



Barry Lee Myers  
Chief Executive Officer

May 18, 2015

The Honorable Lamar Smith  
United States Congressman  
Chairman  
Committee on Science, Space, and Technology  
U.S. House of Representatives  
2321 Rayburn House Office Building  
Washington, DC 20515

Dear Mr. Smith,

I write in support of House Bill 1561. I testified last year in support of an earlier version of the bill in the prior Congress.

This bill is unique and creative and for the first time both acknowledges and brings together the government agencies, academia, and the American Weather Industry as cooperative and constructive partners in improving the data, research, models, and most importantly the warnings of severe weather, to the American public.

AccuWeather fully supports the passage of H.R. 1561.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Barry Lee Myers", is written over a horizontal line. The signature is fluid and cursive.

Barry Lee Myers  
Chief Executive Officer



Barry Lee Myers  
Chief Executive Officer

May 18, 2015

The Honorable Eddie Bernice Johnson  
United States Congresswoman  
Ranking Member  
Committee on Science, Space, and Technology  
U.S. House of Representatives  
394 Ford House Office Building  
Washington, DC 20515

Dear Ms. Johnson,

I write in support of House Bill 1561. I testified last year in support of an earlier version of the bill in the prior Congress.

This bill is unique and creative and for the first time both acknowledges and brings together the government agencies, academia, and the American Weather Industry as cooperative and constructive partners in improving the data, research, models, and most importantly the warnings of severe weather, to the American public.

AccuWeather fully supports the passage of H.R. 1561.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Barry Lee Myers", written over a horizontal line. The signature is fluid and cursive.

**Barry Lee Myers**  
Chief Executive Officer

385 Science Park Road, State College, PA 16803-2215 P 814.235.8520 M 814.574.4221  
E [Barry.Lee.Myers@accuweather.com](mailto:Barry.Lee.Myers@accuweather.com) [AccuWeather.com](http://AccuWeather.com)



May 15, 2015

The Honorable Lamar Smith, Chairman  
The Honorable Eddie Bernice Johnson, Ranking Member  
Committee on Science, Space and Technology  
US House of Representatives  
Washington, DC 20515

Dear Representatives Smith and Johnson:

The American Commercial Space Weather Association (ACSWA) supports the passage of HR 1561, the Weather Forecast and Innovations Act of 2015. ACSWA has nothing but praise for those members of the Committee on Science, Space and Technology that forged a bi-partisan coalition and worked together to advance this critical legislation. We want to thank Representatives Smith, Johnson, Bonamici, Bridenstine, Lucas, Rohrabacher and Stewart for their leadership on this bill.

This bipartisan bill will help improve America's severe weather forecasting capabilities through a visionary weather research plan at the National Oceanic and Atmospheric Administration (NOAA). We applaud your forward thinking to require the Commerce secretary to draft a strategy to enable the procurement of commercial weather data. By creating the Commercial Weather Data Pilot Program this will enable NOAA to better consider private sector data that will be more cost sustainable and also, help save lives.

The American Commercial Space Weather Association is an association of companies that promotes space weather risk mitigation for critical national infrastructure related to national daily life, economic strength, and national security. ACSWA, as an association and in conjunction with its member companies, is playing a vital role by identifying important data and technology gaps that can be filled by private or government actions and by developing value-added products and services for the benefit of human and

property safety as well as for vibrant commerce.

We concur that HR 1561, the Weather Forecast and Innovations Act of 2015, is the first step towards giving NOAA the authority to purchase high-value commercial weather data and will help NOAA regain its global forecasting superiority in weather prediction.

Sincerely,

A handwritten signature in cursive script that reads "Geoff Crowley".

Dr. Geoff Crowley

On behalf of: Executive Committee

American Commercial Space Weather Association

cc. Dr. Kent Tobiska, ACSWA Exec. Cttee  
Dr. Devrie Intriligator, ACSWA Exec. Cttee  
Dr. Robert Schunk, ACSWA Exec. Cttee



# ATMOSPHERIC & SPACE TECHNOLOGY RESEARCH ASSOCIATES, LLC

5777 CENTRAL AVENUE • • BOULDER, COLORADO, USA 80301 • • 210-834-3475

EIN: 20-2946717

DUNS# 60-1975803

May 15, 2015

The Honorable Lamar Smith, Chairman  
The Honorable Eddie Bernice Johnson, Ranking Member  
Committee on Science, Space and Technology  
US House of Representatives  
Washington, DC 20515

Dear Representatives Smith and Johnson:

Atmospheric & Space Technology Research Associates (ASTRA) supports the passage of HR 1561, the Weather Forecast and Innovations Act of 2015. ASTRA has nothing but praise for those members of the Committee on Science, Space and Technology that forged a bi-partisan coalition and worked together to advance this critical legislation. We want to thank Representatives Smith, Johnson, Bonamici, Bridenstine, Lucas, Rohrabacher and Stewart for their leadership on this bill.

This bipartisan bill will help improve America's severe weather forecasting capabilities through a visionary weather research plan at the National Oceanic and Atmospheric Administration (NOAA). We applaud your forward thinking to require the Commerce secretary to draft a strategy to enable the procurement of commercial weather data. By creating the Commercial Weather Data Pilot Program this will enable NOAA to better consider private sector data that will be more cost sustainable and also, help save lives.

ASTRA is a technology development company, and we have developed cutting edge space weather products, including model simulation capabilities, and ground-based measurements, that promote space weather risk mitigation for critical national infrastructure related to national daily life, economic strength, and national security.

For example, one such data set that has piqued the interest of NOAA is our array of GPS receivers in Alaska that monitor ionospheric GPS scintillation.



ATMOSPHERIC & SPACE TECHNOLOGY  
RESEARCH ASSOCIATES, LLC

5777 CENTRAL AVENUE • • BOULDER, COLORADO, USA 80301 • • 210-834-3475

EIN: 20-2946717

DUNS# 60-1975803

We concur that HR 1561, the Weather Forecast and Innovations Act of 2015, is the first step towards giving NOAA the authority to purchase high-value commercial weather data and will help NOAA regain its global forecasting superiority in weather prediction.

Sincerely,

Geoff Crowley, PhD  
President/Chief Scientist  
Atmospheric & Space Technology Research Associates (ASTRA) LLC



May 15, 2015

The Honorable Lamar Smith, Chairman  
The Honorable Eddie Bernice Johnson, Ranking Member  
Committee on Science, Space and Technology  
US House of Representatives  
Washington, DC 20515

Dear Representatives Smith and Johnson:

AWCIA, an organization representing many of America's leading weather industry companies, supports the passage of HR 1561, the Weather Forecast and Innovations Act of 2015. AWCIA has only praise for those members of the Committee on Science, Space and Technology that forged a bi-partisan coalition and worked together to advance this critical legislation. We want to thank Representatives Smith, Johnson, Bonamici, Stewart, Lucas, Rohrabacher and especially to Jim Bridenstine for his leadership.

