



NOAA Must Take Action to Avoid Gaps in Hurricane Hunter Missions and Improve Oversight, Program Management, and Systems Engineering Practices

Audit Report OIG-25-023-A

June 17, 2025

➤ **What We Audited** | Our objective was to assess the National Oceanic and Atmospheric Administration's (NOAA's) progress replacing its hurricane hunter aircraft. To satisfy our objective, we examined the design, planning, and execution of the replacement programs.

➤ **Why This Matters** | NOAA's three hurricane hunter aircraft are highly specialized planes that collect environmental data to inform hurricane track and intensity forecasts. One plane has exceeded its estimated service life, and the other two will reach the end of their estimated service lives in 2030. NOAA has initiated replacement efforts and Congress has appropriated funds for replacement hurricane hunter aircraft.

Gaps in aircraft coverage have a high potential to degrade the quality of hurricane forecasts and warnings, which drive evacuation orders for coastal communities. Accurate forecasts can help save lives, avoid unnecessary evacuations, and in doing so provide economic benefits.

➤ **What We Found** | We found that (1) hurricane hunter replacement programs started late, delayed definition of requirements, and did not identify and manage key risks; (2) hurricane hunter replacement programs need more effective management and executive oversight; and (3) technically complex acquisition and development programs require mature systems engineering practices.

We conclude that NOAA's severe storm forecasts and warnings are at risk due to the likelihood of gaps in aircraft mission capabilities.

➤ **What We Recommend** | We made seven recommendations to help NOAA apply effective program management and oversight to these major acquisitions.