

CLWP SRU SINGAPORE
LOCAL STANDARD ITEM
NUMERICAL INDEX

FY-21

<u>ITEM NO.</u>	<u>TITLE</u>	<u>UTILIZATION CATEGORY</u>	<u>DATE</u>
099-201SI	Calibration Intervals for Contractor Measuring and Test Equipment; accomplish	I	22 MAY 2019
099-202SI	Work Authorization Form(s); coordinate	I	15 SEP 2020
099-203SI	Naval Supervisory Authority (NSA) notifications; accomplish	I	15 SEP 2020

CLWP SRU SINGAPORE
LOCAL STANDARD ITEM

FY-21

ITEM NO: 099-201SI
DATE: 22 MAY 2019
CATEGORY: I

1. SCOPE:

1.1 Title: Calibration Intervals for Contractor Measuring and Test Equipment; accomplish

2. REFERENCES:

2.1 Standard Items

2.2 ANSI/NCSL Z540-3, Requirements for the Calibration of Measuring and Test Equipment

2.3 ISO/IEC 17025, General Requirements for the Competence of testing and Calibration Laboratories

2.4 NAVSEA 04-4734, Navy and Marine Corps Calibration Laboratory Audit/Certification

3. REQUIREMENTS:

3.1 Accomplish the requirements of 2.1 to ensure calibration laboratories meet the requirements of 2.2, 2.3, or certified in accordance with 2.4.

3.1.1 Objective Quality Evidence supporting accreditation of calibration laboratories used, and certification of Measuring and Test Equipment used, must be provided to the SUPERVISOR, when requested.

3.2 Calibration intervals assigned to Measuring and Test Equipment used by the contractor for acceptance testing must meet those specified in Attachment A, unless alternative calibration intervals are established in accordance with 2.2.

3.2.1 The intervals specified in Attachment A are maximum allowable intervals which must not be exceeded. Intervals shorter than those specified are acceptable for use without further approval by the SUPERVISOR.

3.3 When calibration intervals do not meet the requirements of Attachment A, the contractor must perform either of the following:

3.3.1 Submit one legible copy in ENGLISH, in hard copy or approved transferrable media to the SUPERVISOR for acceptance, of recommended calibration intervals for instruments not listed in Attachment A.

3.3.1.1 Approval by the SUPERVISOR shall be obtained for all intervals not specified in Attachment A prior to conducting acceptance testing.

3.3.2 Submit one legible copy in ENGLISH, in hard copy or approved transferrable media to the SUPERVISOR for acceptance, of a procedure which establishes the calibration interval requirements of 2.2.

3.3.2.1 The contractor must have an approved procedure prior to conducting acceptance testing.

3.4 The contractor must ensure that the Measuring and Test Equipment resources provided:

3.4.1 Are suitable for the specific type of Measuring and Testing activities being undertaken.

3.4.2 Are maintained to ensure their continuing fitness for their purpose.

3.5 The contractor must ensure Measuring and Test Equipment are safeguarded from adjustments, damage, or deterioration that would invalidate the calibration status and subsequent measurement results.

3.6 When Measuring and Test Equipment is found to be unfit for its intended purpose, the contractor must determine if the validity of previous measurement results has been adversely affected.

3.6.1 When the validity of any previous measurement has been adversely affected, submit one legible copy, in ENGLISH, in hard copy or approved transferrable media, a report listing the results of 3.6. Include in the report the contractor's determination, any previous measurement(s) adversely affected, and recommendation(s) for corrective action.

3.7. Reports providing results utilizing Measuring and Test Equipment must be documented with the units of measurement achieved by the device, and provide the unit conversion (as necessary) to certify that the requirements are met in the units specified by the work specification.

4. NOTES:

4.1 NAVSEA OD 45845, Metrology Requirements List (METRL), is not available for public release. This LSI is intended to meet the intent of the calibration interval requirements of NSI 009-04 for contracted work OCONUS.

ATTACHMENT A: GENERIC CALIBRATION INTERVALS

Max. Cal. Interval (Months)	Equipment Description
----	-A-
18	ANALYZER, DEW POINT - TEMPERATURE, HUMIDITY
5	ANALYZER, GAS, ALL TYPES WITH REPLACEABLE SENSORS
5	ANALYZER, GAS COMBUSTIBLE
5	ANALYZER, GAS COMBUSTIBLE AND OXYGEN
5	ANALYZER, GAS, MULTI
11	ANALYZER, NOISE
5	ANALYZER, OXYGEN
24	ANALYZER, POWER
33	ANALYZER, SERVO
24	ANALYZER, SIGNAL
5	ANALYZER, SINGLE GAS
----	-B-
12	BALLS, PRECISION, WORKING
36	BAR, SINE
12	BAROMETER, DIGITAL
12	BAROMETER, MERCURY
24	BLOCK, GAGE
NCR	BLOCK, HARDNESS TEST
36	BLOCK, SINE
36	BLOCK, ULTRASONIC
24	BLOCK, VEE, MATCHED PAIR
NCR	BLOCK, VEE, UNMATCHED
12	BORESIGHT
21	BRIDGE, RESISTANCE / CONDUCTIVITY
----	-C-
11	CALIBRATOR, TEMPERATURE
24	CALIPER, DIAL
36	CALIPER, VERNIER
NCR	CHARGER, BATTERY
36	COMPARATOR, GAGE

