J27 The Evolution of Security Features in International Travel Documents

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Learning Overview: After attending this presentation, attendees will have a more thorough understanding of how the construction of international travel documents evolves to meet new standards and thwart counterfeiters.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by providing a better understanding of the more common security elements and features that appear in international travel documents, showing how those elements evolve as needs arise.

For international travel, a person is usually required to provide documentary proof of citizenship for their home or adopted country before being allowed to board a train, boat, or plane, or to cross a country's border. In most cases, the required travel document is a passport or similar booklet that contains personalized data, which normally includes the date of birth and image of the bearer, to establish identity.

In the early 20th century, when passport use first came into the lexicon, the documents were not very sophisticated and were, in fact, sometimes very rudimentary. As their use became more widespread, the information contained in passports became more valuable and, thus, more susceptible to fraud and theft. Recognizing the valuable nature of that information, passport producers understood the need to secure the personalized data against misuse and counterfeiting. In earlier documents, that security was most often achieved using one or two security features of varying degrees of sophistication. As international travel became more popular, affordable, and more widely available, the documents evolved to become more sophisticated and secure.

In the 1940s, the International Civil Aviation Organization (ICAO) was formed by the United Nations to govern practices and standards regarding air navigation, including aspects such as flight inspection and facilitation of border-crossing procedures. As the ICAO developed and grew, among its many duties, it became the de facto dictating body for passport security. The ICAO was responsible for developing standards for the advancement and use of machine-readable travel documents, and more recently (in 2015) has developed standards for the design and use of biometric passports, which utilize Radio Frequency Identification (RFID) chips to store the valuable personalized data and information.

In this presentation, attendees will see a selection of international travel documents, showing how the documents evolved and advanced from the days prior to ICAO conformity through the progression of adding security features over the years to bring them into compliance. As travel documents continue to hold high value for criminals, such as terrorists and human smugglers, the necessity remains for passport designers to stay one step ahead of the counterfeiters. To meet these demands, document security designers are now developing more sophisticated and expensive features to thwart criminals. Savvy document designers recognize not only the need to utilize these sophisticated security features and safeguards, but to continue to meet financial demands that often limit how much can be spent on each booklet. This presentation will allow viewers to see how passport designers use a layered approach of security features of varying cost and sophistication to meet these goals.

International Travel Documents, Security Features, Counterfeiting