

	<h1>COMMERCE FIRE DEPARTMENT</h1>
	<h2>Standard Operating Guidelines</h2>
	Subject: Thermal Imaging Camera
	Reference Number: 2.13
	Effective Date: 11/22/2013 Last Date Revised: 8/6/2015
Approved By: Chief Kevin Dean	

Purpose: The purpose of this guideline is to identify the strategic and tactical approach for the deployment of thermal imaging cameras (also referred to as TICs)

Policy: It shall be the policy of this department to utilize thermal imaging cameras (TIC) in every structure fire and any other situation as identified where it will enhance the safety of fire department personnel and the citizens we serve. The camera is a tool to make our jobs safer and complete searches more effectively. However, they are not to supersede our standard fire-ground procedures. They should be used in such a manner as to enhance those procedures.

Guidelines:

The primary use of the TIC for the Commerce Fire Department is for conducting search/rescue and crew accountability tasks. The use of a TIC can prove to be a useful tool during search and rescue tasks by reducing the amount of time it may take using standard search techniques. This will lead to a more effective and organized search, while quickly identifying the fire. By locating the fire quickly, we will better be able to determine our tactical priorities and rescue priorities (do we remove the victims from the fire or remove the fire from the victims).

The TIC will enhance the ability to maintain crew accountability by increasing the vision capabilities of the operator. This will ultimately lead to enhanced firefighter safety while working in a hostile environment.

Operational Guidelines:

1. TIC will be carried on Engine 1, Engine 2, and Service 1.
2. It is the officer's responsibility (or person riding in that position) to carry TIC into a structure whenever the initial response involves, but not limited to, structure fire, alarms and smell of smoke.
3. When Engine Company arrives on the scene of a fire or any incident where smoke will or could hamper visibility, the person riding in the officer's position of the apparatus shall secure camera and take it to the entry point of the structure.

4. Once the TIC has been placed to operation, the user should stay with hose line crew. If not, a tag line shall be deployed. The operator of the camera shall don the rope pack and secure the end of the rope to an adequate anchor just outside the entry point.
5. A Rapid Intervention Team (RIT) shall be established with an additional camera at the Incident Commander's discretion.
6. If conditions warrant the use of a TIC, the officer accompanying nozzle operator shall be the operator of the TIC. If the attack crew has three or more, or the officer will not be entering the hazard zone, the officer shall make an assignment to one of the crew to utilize the TIC. Camera operators must be aware that they have a tendency to move faster than the rest of the team who are operating in zero visibility. Any team operating in a hazard zone will consist of a minimum of two personnel. Standard firefighting practices should be observed with the TIC.
7. Operator of the TIC must stay in contact with Incident Commander by way of radio communications frequently and give reports when needed.
8. When searching for victims, personnel should utilize basic rescue techniques while using the TIC (i.e. search under beds, in closets, under obstructions etc.).
9. The camera has a tendency to inspire overconfidence because it allows crews to "see" in an environment that in reality has no visibility. The firefighters must remember to use basic firefighting fundamentals, such as, following and keeping in contact with walls, staying low in heat and smoke and, operating with a hand line or tagline. These and other fundamentals are to be utilized even while using TIC. All personnel must understand the camera could fail and an escape route must be easily located.
10. The camera can also serve as a tool for detecting heat during the overhaul phase of an incident. It must be remembered, however, that the TIC cannot penetrate most construction materials, including: drywall, plaster and lathe, concrete, glass or plastic. Also, the TIC cannot penetrate water. Because the camera has a black and white display it is sometimes difficult to differentiate between what is heat or fire trapped in a wall and what is radiant heat.

Daily Inspection:

The camera shall be checked as part of the daily equipment check of the truck to which it is assigned.

1. The camera should be inspected for cleanliness. If any part of the camera is dirty, a clean rag dampened with mild soap should be used to clean the camera.
2. The camera and its carrying strap must be thoroughly dry before returning to its proper storage location.
3. The camera should be turned on and checked for proper operation and then turned off.
4. The batteries should be checked and changed if less than $\frac{3}{4}$ full.
5. The camera should be returned to its proper storage location.
6. Any problems should be reported to proper officer in charge.

Maintenance:

1. Batteries should be rotated weekly and charge as necessary on Fridays
2. Screws on camera should be checked periodically for tightness.
3. After camera has been used on an incident, it should be thoroughly cleaned and dried before it is returned to its storage location. Both batteries should be fully charged.

Safety:

No operation as outlined in this SOG shall preclude any person from using good judgment with due regard for the safety of all personnel.