This bipartisan bill will help improve America's severe weather forecasting capabilities through a visionary weather research plan at the National Oceanic and Atmospheric Administration (NOAA). We applaud the improvements in the bill for hurricane and tornado warnings. By creating the Commercial Weather Data Pilot Program this will enable NOAA to better consider private sector data that will be more cost sustainable and also, help save lives.

AWCIA membership comprises small and large commercial entities across America. The AWCIA membership serves governmental agencies, small, medium and large companies, and the general public with value added products every day. NOAA/NWS and their programs and employees have Weather Industry support. America's weather and climate Industry has NOAA/NWS support. In this ideal partnership, the American citizen emerges as the ultimate beneficiary.

Our membership agrees that HR 1561, the Weather Forecast and Innovations Act of 2015 is the first step towards giving NOAA the authority to purchase high-value commercial weather data and will help NOAA regain its global forecasting superiority in weather prediction.

Sincerely,

A handwritten signature in blue ink, appearing to read "Steve Root", enclosed within a large, loopy blue oval.

Steve Root  
President



*DR. DEVRIE S. INTRILIGATOR, DIRECTOR  
CARMEL RESEARCH CENTER | SPACE PLASMA LABORATORY  
P. O. BOX 1732, SANTA MONICA, CA 90406  
TEL: (310)829-5275 | FAX:(310)453-2983 | DEVRIEI@AOL.COM*

May 17, 2015

The Honorable Lamar Smith, Chairman  
The Honorable Eddie Bernice Johnson, Ranking Member  
Committee on Science, Space and Technology  
US House of Representatives  
Washington, DC 20515

Re: Carmel Research Center, Inc. --- Support for HR 1561

Representatives Smith and Johnson:

Carmel Research Center, Inc. (CRC) supports the passage of HR 1561, the Weather Forecast and Innovations Act of 2015. CRC congratulates those members of the Committee on Science, Space and Technology that forged a bi-partisan coalition and worked together to advance this critical legislation. We thank Representatives Smith, Johnson, Bonamici, Bridenstine, Lucas, Rohrabacher, and Stewart for their leadership on this bill.

This important bipartisan bill will help improve America's severe weather forecasting capabilities through a visionary weather research plan at the National Oceanic and Atmospheric Administration (NOAA). We applaud your forward thinking to require the Department of Commerce Secretary to draft a strategy to enable the procurement of commercial weather data. By creating the Commercial Weather Data Pilot Program this will enable NOAA to better consider commercial data that will be more cost sustainable and also, help save lives.

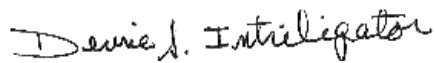
Carmel Research Center, Inc. was founded in 1978. CRC promotes space weather risk mitigation for critical national infrastructure



related to national daily life, economic strength, and national security. CRC is playing a vital role by identifying important data and technology gaps that can be filled by commercial or government actions and by developing value-added products and services for the benefit of human and property safety as well as for vibrant commerce.

We concur that HR 1561, the Weather Forecast and Innovations Act of 2015, is the first step towards giving NOAA the authority to purchase high-value commercial weather data and will help NOAA regain its global forecasting superiority in weather prediction.

Sincerely,

A handwritten signature in cursive script that reads "Devrie S. Intriligator".

Dr. Devrie S. Intriligator



201 N. Orange Grove Blvd., Suite 503  
Pasadena, CA 91103

The Honorable Lamar Smith  
Chairman, Committee on Science, Space and Technology  
US House of Representatives  
Washington, DC 20515

The Honorable Eddie Bernice Johnson  
Ranking Member, Committee on Science, Space and Technology  
US House of Representatives  
Washington, DC 20515

5/18/15

Dear Chairman Smith and Ranking Member Johnson:

I write to thank you for marking up H.R. 1561, the Weather Research and Forecasting Innovation Act in the House Committee on Science, Space and Technology. It is heartening to see a bipartisan effort to address the important issues facing the national weather enterprise. GeoOptics is in strong support of bill and we support efforts to bring it before the full House of Representatives as soon as possible.

H.R. 1561 has a number of important provisions, including sections on improving observing system, computing and weather research planning, and improving severe weather predictions. I believe it is particularly important for NOAA to carefully evaluate its space-based observing systems to make sure it is creating its forecasts as efficiently and effectively as possible. GeoOptics is also a strong supporter of Section 10 of the bill, which clarifies existing law to encourage NOAA to pursue the purchase of commercial weather data.

GeoOptics is building a constellation of small satellites that will provide advanced, affordable and reliable weather and environmental data to the Federal government and other customers. The GeoOptics constellation will provide data that can see into the heart of the strongest storms and help predict their paths. The data will also be able to help calibrate other satellite data, increasing the power of our existing weather resources. By leveraging the signals from the nation's GPS system and technologies present in every smartphone, GeoOptics satellites will be smaller and more affordable than traditional weather satellites, allowing our knowledge of the atmosphere to expand dramatically without stretching the budget.

By including Section 10, you have taken a necessary step to ensure NOAA has the authority and encouragement of Congress to purchase high-quality weather data from commercial providers. I believe that commercial weather data can reinvigorate NOAA's data acquisition and put the agency on a strong path into the future.

I believe this broadly supported, bipartisan bill should be brought to the House Floor as soon as possible and I thank you both for your leadership on this important issue.

Sincerely,

A handwritten signature in black ink, appearing to read "C. Lautenbacher, Jr." with a stylized flourish at the end.

Conrad C. Lautenbacher, Jr.  
Vice Admiral, U.S. Navy (Ret.)  
CEO, GeoOptics, Inc.



18 May 2015

The Honorable Lamar Smith, Chairman  
The Honorable Eddie Bernice Johnson, Ranking Member  
Committee on Science, Space and Technology  
US House of Representatives  
Washington, DC 20515

Subject: Global Weather Corporation support for HR 1561

Dear Representatives Smith and Johnson:

Global Weather Corporation (GWC) supports the passage of HR 1561, the Weather Forecast and Innovations Act of 2015. GWC greatly appreciates the efforts of those members of the Committee on Science, Space, and Technology who forged a bi-partisan coalition and worked together to advance this critical legislation. We want to thank Representatives Smith, Johnson, Bonamici, Bridenstine, Lucas, Rohrabacher, and Stewart for their leadership on this bill.

This bipartisan bill will help improve America's weather forecasting capabilities through many of its provisions. We applaud your forward thinking to motivate innovative approaches that improve weather data procurement. Among other things, this will enable NOAA to better consider commercial data that could be more cost sustainable and help save lives.

Global Weather Corporation (GWC) is a private-label supplier of precision weather forecast information to businesses for use in internal applications, websites, and mobile applications. GWC's forecasts are delivered on-demand through scalable web services for any location in the world and are relied upon by our customers to improve decision-making, increase operational efficiency, and better serve customers. The core forecast model we use was developed over the last decade at the National Center for Atmospheric Research (NCAR) and is among the most widely validated weather technologies in the world. GWC was founded as an NCAR technology transfer company by the University Corporation for Atmospheric Research Foundation in 2009 and is privately held.

