

## **Questioned Documents Section - 2015**

## J11 Case Studies of Simulated Security Features in United States Identity Documents

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After attending this presentation, attendees will gain an understanding of current trends in simulated security features in plastic United States identity documents. Simulated laser engraving, embossing, and optically variable devices in the United States Border Crossing Card (BCC) and the United States Passport Card will be the focus of this presentation.

This presentation will impact the forensic science community by cultivating an awareness of how an identity document and its security features evolve as counterfeiters constantly find new ways to compromise current security features. The opportunity for most laboratories to study these advancements may be infrequent; therefore, this presentation will provide visual examples as well as methodologies for examinations leveraging a wide array of tools.

The United States BCC allows Mexican nationals to travel to and from the United States. The BCC cannot be used to gain employment or other benefits while in the United States. In order to obtain a BCC, an applicant must establish that they have ties to Mexico that would compel their return after visiting the United States.

The United States Passport Card permits United States citizens to travel between the United States, Canada, Mexico, the Caribbean, and Bermuda at land border crossings or sea ports of entry. This card may not be used for international air travel.

The United States BCC and United States Passport Card have been subject to countless attempts at unlawful replications and alterations over the years. With readily available access to digital printing methods such as thermal, inkjet, and laser printers, document mills have proliferated around the world. As a result, the United States government is constantly working to reinforce security of these documents to discourage and prevent those who seek to gain entry into the United States through unlawful means. Nevertheless, the Homeland Security Investigations Forensic Laboratory (HSI-FL) examines a multitude of counterfeit and altered United States BCCs and United States Passport Cards each year.

Plastic identity documents sometimes consist of polycarbonate layers receptive to laser engraving. These laser-receptive substrates react to the laser by altering the chemical composition of the card. This makes the removal of the laser-engraved data unlikely. Examples of altered United States BCCs and United States Passport Cards encountered in casework at the HSI-FL will be discussed in this presentation.

Security Features, Simulated, Laser Engraving