Annual Maintenance Checklist (V2.1)

Before you go:

☐ Review WFMI 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)
  - 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)
  - 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 WFMI: 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.