



*National Weather Service
Employees Organization*

Elimination of Information Technology Officers at the 122 Weather Forecast Offices will result in a degradation of the forecasts and warnings issued by those offices.

The President's budget for the National Weather Service for Fiscal Year 2013 reduces funding for NWS operations by \$39 million, including a \$27 million reduction in the "local forecast and warnings" line item. This reduction includes the elimination of the Information Technology Officer, which is a core position at each of the National Weather Service's 122 Weather Forecast Offices (WFO). The NWS proposes to replace the local ITOs with 24 regional ITOs, who will ostensibly be able to perform the work of 122 employees at centralized locations at a savings of \$9.74 million.

The job of an Information Technology Officer (ITO) is a critical part of the technology and administration of the National Weather Service at the local level. The software that forms the backbone of the WFO's forecast and warnings is known as AWIPs and resides locally on each WFO's servers. The most valuable service provided by the ITOs is the adaptation of AWIPs to local needs, the development of software and applications for each WFO's unique mission and needs, and then training the local forecasters on their use. In fact, nearly all NWS software products were created in the field.

The present configuration of the NWS's Forecast Offices led to a tightly woven collaboration between each WFO and the local emergency managers, media, academia community, governmental agencies, public officials, communities, local businesses, and with the advent of social media – the public. These types of collaborations prompted the development of a highly customized level of IT based services by the ITO that are unique to each Forecast Office. These tailored products and services make it impossible to consolidate the ITOs without a degradation of services to the American public.

While a centralized support concept might work for generic software like Microsoft Office or Google, which takes a one size fits all approach, it will not work at a Weather Forecast Office because of the locally developed and extremely user centric software and systems in use to support the local customers.

In addition, most of the ITOs in a Weather Forecast Office are also meteorologists who help out during severe weather events. They issue forecast, severe weather warnings, provide briefings, and cover shifts when another forecaster is sick or on leave; thereby saving the government money on paying overtime for someone to

cover that shift. According to the NWS's own service assessments covering the historic 2011 tornado event, having an ITO on site during a severe weather outbreak is considered a best practice for Weather Forecast Offices.

The present IT infrastructure of the National Weather Service is not capable of supporting the remote administration of IT services at local WFOs. The download speeds at most WFOs are no faster than they were a decade ago and will not support the remote administration of systems in a WFO. Additionally, as more data comes online, the increased size of the data sets disseminated will continue to decrease the download speeds of the WFOs. A considerable number of software maintenance and repair activities require local access and cannot be performed from a distance. Troubleshooting often requires rebooting machines, observing specific errors, and verifying changes or repairs.

The lack of an ITO position at the Weather Forecast Office will stifle the dynamic and innovated products and services that will continue to lead the agency into the future. By removing the very catalyst of innovation and integration, the ITO, the agency will be derailing the current level of services and limit the diversity of products it intends to provide to key decision makers; thereby negatively impacting the nation as a whole.

The ITOs at the WFOs have a proven record of identifying inadequacies and creating innovative methods to resolve these deficiencies, while allowing the agency to enhance its ability to perform the mandates of its mission.

The ITO was integral in the development of many successful programs, which are utilized as baseline services across the agency today. They are responsible for the development of software that precisely monitors the accuracy of aviation and local forecasts. They were instrumental in the development of software utilized by NOAA Weather Radio to alert the public to take life saving precautions. The ITO position was essential to the creation of iNWS, which is a platform that disseminates warning alerts via SMS text and e-mail messaging services via mobile devices. The emergency response community across the nation has lauded this program's ability to give them the flexibility to be away from their office and yet still provide them with the information to make crucial life saving decisions. Through their innovation and versatility ITOs resolved the problem of how to quickly share critical warning decision expertise and other types of significant weather information in real-time with the media and emergency response community by developing NWSChat. Customers who utilize the NWSChat application have heralded it as one of the greatest advancements by the agency in several years and have credited the real time interaction and dissemination of information to saving countless lives.

In addition to the benefits granted to the Weather Forecast Offices' external customers, the ITO position has streamlined numerous administrative tasks at the

local office. The automation of numerous processes directly resulted in the increase of productivity and the reduction of workload on the staff.

As the agency prepares for the deployment of the second generation of AWIPS, it is relying upon the uniqueness of the ITO's insight of the agency's operations to successfully deploy the system to the Weather Forecast Office.

When the internet bandwidth of the Weather Forecast Office reduces the office's capabilities to perform its mission, it is the ITO who develops applications that consolidates services, thereby freeing the office's bandwidth, and allowing the office to continue to function during severe weather. This work is a vital part of severe weather operations. ITOs develop numerous cost saving measures, for example, the online multimedia briefings that are accessed by teachers to display for their classes; innovative web conferencing techniques, developed by ITOs, is utilized to teach volunteers how to identify and report severe weather to WFOs. Previously, these functions required a meteorologist to travel to locations, which was inefficient and expensive.

ITOs should not be lumped into the President's plan to consolidate IT resources, because the ITO position is far more than just an IT resource. With duties ranging from programming to forecasting to severe weather warning operations, the ITO position is perhaps the most multifaceted position and is an essential part of the Weather Forecast Office family. The ITO position was the lynch pin that allowed the National Weather Service to successfully meet the needs of the nation during one of the worst years for weather disasters in 2011. Moreover, in the future, it will be the ITO that will be the catalyst to push the agency forward in innovation and to discover new methodologies. This will be accomplished by not only leveraging the IT technology of today, but by being able to leverage the upcoming uncertainty in technology of tomorrow in order to support the mission of the National Weather Service and to successfully move into the future as a Weather Ready Nation.