## The Affidavit:

- (1) The affiant should include a summary of his or her training and experience as it relates to executing search and arrest warrants at night.
- (2) The following or something similar should be included in the affidavit:

Based on my training and experience, I am aware that there exists an increased threat of violence when search and arrest warrants are executed in residences during nighttime hours. This is mainly because, due to poor or nonexistent lighting, the deputies who are posted outside just prior to entry are especially vulnerable to a surprise attack. (Although deputies try very hard not to make any noise that would alert the occupants of their presence outside the residence, this is sometimes difficult or impossible to accomplish.) These situations are also dangerous because the occupants may be unable to see the deputies' uniforms or other identifying attire and, as the result, mistake the deputies for robbers or others who wish to harm them. This would likely result in violence against the deputies.

To help reduce these threats, the Alameda County Sheriff's Office has purchased a thermal imaging camera that enables deputies who are outside the residence to obtain general information about the number and location of people who are currently inside. This information will enable deputies to adjust their entry strategy to focus on these locations. In addition, if deputies have knocked and announced their entry, the thermal imaging information will help them determine whether any of the occupants have moved to hiding places or have taken positions near the entryway so as to constitute a threat to the first deputies who enter.

For the following reasons, I believe that the employment of a thermal imaging camera will be minimally intrusive: (1) it will be focused exclusively on the residence to be searched, and (2) it reveals only heat sources—it does not provide a photographic image of anything.

In discussing such cameras, the U.S. Supreme Court explained that "[t]hermal imagers detect infrared radiation, which virtually all objects emit but which is not visible to the naked eye. The imager converts radiation into images based on relative warmth—black is cool, white is hot, shades of gray connote relative differences; in that respect, it operates somewhat like a video camera showing heat images." *Kyllo v. United States* (2001) 533 U.S. 27, 29-30. Similarly, the First Circuit said, "All objects emit heat, in the form of infrared radiation, which can be observed and recorded by thermal imaging devices. Specifically, thermal imagers detect energy radiated from the outside surface of objects, and internal heat that has been transmitted to the outside surface of an object, which may create a differential heat pattern." *U.S. v. Nueva* (1st Cir. 1992) 979 F.2d 880, 882.

**The Search or Arrest Warrant**: [The following or something similar should be included in the warrant as part of the court's order: For the reasons set forth in the accompanying affidavit, the deputies who execute this warrant are authorized to employ a thermal imaging camera prior to and upon entering the premises to be searched, provided that the camera is operated by a deputy who has been thoroughly trained in its use. Furthermore, the deputies are ordered to record and retain the images obtained by the thermal imaging camera so that it may be available to both the prosecution and defense in subsequent court proceedings.