NOTE: "NCR" IDENTIFIES EQUIPMENT WITH "NO CALIBRATION REQUIRED"

ATTACHMENT A (CONT.): GENERIC CALIBRATION INTERVALS

Max. Cal. Interval (Months)	Equipment Description
----	-C- (CONT.)
6	COMPARATOR, SIGNAL
----	-F-
22	FURNACE, THERMOCOUPLE
----	-G-
24	GAGE, BORE
36	GAGE, DEPTH
12	GAGE, ELECTRONIC
48	GAGE, FEELER
24	GAGE, HEIGHT
NCR	GAGE, SURFACE
48	GAGE, TAPER
12	GAUSSMETER
36	GENERATOR, SIGNAL
36	GENERATOR, SIGNAL, SWEEP
----	-H-
36	HYDROMETER, ASTM
24	HYDROMETER, OTHER
----	-I-
24	INDICATOR, DIAL
18	INDICATOR, FLOW
----	-L-
12	LASER
36	LEVEL
24	LOAD CELL
----	-M-
12	MANOMETER, CAPACITANCE, INDICATOR
12	MANOMETER, DIAL
21	MEASUREMENT SYSTEM, RESISTANCE
36	METER, AMMETER
36	METER, AMMETER, ANALOG, MEGA

NOTE: "NCR" IDENTIFIES EQUIPMENT WITH "NO CALIBRATION REQUIRED"

ATTACHMENT A (CONT.): GENERIC CALIBRATION INTERVALS

Max. Cal. Interval (Months)	Equipment Description
----	-M- (CONT.)
36	METER, AMMETER, CLAMP-ON
8	METER, CAPACITANCE
22	METER, DIFFERENTIAL VOLTMETER
15	METER, DIGITAL VOLTMETER
9	METER, FIELD INTENSITY / RADHAZ / RIFI
48	METER, FREQUENCY, COAXIAL
12	METER, GAUSS
27	METER, IMPEDANCE
24	METER, IMPEDANCE, RF
10	METER, LIGHT
24	METER, MULTIMETER, DIGITAL
36	METER, MULTIMETER, DIGITAL, HAND HELD
26	METER, MULTIMETER, ANALOG
22	METER, NOISE
32	METER, OHMMETER, ANALOG
31	METER, OHMMETER, DIGITAL
36	METER, PH
36	METER, PHASE
27	METER, PHASE ANGLE VOLTMETER
36	METER, POWER
12	METER, SOUND LEVEL
6	METER, VIBRATION
36	METER, VOLTAMMETER
16	METER, VOLTMETER, ANALOG
36	METER, VOLTMETER, ELECTROSTATIC
8	METER, VOLTMETER, RF
11	METER, VOLTMETER, SELECTIVE
13	METER, VOLTMETER, VECTOR
20	METER, WATTMETER, AC
12	METER, WATTMETER, RF

NOTE: "NCR" IDENTIFIES EQUIPMENT WITH "NO CALIBRATION REQUIRED"

ATTACHMENT A (CONT.): GENERIC CALIBRATION INTERVALS

Max. Cal. Interval (Months)	Equipment Description
----	-M- (CONT.)
36	MICROMETER
24	MULTIMETER
----	-O-
36	OSCILLOSCOPE, DIGITAL
34	OSCILLOSCOPE, PLUG-IN
16	OSCILLOSCOPE, PORTABLE
----	-P-
36	PARALLEL
36	PLATE, SINE
NCR	PLATE, SURFACE
12	PRESSURE GAUGE, BOURDON TUBE, TEST
24	PRESSURE GAUGE, BOURDON TUBE, WORKING
12	PRESSURE GAUGE, DIAPHRAGM
12	PRESSURE GAUGE, DIGITAL, TEST
24	PRESSURE GAUGE, DIGITAL, WORKING
18	PRESSURE GAUGE, MAGNEHELIC
06	PRESSURE INDICATING DEVICE, MCLEOD
31	PROTRACTOR
31	PYROMETER
----	-R-
16	RECORDER
12	RECORDER, STRIP CHART
NCR	RULE
----	-S-
18	SENSOR, DEW-POINT-TEMPERATURE
24	SQUARE
36	SQUARE, CYLINDRICAL
24	STRAIGHTEDGE
----	-T-
24	TABLE, OPTICAL

NOTE: "NCR" IDENTIFIES EQUIPMENT WITH "NO CALIBRATION REQUIRED"

