

Annual Maintenance Checklist (V2.2)

Before you go:

- Review WX observations and messages for any possible issues. Record station information:
 - Station Name: _____
 - NESDIS ID: _____
 - Transmit Time: _____
 - Channel: _____
 - Antenna Elevation and Azimuth: _____
 - Download newest Application Software from ftsinc.com to a thumb drive. (F6 datalogger only)

At station:

- Do a walk around station and check for:
 - Damage to sensors, cables, and tower.
 - Check tower for orientation, level and mast plumb.
 - Verify GOES antenna elevation and azimuth.
- Interface datalogger (using laptop or touchscreen depending on datalogger model):
 - Insert thumb drive and start a visit report. (F6 datalogger only)
 - Record firmware and update if needed. Application Software: _____ Operating System: _____
 - Record program name: _____
 - Verify all satellite transmit information. (NESDIS ID, TX Time, Channel, Message Centering box checked)
- Get current weather conditions of all sensors and record values:
 - Relative Humidity: _____ Air Temp: _____ Fuel Moisture: _____ Fuel Temp: _____ (replace yearly)
 - Wind Speed: _____ Wind Direction: _____ (replace every 2 years)
 - Solar Radiation: _____ Tipping Bucket: _____ (replace every 3 years)
 - Battery Voltage: _____ (replace every 7 years for permanent stations, 3 years for portable stations)
 - Record asset numbers of new sensors to be installed on the station. (RAWS Depot contracts only)
 - o RH/AT: _____ FM/FT: _____ WS: _____ WD: _____ SR: _____ TB: _____ Other: _____
 - Replace the required sensors and secure all cabling neatly to the tower using zip ties.
- Sensor Validation: (Compare previously recorded RH/AT and FM/FT values with new values.)
 - Verify Tipping Bucket by performing ten tip test. Set rain back to previous value if station has an automatic rain reset prg. Set to 0 for manual rain reset prg. (verify transmit time so tip test values are not transmitted)
 - Verify Solar Radiation by covering sensor and scanning. Should read close to a 0 value.
 - Scan WD and check quadrants at 0 degrees (N), 90 degrees (E), 180 degrees (S), and 270 degrees (W).
 - Scan WS and spin prop or cups at a slow and fast wind speed. Verify change in value.
 - Verify all SDI sensors have been mapped through SDI icon. (F6 Datalogger only)
 - Interrogate station radio. (only for stations equipped with radio voice transmitters)
 - o If radio transmission is not successful, check radio frequency, volume, squelch, and DTMF tones.
- Before leaving the station:
 - Yagi Style GOES antenna with pigtail cable protruding from the mounting bracket requires silicone tape.
 - Clean solar panel, replace fuel bed, and clean up all garbage.
 - End the visit report and remove thumb drive. (F6 dataloggers only)
 - Raise the mast and secure the site. (lock the cabinet and close the gate used to access station)
 - Contact the RAWS Help Desk (208-387-5475) to verify a successful GOES transmission.

Back at the office:

- Complete Post Trip Update in WX Weather: Check boxes of assets installed on station, input last annual maintenance date, TB zero date, program name, operating system version, application software version, and perform narrative entry.