and could fail anytime. Worse, the newest satellite in the fleet only is expected to last until 2016 - well before the planned 2017 launch of a replacement.

If the NOAA were to lose the entire fleet, then the consequences could be disastrous. According to one government report: "NOAA's forecasts of Superstorm Sandy's track could have been hundreds of miles off without polar-orbiting satellites ... (and) would have shown the storm remaining at sea."

Though the Pentagon also runs a polar-satellite program, officials with the Government Accountability Office - the investigative arm of Congress - have warned of similar "gap" risks on the military side.

Yet neither lawmakers nor agency officials have offered much in the way of concrete solutions.

One possibility - using satellite data from China - was suggested in a NOAA-commissioned study earlier this year, but the idea has faced stiff resistance from lawmakers worried about the U.S. being beholden to a rival foreign power.

It also was recommended by Young's group that the Obama administration try to develop a "filler" satellite as a backstop in case there's a coverage gap in mid-decade. But the quick turnaround and potential cost - likely in the hundreds of millions of dollars - are daunting prospects at a time of sharp budget cuts.

Much of the blame for the current situation can be attributed to a failed effort in the 1990s to combine military and civilian [satellite](#) programs. Because of schedule delays and ballooning costs, the initiative was canceled in 2010 - leaving the U.S. with few options.

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