We concur that HR 1561, the Weather Forecast and Innovations Act of 2015, is the first step towards giving NOAA the authority to enhance its ecosystem of data providers. It will help NOAA regain its global forecasting superiority in weather prediction.

Sincerely,

A handwritten signature in black ink that reads "William B. Gail".

William B. Gail, PhD  
Co-Founder and Chief Technology Officer



US House of Representatives  
House Science Committee  
Washington, DC 20515

May 18<sup>th</sup> 2015

Dear House Science Committee:

**RE: MetraWeather US Support for HR 1561**

Thank you for championing this very important initiative...it is vital to improving the quality of life for Americans and the profitability of American businesses.

This legislation will drive important scientific gains in our understanding of the atmospheric processes that fuel high impact weather events and will ensure what we learn is implemented into daily practice across the vast Weather Enterprise.

MetraWeather US believes successful implementation of HR 1561 will drive improvements in the accuracy and communication of high impact weather events. These improvements, when powered by the strength of the entire Weather Enterprise, will protect and improve the lives of Americans. Additionally, this legislation provides an opportunity to grow our economy, as weather sensitive businesses will have access to better weather intelligence to proactively mitigate environmental impacts; thereby, reducing costs, increasing margins and improving services for the American people.

Again, we commend Congress for taking up this very important cause and look forward to working with NOAA, academia and the private weather enterprise to maximize its benefits for the American people.

Yours sincerely

A handwritten signature in black ink, appearing to read "Donald H. Berchoff".

Donald H. Berchoff  
Vice President, MetraWeather US (former Director, Science and Technology at the US National Weather Service)

POWERFUL WEATHER INTELLIGENCE

27800 Tower Center Plaza  
Suite 200A, Irvine, CA  
92618-2202  
Phone: 949.415.7600  
don.berchoff@metraweather.com

MetraWeather (US) Inc. (MetraWeather) is  
the trading name of Meteorological Service  
of New Zealand Ltd (MetService) in the  
USA. ISO 9001 Certified

May 15, 2015

The Honorable Lamar Smith, Chairman  
The Honorable Eddie Bernice Johnson, Ranking Member  
Committee on Science, Space and Technology  
US House of Representatives  
Washington, DC 20515

Dear Representatives Smith and Johnson:

Panasonic Avionics Corporation supports the passage of HR 1561, the Weather Forecast and Innovations Act of 2015. Panasonic Avionics has nothing but praise for those members of the Committee on Science, Space and Technology that forged a bi-partisan coalition and worked together to advance this critical legislation. We want to thank Representatives Smith, Johnson, Bonamici, Bridenstine, Lucas, Rohrabacher and Stewart for their leadership on this bill.

This bipartisan bill will help improve America's weather forecasting capabilities through a visionary weather research and implementation plan at the National Oceanic and Atmospheric Administration (NOAA). We applaud your forward thinking to require the Commerce secretary to draft a strategy to enable the procurement of commercial weather data. By creating the Commercial Weather Data Pilot Program this will enable NOAA to better consider private sector data that will be more cost sustainable and also, help save lives.

Panasonic Avionics Corporation's core weather technology includes:

- Its Tropospheric Airborne Meteorological Data Reporting (TAMDAR) sensor, a small and lightweight device designed to collect sophisticated weather data from the atmosphere during the flight of an aircraft. TAMDAR is installed across a network of hundreds of commercial aircraft that are operated by more than a dozen partner airlines. It collects thousands of highly detailed and accurate readings from the upper atmosphere each day.
- The ability to transmit the atmospheric data over Panasonic's global aeronautical networks, including Iridium, in real time to the Panasonic operations center
- Its scientific and engineering teams' solutions to analyze and quality control and assimilate the atmospheric data to ensure accuracy, providing the maximum benefit for weather forecasting models.

We concur that HR 1561, the Weather Forecast and Innovations Act of 2015, is the first step towards giving NOAA the authority to purchase high-value commercial weather data and will help NOAA regain its global forecasting superiority in weather prediction.

Sincerely,



Neil Jacobs  
Chief Atmospheric Scientist  
Panasonic Avionics Corporation

The Honorable Lamar Smith  
Chairman  
Committee on Science, Space and Technology  
2321 Rayburn House Office Building  
United States House of Representatives  
Washington, D.C. 20515

The Honorable Eddie Bernice Johnson  
Ranking Member  
Committee on Science, Space and Technology  
2468 Rayburn Office Building  
United States House of Representatives  
Washington, D.C. 20515

Dear Chairman Smith and Ranking Member Johnson:

I am writing to congratulate you on the bipartisan effort that has brought about the rapid introduction and approval by your Committee of the critically important Weather Research and Forecasting Innovation Act. I want to implore you to continue to work for passage in the full House of Representatives and to ensure that disparate interests in the Senate not dilute this strong and effective legislation. As I'm sure you are aware, the legislation in this Act is critical to the safety of Americans, the well-being of businesses nationwide, and the overall stability of the U.S. economy. Passage of this Act is also critically important to the future of the U. S. space industry.

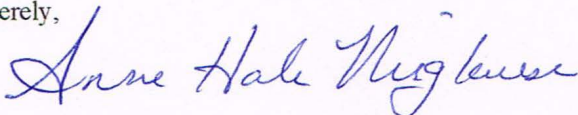
Catastrophic weather has become ever-present in the news and, indeed, across our land. From Hurricane Katrina and Superstorm Sandy to the violent EF4 and EF5 tornados that ravage parts of our heartland year after year, all with a backdrop of floods and droughts that are breaking historical records, our nation is faced with a growing threat to our people and our economy. Meanwhile, our nation's forecasting capabilities, already behind those of the Europeans, are on the verge of regressing even more just when we need them to get better. This is largely due to a decline in U.S. weather satellite coverage that is already underway and expected to get much worse, as well as an overall lack of resources devoted to weather forecasting activities.

Your committee has done a superb job of crafting legislation that places appropriate emphasis and resources on developing observational, computing and modeling capabilities that will deliver required improvements in weather forecasting, especially in prediction of extreme events that pose the biggest risks to life and property. At a time when partisan issues have mired much of our nation's priority legislative initiatives, the Environmental Subcommittee has developed legislation that all can agree will best serve our nation and better protect our people and infrastructure.

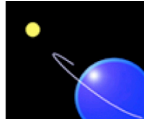
Importantly, this legislation recognizes and nurtures the role of private industry in data collection and weather forecasting. U.S. companies stand ready to augment our national observing systems in a way that strengthens the global observing system, accelerates innovation in data collection, lowers government costs and creates high-tech U.S. jobs. The engagement of private industry encouraged by this Act is crucial to maintaining and improving the accuracy of weather forecasts in the years and decades to come, and to establishing U.S. leadership in a new race to space, while more evenly spreading the costs of data collection among stakeholders worldwide, rather than saddling the U.S. taxpayer with the lion's share of the financial burden.

