


September 28, 2011

MEMORANDUM FOR: NWS Regional Training Managers
FROM: LeRoy Spayd 
Chief, OCWWS Training Division
SUBJECT: FY 2012 Training Guidance Memorandum

The Office of Climate, Water, and Weather Services (OCWWS) Training Division is providing this training guidance memorandum to assist all Regional Training Managers in developing Regional training plans. Local Office training plans are required per National Weather Service (NWS) Instruction 20-106: [Office Training Plans](#). This memorandum includes mandated training items that must be completed by the target audience on or before the indicated date. This memorandum will be reviewed and updated as needed to reflect unanticipated requirements or unexpected training delivery delays.

Mandated Training (NOAA / Office of Personnel Management (OPM) / Occupational Safety and Health Administration (OSHA), etc.)

- **IT Security Awareness Course**: Annual IT security training. All NOAA Employees and contractors must complete by **September 23, 2012**. This course can be accessed via a link on the Commerce Learning Center (CLC) but the course is actually outside of the CLC.
- **NOAA Employee Safety, Environmental and Sustainability Awareness Course**: Annual safety training can be accessed via a link on the Commerce Learning Center (CLC) but the course is actually outside of the CLC. All NOAA Employees must complete by **December 30, 2012**.
- **No Fear Act**: Mandatory completion on a biennial basis for all NWS employees. Training next to be conducted during FY12 (date to be determined).
- **Management and Supervisory Training**: All new supervisors must attend 80 hours of training to include the NWS Training Center (NWSTC) Management and Supervision in-residence course, or appropriate OPM course(s) within the first year of their new position. For more information, access the [OPM policy on Management Training](#).
- **Property Custodian Training**: Annual refresher training mandated for property custodians. More information is available [here](#).
- **Government Ethics Training**: Refresher training mandated once every three years for all employees (GS-11 or above) and those who are required to file financial disclosure reports.

- **Purchase Card Training:** [Purchase Card/General Services Administration \(GSA\) SmartPay Training](#) for cardholders and approving officials. Refresher training required annually.
- **Travel Card Training:** [GSA SmartPay Travel Card Training](#) for cardholders and approving officials. Refresher training required once every three years.
- **Tower Safety Training:** Mandated training for those involved with climbing towers as a part of their job. This includes the contract Fall Protection and Rescue courses at the NWSTC.
- **Contracting Officer Technical Representative (COTR) Refresher Course(s):** See [COTR Refresher course descriptions](#) for more information.

NWS Policy Mandated Training

- **Four Weather Event Simulator (WES) Cases:** All Weather Forecast Office (WFO) staff with meteorological forecast and warning responsibility are mandated to complete at least four WES simulations per year. See NWS Instruction 20-101: [Use of Weather Event Simulator](#).
- **Marine Training:** Required for all NWS marine forecasters, per NWS Instruction 10-340: [Marine Forecaster Training](#). The required classes are located on the [NWS LearnCenter](#).
- **Fire Weather Training:** Per NWS Instruction 10-405: [Fire Weather Services Training and Professional Development](#), [Incident Command Structure \(ICS\)-100: Introduction to ICS](#) and [ICS-700: National Incident Management System \(NIMS\): An Introduction](#) are both required for NWS staff providing spot forecasts or phone briefings to first responders and NWS staff acting as a focal point or program manager involving incident response. This includes Incident Meteorologists (IMETs), Meteorologists in Charge (MICs), and Warning Coordination Meteorologists (WCMs).

NWS Recommended Training

- **Severe Weather/Warning-Related Training Modules:** To provide the best warning service, WFO staff with warning responsibility need to maintain their proficiency. This requires scenario practice (see WES Scenario requirements under NWS Policy Mandated Training) and staying up to date with changes to NWS policy, changes to technology (such as Advanced Weather Interactive Processing System II (AWIPS II)) and updated science and conceptual models. A good catalog of available severe weather training is located [here](#), but some specific recommendations are:
 - [Distance Learning Operations Course \(DLOC\)](#): Intended for new WFO meteorologist hires.
 - [Advanced Warning Operations Course \(AWOC\)](#): Winter, Severe, and Core Tracks for follow on after taking DLOC.

- **Climate Services:** All NOAA/NWS employees represent the agency to meet mission related activities and interact with the public. Since NWS staff is frequently asked to provide climate information, the NWS Strategic Plan specifically states that the workforce should be trained in climate science to make NWS a strong partner in the delivery of NOAA Climate Services. Available climate training resources can be found [here](#). For office climate focal points, a virtual [Climate Variability and Change](#) class is offered.

- **Decision Support Services:** The NWS Roadmap Services Plan will detail the increasing NWS role to provide support for decision makers leading up to, during, and after high impact events. The NWS must provide interpretive services to support decision makers and their efforts to protect communities. Therefore, it is important to understand the ICS used by first responders and emergency managers. ICS Modules are available through the [Federal Emergency Management Agency \(FEMA\) Training Page](#).
 - **ICS-700: National Incident Management System (NIMS): An Introduction.** Target Audience: All Forecasters.
 - **ICS-300: Incident Command Training:** As available, local, residence training opportunity, if funding allows. Target Audience: Office managers.
 - **ICS-100: Introduction to the Incident Command Structure.** Target Audience: All Forecasters.
 - **Decision Support Services 101: The Integrated Warning Team.** Target Audience: WFO/River Forecast Center (RFC)/Center Weather Service Unit (CWSU) staff. Available on the [NWS LearnCenter](#).

