

SECURITY ISSUES FOR IDENTIFICATION DOCUMENTS

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INTRODUCTION

Counterfeiting identification documents is both easy and on the rise. Large criminal enterprises and enterprising college students are finding that readily available printing and imaging technology allow for the quick and simple production of convincing, but phony, identification documents. And while the investment in creating counterfeit identification documents is low, the potential rewards associated with fake identification documents can be high. With a fake identity, an individual can potentially gain illegitimate access to secure military facilities, qualify for government benefits, defraud credit companies or make illegal purchases of firearms or alcohol.

The threat that such criminal activity poses to the United States is significant. Fake identification documents threaten the integrity of U.S. borders, the safety of U.S. roadways and airways, the security of military bases and airports, the commercial interests of private industry and the efforts of law enforcement to hold criminals accountable for their actions. On September 11th, terrorists responsible for attacks on the World Trade Center and the Pentagon were believed to have used counterfeit driver's licenses to evade detection by law enforcement.

Numerous 'next generation' security technologies have been developed for other documents of value. In this article, we will explore how American Bank Note Holographics, Inc. ("ABNH"), a leading developer and manufacturer of sophisticated optical security devices, has applied its expertise in document and card security to the specific problems confronting issuers of identification documents.

FORMS OF IDENTIFICATION DOCUMENTS

Below is a list of various forms of identification accepted by the U.S. Department of Justice's Immigration and Naturalization Service. Only one (or in some cases, two) of these forms of identification are required by government agencies, employers or other entities that would wish to establish an individual's identity:

- U.S. Passport.
- Foreign Passport.
- Alien Registration Receipt card.
- Employment Authorization card.
- State-issued driver's license or identification card.
- U.S. Social Security card.
- School identification card with photograph.
- Voter registration card.
- U.S. military card.
- Identification card issued by Federal, State, or local government agencies or entities.
- Military dependent identification.
- Native American tribal documents.
- Driver's license issued by a Canadian Government authority.
- U.S. Coast Guard Merchant Mariner Card.
- U.S. citizen ID card.
- ID card for Resident Citizen in U.S.

USES OF IDENTIFICATION DOCUMENTS

Governments, businesses and educational institutions employ identification cards for a variety of purposes including:

- Maintaining the integrity of borders with passport documents.
- Ensuring the safety of roadways and airways with drivers and pilots' licenses.
- Securing military bases and other high security installations with military identifications.
- Preserving the confidentiality and security of documents and facilities in private industry with employee identification cards.
- Guarding the security of academic institutions with student identification cards.

CRIMINAL USES OF FALSE OR COUNTERFEIT IDENTIFICATION DOCUMENTS

Counterfeit identification that enable identification fraud and may lead to many serious crimes, including:

- Identification theft by criminals who may represent themselves as someone else, particularly terrorists and other criminals to evade detection by law enforcement.
- Aliens and criminals to enter the U.S. illegally and anonymously.
- Unauthorized individuals to enter secure areas such as military bases, bank facilities and airports.
- Untrained individuals to drive automobiles, operate heavy machinery or pilot airplanes.
- Undocumented migrants to work lawfully in the United States.
- Criminals to illegally obtain health benefits and other social support benefits.
- Deadbeat dads and convicted felons to escape accountability for their actions by changing their identities.
- Teenagers to gain illegal access to alcohol and cigarettes.

RECENT EXAMPLES OF COUNTERFEITING 'SECURE' IDENTIFICATION DOCUMENTS

The U.S. Department of Justice's Immigration and Naturalization Service ("INS") has been active in trying to shut down large-scale operations focused on producing counterfeit identification documents. Some high profile reports of counterfeit identification documents have included:

- In 1993, a seizure of 400,000 fake identification documents.
- In May 1998, a seizure of a sophisticated portable printing press, 24,000 counterfeit Social Security Cards, 50,000 blanks, printing inks, solvents, plates, rubberized back-lays, and various other implements used in counterfeiting were seized.
- In November 1998, a seizure of more than 2 million fake identification documents were seized including high-quality counterfeit Resident Alien Cards, Social Security cards and driver's licenses from nine states.
- On September 11, 2001, terrorists responsible for attacks on the World Trade Center and the Pentagon were believed to have used counterfeit driver's licenses to board airplanes.

In addition to the large-scale counterfeit operations described above, the advent of inexpensive and sophisticated imaging technologies and the growth of new distribution channels such as the Internet, has allowed novice counterfeiters to proliferate with alarming speed. Recently, Senator Susan Collins chaired a U.S. Senate Permanent Subcommittee on Investigations hearing to highlight the ease with which high quality fake identification documents could be purchased on the Internet. Senator Collins found that within a few days she could procure documents that identified her as a member of the U.S. Armed Forces, a reporter, a student at Boston University, and as a licensed driver in Florida, Michigan, and Wyoming.

SOURCES FOR COUNTERFEIT IDENTIFICATION DOCUMENTS

The Internet

A search on a prominent Internet search engine on the phrase "How To Make A Fake ID," yielded 42,900 Web page matches. Some of the Web site titles found included "Fake ID Book – Templates – Instructions – Procedures," "A Beginner's Guide to Fake ID," and "Make Your Own Fake ID." In addition, a number of Web sites promised to create full identity packages for as little as \$45.00, delivered via UPS or Federal Express. There are even Web sites that rate the relative helpfulness other Web sites can offer in the quest for fake identification documents.

