



B126 Examination of Fired Bullet of Non-Straited Markings of Abnormal Barrels

Anil K. Sinha, PhD, LLB*, State Forensic Science Laboratory, Government of Bihar, 55/60, Officers' Flat, Bailey Road, Patna, Bihar 800001, India

The goal of this presentation is to identify crime bullets that in most cases can be established as to have been fired through abnormal and/or superman make firearms whose barrels have non-straited land and groove marks. This presentation will impact the forensic community and/or humanity by identifying whether the fired bullet

from the barrel of abnormal firearms is fired from such firearms, so it shall be beneficial for correct judgments.

Examination of crime bullets fired through rifled barrels of superman make and/or abnormal undersized firearms was conducted. The instru- mental and physical examinations were carried out on the class and individual characteristics markings. The bullets were fired through the rifled barrel of abnormal and undersized make firearms. The examinations were carried out so that the characteristics marks available on the bullet fired through such barrels have been analyzed; with special reference in imi- tation make firearms and superman make firearms. Such type of crime bullets may be classified on physical and visual examination and for con- firmation the microscopic comparison examination was carried out with test fired bullets.

Analysis of the crime bullets fired through the barrel of undersized firearm is comparatively easy and reliable. This is due to the bullet not trav- eling along the pre-determined path from the breech to muzzle end. The bullet accepted irregular rifling marks and surface irregularities; these were observed. The characteristics break, shape, size, and relative positions of rifling marks and shaving can be used to identify the fired bullets in respect to the firearm. The importance of the characteristics marks is clear, espe- cially when the bullets are mutilated and characteristics marks, striations are not sufficient to permit identification. The marks are so pronounced and characteristic that positive identification in some cases is possible; even by visual examination and instrumental comparison. Jacketed bullets lodged inside a weapon usually cannot be identified in respect to the firearms because there is no absorption of lands and grooves, and continuous stria- tions marks due to resistance of the movement of bullets. Only microscopic comparison is possible on certain data for identification. It is not possible to compare the lead bullets with jacketed bullets. If the crime bullet is made of lead, it cannot be identified by comparison with the jacketed test fire bullets and vice versa.

Abnormal, Barrel, Bullet