



Volume 9 Issue 5 - May 2020

Director's Message



If you grew up in the 1960's or 1970's you may remember comic book ads featuring 'Sea Monkeys'. Described as a "bowl full of happiness", Sea Monkeys were depicted as smiling creatures in an underwater kingdom where they were "always clowning around, performing stunts and playing games with each other." For less than \$2 you could become an overlord of a bowl full of aquatic pets that "loved attention and could be trained to obey your commands."

The ambitious plans that I had for my Sea Monkeys were dashed within hours of receiving my package in the mail. It turned out that these frolicsome pets were, in fact, tiny brine shrimp larvae. Although brine shrimp may have their place in a biology class, what I learned was that advertising can be quite misleading. It was a lesson that I never forgot.

During the SARS outbreak of 2003, thermal imaging was used in many locations to help detect feverish persons as they travelled through public places such as airports. Those found to have an elevated body temperature would be alerted and requested to quarantine themselves from others. In the ensuing years, standards were developed governing the construction and operation of thermal imaging systems used for human body temperature screening.

Because the SARS 2003 outbreak was confined largely to Asia, the use of thermal imaging did not gain a lot of traction globally. All of that changed with the COVID-19 pandemic. Lower prices for thermal imaging systems, combined with a temporary suspension of strict rules published by the US Food and Drug Administration, have created a huge opportunity for the application of thermal imaging.

Unfortunately, this opportunity has also come with a downside. Over the past several weeks there has been a marked increase in the number of companies that are now offering 'infrared technology' for body temperature screening. Many of the products do not conform to best practices and the attendant advertising can be more misleading than a Sea Monkey ad.

Infraspection Institute fully supports thermal imaging for body temperature screening provided that the proper equipment is selected and is operated by trained technicians in accordance with industry best practice. If you or your company are seeking to acquire infrared equipment for body temperature screening, we would invite you to take our new training class that will help you to understand the technology and how to select the proper equipment.

Properly applied, thermal imaging can help to ensure the health and safety of the public. It is nothing to be monkeyed with.

T/IR Systems Launches New Thermography Software



T/IR Systems LLC recently announced the release of [TI Reporter™](#), a new cloud-based reporting and data management software for infrared thermography. TI Reporter™ works with all

Upcoming Courses

[Level I Certified Infrared Thermographer®](#)

- May 18 - 22 Perth
- Jun 8 - 12 Palm Springs
- Jun 22 - 26 Tacoma
- Jun 22 - 26 Kuala Lumpur
- Jul 13 - 17 Salt Lake City
- Jul 20 - 24 West Windsor
- Jul 20 - 24 Melbourne
- Jul 20 - 24 Montreal
- Jul 27 - 31 Seal Beach

[Level II Certified Infrared Thermographer®](#)

- Jun 8 - 12 West Windsor
- Jul 13 - 17 Kuala Lumpur

[Level III Certified Infrared Thermographer®](#)

- Jun 10 - 12 Melbourne
- Sep 21 - 23 West Windsor

* Flexible Learning Course

[Full 2020 Schedule](#)

Upcoming Conferences

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

[Thermal Imaging Conference](#)

September 14 - 17, 2020
South Lake Tahoe, NV

[SMRP Conference](#)

October 19 - 22, 2020
Columbus, OH

[IR/INFO Conference](#)

January 17 - 20, 2021
Orlando, FL

thermal imagers and allows thermographers to quickly generate standards-compliant reports for a wide variety of applications. T/IR Systems LLC is the parent company of Infrasppection Institute.

Combining cloud technology with state-of-the-art features, TI Reporter™ is the world's first cloud-based thermography software that works with all thermal imagers. Reports can be quickly and easily generated from one's office or while in the field. Because it is cloud based, TI Reporter™ works with all computer operating systems. There is no need to install any type of program or software onto your computer.

Written by practicing thermographers, TI Reporter™ contains preformatted templates for a wide variety of infrared inspection applications including, but not limited to: electrical systems, mechanical systems, building envelopes, flat roofs, underground piping, and steam systems. TI Reporter™ automatically calculates temperature limits for electrical and mechanical equipment and can provide cost savings reports. The software is designed for in-house thermographers as well as thermographic consultants.



For a limited time, thermographers can try TI Reporter for free by visiting www.TI-Reporter.com.

[More Information](#)

Links of Interest

IRINFO.ORG

CITA.ORG

[The RAM Review](#)

TI-Reporter.com

IRFeverScreen.com

IR Body Temperature Screening Course



Infrared Body Temperature Screening is a 5 hour theory and application course for the use of thermal imaging to detect elevated body temperature in humans.

This is a specialized course dedicated to this unique application. Course is equivalent to a five hour classroom course

with a two hour period allotted for the online exam at the end of the course. Course completion may be applied toward training requirements for Infrasppection Institute Level I, II, or III thermographer certification.

This course covers infrared theory, heat transfer concepts, equipment operation and selection, current regulations, standards compliance, screening area setup and procedures, adjunctive equipment, and safety issues. Course is designed for program managers and for operators of infrared body temperature screening systems.

Students are trained to set up and operate both purpose-built and industrial grade thermal imagers suitable for human body temperature screening. Self directed learning activities are provided to help student gain practical experience; however, one need not have an infrared imager to successfully complete the course. Course tuition includes 24 hour access to all online course presentations, downloadable Student Reference Manual, online exam, and written proof of course completion.

[More Information](#)

Checking IR Equipment Calibration

Infrared radiometers must be within calibration in order to accurately measure temperatures. Traditionally, thermographers periodically send their equipment to the manufacturer for calibration. For some, this process can take several weeks and can be rather expensive. As an alternative, savvy thermographers can check the calibration of their instrument quickly and easily using some commonly available items.



In order to check infrared radiometer calibration, you will need at least two targets, each with a known temperature and emittance. A

simple solution is to use a container of ice water and a container of boiling water with a coupon of Scotch PVC electrical tape affixed to the container's exterior surface. The size of both targets must exceed the spot measurement size of the instrument being calibrated. Container temperatures may be ascertained with a thermometer, thermocouple, or contact radiometer.

Once targets have been prepared, use the following procedure:

- Turn radiometer on and allow it to stabilize to room temperature
- Set radiometer perpendicular to target surface
- If possible, set radiometer inputs for distance, humidity & air temperature
- Aim, focus and calculate Reflected Temperature
- Set radiometer emittance control. Scotch 191 tape = 0.97 LW or SW. Ice = 0.98 LW; 0.93 SW
- Using subject radiometer, measure temperature of target. For ice water, measure temperature of ice cubes. For hot water container, measure tape coupon.
- Compare radiometer's value with contact temperature reading for each target to ensure that radiometer is within spec

A heated blackbody simulator can be used to check instrument calibration at higher temperatures. Because radiometer calibration is not user-adjustable, it will be necessary to return it to the manufacturer should you find your instrument is out of spec.

[More Information](#)

Got Game?



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

