

Journal of the American Society of Questioned Document Examiners

Volume 1, Number 2

ABSTRACTS

1. Foreword
Janis M. Winchester, Editor

Forensic Document Examiners provide Expert Witness testimony in courts of law presenting demonstrative proof concerning the fact that a document is genuine or forged. Thorough grounded training of the Forensic Document Examiner is required for the scientific analysis of handwriting, hand printing, and various seen or unseen qualities of the document. The presentation of the findings in court assists the Judge and Jury in their deliberations concerning the guilt or innocence of an individual.

2. An Investigation into the Degree of Similarity in the Handwriting of Identical and Fraternal Twins in New Zealand
David Boot

A document examination case involving the handwriting of identical twins showed a striking degree of similarity in their handwriting. Following this observation, research was undertaken to gauge the degree of handwriting similarity in a larger sample of identical and fraternal twins' handwriting. Handwriting samples and questionnaires allowed the investigation of factors such as genetically linked similarity, schooling, and handedness. The results showed that none of the twins wrote exactly alike, however in some cases there was a marked degree of similarity. No evidence was found to suggest that identical twins write with more similarity than fraternal twins. While the effect of genetic factors on handwriting could not be truly judged, the study did highlight the need for care and thoroughness in any examination of handwriting.

3. Flat Die Stamps: A New Technology from Brother
Jan Seaman Kelly

The traditional manufacturing processes of stamps produced a stamp with a relief on the die. Brother has created the SC-2000 (Stampcreator Pro) and the SC-300 PC that manufacture stamps with a flat die, i.e., no relief. The purpose of this paper is to describe the process and evaluate the features or characteristics that separate stamps made by the Brother stamp units from stamps made by more traditional manufacturing processes.

4. Classification of Ink Jet Printers and Inks
Paige Doherty

This study evaluates and compares ink samples from current and discontinued ink jet printer models in an effort to classify and date the formulations of ink. The physical and chemical properties of black ink samples printed with 18 types of cartridges (used in 32 different printer models) and unprocessed samples from eight black ink cartridges were analyzed. This research found that: (1) processed and raw inks from the same model cartridges produced varying spectral results and consistent chemical results, (2) many of the inks could be differentiated and classified, and (3) the limited sampling of inks available for dating could be correlated to an introduction or revision date.

5. Survey of Techniques Used to Visualize Indented Markings
Jerry L. Brown

This is a review of information and techniques utilized to visualize indented markings on paper. This information is intended only as a survey, providing highlights of the different techniques used to visualize indented marks and text. The main reason for this survey is that since its introduction, the Electrostatic Detection Apparatus (ESDA) is the method of choice for visualizing indented marks. The ESDA is not the panacea for all indented impression problems, but it is easier than whatever is second. Sometimes other methods of inquiry into visualizing indentations may be necessary to come up with needed answers.

6. Using the ESDA to Visualize Typewriter Indented Markings
Jerry L. Brown and Gary Licht

Forensic Document Examiners look at papers that may contain indented typed impressions. Normally, these impressions can be seen during the visual examination of the questioned document. One way to process this type of document is to use the Electrostatic Detection Apparatus (ESDA), Electrostatic Vacuum Box, or Indentation Materializer. The ESDA examination results in a darkened sheet of imaging film, but no developed indented impressions of the typed material.

7. Cause of Typewriter Printwheel Damage Observed in the Questioned Document
Donald D. Moryan

Typing defects are used during an examination to identify a questioned element as to the method being used to produce a questioned document. Damage and wear of the typescript can be seen under magnification. This is a case study of an unusual cause of typeface damage to a printwheel, which was observed on a questioned document.

8. Preparation of Court Charts Through Digital Imaging
L. Keith Nelson and A. Frank Hicks

In order to demonstrate their findings in a court of law, Forensic Document Examiners frequently prepare enlargements of the signatures or other handwriting that has been examined. This can be a very time-consuming process if photography is used. The authors present an alternative to this method that uses digital imaging with a computer to more quickly prepare professional-looking charts. In addition to the handwriting images, the charts can be supplemented with annotations such as arrows and text, both of which can be colorized if needed.

9. Historical Review
John Paul Osborn

The field of forensic document examination has a rich history. Particularly in the early 1900s, before expert testimony concerning the identification of writing and other aspects of this discipline were readily accepted by courts in the United States, the pioneers of this field had the daunting task of proving its worthiness and usefulness to deciders of fact. Among those pioneers was Albert S. Osborn.

10. The Relation of Light to the Proof of Documents
Albert S. Osborn

I can think of no association that bears a name which affords such a temptation to the manufacture of figures of speech as an Illuminating Engineering Society. The name at once suggests the dark places that need your assistance. Every department of human activity does indeed need illuminating engineers and what we all want everywhere and all the time is more light. Light is an important factor in the proof of documents and light engineers can promote justice by making it easier to prove the facts regarding disputed documents. Anything relating to the subject of illumination that affects the quality of human vision is of vital importance in all forgery investigations.