CPM Professional Competency

Program Requirements and Functions

- 1. Understand the structure and hierarchy of the National Weather Service Cooperative Observer program.
- 2. Demonstrate knowledge of program mission to support climatological and hydrometeorological operations.
- 3. Understand the responsibilities related to operations and maintenance of the:
 - "a" network to support climatology requirements
 - "b" network to support hydrology requirements
 - "c" network to support meteorology requirements
- 4. Demonstrate the ability to perform a complete observation, (to include precipitation, temperatures, soil temperatures, evaporation and remarks), properly fill out the correct forms, and transmit the observation in near-real time.

Program Administration

- 1. Demonstrate the ability to request a new station, relocate a station, close a station or significantly modify an existing station using WS Form B-43.
- 2. Demonstrate the ability to accurately enter and maintain the COOP stations in the Cooperative Station Service Accountability (CSSA) and produce WS Form B- 44.
- 3. Demonstrate the ability to request proper Station Identifiers (SID) using the NWS Location Identifier (NWSLI) web interface.
- 4. Demonstrate the ability to conduct a proper site survey and use appropriate instruments to collect location and exposure data.
- 5. Demonstrate the ability to maintain accurate payroll accounts, prepare form CD-404 and to protect Personal Identity Information (PII).
- 6. Demonstrate the ability to properly maintain and administer the program budget.
- 7. Demonstrate the ability to successfully complete station inspections in accordance with NWS procedures and document inspections in the CSSA.
- 8. Demonstrate the ability to administer the awards program.
- 9. Understand how to maintain an adequate supply reserve and order supplies from NLSC as needed.

- 10. Demonstrate and understand the importance of recruiting suitable/excellent observers.
- 11. Demonstrate the ability to successfully train volunteer observers and coworkers associated with this program.
- 12. Understand complimentary observations.

Quality Assurance / Quality Control

- 1. Understand the NWS Directives 10-1307, 10-1313 and 10-1315 as they apply to all aspects of the program.
- 2. Demonstrate the ability to site stations and equipment to ensure proper exposure.
- 3. Demonstrate the ability to properly enter and update CSSA metadata.
- 4. Demonstrate the knowledge of requirements to maintain network data continuity on station moves/relocations.
- 5. Demonstrate the ability to ensure established quality control and quality assurance procedures are followed.
- 6. Demonstrate the ability to properly process data documents.
- 7. Demonstrate the ability to utilize:

WSSRD - Web Search Store Retrieve Data

SIRIUS – Missing Station Reports

DATZILLA – Error reporting mechanism

xmACIS – Applied Climate Information System

Equipment Installation & Maintenance

1. Demonstrate the ability to install and maintain rain gauges.

Standard rain gauge Fischer-Porter/Fischer-Porter Upgrade recording rain gauge Universal rain gauge Plastic rain gauge

2. Demonstrate the ability to install and maintain temperature systems.

Maximum-Minimum Temperature Systems including -1, -7, Nimbus and lightning protection
Soil Temperature systems
Cotton Region shelter with maximum-minimum thermometers

3. Demonstrate the ability to install and maintain evaporation measuring equipment.

F104-A/F105-1 anemometer Monel and galvanized pans Sixes thermometers Stilling wells Hook and spider gauge

4. Understand how to properly prepare observing sites.

Fence to protect evaporation sites
Trenching for instrument installation
Electrical connections and lightning protection
Closed-loop surveys

5. Demonstrate the ability to install and maintain snow measuring equipment.

Snow boards Snow stakes

6. Be familiar with how to install and maintain river stage equipment.

Wire weight gauge Staff gauge Determine wire weight gauge check-bar setting

Surface Data Dissemination

- 1. Understand importance of data collection, monthly and near-real time.
- 2. Demonstrate the ability to oversee operation and administrative support of the Interactive Voice Remote Observations Collection System (IV-ROCS) data ingest system.
- 3. Demonstrate the ability to oversee operation and administrative support of the WxCoderIII web-based data ingest system.

Environmental Compliance & Safety

1. Demonstrates knowledge of NWS Directives 50-5116, federal, state, and local environmental and hazardous materials regulations. Understand how to properly

dispose of waste materials. (Examples: antifreeze oil, mercury, sixes thermometers, copper sulfate, pesticides/herbicides, batteries, paint)

2. Understand and perform the safety procedures mandated by NWS Directives 50-1115, OSHA, and appropriate governing bodies. Maintain proper safety equipment and documentation.

Partners, Public, and Media Relations

- 1. Demonstrate the ability to interact with NWS partners to promote and make the best use of COOP program resources, including the affected Service Hydrologist, WFO management, River Forecast Centers, and Regional Headquarters.
- 2. Demonstrate ability and willingness to work with the National Climate Data Center and the Regional Climate Centers to assure and improve the quality and availability of Cooperative Observer data.
- 3. Demonstrate the ability to prepare press releases in accordance with NOAA standards.
- 4. Demonstrate the ability to effectively administer the COOP Observer Awards program in accordance with NWS Directive 10-1314.
- 4. Demonstrate the ability to communicate effectively with the local media to promote the program and the NWS.
- 5. Demonstrate skill in public speaking and the ability to interact effectively with users and the community.
- 6. Demonstrate the ability to coordinate program issues effectively with other agencies.