ATTACHMENT A (CONT.): GENERIC CALIBRATION INTERVALS

Max. Cal. Interval (Months)	Equipment Description
----	-T- (CONT.)
24	TACHOMETER, MECHANICAL
15	TENSIOMETER
12	TEST SET, FIBER OPTIC
18	TEST SET, FUEL FLOW
24	TEST SET, VOLTAGE
6	TEST STAND, ENGINE
9	TEST STAND, GENERATOR
5	TEST STAND, OXYGEN
24	TESTER, CIRCUIT
36	TESTER, FLOWMETER
24	THERMOCOUPLE
36	THERMOMETER, BIMETAL
31	THERMOMETER, DIGITAL
24	THERMOMETER, INFRARED
36	TIMER, DIGITAL
12	TIMER, PRECISION
21	TORQUE GAGE
15	TORQUE MULTIPLIER
24	TORQUE SCREWDRIVER, DIAL
15	TORQUE SCREWDRIVER, SNAP ACTION
15	TORQUE SCREWDRIVER, SNAP ACTION, PRESET
21	TORQUE WATCH
36	TORQUE WRENCH, BEAM, FLAT
24	TORQUE WRENCH, BEAM, ROUND
24	TORQUE WRENCH, DIAL
12	TORQUE WRENCH, DIGITAL
NCR	TORQUE WRENCH, IMPACT
15	TORQUE WRENCH, SNAP ACTION
18	TORQUE WRENCH, SNAP ACTION, PRESET
12	TRANSDUCER, PRESSURE

NOTE: "NCR" IDENTIFIES EQUIPMENT WITH "NO CALIBRATION REQUIRED"

ATTACHMENT A (CONT.): GENERIC CALIBRATION INTERVALS

Max. Cal. Interval (Months)	Equipment Description
----	-T- (CONT.)
6	TRANSDUCER, VELOCITY
6	TRANSDUCER, VIBRATION
----	-V-
NCR	VALVE, METERING
NCR	VALVE, REGULATED
NCR	VALVE, RELIEF
36	VERNIER
14	VISCOMETER
----	-W-
36	WEIGHT
36	WIRE, MEASURING

NOTE: "NCR" IDENTIFIES EQUIPMENT WITH "NO CALIBRATION REQUIRED"

CLWP SRU SINGAPORE
LOCAL STANDARD ITEM

FY-21

ITEM NO: 099-202SI
DATE: 15 SEP 2020
CATEGORY: I

1. SCOPE:

1.1 Title: Work Authorization Form(s); coordinate

2. REFERENCES:

2.1 Standard Items

3. REQUIREMENTS:

3.1 When it is determined that a Work Authorization Form (WAF) in accordance with 009-24 of 2.1 is required prior to commencement of work, the contractor must verify their responsibilities for the overall execution of the WAF coordinator (WAFCOR) duties in accordance with 009-106 of 2.1 and the Performance Work Statement.

3.1.1 The contractor must verify what responsibilities exist as WAFCOR with the SUPERVISOR. WAFCOR duties will not be the responsibility of a non-US contractor, unless directed otherwise by the SUPERVISOR.

3.1.2 The contractor must know and understand the potential hazards associated with the work, as briefed by the WAFCOR and the ship's force, prior to commencement.

3.2 There shall never be more than one designated WAFCOR.

3.2.1 The contractor must obtain written approval from the SUPERVISOR when requesting to be relinquished of WAFCOR duties.

3.3 The contractor must clearly designate WAFCOR personnel assignments.

3.3.1 The contractor must never assign the same WAFCOR personnel to more than one ship concurrently.

3.3.2 The contractor must ensure the turnover of any WAFCOR personnel assignment is comprehensive and communicated to the SUPERVISOR and ship's force.

4. NOTES:

4.1 This LSI directly relates to and supplements 009-24 and 009-106 of 2.1.

4.2 When ship's force performs WAFCOR duties, the SUPERVISOR will act as the intermediary to ensure contract compliance.

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FY-21

ITEM NO: 099-203SI
DATE: 15 SEP 2020
CATEGORY: I

1. SCOPE:

1.1 Title: Naval Supervisory Authority (NSA) notifications;
accomplish

2. REFERENCES:

2.1 Standard Items

3. REQUIREMENTS:

3.1 Obtain approval from the SUPERVISOR for the following activities prior to taking any action.

3.1.1 The conduct of maintenance on energized or operating equipment.

3.1.2 Recommencing equipment operation after suspected tampering is discovered.

3.1.3 Conducting maintenance on any system that would allow only single-barrier protection to the sea.

3.1.4 Conducting corrective or preventive maintenance during fueling operations.

3.1.5 Operating equipment with a "yellow" tag (CAUTION tag) in order to accomplish maintenance.

3.1.6 "Conducting inspection and/or maintenance on equipment with a "red" tag (DANGER tag)."

4. NOTES:

4.1. None