



Report In Brief

U.S. Department of Commerce Office of Inspector General

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Why We Did This Review

The National Data Buoy Center operates three major buoy systems and a network of coastal marine observing stations that provide critical data on oceanic and atmospheric conditions. We assessed whether NDBC (1) meets user needs with the data provided from the various platforms; (2) has adequate processes for maintaining and repairing the systems; (3) responds appropriately to buoy data losses; and (4) has an effective acquisition strategy and proper administration and oversight for its support services contract. We also sought to determine whether NOAA (1) provides appropriate channels for marine observation data customers to communicate their needs; (2) effectively manages transitions of buoy programs and coordinates buoy development efforts; and (3) plans to further develop multipurpose maritime observation platforms.

Background

The center operates and maintains 103 weather buoys, 56 C-MAN stations, 34 DART buoys, and 55 TAO buoys. The data from these systems is used by weather and hurricane forecasters, researchers, climatologists, oceanographers, commercial fishers, and recreational boaters, among others. The systems' repair and maintenance is provided by SAIC under a 5-year contract with a maximum value of \$500 million. The U.S. Coast Guard provides ship transit services for the center so that it can repair and maintain its weather buoys. The center also leases privately owned vessels to service the DART buoys and uses a dedicated NOAA ship to service the TAO buoys.

View the full report at
<http://www.oig.doc.gov/oig/reports/2008/IPE-18585.pdf>.

National Oceanic and Atmospheric Administration

The National Data Buoy Center Should Improve Data Availability and Contracting Practices (IPE-18585)

What We Found

Data availability. The National Data Buoy Center maintains high levels of data availability for three of its major observing systems: the tropical atmosphere buoy array (TAO), the Deep Ocean Assessment and Reporting of Tsunamis (DART) array; and the Coastal Marine Automated Network (C-MAN). However, data availability for the weather buoys has fallen. We found that frequent unsuccessful maintenance visits complicate the center's efforts to maintain data availability: maintenance records we reviewed showed that 51 of 101 buoys received multiple service visits within relatively short time frames because, among other things, service personnel had incomplete records of a buoy's technical specifications, were inexperienced, or were insufficiently trained.

Maintenance contract. We also identified weaknesses in the support services contract and its administration. For example, provisions for extending the contract term are vague and do not establish prices beyond the initial 5-year term; and financial incentives were not sufficient to promote excellent performance. (NOAA strengthened these incentives during our review.) In addition, the Department does not have guidance on the use of award-term provisions and needs to define its policies and procedures for the review of major acquisitions by Commerce's Acquisition Review Board. Finally, the contractor's performance metrics are not fully aligned with the center's core data availability goals. And the metrics often do not give much weight to the center's core goal of maintaining data availability.

Transition of buoy systems from development to operations. Difficulties encountered during the transitions of the DART and TAO buoy arrays from the Pacific Marine Environmental Lab to the center highlight the need for better planning and coordination when moving systems from research to operations. We found that neither the lab nor the center had clearly defined data collection requirements for the DART system as part of the transition, which contributed to the loss of important observational data needed by researchers studying the 2004 Sumatra tsunami. NOAA initially did not provide adequate funds for the TAO transition, and the center had difficulty obtaining adequate documentation and technical specifications from the lab.

What We Recommended

We made 26 recommendations, including that (1) the center should work with its contractor to reduce the number of unsuccessful service visits; (2) NOAA improve coordination with the Coast Guard on servicing weather buoys; (3) NOAA clarify the legality of contract provisions extending the term of the contract; and (4) the center revise its metrics for assessing contractor performance. We also recommended that NOAA management should exercise proper oversight to ensure that data requirements and technical specifications are clearly defined prior to transitioning buoy systems from research to operations, and should ensure that adequate funding is available to cover transition costs.