

# THE MEASUREMENT INSIDER

Volume: 01  
Issue: 03

September 2024



Mike Strain, DVM  
COMMISSIONER

Metrology Laboratory



## UPCOMING HOLIDAYS AND LAB CLOSURES



### Election Day

Tue, Nov 5th - Lab Closed

### Veterans Day

Mon, Nov 11th - Lab Closed

### Thanksgiving

Thurs, Nov 28th - Lab Closed

### Lab Services:

In our Metrology Lab, we calibrate

- Weights
- Test Measures
- J Provers

for business owners, service technicians, farmers, and industry personnel who work with measuring devices for mass and volume.

Businesses we serve include scale companies, fuel companies, and other businesses that rely upon precise measurements.



### Lab Customer Survey

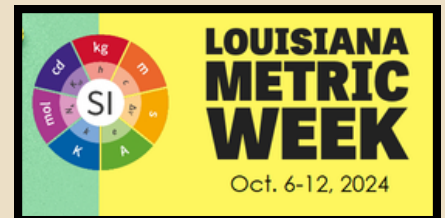
Our metrology lab highly values your feedback as it plays a crucial role in our continuous improvement and quality assurance efforts. We kindly ask that you take a moment to complete our survey by Friday, Sept 27th, 2024.



Thank you for your time and support!

## LOUISIANA METRIC WEEK

The State of Louisiana has officially proclaimed the week of October 6 - 12, 2024, Metric Week! Metric Week is an annual event that falls on the week of October 10th since the metric system is based on powers of 10! This event brings awareness to and highlights the simplicity, precision, and global adoption of the metric system, which is widely used in science, medicine, and many industries. The system's structure, based on multiples of 10, makes it easy to learn, apply, and communicate universally. By embracing the metric system, we support international collaboration, consistency in trade, and advancements in technology. Join us in celebrating LA Metric Week and the system that unites us all!

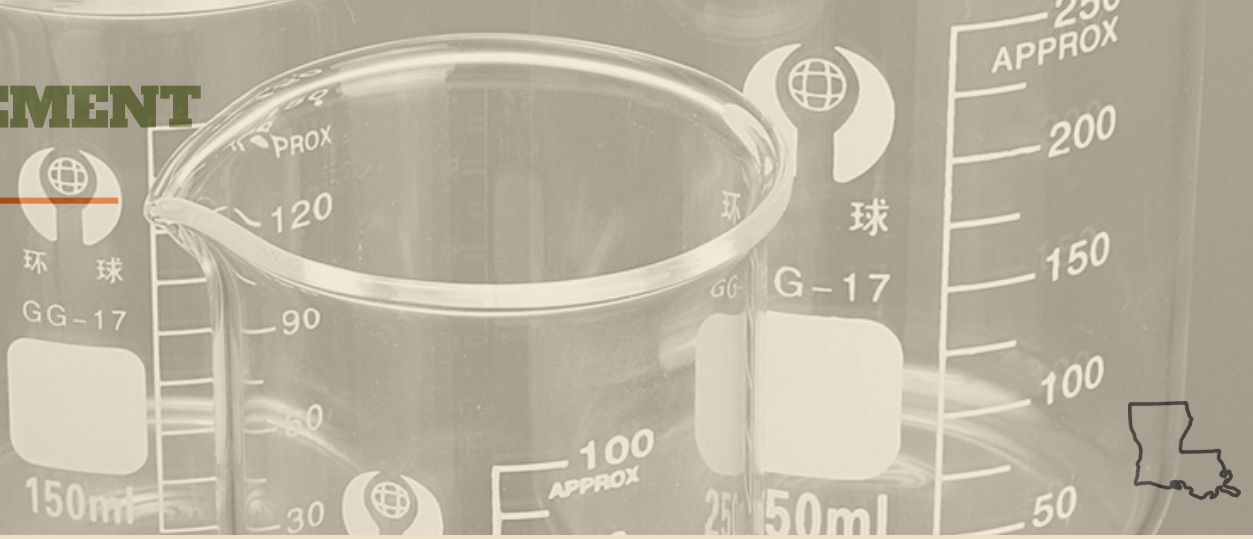


[View metric week proclamation here](#)