Criminal Syndicates

Organized crime and major street gangs have created large-scale operations focused on the production of fake identification documents. In many cases, these documents are sold on the street to migrant workers in order to allow them to work in the United States. In some cases, scam artists seeking to fleece state governments out of benefits use these documents.

Home Production

The U.S. Senate Permanent Subcommittee on Investigations recently found that someone with an exceptionally modest familiarity with the Internet and \$50.00 in art supplies can have all the tools necessary to create a convincing fake identification document. Clearly, the Internet has become a major tool facilitating the dissemination of information regarding the production of fake identification documents as well as fake identification documents themselves.

CURRENT SECURITY FEATURES FOR IDENTIFICATION DOCUMENTS

There are no uniform standards for document security across the wide range of identification documents in use today. Many ID documents today, particularly state drivers' licenses, were not even designed with security in mind and include features that are either readily available on the Internet or can be easily simulated by amateur counterfeiters using widely available technologies.

Some features that were presumably incorporated in common identity documents for security purposes that are currently being compromised by counterfeiters include:

Rainbow (iris) Printing

Rainbow printing enhances document security with an extremely subtle shift in color across an identity document. A color copier or scanner cannot accurately produce this color shift but simulations of this technology are readily available through the Internet and art supply stores.

High Refractive Index Coatings (HRI)

HRI is a popular product as it enables document issuers to place a see-through design over printed information in a cost effective way using a clear base film that is coated with a reflective overall treatment such as zinc oxide. Problems include its relatively weak refractive image and wide availability commercially and over the Internet. In addition, HRI coatings offer forensic investigators no physical forensic indicators and are subject to damage by solvents and have weak adhesive properties.

Retro-reflective

This product is a thick overlay containing a pattern of glass beads that reflects light under a

special scope and delivers an effect that resembles a road sign's reflection of light back from a car's headlights. Problems include its relative thickness and costly application. In addition, simulations of this product are easily created using glass beads from art supply stores. More often, however, the overlay is simply removed and replaced with another clear overlay which may or may not have faint printing of the original pattern.

Magnetic Stripes

Used to store personal information about a document bearer, brown or black magnetic stripes are widely available on the Internet and lack any overt security elements.

SOLUTIONS TO IMPROVE SECURITY OF IDs AGAINST COUNTERFEITING

Clearly, the current security features used in identification documents provide only limited security as evidenced by numerous high profile incidents of counterfeiting. Some solutions are outlined below:

Create Uniform Security Standards. In the early 1980s, MasterCard and Visa and their member banks were suffering enormous losses due to counterfeiting. Much like the diverse array of drivers licenses currently issued by the states, all member banks issued credit cards under the MasterCard and Visa networks with the design and printing specified by the individual banks. MasterCard and Visa addressed the counterfeiting problem by mandating a uniform security feature in the form of a hot stamped hologram in the same place on each card, while leaving the rest of the design up to the discretion of the member banks. This resulted in a dramatic reduction in the incidence of credit card counterfeiting. This solution works because each layer of the security chain: consumer, issuer and law enforcement official alike, know where and what to look for to authenticate a given card. With the lack of consistent standards across identification documents today, it is often difficult to give reasonable assurance of a given document's authenticity.

Replace HRI and Retro-reflective Technology With Demetallized Holograms. While most drivers licenses use HRI or Retro-reflective technology, these products offer very little security and they are widely available to the public as commercial non-security products. Demetallized holograms require specialized technology, and incorporate overt, covert and forensic security advantages. This technology is produced under secure conditions, and is not available commercially like HRI.

Upgrade Magnetic Stripe with HoloMag™. Many identification documents already feature a magnetic stripe on the back that is used to store information about the ID carrier. Conventional magnetic stripes are a widely available commodity, but HoloMag™ is a highly secure anti-counterfeiting device which combines the security of a hologram with a magnetic stripe. HoloMag is difficult to produce or simulate, and can incorporate overt and covert verification features that would be instantly recognizable to the general public and used by law enforcement in forensic investigations. With HoloMag incorporated on the base card stock, the raw material for ID card production can be secured much like the watermark, the embedded thread and the tactile feel of bank note paper enhance the security of the currency.

CONCLUSION

Improving the security of identity documents is a matter of urgent national security. Most identity documents in use today were not designed as secure documents, and there are no uniform security standards in place to assist the public and law enforcement in the recognition of genuine versus counterfeit identity documents. Furthermore, the tools available to counterfeiters to simulate documents in use today have significantly improved. At the same time, the determination of terrorists and other criminals to use counterfeit documents to support their terrorism and other criminal activities poses an immediate and urgent threat. The United States



and other countries must act quickly and decisively to implement uniform and sophisticated security standards that thwart counterfeiters. These security features must be practical for document issuers to implement, easy for the public to recognize and provide specific identifying features for law enforcement and forensic investigators. American Bank Note Holographics has extensive experience in the design and implementation of security features that meet these objectives.

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Adam Scheer is the Vice President of Corporate Development at American Bank Note Holographics, Inc. ("ABNH"). ABNH is a world leader in the origination, production, and marketing of holograms. ABNH's products are used primarily for security applications such as counterfeiting protection and authentication of transaction cards, identification cards, documents of value, consumer and industrial products as well as for packaging and design applications. ABNH is headquartered in Elmsford, NY.