SWGGUN SCIENTIFIC WORKING GROUP for FIREARMS and TOOLMARKS

Guidelines for the Documentation of the Examination of Tools and Toolmarks

1.0 Objective

The purpose of this document is to set forth guidelines to examiners conducting forensic examinations of tools/toolmarks.

2.0 Introduction

2.1 The examination of any tool/toolmark will be documented. This documentation should include the condition and physical characteristics of the tool/toolmark as received and will include information related to tests conducted with the tool.

2.2 Generally accepted forms of documentation include, but are not limited to, worksheets, laboratory notes, sketches, photographs, video, and reference material.

3.0 Safety Considerations

3.1 It is the responsibility of the user of this guideline to establish appropriate health and safety practices and determine the applicability of regulatory limitations prior to use.

3.2 Toolmark evidence in the laboratory environment is not dangerous if handled correctly.

4.0 Documentation of Physical Characteristics

4.1 Documentation of a tool should include the following (when applicable):

4.1.1 Brand
4.1.2 Type (i.e. hammer, bolt cutters)
4.1.3 Size
4.1.4 Dimensions/Shape of working surface
4.1.5 Labeling of working surface(s)
4.1.6 Damage
4.1.7 Trace evidence

4.2 Documentation of a toolmark should include the following (when applicable):

4.2.1 Dimensions/Shape
4.2.2 Type (i.e. impressed/striated/direction)
4.2.3 Trace evidence
4.2.4 Source (tool type)

5.0 Documentation of Examination

5.1 Documentation of examination of a tool may include the following:

5.1.1 Action type (i.e. cutting, prying, pinching, shearing)
5.1.2 Test material (i.e. lead, copper, Mikrosil)
5.1.3 Testing procedure (i.e. manner of use, angle, direction of motion)

5.2 Documentation of examination of a toolmark may include the following:

5.2.1 Direct
5.2.2 Indirect (i.e. casting)
5.2.3 Comparison

Appendix 1 – References

1. Miller J. An Introduction to the Forensic Examination of Toolmarks. AFTE Journal. 2001 July;33(3):233-248.

2. Miller J, Beach G. Toolmarks: Examining the Possibility of Subclass Characteristics. AFTE Journal. 2005 Oct;37(4):296-345.

3. Freels R. Mikrosil Casting Material Information. AFTE Journal. 1983 Apr;15(2):80.

4. Cochrane DW. Class Characteristics of Cutting Tools and Surface Designations. AFTE Journal. 1985 July;17(3):73-82.

Appendix 2 – Document History

Date	Section	Changes
06/20/2013		Draft Approved
08/02/2013		Posted for Review
12/04/2013		Adopted