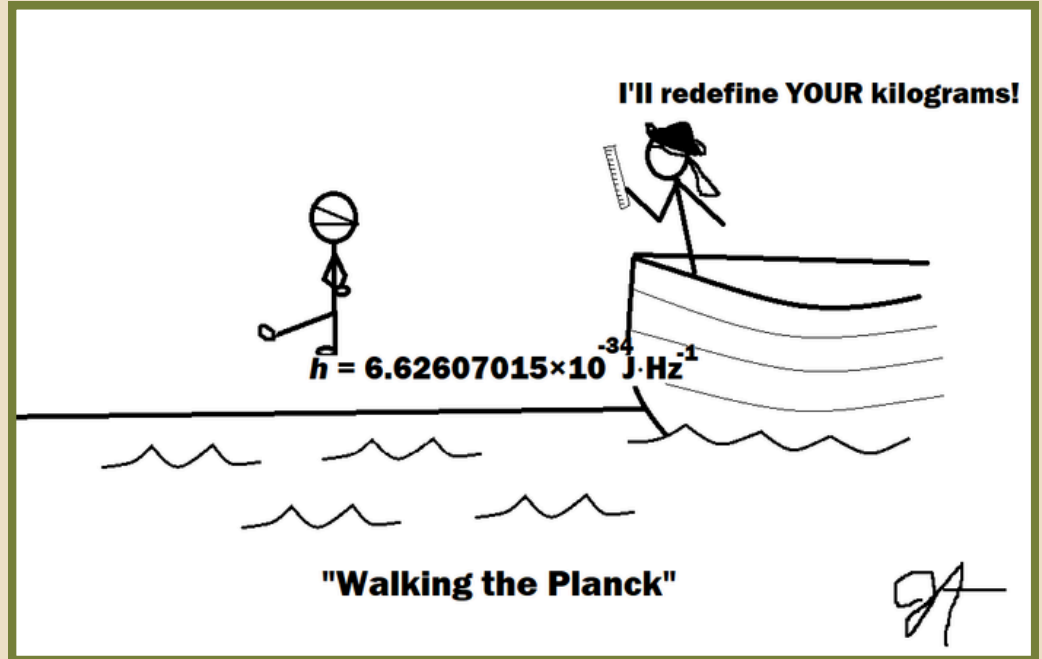
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## CALIBRATION CARTOONS PT. 2

By Jennifer Adair  
Metrologist



## PLAN ON SHIPPING YOUR ITEMS TO OUR LAB?



Please provide account number and/or return shipping label if using FedEx or UPS.

You must create a Bill of Lading to accompany the pickup. Please send it to [metrologylab@ldaf.state.la.us](mailto:metrologylab@ldaf.state.la.us) so that we may give it to the driver.

You must schedule your own pickup after being notified that weights/measures are ready.

Deliveries and pickups may be scheduled between the hours of 8:00 a.m. and 3:00 p.m. on your scheduled day.

Pallets are not to be heavier than 2500 lb.



## METROLOGY TERMS TO KNOW



**F-test** - an F-test evaluates significance of agreement between standard deviations. Sample variation is statistically the same = pass, sample variation is statistically unequal = fail.

**Reproducibility** - closeness of the agreement between the results of measurements of the same measurand carried out under changed conditions of measurement.

**ASTM** - ASTM International is a global organization that develops and provides standards for various industries and sectors.

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## Updated Lab Fees - Starting January 1, 2025

	Mass Echelon III (per item calibrated)	Mass Echelon III Adjustment Fee (per item adjusted to MPE)	Mass Echelon II (per item calibrated)	Mass Echelon II Adjustment Fee (per item adjusted to MPE)
Weights up to and including 10 pounds or 5 kilograms	\$7	\$7	\$25	\$25
Weights over 10 pounds or 5 kilograms up to and including 50 pounds or 30 kilograms	\$12	\$12	\$50	\$50
Weights over 50 pounds or 30 kilograms up to and including 1000 pounds or 500 kilograms	\$25	\$25	\$50	\$50
Weights over 1000 pounds or 500 kilograms up to and including 2500 pounds or 1000 kilograms	\$50	\$50		

All volumetric testing and calibration or special tests not listed in the fee schedule shall be performed at a rate of \$40 per hour.



