The National Weather Service has always had a large role in aviation forecasting. Nationally, the Aviation Weather Center in Kansas City, MO issues convective SIGMETs, turbulence, and icing forecasts, among other things, for the entire country.

Regionally, Center Weather Service Units embedded within Federal Aviation Administration air traffic control facilities act as liaisons between forecasters and air traffic controllers.

Locally, the NWS forecast office here in Raleigh has the responsibility of issuing Terminal Aerodrome Forecasts (TAFs) for five airports in central NC including the Raleigh-Durham Int’l Airport, the Piedmont Triad Int’l Airport, Fayetteville Regional Airport, Smith-Reynolds Airport in Winston-Salem and Rocky Mount-Wilson Regional Airport.

In addition, an aviation forecast discussion is provided every 6 hours attached to the bottom of the Area Forecast Discussion.
In late 2017, NWS Raleigh began providing area wide forecasts for four important aviation elements including ceiling height, visibility, low level wind shear height, and low level wind shear speed. Forecasts can be accessed on the NWS Raleigh aviation page located at http://www.weather.gov/rah/aviation.

At this time, three-hourly forecasts are available out to 24 hours for each of the elements. There are future considerations that would extend these forecasts out to 36 hours and be available hourly. In addition, hourly forecasts for ceiling and visibility are currently available in the hourly weather graph portion of the point and click forecast (See graphic on Page 1).

The initiative is part of the National Oceanic and Atmospheric Administration’s contribution to the FAA’s NextGen project which is the FAA-led modernization of our nation's air transportation system. Its goal is to increase the safety, efficiency, capacity, predictability, and resiliency of American aviation. You can read more about NextGen on the FAA’s website.