Passage of the Weather Research and Forecasting Innovation Act is imperative to our nation's safety and security, and will help better position the U.S. space industry to compete at home and abroad. I encourage you to continue to push for passage in the full House of Representatives and to stand firm for its key provisions in conference with the Senate. If you have any questions regarding our support for this initiative, please do not hesitate to contact me directly at 240-285-1584, or by e-mail at [amiglares@planetiq.com](mailto:amiglares@planetiq.com).

Sincerely,



Anne Hale Miglarese  
President & CEO



# SPACE ENVIRONMENT TECHNOLOGIES

*Space Research    Space Operations    Space Standards*

May 18, 2015

The Honorable Lamar Smith, Chairman  
The Honorable Eddie Bernice Johnson, Ranking Member  
Committee on Science, Space and Technology  
U.S. House of Representatives  
Washington, DC 20515

Dear Representatives Smith and Johnson,

The American Commercial Space Weather Association (ACSWA) supports the passage of HR 1561, the Weather Forecast and Innovations Act of 2015. ACSWA strongly supports those members of the Committee on Science, Space and Technology that forged a bi-partisan coalition and worked together to advance this critical legislation. We want to thank Representatives Smith, Johnson, Bonamici, Bridenstine, Lucas, Rohrabacher, and Stewart for their leadership on this bill.

This bipartisan bill will help improve America's severe weather forecasting capabilities through a visionary weather research plan at the National Oceanic and Atmospheric Administration (NOAA). We applaud your forward thinking to require the Commerce secretary to draft a strategy to enable the procurement of commercial weather data. By creating the Commercial Weather Data Pilot Program this will enable NOAA to better consider private sector data that will be more cost sustainable and also, help save lives.

The American Commercial Space Weather Association is an association of companies that promotes space weather risk mitigation for critical national infrastructure related to national daily life, economic strength, and national security. ACSWA, as an association and in conjunction with its member companies, is playing a vital role by identifying important data and technology gaps that can be filled by private or government actions and by developing value-added products and services for the benefit of human and property safety as well as for vibrant commerce.

We concur that HR 1561, the Weather Forecast and Innovations Act of 2015, is the first step towards giving NOAA the authority to purchase high-value commercial weather data and will help NOAA regain its global forecasting superiority in weather prediction.

Sincerely,

W. Kent Tobiska

Executive Committee, American Commercial Space Weather Association  
President, Space Environment Technologies



05/15/2015

The Honorable Lamar Smith  
Chairman  
Committee on Science, Space, and Technology  
U.S., House of Representatives  
2321 Rayburn House Office Building  
Washington, DC 20515

The Honorable Eddie Bernice Johnson  
Ranking Member  
Committee on Science, Space, and Technology  
U.S., House of Representatives  
394 Ford House Office Building  
Washington, DC 20515

Dear Chairman Smith and Ranking Member Johnson:

**Regarding: Letter of support for H.R. 1561 – The Weather Research and Forecasting Innovation Act of 2015**

First and foremost, I would like to thank you for your commitment and continued support of the advancement of Science, Space and Technology in the United States. The progress you have made with H.R. 1561 – The Weather Research and Forecasting Innovation Act of 2015 is astounding and, if passed, will prove to be a tremendous value to the businesses, development and safety of the United States. To improve the National Oceanic and Atmospheric Administration’s weather research through a thoughtful, cost effective, focused program that incorporates partnerships with private organizations is an idea that is widespread for optimizing weather forecasting - not only in the U.S., but globally.

Most private companies cannot compete with the capabilities of NOAA, but can partner with them and provide data that is valuable to them and their value added systems. As you know, in the U.S. we have a looming weather data gap, but thankfully, as outlined in H.R. 1561, there are promising ways to close the gap. Data provided by GPS-RO, private companies, private-public collaborations are promising solutions. To operate in a collaborative spirit on combined technology takes the best of both worlds and provides a better service to the users of that technology and data.

With the private and public sectors working together, we will be able to move last century’s weather forecasting into the 21st century - where weather is as predictable as it should be. We live with unpredictable weather and everyone accepts it as a part of everyday life. We know, however, that it is just a lack of data, not technology. We simply do not have the right amount of sensors and data information that we need to make better weather predictions. This data coupled with the weather models that we currently use will dramatically improve weather forecasting.

The weather impact on various industries in the U.S. is close to 5 billion dollars. Weather touches every industry in the United States and the impact of not knowing the weather is profound. It is critical for the advancement, wellbeing and economy of the United States to pass H.R. 1561 – The Weather Research and Forecasting Innovation Act of 2015. It will set a new standard for ensuring that weather data is reliable, accurate and cost effective - substantially improving the lives of every American. If you have any questions regarding my or Spire Global’s support for this initiative, please contact me directly at: 646-515-3375 or via e-mail: [peter@spire.com](mailto:peter@spire.com). Thank you for your time.

Regards,

Peter Platzer  
Chief Executive Officer  
Spire Global, Inc.  
415-356-3400





May 15, 2015

The Honorable Lamar Smith, Chairman  
The Honorable Eddie Bernice Johnson, Ranking Member  
Committee on Science, Space and Technology  
US House of Representatives  
Washington, DC 20515

Dear Representatives Smith and Johnson:

Science and Technology Corporation (STC) supports the passage of HR 1561, the Weather Forecast and Innovations Act of 2015. STC has nothing but praise for those members of the Committee on Science, Space and Technology that forged a bi-partisan coalition and worked together to advance this critical legislation. We want to thank Representatives Smith, Johnson, Bonamici, Bridenstine, Lucas, Rohrabacher and to Chris Stewart for his early leadership on this bill.

This bipartisan bill will help improve America's severe weather forecasting capabilities through a visionary weather research plan at the National Oceanic and Atmospheric Administration (NOAA). We applaud your forward thinking to enable a path for the procurement of commercial weather data. By creating the Commercial Weather Data Pilot Program this will enable NOAA to better consider private sector data that will be more cost sustainable and also, help save lives.

Science and Technology Corporation is a science, sensors, and systems company that has long been delivering an extensive range of award-winning advanced scientific, engineering, and technical support services to U.S. Government and industry customers. Our staff supports many of the operational missions that monitor the heartbeat of our planet through a growing number of Earth Observing System of System platforms. STC is working with Tempus Global Data on its hyperspectral atmospheric sounder sensor called STORM (Sounding and Tracking Observatory for Regional Meteorology).

Of behalf of the Science Advisory Council for Tempus, we concur that HR 1561, the Weather Forecast and Innovations Act of 2015, is the first step towards giving NOAA the authority to purchase high-value commercial weather data and will help NOAA regain its global forecasting superiority in weather prediction.

Sincerely,

Dr. Hal Bloom,  
Group Vice President, Science and Engineering Division, Science and Technology Corp.  
Chairman, Science Advisory Council for Tempus Global Data



**Science Advisory Council for Tempus Global Data**

***Dr. Hal Bloom, Chairman***

Group Vice President of the Science and Engineering Division with Science and Technology Corporation (STC), Columbia, MD.

