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STATE OF NEW JERSEY : SUPREME COURT OF NEW JERSEY
: September Term 2016
: Docket No. 078390
: M-244/245/246
:
Plaintiff/Movant, : On Appeal From:
:
: Superior Court of New Jersey
v. : Appellate Division
: Docket No.: A-58-16
:
EILEEN CASSIDY, :
:
:
Defendants/Respondent.:
:
:

AMICUS CURIAE NEW JERSEY STATE BAR ASSOCIATION BRIEF IN SUPPORT
OF SPECIAL MASTER'S REPORT

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PRELIMINARY STATEMENT

The New Jersey State Bar Association (NJSBA) thanks the Court and Special Master Joseph F. Lisa, PJAD (ret & t/a recall), for the privilege of being admitted *Amicus Curiae* in this matter and being allowed to actively participate in every hearing day and every filing in the matter, as it did in State v. Chun, 194 N.J. 54 (2008), cert. denied, 555 U.S. 825, 129 S. Ct. 158, 172 L. Ed. 2d 41 (2008), and State v. Chun II, 215 N.J. 489 (2013).

The NJSBA agrees with the Special Master's findings and conclusions. In short, the evidence below supports his holding that the failure of the State to use a National Institute of Standards and Technology (NIST)-traceable, Control Company Digital Thermometer (CCDT) (approved in State v. Holland, 423 N.J. Super. 309 (App. Div. 2011)) does both undermine and call into question the scientific reliability of readings obtained from the Alcotest 7110 MkIIIc (Alcotest). The Special Master's conclusion reaffirms the assumptions made by Judge Michael Patrick King in his 2007 Special Master's Report and accepted by this Court in Chun as a critical factor in the careful balancing of steps necessary to achieve scientific reliability, and thus, evidentiary admission, of Alcotest readings.

The Special Master's mission was constrained to address a specific scientific question. The NJSBA, however, urges this Court to do more than adopt the Special Master's report. The association urges the Court to take affirmative steps to ensure that the rights of New Jersey citizens remain protected now and in the future.

The NJSBA is dedicated, as an organization, to enhancing public confidence in our entire criminal justice system, which includes lawyers, prosecutors, police and courts. From the outset, the NJSBA advocated for the Court to reaffirm the careful checks and balances that were established in Chun, and not abandon the NIST-traceable thermometer requirement brought to the Court's attention because of the malfeasance of one state police officer. To do so would lessen the rights of our citizens merely for the sake of preserving convictions. The NJSBA is guided by this Court's words, as stated in State v. Gookins, 135 N.J. 42 (1994), which was also a drunk driving case where questions of officer malfeasance might mean reopening cases:

Because public confidence in the criminal-justice system depends on the integrity of the courts, the prosecutors, and the police, the system can never disregard misconduct by such actors in the fulfillment of their public duties. In Brady v. Maryland, the Court explained that corrective justice in such circumstances does not constitute "punishment of society for misdeeds of a

prosecutor but avoidance of an unfair trial to the accused. Society wins not only when the guilty are convicted but when criminal trials are fair; our system of the administration of justice suffers when any accused is treated unfairly." (citation omitted)

In this case, the NJSBA urges the Court to preserve the confidence and integrity of the judicial process through several proactive steps: adopt the Special Master's Report and require continued use of the NIST-traceable thermometer in Alcotest recalibrations; continue the Special Master's order to require prosecutors to provide discovery in pending cases for prior DWIs to assure they are not tainted; require constitutionally sufficient notice to all potential defendants affected by this matter; and require a procedure to manually record the readings of the NIST-traceable thermometer used in calibrating the Alcotest machines, and provide same in routine discovery to defense, with the further right of defense, upon specific additional request, to inspect any reading recorded in the memory of the NIST thermometer.

STATEMENT OF FACTS

The NJSBA adopts the findings of fact in the Special Master's Report (SMR). In addition, to further inform the Court's decision-making in this matter, the association highlights a few key concepts elicited during testimony presented before the Special Master that are necessary to provide the full context of the workings of the Alcotest machine, and the checks and balances required by this Court's decision in Chun for scientifically reliable results.

