

Enter Date:

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NIST HANDBOOK 150-2 ANNEX C CHECKLIST TIME AND FREQUENCY MEASUREMENTS

Instructions to the Assessor: This checklist addresses specific accreditation requirements prescribed in NIST Handbook 150-2, Annex C, *Time and frequency measurements*.

- All items on this checklist shall be addressed.
- Select "OK" for each item you observed or verified as compliant at the laboratory.
- Select "X" for each item that represents a nonconformity.
- Select "C" for each item on which you are commenting for other reasons.
- Place a "N/A" beside any item that does not apply.
- Record the item number and the nonconformity explanation and/or comment on the appropriate comment sheet.

C.2 Measurement traceability

___ C.2.1 Because a waveform is a set of ordered pairs (i.e., time, voltage), traceability of both the time and voltage shall be in place.

NOTE This is normally demonstrated by calibration of a high-speed oscilloscope or calibration of a fast-rise generator by an external source meeting the requirements in NIST Handbook 150, Annex B.

C.2.2 Laboratories that utilize a Global Positioning System Disciplined Oscillator (GPSDO) to establish traceability shall:

___ a) have procedures in place to insure GPS is locked and working properly;

___ b) consider the internal oscillator's short-term stability and measurement time in the laboratory's reported uncertainty.