***Dr. Chris Barnet***

Senior Research Scientist at STC, Columbia, MD.

***Dr. Larrabee Strow***

Research Professor of Physics at the University of Maryland, Baltimore County.

***Mr. Paul Stewart***

Director of Technology at the Space Dynamics Laboratory, Utah State University, North Logan, UT

***Dr. Scott Jensen***

Chief Scientist for Tempus Global Data, Ogden, UT.

***Mr. Timothy Turner-Valle,***

Senior Systems Engineer, Ball Aerospace, Broomfield, CO

***Dr. Charles Wight***

Weber State University President, Ogden, UT.



May 15, 2015

The Honorable Lamar Smith, Chairman  
The Honorable Eddie Bernice Johnson, Ranking Member  
Committee on Science, Space and Technology  
US House of Representatives  
Washington, DC 20515

Dear Representatives Smith and Johnson:

Tempus Global Data supports the passage of HR 1561, the Weather Forecast and Innovations Act of 2015. Tempus has nothing but praise for those members of the Committee on Science, Space and Technology that forged a bi-partisan coalition and worked together to advance this critical legislation. We want to thank Representatives Smith, Johnson, Bonamici, Bridenstine, Lucas, Rohrabacher and to Chris Stewart for his early leadership on this bill.

This bipartisan bill will help improve America's severe weather forecasting capabilities through a visionary weather research plan at the National Oceanic and Atmospheric Administration (NOAA). We applaud your forward thinking to require the Commerce secretary to draft a strategy to enable the procurement of commercial weather data. By creating the Commercial Weather Data Pilot Program this will enable NOAA to better consider private sector data that will be more cost sustainable and also, help save lives.

Tempus is an atmospheric and environmental data company, headquartered in Ogden, Utah, has licensed hyperspectral atmospheric sounding technology from Utah State University that will provide highly complex views of the atmosphere in three dimensions. We are planning to launch a constellation of sensors in a geosynchronous orbit. Our STORM sensors will capture persistent and recurring slices of the atmosphere, which result in unprecedented accuracy and clarity to provide forecasters with better data to enable them to make more accurate weather predictions. Big data sets and visualization tools will inform and drive critical business decision-making for economic sectors.

We concur that HR 1561, the Weather Forecast and Innovations Act of 2015, is the first step towards giving NOAA the authority to purchase high-value commercial weather data and will help NOAA regain its global forecasting superiority in weather prediction.

Sincerely,

A handwritten signature in black ink, appearing to read "Alan Hall".

Alan Hall, Chairman and CEO



May 18, 2015

The Honorable Lamar Smith  
Chairman, Committee on Science, Space and Technology  
U.S. House of Representatives  
2321 Rayburn House Building  
Washington, D.C. 20515

The Honorable Eddie Bernice Johnson  
Ranking Member, Committee on Science, Space and Technology  
U.S. House of Representatives  
394 Ford House Office Building  
Washington, D.C. 20515

Re: H.R. 1561, Weather Research and Forecasting Innovation Act of 2015

Dear Representatives Smith and Johnson:

Through The Weather Channel (weather.com) and Weather Underground (wunderground.com) brands, The Weather Company provides millions of people every day with the world's best weather forecasts, content and data, connecting with them through television, web, mobile and tablet screens, as well as third-party publishing partners. Additionally through our subsidiary, WSI, the company delivers superior professional weather services for the media, aviation and energy sectors. We have followed with interest the development of H.R. 1561, *Weather Research and Forecasting Innovation Act of 2015*. Weekly, if not daily, we are all witness to hazardous weather impacting the well-being of our citizens and disrupting important sectors of the national economy. On behalf of The Weather Company, I write to express my appreciation of your efforts to address in a bipartisan manner the issue of improving weather services.

This Bill rightly recognizes the interdependence among the public, private and academic sectors as well as the necessity to engage federal agencies conducting weather research across the federal government. Its strong emphasis on research to operation is welcome as is its attention to multi-year research planning. Further, we believe the Environmental Services Information Working Group has been effective, and we support its continuation as directed in H.R. 1561.

David Kenny, Chairman & CEO  
THE WEATHER COMPANY  
1177 Avenue of the Americas, 6th Floor ♦ New York, NY 10036  
david.kenny@weather.com  
www.weather.com



We offer a note of caution, though, with what we believe could be interpreted as a mandate to commercialize weather observations. While the federal government should always be striving to find the most cost effective means to acquire data, great care must be exercised to guard against stifling innovation and economic growth – two of the goals of this Bill. Further, the U.S. policy of free and open exchange of weather data has been a strong plank in our international collaboration efforts. Indeed, the U.S. has a long practice of encouraging other countries to freely exchange their data to benefit citizens everywhere. We must remain mindful of the potential impact that private commercialization of weather observations may have on these important international efforts.

While we ask that you consider our concern about the unintended consequences of possible commercialization of weather observations, The Weather Company supports your efforts to improve the weather readiness of our Nation through H.R. 1561.

Thank you for your consideration, and please feel free to contact me if you would like to discuss this matter further. I can be reached at the office number above.

Respectfully,

A handwritten signature in black ink, appearing to read "David W. Kenny".

David W. Kenny  
Chairman & CEO, The Weather Company



---

**DR. THOMAS J. BOGDAN**  
**UCAR PRESIDENT**

**303-497-1652**  
**BOGDAN@UCAR.EDU**

May 18, 2015

The Honorable Lamar Smith  
House Science, Space and Technology Committee  
2321 Rayburn House Office Building  
Washington, D.C. 20515

The Honorable Eddie Bernice Johnson  
House Science, Space and Technology Committee  
394 Ford House Office Building  
Washington, D.C. 20515

The Honorable Jim Bridenstine  
House Science, Space and Technology Committee  
2321 Rayburn House Office Building  
Washington, D.C. 20515

The Honorable Frank Lucas  
House Science, Space and Technology Committee  
2321 Rayburn House Office Building  
Washington, D.C. 20515

The Honorable Suzanne Bonamici  
House Science, Space and Technology Committee  
394 Ford House Office Building  
Washington, D.C. 20515

Dear Chairmen Smith, Bridenstine, Vice-Chair Lucas, and Ranking Members Johnson and Bonamici:

On behalf of the nation's atmospheric sciences community and the 105 member universities that comprise the University Corporation for Atmospheric Research (UCAR), I commend your bipartisan efforts on H.R. 1561 the Weather Research and Forecasting Innovation Act of 2015. I am pleased the Committee has made progress on legislation to improve weather forecasting and accelerate research-to-operations within the U.S. weather enterprise. UCAR is pleased to support this bill and the continuation of the legislative process to strengthen our weather enterprise. The bipartisan approach under consideration offers many new improvements on earlier versions of the bill and UCAR is grateful for the opportunity we have been given to participate in the development of this critical legislation.