1. **Metrology.** The science of measurements is called metrology. In the United States, standards for measurements are traced back to the National Institute of Standards and Technology (NIST). Instruments are not themselves NIST-traceable, but rather may produce NIST-traceable measurements if certain internationally recognized criteria are met, including one called "documentation." In order for measurements to be scientifically reliable, they must be, among other things, documented back to a "traceable" measurement. What needs to be documented is specified in recognized international standards.

2. **Scientific Reliability.** Scientific reliability requires measurements to be both "accurate" and "precise." Accuracy is how close a measurement is to the target, for example a pitcher throwing a strike. Precision (also called repeatability) requires the accurate result to be repeated, for example, a pitcher continuing to throw strikes. Verification is the process of confirming the accuracy of a single measurement. Calibration is the process of confirming the accuracy over a range of measurements.

3. **Temperature.** Temperature is critical to the scientific reliability of the Alcotest. The Court held in Chun that the temperature 34 degrees Celsius (C) (+/- 0.2 percent) sufficiently approximated the temperature of human breath and that maintaining that specific temperature is critical to the scientific reliability of both the Alcotest's periodic calibration and its routine use on subjects' breath samples. (The issue of human breath temperature was hotly contested in Chun, with the defense and Amicus NJSBA taking the position that human breath was closer to 35°C and that calculation based upon 3°C overstated the true breath result.)

4. **NIST-Traceable Thermometer.** Chun also approved a procedure for "verifying," with the use of a NIST-traceable thermometer, the temperature 34°C (+/- .2 percent) inside each of several

"Draeger CU34" (CU34) simulators used for the calibration. The approved procedure was developed by Dr. Thomas Brettell, at the time the Chief Forensic Scientist of New Jersey, an office under the New Jersey State Police. The NIST-traceable instrument approved in Chun to verify temperature during calibration at the time of Chun was the "Ertco Hart" digital thermometer.

5. **Draeger CU34 Simulator.** The CU34 is a "wet bath" simulator, about the size of a mason jar, which is filled with a known alcohol solution. There is a thermostat in the CU34's cap which has a light that stays on when at the target range of 34°C (+/- 0.2) degrees. (The exact nature of any thermometer inside the CU34 was not litigated.) The scientific reliability of both the known solutions and of the temperature inside the CU34s are absolutely required since they are critical factors in the formula used to convert breath alcohol to blood alcohol (under the scientific principle called "Henry's Law"). CU34 simulators are used not only to calibrate the Alcotest, but also in the daily use of the Alcotest to verify the machine is working properly before and after subject test results.

6. **The Control Company Digital Thermometer.** The Control Company Digital Thermometer (CCDT) was approved in Holland for use in New Jersey, as a NIST-traceable thermometer substitute

for the Ertco-Hart device. The CCDT costs about \$200-\$300, is used by the State for two years, then discarded. The calibration step of using a NIST-traceable thermometer to check the CU34 simulator solution takes about 30 seconds per simulator. The CCDT produces, without controversy, NIST-traceable measurements according to international standards for traceability. The CCDT reads out temperature readings to the third decimal place on a digital screen.

7. **Draeger Probes Measure Resistance Not Temperature.** After the temperature of each CU34 during calibration is verified by a New Jersey State Police (NJSP) coordinator using a CCDT, the coordinator places a "Draeger Black Key Probe" into the solution in each of the CU34s.

The "Agency's Probe" is the same as the Black Key Probe as to its function of measuring resistance in the CU34 wet bath. All Draeger probes are partly made up a long metal tube. The tube is rounded at one end. Inside the tube is a thermistor that measures resistance (not temperature). That thermistor is connected inside the tube to the other end which in turn has a wire that connects the probe to the back of the Alcotest machine.

Black Key Temperature Probes are only distinguished from Agency Probes by having special digital signals which are read

by firmware in the Alcotest and recognizes it as a Black Key Probe having special higher permissions, such as calibration functions. Agency Probes are read by the Alcotest firmware to only allow operator functions. Both probes are the same as far as capturing resistance in the wet bath of the CU34 and sending that data to the Alcotest which then, using a hardware processor and firmware, calculates temperature using Draeger's algorithms.

