**P1.9** **New Training Activities Within the NWS**

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## 1. Introduction

Over the past several years, new training technologies have facilitated a transition towards distance learning to accomplish professional training and development needs. The National Weather Service (NWS) has participated in this transition by migrating many training activities which used to be accomplished via in-residence courses to new training modalities.

## 2. Training Mode

Some of these new modalities include web-based training, teletraining, and webcasts (in which live instructor sessions are captured with audio for reply at the convenience of the student). In some cases, NWS is accomplishing training objectives via a combination of these means. Residence courses are still the best means for accomplishing certain training goals (such as technical training which requires a hands-on approach or advanced scientific training where instructor-student interaction is most important). However, distance learning can even be applied in these cases as prerequisite training or to facilitate the shortening of residence courses.

## 3. WEB Based Training

Many NWS-developed training materials are placed on the web and freely available for widespread university and public use. This provides the benefit of being able to provide these materials to entities outside of NWS. Their availability also allows for those NWS staff who attend in-residence classes to transfer the knowledge of classes to other staff at their field site.

NWS is developing a one-stop shopping web page which provides a link to all sources of operational NWS training:

http://www.nwstc.noaa.gov/d.ntp/#courses

This information includes actual links to web-based course content, as well as a schedule of available residence classes and a listing of training requirements for the various positions across NWS. This web page will also have a search function to facilitate linkage to other NWS training web pages. The information contained within this web source enables the Science and Operations Officer (SOO), to easily put together Individual Development Plans for their staff. The SOO collects the training deficiencies on a yearly basis and forwards these to the regions to form the foundation for the next year's training development.

## 4. SOO Resource Center

A SOO resource center has been established to allow locally developed training materials to be posted and shared with other offices and interested users:

http://www.comet.ucar.edu/sac/

Information included on this site includes current developments associated with numerical models from the National Centers for Environmental Prediction (NCEP), operational impacts of new software releases for use with the Advanced Weather Interactive Processing System (AWIPS), as well other software packages which are developed for NWS operational application by local or regional NWS field offices, or by other university or research entities. A similar resource center has also been developed for NWS Warning Coordination Meteorologists (WCM). This web site contains many outreach and educational items which assists WCMs with their day to day job duties.

## 5. Learning Management System

The NWS plans to implement a Learning Management System (LMS) to allow for easy course registration, tracking, and maintaining a database of staff training. Having access to such a system has become especially important as the number of modalities for providing training to NWS staff has expanded. A LMS can also address the need for tracking completion of training activities. A number of commercially available training packages will be evaluated during the procurement process from which one vendor will be selected. The system selected will be expected to meet a series of requirements, including capability for formal course registration, as well as tracking, testing, evaluation and the provision of certificates.

**6. Warning Event Simulator**

During this past year, NWS procured LINUX computers for all field offices to serve as a Warning Event Simulator (WES). This system will allow field staff, under the direction of the SOO, to replay important case studies as if the event were occurring in real time. This highly successful technique allows field staff to practice their warning decision making skills for the most potentially damaging weather events. The NWS Training Program will distribute a number of cases to ensure many scenarios are available.

**7. Vision**

The Virtual Institute for Satellite Integration Training (VISIT) is a joint effort involving the National Environmental Satellite Data and Information Service (NESDIS) and the National Weather Service (NWS). The primary mission of VISIT is to accelerate the transfer of research results based on atmospheric remote sensing data into NWS operations using distance education techniques. VISIT personnel primarily use a teletraining approach to disseminate training on a variety of topics ranging from lightning meteorology to forecasting winter precipitation. The VISIT site can be accessed at:

http://www.cira.colostate.edu/ramm/visit/visithome.asp

**8. Conclusion**

In summary, the NWS continues to improve the training provided to its staff by expanding materials available on the World Wide Web, using teletraining for instructor interaction, and providing local training opportunities using the WES