By key measures, U.S. weather forecasting capabilities have slipped behind those of a number of international competitors, including the European Union, United Kingdom, and Japan. The Committee's consideration of weather issues and stewardship of weather legislation over the last six months and in the previous Congress are important steps in restoring our international competitiveness in this important scientific arena. The Committee is helping to galvanize the weather community to work together and achieve a more innovative, more robust, and better integrated enterprise that can make the U.S. second to none in weather once again.

Weather authorizing legislation that encourages the entire weather enterprise to strengthen the weather forecast has been long overdue. The last major weather bill that Congress considered was connected to the modernization of the National Weather Service (NWS) in the 1990s, a time when the National Oceanic and Atmospheric Administration (NOAA) essentially was the bulk of the national weather enterprise. Since then, the weather enterprise has evolved and matured into a dynamic national collaboration between the private, academic, and public sectors, each bringing its own contributions and strengths to the service of the nation. The result has been a better weather forecast, which enables us to save lives and protect property in the face of extreme weather as well as make more efficient business and personal decisions around routine weather.

The Weather Research and Forecasting Innovation Act of 2015 pushes the NWS to become more flexible, collaborative, and innovative within the context of the evolving U.S. weather enterprise. The legislation would strengthen the innovation pipeline that advances models, technologies, and products from universities and laboratories to the NWS and in so doing protects lives and property.

The bill would also dramatically improve the scale and quality of collaboration and coordination between the different parts of the U.S. weather enterprise, including private, academic, and public sectors. The weather enterprise needs better coordination at a high level that will ensure resources and functions are aligned effectively and efficiently. This is why I support the creation of an interagency coordinating committee (under Section 12) in the White House Office of Science and Technology to improve coordination of relevant weather research and forecast innovation activities across the federal government.

When NOAA draws on the best assets of the business and university community, it will produce a better weather forecast. Indeed, many of the breakthrough technologies of the last several decades in meteorology have originated at our nation's universities and the National Center for Atmospheric Research. This is why I support the provision in Sec. 3 that calls for at least 30 percent of weather research resources in NOAA's Office of Oceanic and Atmospheric Research to be made available to America's weather industry and the academic community.

Your engagement with key stakeholders in the academic community, including UCAR, the American Meteorological Society, the Weather Coalition, and the National Academy of Sciences, has resulted in a bill with a broadened perspective that better reflects the full breadth of the weather enterprise. Thank you for your efforts on this legislation, your attention to weather issues, and your engagement with the weather community. As a representative of the broad university community in the atmospheric sciences, I look forward to continuing to work with you as the Weather Research and Forecasting Innovation Act of 2015 progresses off the floor and to the Senate.

Best regards,

A handwritten signature in black ink that reads "Thomas J. Bogdan". The signature is fluid and cursive, with the first name "Thomas" and last name "Bogdan" clearly legible.

Thomas J. Bogdan  
President  
UCAR



# ZIONS BANK<sup>®</sup>

*Office of the President*

A. Scott Anderson  
President and CEO

May 18, 2015

The Honorable Lamar Smith, Chairman  
The Honorable Eddie Bernice Johnson, Ranking Member  
Committee on Science, Space and Technology  
US House of Representatives  
Washington, DC 20515

Dear Representatives Smith and Johnson:

As the past President of Utah Science Technology and Research Initiative (USTAR), and President and CEO of Zions Bank I support the passage of HR 1561, the Weather Forecast and Innovations Act of 2015. USTAR has nothing but praise for those members of the Committee on Science, Space and Technology that forged a bi-partisan coalition and worked together to advance this critical legislation. We want to thank Representatives Smith, Johnson, Bonamici, Bridenstine, Lucas, Rohrabacher and to Chris Stewart for his early leadership on this bill.

This bipartisan bill will help improve America's severe weather forecasting capabilities through a visionary weather research plan at the National Oceanic and Atmospheric Administration (NOAA). We applaud your forward thinking to require the Commerce secretary to draft a strategy to enable the procurement of commercial weather data. By creating the Commercial Weather Data Pilot Program this will enable NOAA to better consider private sector data that will be more cost sustainable and also, help save lives.

USTAR works with innovators and entrepreneurs around the state of Utah. The USTAR Governing Authority consists of 10 members appointed to four-year terms by the Governor, the Speaker of the House, the Senate President and the Commissioner of Higher Education. The USTAR Governing Authority is a group of business and community leaders with experience in invention, entrepreneurship, financial capital, university research, and running and growing companies. For example, USTAR has been a long supporter of the development of the hyperspectral atmospheric sounding technology from Utah State University that is licensed to Tempus Global Data.

I completely concur that HR 1561, the Weather Forecast and Innovations Act of 2015, is the first step towards giving NOAA the authority to purchase high-value commercial weather data and will help NOAA regain its global forecasting superiority in weather prediction.

Sincerely,



A. Scott Anderson



<https://weathercoalition.org/>

Page 1 of 2

18 May 2015

The Honorable Lamar Smith  
Chair, Committee on Science, Space, and Technology  
The U.S. House of Representatives  
2321 Rayburn House Office Building  
Washington, D.C. 20515

Dear Mr. Smith:

I write on behalf of **The Weather Coalition**, a professional trade association of 21 members from all across the US. The members are drawn from the private, academic, and R&D sectors of the national weather enterprise. The aim of the association is to undertake, promote, and support programs that will make “second to none” our nation’s portfolio of environmental observations and weather forecasting capabilities, including the underpinning research, development, and transition to operations. The intent of the Coalition’s efforts is to significantly improve our nation’s weather prediction and warning capabilities. These are resident in both federal agencies and the American weather industry, and supported by the academic and R&D sectors. The Coalition believes that such improvement are essential to reduce our nation’s socioeconomic vulnerability to weather, improve national physical and environmental security, increase protection of life and property, and enhance the global competitiveness of U.S. industry.

**The Weather Coalition supports the passage of House Bill 1561.** When passed, this bill will represent a major step toward improvements in our nation’s weather prediction capabilities. The Coalition sees the following three points as particularly important:

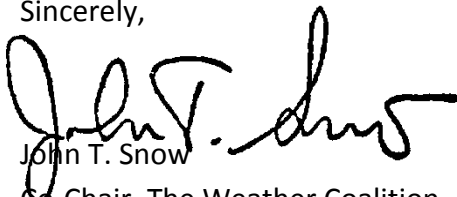
- **Encouraging and Urging the National Oceanic and Atmospheric Administration National Weather Service (NOAA NWS) to make more extensive use of Environmental Data from Commercial Sources:** This will help ensure that the nation is deriving optimal value from investments in environmental observations by leveraging opportunities for NOAA to use lower cost commercial data when there is no negative impact to quality,

delivery or availability. Moving in this direction may also provide a viable option to cover any gap that may occur in the medium future due to loss from age of certain important low-Earth orbit satellites.

