



CCTV and the Law

Going Infrared

Reviewing updated case law as it relates to infrared cameras

By Elliott Goldstein

Infrared cameras are making the news following a recent decision of the Ontario Court of Appeal that held that forward-looking infrared (FLIR) technology constitutes an unreasonable intrusion into the privacy of an individual within his or her residence.

In *R. v. Tessling*,¹ Ontario's highest court reversed the conviction of a person involved in a marijuana-growing operation. The facts of the case are not unusual. The RCMP received a "tip" that marijuana was being grown at a local farm. Ontario Hydro was contacted regarding electricity usage, but it responded that usage was normal.

The RCMP continued its investigation, however, because investigators knew that it was possible to bypass the hydrometers. Visual surveillance of the farm revealed nothing that would suggest that a marijuana-growing operation was taking place. But on April 29, 1999, an RCMP aircraft

that was equipped with a FLIR camera flew over the suspect properties that were owned by the accused and another individual in order to detect heat emanating from the buildings.

What the FLIR camera does is take a picture or image of the thermal energy or heat radiating from the exterior of a building. The technology is able to detect heat sources within a home depending on two things: the location of the source of thermal energy or heat and how well the house is insulated. It cannot, however, identify the exact nature of that source or see inside the building.

The altitude of the aircraft from which it is operated does not affect the accuracy of the system. The use of this technology is based on the operative theory that while heat usually emanates evenly from a building, the lights used in marijuana growing operations give off an unusual amount of heat. By comparing the pattern of heat emanating generally from a building to the heat from specific areas, the FLIR images can show patterns of heat in a building that might indicate a marijuana-growing operation.

The FLIR camera indicated that the accused's property had the heat emanations potentially indicative of a marijuana-growing operation. Using this information, the RCMP got a warrant, entered Tessling's farm and found a large quantity of marijuana, two sets of scales and freezer bags. The officers also found some weapons.

At trial, the accused's lawyer brought a Charter application to exclude the items found at his home during the RCMP search. The trial judge agreed with the Crown that the use of the FLIR technology was not a search within the meaning of section 8 of the Charter, admitted the evidence, and convicted the accused. Tessling appealed.

The Ontario Court of Appeal overturned Tessling's conviction, holding that the use of the FLIR technology by the police to detect heat emanating from his home was a breach of his Charter rights, and therefore the search warrant obtained on the basis of that information was not obtained lawfully. The trial judge should have excluded the evidence.

The appeal court made the following comments on the use of infrared technology:

"First, the FLIR technology reveals information about activities that are carried on inside the home. While the technology measures heat emanating from the outer walls of the house, the source of those emanations is located inside. Moreover, the sole reason that police photograph the heat emanations is to attempt to determine what is happening inside the house. The fact that it is necessary for the police to draw inferences from the heat emanating from the external walls in order to deduce what those internal activities are, does not change the nature of what is taking place. The use of the FLIR technology was an integral step in ascertaining what was occurring inside the appellant's home.

"Secondly, I am satisfied that the FLIR technology discloses more information about what goes on inside a house than is detectable by normal observation or surveillance. In my view, there is an important distinction between observations that are made by the naked eye or even by the use of enhanced aids, such as binoculars, which are in common use, and observations which are the product of technology.

"In any event, I do not share the Crown's view that the FLIR reveals information that is in plain view and easily observable. A member of the public can walk by a house and observe the snow melting on the roof,

or look at the house with binoculars, or see steam rising from the vents. Without FLIR technology, however, that person cannot know that it is hotter than other houses in the area or that one room in particular reveals a very high energy consumption. FLIR technology, in other words, goes beyond observation, disclosing information that would not otherwise be available and tracking the external reflections of what is happening internally.

"The FLIR represents a search because it reveals what cannot otherwise be seen and detects activities inside the home that would be undetectable without the aid of sophisticated technology. Since what is being technologically tracked is the heat generated by activity inside the home, albeit reflected externally, tracking information through FLIR technology is a search within the meaning of section 8 of the Charter.

"Some perfectly innocent internal activities in the home can create the external emanations detected and measured by the FLIR, and many of them, such as taking a bath or using lights at unusual hours, are intensely personal. It seems to me, therefore, that before the state is permitted to use technology that has the capacity for generating information which permits public inferences to be drawn about private activities carried on in a home;

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it should be required to obtain judicial authorization to ensure that the intrusion is warranted.

"The heat emanations measured by the FLIR are not visible to the ordinary viewer and cannot be quantified without the technology. The nature of the intrusiveness is subtle but almost Orwellian in its theoretical capacity. Because the FLIR's sensor cannot penetrate walls, it is true that a clear image of what actually transpires inside the home is not made available by the FLIR device. However, it is not the clarity or precision of the image which dictates the potency of the intrusiveness: rather, it is the capacity to obtain information and draw public inferences about private activities originating inside the home based on the heat patterns they externally generate, that renders the breach serious."

The Tessling case means public law enforcement will now have to obtain a warrant before flying over private residences to take FLIR pictures. And while private and corporate security professionals do not require such a warrant, an accused, using the privacy principles contained in this case, may be able to argue his or her Charter rights were infringed by the use of FLIR. 🍁

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Author's Notes

1 [2003] Ontario Judgments No. 186, Ontario Court of Appeal per Abella, J.A. (decided January 27, 2003). All quotes are taken from this case unless otherwise indicated.



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