

# COOPERATIVE STATION INSPECTION

## 1) Cotton Region Shelter (CRS)

- A. Check paint for chipping, fading or wear. Repaint with a good quality white semi-gloss exterior paint if needed.
- B. Replace any missing or broken slats.
- C. Check support for damage. Be certain that all bolts and screws are tight.
- D. Check that the shelter is level and adjust if needed.
- E. Be certain door opens to the north and closes securely.
- F. Remove any wasp or other insect nests.

## 2) Max & Min Thermometers (MXMN)

- A. Clean dust and dirt from the thermometers.
- B. Remove any wasp or other insect nests.
- C. Check and remove separations in the minimum thermometer.
- D. Verify that maximum and minimum thermometers agree within 1 degree.
- E. Clean and lube the Townsend support.

## 3) Maximum/Minimum Temperature System (MMTS)

- A. Check all connections. Repair or replace if worn or loose.
- B. Compare reading from quality thermometer with displayed temperature. Replace faulty component if not reasonably close to same value.
- C. Check all installed lightning protection. Replace any damaged or burned components.
- D. Clean the sensor unit. Be certain to remove any wasp or insect nests from inside the sensor.
- E. Discuss normal operations and explain the "HI," "LO," and "HELP" readings on display. Also review the meaning of "last digit flashing."

## 4) Standard Rain Gauge (SRG)

- A. Check gauge stand to be certain all bolts are tight and assure gauge is level. Replace any missing or broken bolts, and level if needed.
- B. Check measure tube and overflow tube for leaks. Replace if needed.
- C. Check funnel for damage.
- D. Paint gauge if needed. No "standard" color has been directed however most are painted silver or are left unpainted.
- E. Check the measure sticks and snow stick if issued. Replace if needed.

## 5) Fischer and Porter Recording Gauge (F&P)

- A. Check outer case for damage and quality of paint. Clean the case, inside and out, with a good quality cleaner.
- B. Be certain funnel is installed for summer operation, or removed for winter frozen precipitation) season.
- C. Check flexures. Replace any bent flexures.
- D. Check drive cable. Replace if frayed or broken.
- E. Check battery and solar panel voltages under load conditions. Replace or repair as needed.

## COOPERATIVE STATION INSPECTION - CONTINUED

### 5) Fischer and Porter Recording Gauge (F&P) - CONTINUED

- F. Check dash pot. Add dash pot fluid if needed. Be certain post is not rubbing on side of pot.
- G. Check tape roll. Replace if amount remaining will not last until next scheduled visit (optional).
- H. Check calibration. Repair gauge and adjust as needed.
- I. Drain, clean, and recharge bucket. Add antifreeze if needed for winter operation. Be certain to follow proper HazMat procedures.
- J. Discuss gauge operation and tape annotations with observer. Assure the observer has adequate supplies (spare roll of tape, oil, antifreeze, and mailers with stamps).

### 6) Station MetaData - B44

- A. Verify Latitude and Longitude
- B. Verify observation types and times
- C. Verify equipment and serial numbers
- D. Verify Observer Information

### 7) The Cooperative Observer

- A. Check if supplies are sufficient.
- B. Quality control observations for previous months.
- C. Go over any problems and tactfully correct any errors in procedures or reporting practices. Review ROSA reporting procedures.

**Spend some time talking with the observer!**

# AG WEATHER STATION INSPECTION

## 1) Check Station Exposure

A. Using the B-44, check and update all exposures.

## 2) Cotton Region Shelter (CRS)

- A. Check paint for chipping, fading or wear. Repaint with a good quality white semi-gloss exterior paint if needed.
- B. Replace any missing or broken slats.
- C. Check support for damage. Be certain that all bolts and screws are tight.
- D. Check that the shelter is level and adjust if needed.
- E. Be certain door opens to the north and closes securely.
- F. Remove any wasp or other insect nests.

## 3) Max & Min Thermometers

- A. Clean dust and dirt from the thermometers.
- B. Remove any wasp or other insect nests.
- C. Check and remove separations in the minimum thermometer.
- D. Verify that maximum and minimum thermometers agree within 1 degree.
- E. Clean and lube the Townsend support.

## 4) Evaporation Pan and Anemometer

- A. Check pan for holes and algae.
  - (a) If any algae, add some copper sulphate.
  - (b) Repair any holes and remove any corrosion.
- B. Check wood frame support for decaying boards.
  - (a) Be certain the platform is level and stable.
- C1. Check fixed point gauge for operations and cleanliness.
  - (a) Check fill tube for leaks and readability.
- C2. Check Hook gauge for smooth operation.
- D. Inspect "Sixes" thermometer for any separations.
- E. Disassemble anemometer, clean & oil, then re-assemble.

## 5) Soil Thermometer (Palmer)

- A. Check inside of soil thermometer shelter.
  - (a) Replace silica gel pack.
  - (b) Check for moisture inside dial.
  - (c) Check for frozen pointers.
- B. Measure depth of probe.
- C. Submerge comparison thermometer to check accuracy.
- D. If Bare ground - Apply soil sterilizer inside box.

## 6) The Standard Rain Gauge (SRG)

- A. Check gauge stand to be certain all bolts are tight and assure gauge is level. Replace any missing or broken bolts, and level if needed.

# AG WEATHER STATION INSPECTION - CONTINUED

## 6) The Standard Rain Gauge (SRG) - CONTINUED

- B. Check measure tube and overflow tube for leaks. Replace if needed.
- C. Check funnel for damage.
- D. Paint gauge if needed. No "standard" color has been directed however most are painted silver or are left unpainted.
- E. Check the measure sticks and snow stick if issued. Replace if needed

## 7) The Weather Compound

- A. Inspect fence for needed repairs.
- B. Cut grass if necessary.

## 8) Station MetaData - B44

- A. Verify Latitude and Longitude
- B. Verify observation types and times
- C. Verify equipment and serial numbers
- D. Verify Observer Information

## 9) The Cooperative Observer

- A. Check if supplies are sufficient.
- B. Quality control observations for previous months.
- C. Go over any problems and tactfully correct any errors in procedures or reporting practices. Review ROSA reporting procedures.

**Spend some time talking with the observer.**