- **Severe Weather:** To provide the best warning service, forecasters need to maintain their proficiency. This requires scenario practice (see WES Scenario requirements) and staying up to date with changes to NWS policy, changes to technology (such as AWIPS II) and updated science and conceptual models. A good catalog of available severe weather training is located [here](#).

- **Hydrology:** In order to meet regional hydrologic training requirements, the following [NWS LearnCenter](#) Development Plans are recommended by the OCWWS Hydrologic Services Division and the Regional Hydrology Team (RHT). The target audiences are WFO forecasters, WFO Hydrologic Program Managers, and RFC hydrologists.
 - **FY12 Hydrology Training for WFO Forecasters:**
This training addresses Quantitative Precipitation Forecasts (QPF), hydrologic science fundamentals, provides river forecast and flash flood case studies, and covers basic AWIPS hydrology software for the WFO forecaster.
 - **FY12 Hydrology Training for WFO Hydrology Program Managers:**
This training addresses QPF, hydrologic science fundamentals, provides river forecast and flash flood case studies, and delivers basic AWIPS hydrology software. Also addressed are advanced hydrologic and hydraulic concepts, modeling and hydrologic ensembles.

- **FY12 Hydrology Training for RFC staff:**
This training covers QPF and Quantitative Precipitation Estimator (QPE), dam failure, hydraulics and the St. Venant equations, distributed hydrologic models, hydrologic ensembles, verification and use of the Graphics Generator.
- **Management and Leadership:** Local leadership enrichment programs at each office will recommend leadership training opportunities for all employees. The following courses are offered by the OCWWS Training Division. For full course descriptions, visit the [NWS Training Portal](#).
 - **Management and Supervision Course:** Priority is given to new supervisors such as MICs, Electronics Systems Analysts (ESAs) and Hydrologists-in-Charge (HICs). Non-bargaining unit staff, to include WCMs, Science and Operations Officers (SOOs), Development and Operational Hydrologists (DOHs), Service Coordination Hydrologists (SCHs), and Regional/NWS Headquarters Team Leads are eligible for the course on a space available basis.
 - **Field Operations Management:** For Lead forecasters and other field staff who act as MIC/HIC in their absence.
 - **Headquarters Operations Management Course:** A version of the Field Operations Management course tailored to and taught at NWS Headquarters for NWS Headquarters bargaining unit staff.
- **Dual-Polarization (Dual-Pol) Training:**
 - **Dual-Pol Operations Course:** Relevant WFO staff are strongly encouraged to complete this distance learning training within 30 days of deployment at your office.
 - **NWSTC Dual-Pol Maintenance training** for those offices starting deployment.
- **AWIPS II:**
 - **Application Focal Point Training** and **Variance Training** is being developed, completed and reviewed by the Operational Test and Evaluation (OT&E) sites and will be finalized and released prior to AWIPS II deployment.
 - WFO ESAs and Information Technology Officers (ITOs) will attend the **AWIPS II Systems Administration** in-residence training course for deployment.
- **Dispersion:** For those staff that provide dispersion support, please note NWS Instruction 10-518: [Non-Weather Related Emergency Products Specification](#). To support Instruction 10-518, a new COMET module on [HYSPLIT Applications for Emergency Decision Support](#) is recommended. The module should be taken on the [NWS LearnCenter](#) so students receive credit and is included in their transcripts.

- **Tsunami:** In order to provide training information to coastal offices with tsunami responsibilities, the Cooperative Program for Operational Meteorology, Education and Training (COMET®) [Meteorology, Education and Training](#) (MetEd) website hosts the following tsunami training modules:
 - [Tsunami Strike! Pacific Edition](#)
 - [Community Tsunami Preparedness](#)
 - [Tsunamis](#)
 - [Tsunami Warning Systems](#)

The modules should be taken on the [NWS LearnCenter](#) so students receive credit and online transcripts are updated to reflect completions.

- **Aviation:** The COMET® **Distance Learning Aviation Course (DLAC) modules (DLAC I and DLAC II)** are available in Aviation sections of NWS CLC and MetEd. COMET's four new **Volcanic Ash** modules can be accessed on the New Training page of [NWS LearnCenter](#), on the COMET® [MetEd](#) website, or from the [NWS Training Portal](#).
- **Space Weather:** The OCWWS Training Division and Space Weather Prediction Center (SWPC), with coordination by the NOAA Central Regional Collaboration Team, are developing a distance learning training module on space weather specifically tailored as an introduction for NWS employees. This training course will prepare NWS staff for questions they may receive related to increased solar activity, and will provide an explanation of space weather and its impacts; a SWPC overview; and answering inquiries related to space weather. A formal announcement will be made and posted on the [NWS Training Portal](#) when the module is available. COMET® is also working on an update to its **Space Weather Basics** module which is due to be announced and released in early FY12.
- **Satellite Training:** A wealth of satellite related distance training is available in coordination with the National Environmental Satellite Data and Information Service (NESDIS), COMET® and the Virtual Institute for Satellite Integration and Training (VISIT). Links to these materials are available at the [NWS LearnCenter](#) via VISIT and Satellite HydroMeteorology (SHyMet) under "New Training" and in the "Satellite" Section of the COMET® [MetEd](#) website. Note that several new satellite training modules are being prepared and delivered as part of the GOES-R Proving Ground program. These Proving Ground training materials are available through VISIT and will be part of new SHyMet courses and will be announced on the [NWS Training Portal](#).
- **Unified Messaging System (UMS):** Training on the new NOAA-wide messaging system will be available to all employees in the December, 2011 timeframe. Individual employees will receive e-mails announcing webinars and in-person training opportunities. Visit the [NOAA UMS project website](#) for more information regarding the UMS transition, schedules, and training opportunities.