

Guidelines for the Documentation of Firearm Examinations

1.0 Objective

The purpose of this document is to set forth guidelines to Firearm Examiners conducting forensic examinations of firearms.

2.0 Introduction

- **2.1** The examination of any firearm will be documented. This documentation may include the condition and physical characteristics of the firearm as received and will include information related to tests conducted with the firearm.
- **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** Firearms evidence in the laboratory environment is not dangerous if handled correctly; however, <u>all firearms must be treated as though</u> <u>they are loaded</u>. This rule must be followed at all times.
- **3.3** If a loaded firearm is submitted to the laboratory it must be rendered safe. It is important to document the condition as received.

4.0 Documentation of Physical Characteristics

- **4.1** Documentation shall include the following:
 - **4.1.1** Caliber/Gauge
 - 4.1.2 Make/Model
 - **4.1.3** Serial number(s)
 - **4.1.4** Firearm type
- **4.2** Based on the examination required, additional documentation may include the following:
 - **4.2.1** Additional markings/Importer
 - **4.2.2** Type of action
 - 4.2.3 Safety/Position

- **4.2.4** Extractor/Ejector
- 4.2.5 Firing pin
- 4.2.6 Breechface
- **4.2.7** Damage
- **4.2.8** Visual abnormalities
- **4.2.9** General rifling characteristics
- 4.2.10 Trace evidence
- 4.2.11 Bore condition
- **4.2.12** Presence of a magazine and load condition
- **4.2.13** Presence and/or location of cylinder flares
- 4.2.14 Cylinder rotation
- **4.2.15** Reference material
- **4.2.16** Accessories and attachments
- 4.2.17 Other

5.0 Documentation of Examination

- **5.1** Based on the examination required, testing may include the following:
 - **5.1.1** Mechanical evaluation
 - 5.1.2 Full auto test
 - 5.1.3 Barrel/Overall length
 - 5.1.4 Trigger pull
 - **5.1.5** Projectile velocity
 - 5.1.6 Impact test
 - **5.1.7** Cartridge interchangeability
 - 5.1.8 Safety function
 - **5.1.9** Magazine capacity
 - **5.1.10** Silencer test
 - 5.1.11 Test firing
 - **5.1.12** Other

6.0 References

- 1. Thompson, Roger C., "Firearms Malfunction Worksheets," <u>AFTE Journal</u>, Vol. 15, No. 1, p. 100.
- American National Standards Institute, Inc., "American National Standard Voluntary Industry Performance Standards Criteria for Evaluation of New Firearms Designs Under Conditions of Abusive Mishandling for the Commercial Manufacturers". (ANSI/SAAMI Z299.5-1985), November, 1985.
- 3. "Forensic Examiners Firearms Recall/Safety Warning List", FBI Laboratory.
- 4. "A Guide to Firearms Safety", <u>A Safety and Educational Publication of the</u> <u>National Rifle Association</u>, May 1994.
- 5. "Technical Protocols for the Handling of Firearms and Ammunition", FBI, June 1992.
- 6. Scientific Working Group for Firearms and Toolmarks, "Guidelines for Trigger pull Analysis", November 14, 2006.

- 7. Scientific Working Group for Firearms and Toolmarks, "Forensic Examination for Silencers", September 27, 2005.
- 8. <u>Association of Firearm and Tool Mark Examiners Technical Procedures Manual</u>, Version July 9, 2001.

Appendix 2- Revisions

| Date | Section | Changes |
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| 10/24/12 | | Added Appendix 2 |
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