The metrology laboratory will implement changes to its calibration fees, effective January 1, 2025. Please let us know if you have any questions.



Metrology Fees for Calibration Services	Fee (per item calibrated)	Adjustment Fee (per item adjusted to MPE)
Weights up to and including 10 lb or 5 kg	\$7.00	\$10.00
Weights over 10 lb or 5 kg up to and including 50 lb or 25 kg	\$10.00	\$10.00
Weights 250 lb up to and including 1000 lb or 500 kg	\$25.00	\$10.00
Weights over 1000 lb or 500 kg	\$50.00	\$10.00
5 gal test measures and provers	\$30.00	

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## Louisiana Metrologists attended the 2024 Regional Measurement Assurance Program in Broomfield, CO.



This annual training is essential for State Laboratories to maintain NIST recognition and is crucial for keeping metrologists up to date on the latest standards and publications, ensuring that laboratories adhere to standardized practices. NIST recognition guarantees the laboratory's traceability to the International System of Units (SI). A key element of the meeting is the planning of proficiency testing, which Louisiana participates in across all areas of its measurement scope to ensure consistent, high quality, and precise results. Another highlight of the event is a guided tour of the host state's metrology laboratory, offering an invaluable opportunity for metrologists to exchange knowledge, discuss challenges, and explore the latest advancements in metrology technology and practices.

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### The Strength of Measurement on the Gridiron By Tyler Holmes, LDAF

The legendary NFL coach Vince Lombardi once said, "Football is a game of inches." As a fan of many Louisiana football teams, I can surely say this quote is still relevant to this day. In the world of metrology, we can take it a step further and say it's a game of possibly millimeters. According to ESPN, field measurements using chains have been taken since 1920 to measure a team's needed first down distance. In American football, teams have 4 downs to gain at least 10 yards to be awarded a fresh set of downs. Often due to human error and chain measurement issues, mistakes have happened that have decided huge games and championships. The NFL has recognized the need for innovation of this system and is working on an interesting change.

This preseason the NFL tested a location-based system developed by Sony. This system uses cameras placed around each stadium to track the location of the players and the ball. Gary Brantley, the NFL's senior vice president and chief information officer stated, "We're in the installation phase for all of our stadiums, really getting them calibrated and up to date." In metrology, one of the most important topics of discussion we always bring up is the uncertainty of measurements. Uncertainty components in length measures can be environmental conditions, repeatability, human error, and many other factors that can affect measurement data. Unlike a metrology measurement lab, NFL field conditions can change by the second due to rain and uncontrollable damage to the measurement surface. That causes further expansion of the first down measurement uncertainty. Although we can never truly say a measurement is "perfect," the NFL is taking a step in the right direction to use measurement science to improve the game that brings so many of us joy on Sundays.



# LSU

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### SCHEDULING A CALIBRATION



**Please fill out a calibration request form to schedule all mass and volume calibrations.**

**[Click Here For Calibration Request Form](#)**

#### Contact Information

Louisiana Metrology Lab  
5825 Florida Blvd  
Baton Rouge, Louisiana  
70806

#### Hours of Operation

Mon - Fri  
8 am to 4:30 pm

#### Lab Phone

225.922.1379

#### Email

metrologylab@ldaf.state.la.us

#### Certificate of Metrological Traceability

LDAF's Weights and Measures Division recently received a two-year Certificate of Metrological Traceability from the National Institute of Standards and Technology (NIST) which ensures that all calibrations performed by the laboratory are traceable to the International System of Units through NIST and that the lab is also competent, impartial, and independent. The State of Louisiana voluntarily participates in this formal evaluation process for the recognition of metrological traceability.

[Click here to view certificate](#)