The measurement of temperature is dependent upon a number entered into the Alcotest during calibration called the "Probe Value." This value is assigned by Draeger during its verification process in their "service workshop" to compensate for changes in the metal tube, among other things. The NJSP coordinator is required to input the Draeger-assigned probe value into the Alcotest firmware to correctly calculate temperature. The Alcotest does not read out temperature in the course of calibration, unless coordinators request a read out by pushing the keyboard escape key.

Simply put, all Draeger probes require the manual entry of a corrective "probe value," measure only resistance and rely on an Alcotest machine algorithm for the Alcotest (not probe) to determine temperature. That temperature is calculated to the second decimal place by the Alcotest, unlike the more accurate CCDT which measures temperature to the third place.

8. **NIST-Traceability.** Both Draeger CU34s and probes are verified once a year at Draeger's "service workshop" outside of New Jersey. In Chun, the Court required calibration of the Alcotest every six months, which included verifying the CU34 was working properly.

Draeger does not maintain an accredited lab for this purpose. Draeger issues certificates that claim their devices are tested with instruments that are NIST-traceable. That subject was in hot dispute in this litigation. Nevertheless, even assuming arguendo that the instruments used by Draeger to test the probes were capable of producing NIST-traceable measurements, that alone would not make the probes capable of obtaining NIST measurements, since they do not themselves meet the recognized criteria for NIST traceability.

Draeger uses three Omega brand thermometers, which they assert are NIST-traceable, in a six-gallon tank, along with a Multimeter, to verify resistance at 34°C on its probes. It is important to remember that the probes themselves do not calculate temperature; rather that function is performed by the Alcotest machine. They must work together to obtain a temperature reading, with the probe capturing resistance and the Alcotest machine using algorithms to calculate temperature to two decimal places. In as much as they are not certified

together as a system, essentially what Draeger is doing is testing their own probes.

The Alcotest itself, which remains in New Jersey while Draeger performs verification on its probes at its service workshop elsewhere, could still miscalculate the temperature even with a verified probe. Draeger does no verification testing of the marriage of the probe to the Alcotest machine, even though Draeger freely admits that both are parts of the temperature calculation. The only verification of the probe and Alcotest together is in New Jersey, by the NJSP, when it uses the CCDT every six months. That procedure takes about 30 seconds to perform on each of four CU34s. The CCDT itself costs about \$200-300 and is replaced every two years. If that procedure were not performed, there would be no temperature verification at all of the combined probe and Alcotest.

9. **Unquantifiable uncertainty makes a measurement**

scientifically unreliable. There are many aspects of the breath-testing process which create uncertainty. It is, however, unknown, unquantifiable uncertainty that is the enemy of scientific reliability. The more things that could go wrong or be in flux, the more unquantifiable the uncertainty is and, therefore, the less scientifically reliable the result will be.

Here are just some of the many things in the calibration process that give rise to uncertainty:

- a) The coordinator has to manually add a probe value, T6:80-25; T6:81-4, and if the probe value is incorrectly entered, an inaccurate breath test will result. T6:83:15-22; T7-93; T8:127-9; T10:149; T10-152.
- b) The CU34 doesn't read out at all, and it doesn't stop, stabilize or print out. T6:88-3.
- c) The coordinator rounds down from the three-decimal place reading to two places. T92:12-16.
- d) The Alcotest will report 0.0 for ambient air blank -- even if there is some alcohol detected -- because it truncates to two decimal places. T6:131-4.
- e) The solution change after calibration does not use the CCDT to check the simulator. T6:144-8; T6:144-17; T6:145-16.
- f) A coordinator could ignore the CCDT since it is not required to be recorded by current NJSP procedure. T6:155-19 (Sgt. Dennis, it is alleged by the State itself, did not use it at all.)
- g) The CCDT reads out to three decimal places, T6:88-3, while the Draeger probes, via Alcotest firmware, reads to only two places. T6:92:12-16.
- h) Alcotest firmware version (current) NJ3.11 has errors. T11:121.

- i) Errors on other Draeger machines have gone unnoticed by Draeger in Germany where it is produced, including additional checks by Draeger in the U.S., and only discovered in a Massachusetts case. T11:153-8 thru 156-3.
- j) The Alcotest is hooked up to an external laptop every six months which could allow in malware. T11-150.
- k) The Alcotest does not have a firewall. T11-163-25.
- l) The metal materials of temperature probes change over time (temperature probe drift) but are only verified and assigned probe numbers once a year. T14:6-20.

