I am a broadcast meteorologist... a member of a profession that, a few decades ago, mostly consisted of kindly gentlemen with baritone voices, occasionally accompanied by a weather puppet or animal mascot.

But we are not your grandma's TV weatherman anymore. For starters, about a fifth of us are female.<sup>1</sup> Six hundred of us are certified by the American Meteorological Society (AMS)<sup>2</sup>, which has verified our meteorological degrees or coursework, given us a rigorous written exam, and had our on-air work judged by a panel of our peers. Others of us are certified by the National Weather Association (NWA)<sup>3</sup>.

These days a television meteorologist is a "real" meteorologist, with a degree or significant college education. We no longer "rip and read" a National Weather Service forecast from a teletype machine. We do our own scientific analysis of the atmosphere. And we have the tools: about 250 television stations own and operate their own weather radar.

Both the AMS and NWA hold national conferences at which broadcasters, National Weather Service personnel, and other important members of the public-private-academic weather community meet to share knowledge and information face to face with each other. These in-person meetings are essential. They make our weather enterprise stronger.

Before we can talk about communicating weather or warnings, or capitalizing on our weather intelligence, one thing is paramount. I think it is something the entire weather enterprise can agree on. We must get the forecast right. We must get the forecast right, because every day, every one of us is impacted directly or indirectly by the forecast. Toward that end, we are gratified that Congress allocated money to NOAA to increase the computing capacity for our weather models.<sup>4</sup> We are justifiably hopeful this will help us close the gap on the European medium-range computer model (ECMWF), which is widely-perceived to be more accurate than its American counterpart (GFS).<sup>5</sup>

So what is the broadcaster's role in all of this? As a – presumably – familiar and trusted voice, we try to skillfully communicate the weather with clarity and meaning to the public. In a way, we are translators – converting scientific language to everyday English. Sometimes it is even necessary for us to express uncertainty in the forecast, to honestly let the public know when there is a close call between different forecast solutions.<sup>6</sup>

When significant weather threatens, we must anticipate and react to it. When there are warnings to pass along, broadcasters "add value" to them by explaining the meaning to our viewers. For example, if there is a developing severe weather situation we do things such as show and interpret frequently-updated radar images, share reports from trusted witnesses, and broadcast live video images to bring the "call to action" message home in vivid terms. In short, our mission is to do what no app can.

As weather communicators, we are beholden to the laws of both meteorological science and social science. Even a good forecast - if poorly communicated - is worthless.

During times of weather crisis, we have recognized the need to deliver a consistent message with our government and private sector partners - to speak with one voice. Social scientists tell us that when people are confronted by conflicting emergency messages they either freeze and do nothing, or waste valuable time trying to gain additional information. Neither is desirable.

Initiatives such as NOAA's Weather-Ready Nation<sup>7</sup> remind us that hazard preparedness begins long before an event happens. And the "Becoming Second to None" report sets a road map for improvement of our forecast system. We will get better - even as the atmosphere reminds us that the margin for error can be slim and unforgiving. As we have experienced the last couple winters, the difference of only a degree or two at cloud level – or a degree or two on the ground – can mean the difference between nuisance weather and a weather disaster.

But I also feel it is also important to put today's discussion in perspective. It has been my privilege to attend meetings of the European Meteorological Society, France's International Weather Forum, and events of the World Meteorological Organization. When I have spoken with my weather colleagues from other countries, one thing becomes clear to me: The weather warning infrastructure we have here in the United States is the envy of the rest of the world. I think it says something about us that we come together today in an effort to make the world's best even better.

- <sup>5</sup> Weather Services for the Nation: Becoming Second to None (National Academies Press, 2012), page 22.
- <sup>6</sup> <u>Completing the Forecast: Characterizing and Communicating Uncertainty for Better Decisions Using Weather and Climate Forecasts (National Academies Press, 2006).</u>
- <sup>7</sup> http://www.nws.noaa.gov/com/weatherreadynation/

<sup>&</sup>lt;sup>1</sup> http://www.magid.com/node/159

<sup>&</sup>lt;sup>2</sup> <u>http://ametsoc.org/memdir/seallist/get\_listofcbm.cfm</u>

<sup>&</sup>lt;sup>3</sup> <u>http://nwas.org/seal/seal-holders.php</u>

<sup>&</sup>lt;sup>4</sup> <u>http://www.noaanews.noaa.gov/stories2015/20150105</u> <u>supercomputer.html</u>