

Annual Maintenance Checklist (V2.3)

Before you go:

- Review WXx Weather 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.

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:
 - Insert thumb drive and start a visit report. (Service Icon >Visit Report>Start Visit)
 - Record program Name _____ (Station Icon>Site Tab>Description)
 - Record firmware and update if needed. AS: _____ OS: _____ TX: _____
 - Verify Telemetry information.(NESDIS, TX Time, Channel, Message Centering box checked, TX version)
- 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:
 - Verify all SDI sensors have been mapped through SDI Icon. (Yellow = Mapped / Red = Not Mapped)
 - 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.)
 - Compare previously recorded RH/AT and FM/FT values with new values.
 - Verify Solar Radiation by covering sensor and scanning. Should read close to a 0 value.
 - Scan WS and spin prop or cups at a slow and fast wind speed. Verify change in value.
 - Scan WD and check quadrants at 0 degrees (N), 90 degrees (E), 180 degrees (S), and 270 degrees (W).
 - Test RVT/Airtalk by using a radio to ensure that DTMF tones return expected weather element report.
- Before leaving the station:
 - End the visit report and remove thumb drive. (Service Icon >Visit Report>End Visit)
 - 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.
 - Raise the mast and secure the site. (Lock the cabinet and close the gate used to access station.)
 - Take photos of the station looking to the North, East, West, and South.
 - Contact the RAWS Help Desk (208-387-5475) to verify a successful GOES transmission.

Back at the office:

- Complete Post Trip Update in WXx Weather: Check boxes of assets installed on station, input last annual maintenance date, TB zero date, program name, operating system version, application software version, transmitter software version, and perform narrative entry. Upload station photos under "Site Information".