LEGAL ARGUMENT

I. LACK OF AN "INDEPENDENT" CHECK ON TEMPERATURE INCREASES UNCERTAINTY AND REDUCES SCIENTIFIC RELIABILITY.

New Jersey adheres to the Frye standard first expressed in Frye v. United States, 293 F. 1013 (D.C. Cir. 1923). In Frye, the Court did not allow the party proponent of a claimed lie detector method (systolic blood pressure) to testify as an expert since the field was not generally recognized. Although thoroughly versed in the method, the witness proponent of the field alone was not sufficient. Frye stands for the principle that a court must find by independent evidence that the subject was one of scientific merit deserving to be admitted as science.

There is a great value to New Jersey citizens in having an independent NIST-traceable device check to verify the solution temperature. No one has questioned that the CCDT produces NIST-traceable measurements or that NIST traceability according to international standards are the gold standard of measurement. There is a reduction in uncertainty and, therefore, more scientific reliability gained by an independent NIST verification. Dr. Thomas Brettel testified he would not change the process to discontinue use of a NIST-traceable thermometer during calibration. Dr. Howard Baum, former director of the NJSP Forensic Science Laboratory, testified that in all his time as

Lab Director, he did not change the process. Even Mr. Brian Shaffer, Draeger's Regional Sales Director, agreed that use of the thermometer would decrease uncertainty. The independent check of temperature provided through the use of the NIST-traceable thermometer gives less uncertainty and therefore more scientific reliability to our police, courts, prosecutors, and citizens, which is especially necessary when an element of a criminal or a quasi-criminal offense can be proven beyond a reasonable doubt by mere admission of an Alcotest test result.

The independent CCDT check once every six months was designed and implemented for the last 17 years. (The Pennsauken pilot program began in 2001). Trooper David Klamik explained he utilizes it to good effect and halts the process if the check does not verify 34°C (+/- 0.2). Dr. Andreas Stolz told the Special Master that no matter all the other steps, a mistaken breath test result could still be produced without using the CCDT to independently check the temperature.

The state and federal governments routinely inspect food, cars, airplanes, and much more, applying independent tests to items that our citizens depend on to be safe and reliable. Similarly, New Jersey residents rely on the Alcotest to yield reliable breath test readings that can be used in DWI prosecutions. Those readings can result in a defendant being subject to consequences of magnitude, such as jail, or prison,

and the revocation of a driver's license, which for many amounts to taking away their ability to work. The accuracy of those readings clear the innocent as well as convict the guilty. Independent checks by government on things that effect our safety and well-being are the norm today. It is what our citizens have come to expect from our modern government, and it is what must be required in connection with the Alcotest, especially given the attached possible consequences of a loss of liberty or ability to work.

II. THE CHUN REQUIREMENT OF SIX MONTH RE-CALIBRATION BARS THE STATE FROM MERELY WITHDRAWING FROM THE USE OF THE NIST-TRACEABLE THERMOMETER UNLESS IT INTENDS TO SEND ALL PROBES AND CU34S BACK TO DRAEGER EVERY SIX MONTHS FOR RE-VERIFICATION NOW INSTEAD OF EVERY YEAR.

The Court's Order in Chun requires re-calibraton of the Alcotest machines every six months. This is a separate requirement, distinct from requiring the use of a NIST-traceable thermometer in that calibration process. However, eliminating the NIST-traceable thermometer requirement would effectively eliminate the six-month calibration requirement as well, as Draeger only calibrates its machines once a year. The State would need to make special arrangements to send every Alcotest machine (not just the CU34s and probes, as is done now) back to

Draeger every six months for re-calibration, rather than once a year, as is done now.

Draeger only "verifies" their probes with independent temperature devices. Neither the New Jersey process to double check the CU34, nor Draeger's to check their probes, can convert a verified device into a device capable of producing NIST-traceable measurements. Both processes merely compare something to a NIST-traceable measurement (assuming *arguendo* that the Dallas Certifications comply with NIST).

