



Questioned Documents—2020

J5 What's Old Is New Again: Portable Instant Photo Systems and Questioned Documents Redux

Javaid Khan, Canada Border Services Agency, Ottawa, ON K2E 7M6, CANADA*

Learning Overview: After attending this presentation, attendees will have a more thorough understanding of currently available instant photo technologies and features associated with those prints.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by: (1) increasing awareness of instant photo technology; (2) offering insight into photo production processes; and (3) illustrating how these prints could be identified in questioned documents.

Invented in the 1940s by Edwin Land, Polaroid® dominated the instant film market for decades, up until it was uprooted by 35mm film and emerging digital formats in the 1990s. After an extended lull in popularity, the incorporation of digital photography with modernized printing technologies led to a resurgence of an updated form of the once-considered vintage instant film system. Although Land's invention has had staying power in today's society, the reality remains that the newer generation of document examiners may have limited experience with instant photography systems. As the potential for improved technology in this area continues to evolve, there is a need for this knowledge gap to be addressed in order to ensure thorough examination of identification documents.

Documents associated with identity often include a photograph. The properties of these documents are dependent on a number of factors, including the issuing country, the requirements at the time of issuance, and the document's purpose for use. Exposure to a broad range of document types has increased due to the breadth and accessibility of international travel and migration, which has in turn led to the necessity of examining all types of unfamiliar identity documents. In the event that a document becomes questioned, identification of production technologies is often required. To properly analyze the value of any findings, awareness of currently available print process technologies, including instant films and their associated features, should be taken into account.

The availability of these low-cost and high-quality instant film systems provides examiners with another factor for consideration as to how a document might have been constructed. Traditional instant film development was based on silver halide exposure with reagent development, producing the expected low-quality instant print. The more current instant photo systems utilize digital photography with integrated reagent development film, or form factor thermographic print processes producing higher-quality images. As a result, more regard should be given to alternate sources of photograph production.

The scope of this presentation will be limited to technology suitable for portrait photo production, as is typically encountered in identity documentation. A non-exhaustive selection of form factor printer devices will also be used, limited to popularity of use. This presentation will provide attendees with an overview of currently available portable instant print photo systems, including portable instant printers, the properties associated with these various technology types, and features that could be used to aid in identifying these products.

Questioned Documents, Instant Photography, Print Process