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## Director's Message



“Just the facts” was a catchphrase popularized by Sergeant Joe Friday in the television series, *Dragnet*. With this simple request, Sgt. Friday sought to focus on facts, rather than speculation, when conducting an investigation. Armed with facts, he was then able to conduct his investigation and reach an accurate conclusion by the end of each program.

While thermography is often thought of as a tool for predictive maintenance and condition assessment, in a larger sense it is an investigative tool. Thermal imaging provides evidence of thermal patterns across the surface of imaged objects. Accurately determining the cause of the observed thermal patterns often requires a little more work. Examples include visual inspections, ammeter readings, or invasive moisture meter readings to corroborate thermal data.

When confirming tests such as those listed above are unavailable during an infrared inspection, thermographers should accurately document their findings/observations and not offer conclusions until all of the facts are known.

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## Is Distance Learning Right for You?

Advancements in technology have reshaped traditional approaches to education. Students are now able to study a wide variety of subjects, including thermography, from nearly anywhere in the world.



Distance learning may be defined as any situation where the student and the instructor are in physically separate locations. Such instruction may be live or pre-recorded and can be delivered via video presentations, remote conferencing, and web-based presentations.

Distance learning provides several advantages over the traditional classroom setting. Chief among these are the elimination of travel costs, 24-hour availability, and increased convenience in scheduling. The availability of distance learning courses for thermography is particularly beneficial to thermographers with hectic schedules.

## Upcoming Courses

### [Online Distance Learning](#)

### [Level I Certified Infrared Thermographer®](#)

- Jul 1 - 4 Brisbane
- Jul 3 - 4 Brisbane \*
- Jul 8 - 11 West Windsor
- Jul 8 - 12 Salt Lake City
- Jul 15 - 19 Kuala Lumpur
- Jul 15 - 19 Quezon City
- Jul 22 - 26 Vancouver
- Aug 5 - 9 Colorado Springs
- Aug 5 - 9 Quezon City
- Aug 12 - 16 Calgary
- Aug 12 - 16 Gold Coast
- Aug 12 - 15 Melbourne
- Aug 14 - 15 Melbourne \*
- Aug 18 - 23 Cheyenne
- Aug 19 - 22 San Francisco
- Aug 12 - 22 San Francisco \*
- Sep 2 - 5 Sydney
- Sep 4 - 5 Sydney \*
- Sep 2 - 6 Pasadena
- Sep 9 - 13 Kuala Lumpur
- Sep 9 - 13 Trinidad
- Sep 16 - 19 Brisbane
- Sep 18 - 19 Brisbane \*
- Sep 16 - 20 Quezon City
- Sep 16 - 20 Albuquerque

When selecting distance learning courses for thermography, be sure to determine the following:

- How and when course is delivered
- Length of course and curriculum
- To which standards does course curriculum conform
- Are experienced instructors available to answer questions
- Does course qualify toward thermographer certification
- Experience of training firm in providing thermographic instruction

Infraspection Institute offer the world's most comprehensive inventory of distance learning courses for thermography. Courses include: Level I, Level II, and Level III thermography as well as applications courses and industry-specific courses. All courses are ASNT compliant and are taught by Level III Infraspection Institute Certified Infrared Thermographers® each having over 40 years' experience.

### [More Information](#)

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## Lightning Safety



Each year lightning kills an average of 67 people in the United States; hundreds more are injured. Few people really understand the dangers of lightning and many fail to act promptly to protect their lives and property.

Thunderstorms are most likely to develop on warm summer days and go through various stages of growth, development, and dissipation. On a sunny day, as the Sun heats the air, pockets of warm air start to rise. When this air reaches a certain level in the atmosphere, cumulus clouds start to form. Continued heating can cause these clouds to grow vertically upward into "towering cumulus" clouds. These towering cumulus clouds may be one of the first indications of a developing thunderstorm.

During a thunderstorm, each flash of cloud-to-ground lightning is a potential killer. Whether a particular flash could be deadly depends on a person being in the path of the lightning discharge. In addition to the visible flash that travels through the air, the current associated with the lightning discharge travels along the ground. Although some victims are struck directly by the main lightning stroke, many victims are struck as the current moves in and along the ground.