However, Chun requires that the NIST device be used every six months. Draeger only compares its probe once a year. In Chun, the evidence showed that six months was the original Draeger recommendation for re-calibration of Alcotests. In fact, the first NJSBA brief (of an eventual three) to the Supreme Court in Chun attached a copy of the original Draeger manual and recommendation for re-calibration every six months and so was part of the Chun record.

The State has not sought to re-litigate the six-month period for re-calibration. Chun, however, assumed use of the NIST-traceable thermometer in a recalibration every six months either in NJ or at Draeger. Therefore, the State cannot prevail here, since it has not sought to overcome the requirement of Chun that the Alcotest system be re-calibrated every six months.

III. THE DECISION IN CHUN WAS A CAREFUL BALANCE OF MANY PARTS NEEDED TO MAKE A "SUFFICIENTLY" SCIENTIFICALLY RELIABLE SYSTEM FOR USE IN NEW JERSEY, AND REMOVAL OF NEW JERSEY'S NIST VERIFICATION PROCESS CREATES ADDED UNCERTAINTY AND CALLS INTO QUESTION THE SCIENTIFIC RELIABILITY OF ALCOTEST RESULTS FOR USE AS EVIDENCE IN CRIMINAL AND QUASI-CRIMINAL MATTERS.

There were many scientific assumptions addressed in Chun, such as breath-to-blood ratio, human breath temperature, electronic interference, mouth alcohol, etc. There was disagreement over some of the assumptions, but the Court found other checks on the system sufficient to guard against any significant errors in those assumptions. For example, in Chun, the defense and NJSBA argued, inter alia, that the assumed temperature of 34°C would overstate Alcotest breath readings because human breath is closer to 35°C, that the assumed 2100/1 ratio of blood-to-breath also overstates a breath reading, and that the mouth alcohol detector does not always capture contamination which would overstate a reading. Ultimately, the Court assumed those things were sufficiently reliable on the condition that many other things were done to reduce uncertainty.

In codifying those assumptions, Chun considered double checks built into the system used by the NJSP to calibrate and test for "breath alcohol" which must be converted by law into "blood alcohol" content. These were all relied on by the Court

to determine "sufficient" scientific reliability. The double checks are:

1. The solutions are verified independently by the New Jersey State Police Laboratory. The State does not just accept what Draeger ships and use them without their own testing.
2. New Jersey re-calibrates all Alcotest machines, even when they come straight from a Draeger service workshop calibration.
3. New Jersey requires re-calibration every six months even though Draeger now recommends it only once a year.
4. New Jersey waits one hour for each CU34 to heat up rather than the 30 minutes Draeger requires.
5. New Jersey requires officers to remove all electronics, even though Draeger claims the Alcotest is shielded.
6. New Jersey waits two minutes between breath samples, and makes sure nothing is in the subject's mouth, and changes mouth pieces for each breath sample, even though Draeger claims the Alcotest detects mouth alcohol without those precautions.
7. And, New Jersey verifies that the CU34s are heating up properly by using its own NIST-traceable thermometer, as required by the Court in Chun, every six months. This, the NJSBA submits, is one of the most important checks because temperature is one of two fundamental assumptions to

convert breath to blood: temperature and solution strength are used by the Alcotest to compute breath alcohol from gas found in the headspace, by use of algorithms, to blood alcohol. Both are critical. The State goes to great lengths, as Dr. Ali Alaouie testified, to independently verify solutions. Yet, the State has asked the Court to find legally insignificant the independent verification for the other critical component needed for scientific conversion, under Henry's Law, of human breath (headspace gas) to blood. It is like having a house of cards all standing sufficiently at the moment and then removing one of two base cards and regardless of what happens to the structure, still calling it a house.

All of these double checks work together to provide scientific reliability. Removing one of the most crucial ones, as the Special Master rightly concluded, calls into question and undermines the scientific reliability of Alcotest readings. As discussed below in Point IV, this could lead to false convictions of innocent citizens.

IV. "PER SE" OFFENSES THAT MUST BE PROVEN BEYOND A REASONABLE DOUBT REQUIRE THE COURT TO MAINTAIN HIGH LEVELS OF SCIENTIFIC RELIABILITY FOR ANY DEVICE WHICH CANNOT BE CROSS-EXAMINED BUT WHICH WILL PRINT OUT READINGS THAT IN AND OF THEMSELVES WILL ESTABLISH AN ELEMENT OF THE OFFENSE.

