AN UNUSUAL CLASS CHARACTERISTIC IN A LIMITED NUMBER OF GRENDEL P12's

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ABSTRACT: During examination and preparation of a test fired cartridge case for *DRUGFIRE* entry from a Grendel P12, unusual breech face impressions were observed.

While noting class characteristics on a test fired cartridge case from a Grendel P12 semi-automatic pistol, the fine circular marks common to most Grendels were observed. In addition to these marks an unusual *sunburst* pattern was noted (*Photo #1*). A closer examination of the breech face of the pistol showed this distinctive *sunburst* design emitting outward from the firing pin hole (*Photo #2*). I talked with Mr. Mike Lalich, Grendel Inc., Cocoa, Fla. who informed me that he knew of the *sunburst* and this was the first inquiry he had on it. He related to me that during the summer of 1994 Grendel changed their type of machine milling process from the older "TREE" machines to the newer CNC (Computer Numerically Control). Grendel mills their slide/breechblock assemblies in lots of between 100-300 at a time. The final lot prior to this manufacturing change was found to have this *sunburst* impression. Mr. Lalich explained that the cutting tool on the old "TREE" machine had unknowingly become dull, and it was not discovered until the inspection of the lot. This caused tool deflection and chatter which in turn produced the *sunburst* design. The new CNC machinery now "tells" when it is time to sharpen the cutting tool. This phenomenon is unlikely to reoccur and only occurred on those slide assemblies within that lot of Grendel P12s with serial numbers + or - 300 of the number of our recovered pistol with number 30724. When coming across cartridge cases having this distinctive *sunburst* impression the examiner should consider those few hundred manufactured by Grendel as a class characteristics.

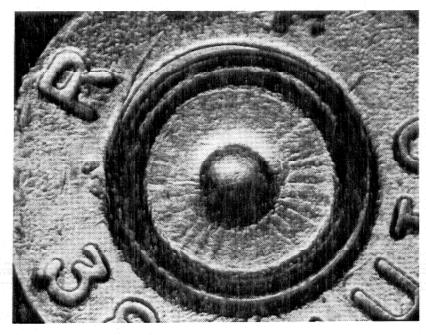


PHOTO #1

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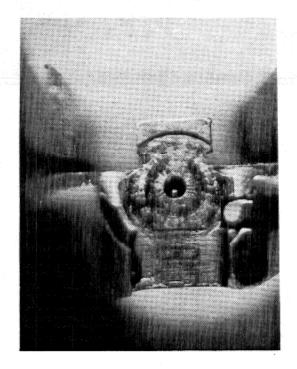


PHOTO #2