- **Enhance the roles of the NOAA Science Advisory Board's Environmental Information Science Working Group (EISWG):** The new responsibilities assigned to EISWG will strengthen community input to NOAA and NOAA NWS leadership with respect to weather research and forecast operations and assist the agency leadership in setting of priorities for allocation of scarce R&D and Research-to-Operations funding. It also will annually engage both the Senate and House Sciences in this important conversation. This provides a significant opportunity for NOAA to leverage the national weather research and operational forecasting enterprise (much of which lies outside the federal government).
- **Establishment of the Interagency Committee for Advancing Weather Services (ICAWS):** In parallel with the preceding point, the establishment of the ICAWS will provide a significant opportunity to enhance the value of federal R&D and operational programs by taking Office of the Federal Coordinator for Meteorology (OFCM) out of NOAA and elevating this critical function to the Office of Sciences and Technology Policy. Such a move will provide greater visibility to the capabilities and needs of the federal, private, and academic sectors, and foster more effective prioritization and coordination of scarce resources.

If **The Weather Coalition** can be of assistance in this matter in the future, please do not hesitate to call upon us.

Sincerely,



John T. Snow

Co-Chair, The Weather Coalition

Regents' Professor Emeritus of Meteorology and

Dean Emeritus, College of Atmospheric and Geographic Sciences

The University of Oklahoma

Principal, Snow & Associates, L.L.C.

[jsnow@ou.edu](mailto:jsnow@ou.edu)

405-590-9689





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Norman, OK 73072  
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WDTinc.com  
info@wdtinc.com

May 15, 2015

The Honorable Lamar Smith, Chairman  
The Honorable Eddie Bernice Johnson, Ranking Member  
Committee on Science, Space and Technology  
US House of Representatives  
Washington, DC 20515

Dear Representatives Smith and Johnson:

Weather Decision Technologies, Inc. (WDT) supports the passage of HR 1561, the Weather Forecast and Innovations Act of 2015. WDT has nothing but praise for those members of the Committee on Science, Space and Technology that forged a bi-partisan coalition and worked together to advance this critical legislation. We want to thank Representatives Smith, Johnson, Bonamici, Stewart, Lucas, Rohrabacher and especially to Jim Bridenstine for his leadership.

This bipartisan bill will help improve America's severe weather forecasting capabilities through a visionary weather research plan at the National Oceanic and Atmospheric Administration (NOAA). We applaud the improvements in the bill for hurricane and tornado warnings. By creating the Commercial Weather Data Pilot Program this will enable NOAA to better consider private sector data that will be more cost sustainable and also, help save lives.

Weather Decision Technologies, Inc. is an industry leader, providing organizations with weather decision support on a global scale. WDT offers specific expertise with Big Data and Weather Analytics as it applies to hazardous weather detection and prediction, forecast modeling, decision analytics, GIS, mobile apps and interactive mapping. WDT employs the world-renowned WeatherOps forecast team, staffed by experts who provide global asset protection and commodities trading decision support.

We concur that HR 1561, the Weather Forecast and Innovations Act of 2015, is the first step towards giving NOAA the authority to purchase high-value commercial weather data and will help NOAA regain its global forecasting superiority in weather prediction.

Sincerely,

Michael D. Eilts  
President and CEO



Walter F. Dabberdt, Ph.D.  
Vaisala Corporate Science Advisor  
mailto: [walter.dabberdt@vaisala.com](mailto:walter.dabberdt@vaisala.com)  
+1 303-262-4024 (office)  
+1 720-352-2732 (mobile)

May 15, 2015

Rep. Lamar Smith  
Chairman  
Committee on Science, Space, and Technology  
U.S. House of Representatives  
2321 Rayburn House Office Building  
Washington, DC 20515

Rep. Eddie Bernice Johnson  
Ranking Member  
Committee on Science, Space, and Technology  
U.S. House of Representatives  
394 Ford House Office Building  
Washington, DC 20515

Subject: H.R. 1561, The Weather Research and Forecasting Innovation Act of 2015

Dear Chairman Smith and Ranking Member Johnson:

As a concerned atmospheric scientist working in the private sector and Co-Chair of the Environmental Information Services Working Group (EISWG) of the NOAA Science Advisory Board, I wish to offer my full support for H.R. 1561. The bill would provide much-needed support for and direction to several NOAA agencies, such as the Office of Oceanic and Atmospheric Research, the National Weather Service, and the National Environmental Satellite Data Information Service, in developing and implementing improvements to NOAA's weather prediction activities. The bill would also strengthen and innovate the way in which NOAA works with academia and the private sector to provide and transfer technologies and information, both to and from NOAA, and would enhance the weather prediction services that ultimately are provided by the Weather Enterprise to industry, public officials, and the general public.

I understand that H.R. 1561 will soon be brought to the floor of the House of Representatives for a vote, and I very much hope that it will receive unanimous bipartisan support. It certainly has my support.

Sincerely,



Walter F. Dabberdt, Ph.D.  
EISWG Co-Chair  
Past President, American Meteorological Society  
Associate Director Emeritus, National Center for Atmospheric Research  
Vaisala Corporate Science Advisor

May 18, 2015

Rep. Lamar Smith  
Chairman  
Committee on Science, Space, and Technology  
U.S. House of Representatives  
2321 Rayburn House Office Building  
Washington, DC 20515

Rep. Eddie Bernice Johnson  
Ranking Member  
Committee on Science, Space, and Technology  
U.S. House of Representatives  
394 Ford House Office Building  
Washington, DC 20515

Subject: H.R. 1561, The Weather Research and Forecasting Innovation Act of 2015

Dear Chairman Smith and Ranking Member Johnson:

I am writing as a private citizen, as an atmospheric scientist working within the academic sector, and as a member of the Environmental Information Services Working Group (EISWG) of the NOAA Science Advisory Board to encourage support for H.R. 1561. The bill would provide much-needed support for enhancing NOAA's weather prediction activities. The bill would also strengthen linkages among the public, academic and private sectors of the U.S. weather enterprise, that will in turn lead to greater innovation and widespread benefits to the general public.

Sincerely,

A handwritten signature in cursive script, appearing to read "Julie A. Winkler".

Julie A. Winkler, Ph.D.  
EISWG Member  
Haslett, Michigan

May 18, 2015

Rep. Lamar Smith  
Chairman, Committee on Science, Space, and Technology  
U.S., House of Representatives  
2321 Rayburn House Office Building  
Washington, DC 20515

Rep. Eddie Bernice Johnson  
Ranking Member, Committee on Science, Space, and Technology  
U.S., House of Representatives  
394 Ford House Office Building  
Washington, DC 20515

I am writing this letter in support of H. R. 1561, *“To improve the National Oceanic and Atmospheric Administration’s weather research through a focused program of investment on affordable and attainable advances in observational, computing, and modeling capabilities to support substantial improvement in weather forecasting and prediction of high impact weather events, to expand commercial opportunities for the provision of weather data, and for other purposes.”*

I have supported multiple diverse NOAA weather and NASA flight programs since receiving my PhD in meteorology from Florida State University 30 years ago. During this time I have enjoyed the privilege and experiences of working alongside many leaders in the field—civil servants, academic researchers, and scientists, engineers, and managers in private industry. The comments below represent my personal opinion, and not that of my employer or any other organization.