A. The "per se" case allows the result to convict.

The reason why temperature verification is so important is because the measurements may alone, in a "per se" case, satisfy the element of intoxication, and convict a defendant, subjecting him or her to consequences of magnitude, such as jail, prison in an indictable case, and, in all cases, loss of the privilege to drive. The direct line from Alcotest result to a "per se" conviction gives a heightened importance to the scientific reliability of this particular machine. The results cannot be cross-examined.

B. Margins of .001 percent makes a difference.

The State uses the results of the breath testing to prove, beyond a reasonable doubt, that a defendant's blood alcohol is not .039 percent, but .040 percent, not .079 percent but .080 percent, not .099 percent but .100 percent and not .149 percent but .150 percent. These are legally critical levels for DWI offenses. Further, these exact levels, as written in our law, are to be proven in *blood* alcohol content not *breath* alcohol

content. So many conversions, based upon so many assumptions, must be made to convert breath to blood alcohol content.

According to Dr. Thomas Brettel, the error range we have of +/- 0.2°C gives us a 95 percent confidence level. Had New Jersey decided to make it +/- 0.1°C degrees, there would be 99 percent confidence. It has been demonstrated that the Alcotest converts temperature only to two decimal places while the CCDT measures to three decimal places. That difference alone could be the difference between conviction with a machine that is less than 95 percent certainty. By very definition then, removing the ability to look to that third decimal place by removing the NIST-traceable thermometer reading creates more uncertainty, which is translated as less scientific reliability than is present now.

V. USE OF THE NIST-TRACEABLE THERMOMETER TAKES ALMOST NO TIME TO DO AND COSTS ALMOST NOTHING; YET NOT USING THE DEVICE, WHICH EVERY EXPERT PARTICIPATING IN THIS CASE FOUND MADE THE READING MORE RELIABLE, COULD WRONGLY COST AN INDIVIDUAL HIS FREEDOM.

The NJSBA finds itself at the precipice of removing the only safeguard that Sgt. Marc Dennis stands accused of not doing, which he then lied about. This did not arise because of routine recommendations.

In fact, the recommendations of the key witnesses all agree that keeping the safeguard is better than not. Trooper David

Klimik, found the CCDT a useful step to his procedure and testified that he would abort the verification of that CU34 if it didn't pass the NIST-traceable step. Dr. Thomas Brettel, who wrote in the NIST step, testified he would still keep the step. Dr. Howard Baum has kept it a practice throughout. And even Mr. Brian Shaffer said it lessened uncertainty.

Our citizens deserve more than to lose a simple yet effective safeguard, to which they are entitled, with the chance it will end in a wrongful conviction. Removal will be seen by the public as nothing but a way to cover over the misdeeds of one police officer in exchange for the sacrifice of the rights of all our citizens.

As demonstrated by Trooper David Klimik at the first hearing in this matter, the entire procedure at issue takes only 30 seconds to perform on each of four CU34s with a device that costs \$200-300 every two years. That is a monumentally small price to pay to be more certain that innocent people are not convicted in New Jersey.

All the experts further agree that the less uncertain a result was, the more scientifically reliable it was. So, maybe for home thermostats "sufficient" scientific reliability is one thing. The NJSBA submits that, for evidential breath test equipment, however, that will print out evidence that cannot be cross-examined, sufficient scientific reliability needs to be of

the highest order. And when keeping that level of reliability takes a trooper only an extra two minutes, every six months, at a nominal cost, its abolition could only be explained by its effect to aid the state in prosecutions at the expense of our citizens' rights.

The NJSBA urges the Court to avoid starting down the path of removing the very safeguards which protect our citizens from being convicted wrongfully by less than the highest standards of scientific reliability.

VI. SINCE THE NIST-TRACEABLE THERMOMETER MUST BE USED TO HAVE A RELIABLE RESULT, THE COURT SHOULD NEXT CONSIDER WHAT REMEDIES MUST BE IMPOSED TO ENSURE THAT DEFENDANTS ARE NOT AND HAVE NOT BEEN WRONGLY CONVICTED BY THE STATE'S FAILURE TO DO SO.

