



April 27, 2004

Dear Colleague,

A number of law enforcement officials in North America have approached the Scientific Working Group on Imaging Technology (SWGIT) requesting guidance in developing policies and procedures to acquire and protect their digital image evidence. Many express concern regarding potential challenges to the integrity of digital images. With those individuals in mind, the SWGIT is pleased to present the attached document "Digital Imaging Procedure, Version 1.0" to the forensic community at large.

This document was published by the United Kingdom's Police Scientific Development Branch (PSDB), which has agreed to let us distribute it through the Forensic Science Communications. We are doing so because this document addresses the issues of digital image acquisition and integrity in a straightforward manner that is consistent with the guidelines and recommendations of SWGIT.

SWGIT strongly encourages agencies to incorporate the recommendations provided in this document within their own policies and procedures as they see fit. In doing so, agencies will be taking an important step to ensure the integrity of their digital image evidence.

Among the most critical fundamental ideas presented in this document is the concept of a "Master Copy", which serves as the digital equivalent of an original film negative or video tape. A "Master Copy" represents either a bit-for-bit duplicate of original digital files or as a digital copy of an analog recording that has been written to removable media, such as a compact disc or DVD-R. Once such a "Master Copy" has been generated, it can be handled using the same policies and procedures an agency would use to protect and preserve the integrity of an original film negative or video tape.

As this "Digital Imaging Procedure, Version 1.0" points out, although it is commonly accepted that a credible manipulation of digital image files can be accomplished relatively easily, it is very difficult to conceal manipulation when the manipulated file is compared to the "Master" file. Thus, creation of a "Master Copy" represents the most critical step in any procedure involving digital image files.

Another important concept discussed within this document is the fact that imaging devices - whether they are film, video, or digital still cameras - do not duplicate (or clone) reality, but merely generate a visual representation of a subject. The degree to which an image represents a "life-like" simulation of reality will be a function of many factors, including such things as the type of camera used, the processing applied to the image, and the means by which the image is displayed. Agencies and personnel utilizing images should be cognizant of the capabilities and limitations of different technologies. Furthermore, agencies must develop policies and procedures and utilize technology that will enable them to generate images of sufficient quality to accomplish their given mission.

SWGIT notes that some of the guidance provided in this document may only apply to agencies operating within the United Kingdom. Agencies planning on implementing the guidelines within North America or elsewhere should take care to ensure that they meet statutory requirements within their jurisdiction.

The SWGIT will continue developing guidelines for the use of imaging technology in the criminal justice system. We will also continue to reach out to our international partners to identify similar documents and guidelines that will be of benefit to our local community. We hope you find this document of assistance in your work.

Sincerely,
Richard W. Vorder Bruegge
SWGIT Chair