First, I would like to take this opportunity to draw your attention to the truly significant role that Dr. Louis Uccellini, Director of NOAA’s National Weather Service (NWS), has played in leading the transformation of America’s weather forecasting enterprise over decades of public service. More than anyone else, Dr. Uccellini deserves credit and recognition for his inspirational leadership and the superb national weather forecasting capability his team has built, which all US citizens now benefit from on a daily basis. Along with recent assignments of Dr. Stephen Volz to lead NOAA’s Satellite and Information Service (NESDIS), Dr. Richard W. Spinrad as NOAA’s Chief Scientist, Dr. Sandy MacDonald as Chief Science Advisor for NOAA’s Office of Oceanic and Atmospheric Research (OAR), backed by Laura Furgione as Assistant Administrator for Weather Services, NOAA’s leadership team is staffed for the advances in weather forecasting and prediction the Bill anticipates.

Many factors have led to the improvement in forecast skill we are seeing. Assimilation of improved satellite observations has been fundamental, enabled by advances in numerical weather prediction (NWP), which underpins these improvements, enabled by advances in high performance computing and related research. Further improvement is within reach, and can and will be achieved through teamwork and relentless determination.

I support this Bill. Americans are becoming increasingly vulnerable to weather impacts for a number of reasons, including increases in extreme precipitation events, climate variability, and coastal storm surge. H. R. 1561 targets a coherent set of areas for improvement in our national weather enterprise, and it is the forward-looking/cross-enterprise collaborative nature of this Bill that is perhaps the most important.

Should the opportunity present itself, there are several areas of possible improvement. First, while the NOAA Weather Radio All 15 Hazards “Mark Trail” Award Program is a positive step, NOAA has embarked on realizing the vision of a Weather Ready Nation (WRN). Along with this, NOAA has instituted the Weather-Ready Nation Ambassador™ initiative to “formally recognize NOAA partners who are improving the nation’s readiness, responsiveness, and overall resilience against extreme weather, water, and climate events.” Perhaps the idea of a “Mark Trail” award could be combined or replaced with a WRN Ambassador award to recognize the focus of the agency. Separately, while I am a big believer in the value of Observing System Simulation Experiments (OSSEs) for advanced atmospheric observing systems under consideration, the mandate of OSSEs, Observing System Experiments (OSEs), and Analyses of Alternatives (AOAs) should be included in a manner such that they

do not inject disproportionate costs or delays into the evolution of the observing system. Finally, there are important sociological issues that are directly related to conveying the substance, relevance, and immediacy of NOAA warnings to the targeted public. It may make sense, consistent with NOAA's WRN vision, to expand the emphasis slightly under the goal of Section 4 to include the *"development, extension, [and effective communication] of accurate, effective, and timely tornado forecasts, predictions, and warnings."*

Respectfully,

(signed)

Dr. Philip Ardanuy

Fellow of the American Meteorological Society

Raytheon Principal Engineering Fellow

Member, Environmental Information Services Working Group (EISWG)



May 18, 2015

Chairman Lamar Smith  
Committee on Science, Space, and Technology  
U.S. House of Representatives  
2321 Rayburn House Office Building  
Washington, DC 20515

Dear Chairman Smith,

I write in full support of House Bill 1561. This bill is unique and creative and for the first time both acknowledges and brings together the entire United States weather enterprise, which includes government agencies, academia, and the commercial weather industry as cooperative and constructive partners in improving the data, research, computer models, and most importantly the warnings of severe weather, to the American public.

Again, I fully support the passage of H.R. 1561



Warren Qualley  
American Meteorological Society Fellow

8888 Calla Lily Ct.  
Lorton, VA 22079

May 18, 2015

The Honorable Eddie Bernice Johnson  
Ranking Member  
Committee on Science, Space, and Technology  
U.S. House of Representatives  
394 Ford House Office Building  
Washington, DC 20515

Dear Ms. Johnson,

I write in full support of House Bill 1561. This bill is unique and creative and for the first time both acknowledges and brings together the entire United States weather enterprise, which includes government agencies, academia, and the commercial weather industry as cooperative and constructive partners in improving the data, research, computer models, and most importantly the warnings of severe weather, to the American public.

Again, I fully support the passage of H.R. 1561



Warren Qualley  
American Meteorological Society Fellow

8888 Calla Lily Ct.  
Lorton, VA 22079

Vieux & Associates, Inc.  
350 David L Boren Blvd, Suite 2500  
Norman, OK 73072

May 18th, 2015

The Honorable Lamar Smith  
United States Congressman  
Chairman  
Committee on Science, Space, and Technology  
U.S., House of Representatives  
2321 Rayburn House Office Building  
Washington, DC 20515

Dear Mr. Smith,

I am pleased to write in support of House Bill 1561. My company uses NOAA weather data for hydrologic applications. Since 1992, we have experience in working with NOAA data and services.

This bill acknowledges and brings together the government agencies, academia, and the American Weather Industry as cooperative and constructive partners in improving the data, research, models. It is much needed legislation.

Vieux & Associates fully supports the passage of H.R. 1561

Sincerely,

Jean E Vieux, President



May 18, 2015

The Honorable Lamar Smith, Chairman  
The Honorable Eddie Bernice Johnson, Ranking Member  
Committee on Science, Space and Technology  
US House of Representatives  
Washington, DC 20515

Dear Representatives Smith and Johnson:

Utah State University supports the passage of HR 1561, the Weather Forecast and Innovations Act of 2015. Utah State is appreciative of those members of the Committee on Science, Space and Technology that forged a bi-partisan coalition and worked together to advance this critical legislation.

This bipartisan bill will help improve America's severe weather forecasting capabilities through a visionary weather research plan at the National Oceanic and Atmospheric Administration (NOAA). We applaud your forward thinking to require the Commerce Secretary to draft a strategy to enable the procurement of commercial weather data. By creating the Commercial Weather Data Pilot Program this will enable NOAA to better consider private sector data that will be more cost sustainable and also, help save lives.

Utah State University has long been a leader in scientific research and innovation in aerospace engineering and satellite development. Our Advanced Weather Systems Foundation has licensed its hyperspectral atmospheric sounding technology to Tempus Global Data. The National Science Foundation reported in 2010 that we were second in the nation in research funding received for aerospace engineering. *Popular Science* magazine ranks us in the nation's Top 30 Awesome College Labs. USU's Space Dynamics Lab worked with NASA to launch a satellite that mapped an infrared atlas of the entire sky that has photographed hundreds of millions of objects and identified 19 new comets.

We concur that HR 1561, the Weather Forecast and Innovations Act of 2015, is the first step towards giving NOAA the authority to purchase high-value commercial weather data and will help NOAA regain its global forecasting superiority in weather prediction.

Sincerely

Stan L. Albrecht  
President

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