A. The Court should keep that part of the Special Master's supplemental order that requires prosecutors to bear the burden and to provide discovery in pending prosecutions, as to prior DWIs that they intend to use in sentencing or as a predicate offense.

Currently, the Special Master's supplemental stay order requires prosecutors in pending cases, because they bear the burden in sentencing and on predicate elements, to provide discovery to defendants that verifies by whom the calibration was done. That order must be carried forward by the Court to ensure that defendants are not sentenced on faulty convictions.

This has been in effect for almost six months without issue and must continue to remedy the State's own malfeasance.

B. The Court should order the State to provide notice to all potential defendants, past and present, with notice of the right to counsel and public defender, if indigent, and further require that notice to be submitted to all parties and Amicus for prior objection to the court.

The Special Master did not believe that he possessed the jurisdiction to impose this requirement. However, the State agreed to voluntarily provide its own limited form of notice.

The NJSBA submits that additional notice will be needed, though, should the Court accept the Special Master's findings, to ensure defendants are apprised of a potential miscarriage of justice, have the opportunity to pursue correction, if appropriate, and are made aware of their right to counsel, if indigent. The NJSBA submits, further, that the proposed notice should be submitted to the Court for review, with an opportunity for all parties and Amicus to submit timely objections, if warranted.

C. The State should be required to institute a procedure whereby the readings of the approved NIST thermometer are recorded by the NJSP coordinator simultaneous with its use in calibration, and such writings be made subject to routine discovery, and that any internal recorded readings in the NIST thermometer's memory be made subject to inspection by defendants upon specific discovery request.

During the hearing, the State argued that the absence of a requirement to record the readings of the NIST-traceable thermometer is evidence of its lack of importance. However, to the contrary, the evidence adduced at the hearing proved the importance of the use of the NIST-traceable thermometer. Its readings are easily manually recorded and, as such an important step, should be recorded.

Going forward, we must strive to avoid what Sgt. Marc Dennis did here from occurring again. The State has procedures in place where the NJSP coordinator writes on the Alcotest calibration sheet the serial number of the Black Key temperature probe used. This was developed because the existing firmware does not do it, and the State has yet (10 years after Chun) to fix the issue by firmware update. Likewise, it would be a simple procedure for the coordinator to write down the NIST-traceable readings and provide them in discovery. While not foolproof, it

would provide a means to ensure compliance with the proper procedure.

Moreover, there was evidence in the case that the CCDT NIST readings may be recorded in a memory function inside the CCDT itself. Therefore, ensuring much more secure confidence that the coordinator will correctly record the actual readings can be provided by requiring that defendants be allowed to inspect the CCDT memoried internal readings upon a specific discovery request. As the NJSBA proposes that this would be by a specific discovery request and since it would require actual inspection at an NJSP location, it is likely to only be requested in exceptional circumstances and, thus, should not become a burden on the State.

CONCLUSION

The NJSBA respectfully submits that removal of the NIST verification step in the current calibration process undermines and calls into question the scientific reliability of Alcotest results, and, therefore, renders the results of the Alcotest insufficiently scientifically reliable for evidentiary use in New Jersey courts.

The NJSBA further recommends that the following remedies be ordered in the public interest:

A) The Court should keep that part of the Special Master's supplemental order that requires prosecutors, in any prosecution, to bear the burden of and continue to provide discovery to defense that shows calibration of any Alcotest for prior DWIs that they intend to use in sentencing or as a predicate offense (so as to make sure that it was not a calibration by Sgt. Marc Dennis);

B) The Court should order the State to provide notice of the outcome of this matter to all potential defendants, past and present, with notice of the right to counsel and public defender, if indigent, and further require that notice be submitted to the Court for approval, with an opportunity for all parties and Amicus to timely object, if warranted; and

C) The State should be required to institute a procedure whereby the readings of the approved NIST thermometer are recorded by the NJSP coordinator simultaneous with its use in calibration, and such writings be made subject to routine discovery, and that the internal recorded readings in the NIST thermometer memory be made subject to defense inspection upon specific discovery request.

Respectfully submitted

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