Lightning can strike as far as 10 miles away from the rain area in a thunderstorm. That's about the distance you can hear thunder. When a storm is 10 miles away, it may even be difficult to tell a storm is coming. If you can hear thunder, you are within striking distance and should seek shelter immediately.

### [More Information](#)

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## Calculating Imager Field of View

Have you ever wondered what the size of your imager's field of view is at a given distance? If you know the visual field of view specifications for a thermal imager, it is possible to calculate the

- Sep 23 - 27 Boise
- Sep 23 - 26 Adelaide
- Sep 25 - 26 Adelaide
- \*

\* Flexible Learning

### [Level II Certified Infrared Thermographer®](#)

- Sep 16 - 19 West Windsor
- Sep 16 - 20 Trinidad
- Oct 14 - 18 Kuala Lumpur
- Oct 28 - 31 Melbourne
- Dec 9 - 13 Trinidad

### [Level III Certified Infrared Thermographer®](#)

- Sep 23 - 25 West Windsor
- Nov 18 - 20 Melbourne

### [Full 2024 Schedule](#)

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## Upcoming Conferences

Infraspection Institute invite you to see us at the following upcoming conferences. Be sure to stop by and say Hello!

### [Vibration Institute](#)

August 7 - 9, 2024  
Covington, KY

### [SMRP Conference](#)

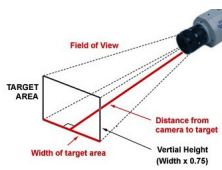
October 7 - 10, 2024  
Orlando, FL

### [IR/INFO Conference](#)

January 19 - 22, 2025  
Orlando, FL

### [NETA PowerTest Conference](#)

March 11 - 15, 2025  
Orlando, FL



size of your imager's viewing area for any given distance using a scientific calculator. The formula for this calculation is:

$$\frac{\{( \tan 1/2 \text{ viewing angle} ) \times \text{distance} \}}{2}$$

To apply the above formula, follow these steps:

1. Determine your imager's Field of View (in degrees) from the manufacturer's specs.
2. Divide the value from Step 1 by 2
3. Determine tangent of number obtained in Step 2
4. Multiply number in Step 3 by distance from imager lens to object.
5. Multiply number obtained in Step 4 by 2. This will be the width of the imager's field of view at the specified distance.

Example: Calculate field of view for 16° lens at 25'.

$$\begin{aligned} (\tan 8^\circ \times 25') \times 2 &= \\ (0.140541 \times 25') \times 2 &= \\ (3.513525') \times 2 &= \sim 7.0' \end{aligned}$$

If your imager specifies different Field of View values for horizontal and vertical, it will be necessary to calculate each value separately. Calculated values should be used for estimation purposes as actual values may vary slightly.

### [More Information](#)

## Early Registration Bonus for IR/INFO Exhibitors



Infraspection Institute are pleased to announce an early registration bonus for exhibitors at our annual IR/INFO Conference. Exhibitors that register and pay for their booth prior to July 15 are eligible to bring a second person at no additional charge. Valued at

\$695, this bonus provides full conference access and conference proceedings.

Now in its 35th year, IR/INFO is the original Advanced Infrared Training Conference, Technical Symposium, and Technology Expo. IR/INFO features four days of networking, learning, and fun in a professional, relaxed, family atmosphere. IR/INFO is the largest annual gathering of thermographers.

IR/INFO is scheduled for January 19 – 22, 2025, in Orlando, FL. IR/INFO is a must-attend event for all manufacturers and distributors of infrared equipment, condition-based monitoring tools and services, reporting software, and those who provide products or services of interest to thermographers.

### [More Information](#)

## Join Thermography's All Star Team

[NFMT](#)

March 25 - 27, 2025  
Baltimore, MD

## Links of Interest

[IRINFO.ORG](#)

[TI-Reporter.com](#)

[NORMI.TV](#)

[A-Rent](#)



[Become an Infraspection Institute Master Thermographer®](#)

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