

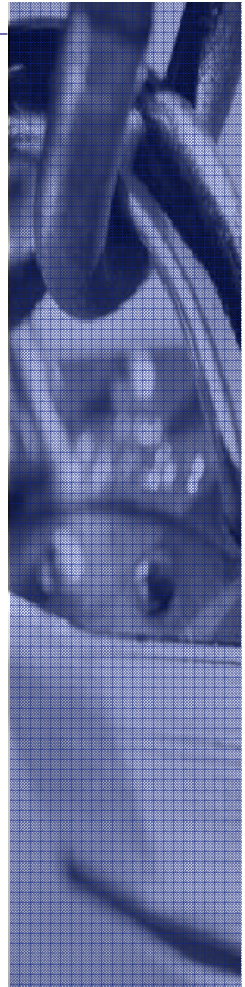
Fraud Prevention

Elizabeth Cobbs, CFE
Security Investigator
Bank of Hawaii

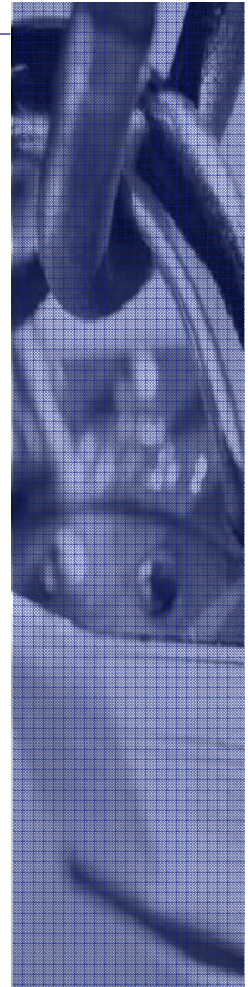
Bank of Hawaii Corporation

Today's Agenda

- Introduction and Overview
- Origins of Business Fraud Loss
 - Embezzlement/Occupational Fraud
 - Check Fraud
- Phishing
- Skimming
- Client Awareness and Preparedness
- Fraud Prevention – Top Ten List
- Q and A



Origins of Occupational Fraud Loss



Elizabeth Cobbs
Investigator
Corporate Security

 **Bank of Hawaii**
Corporation

Embezzlement/Occupational Fraud

■ The Fraud Triangle

Motive

perception of an immediate and un-sharable financial need

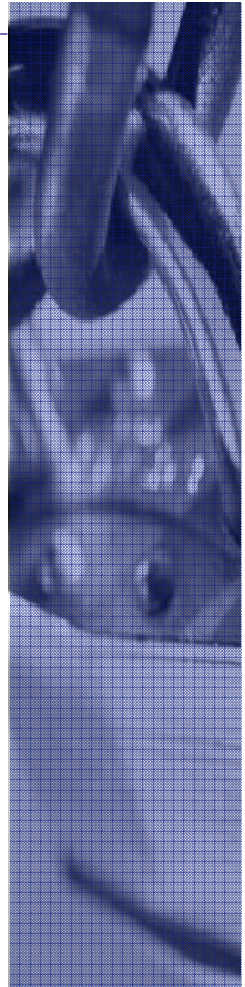
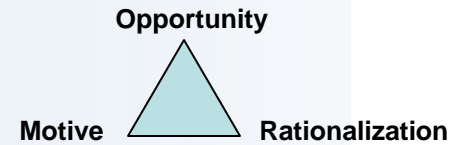
- Alcohol/Drug Abuse
- Extreme Debt
- Spending Disorder
- Illicit Romantic Relationship

Opportunity

perception that one will be able to conceal the theft of funds based on a trusted relationship

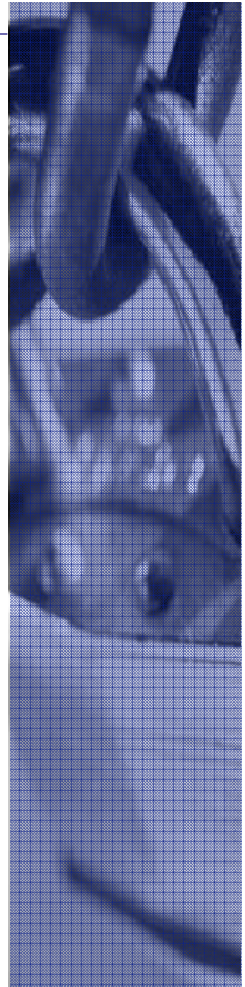
Reward/Rationalization

Sincere belief that a crime has not been committed or is perceived to be justified and that the reward outweighs the risk.



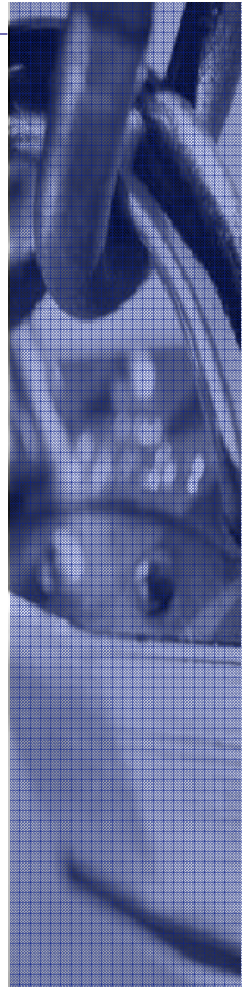
Detecting Fraud – What are the Red Flags?

- Living beyond means
- Financial hardships
- Increasingly secretive about their professional activities
- Divorce/Family problems
- Unusually close association with vendors or customers
- Irritability, suspiciousness or defensiveness
- Employee's refusal for advancement



Occupational Fraud – How To Prevent It

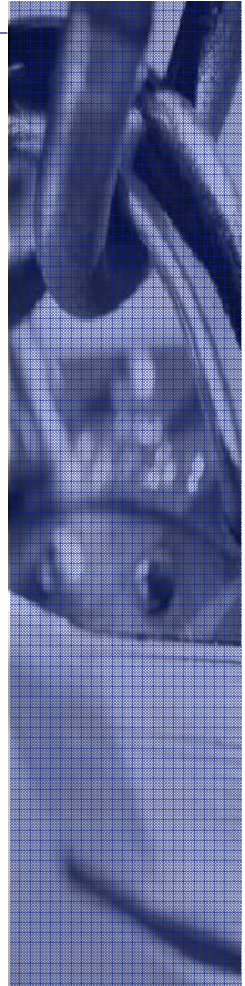
- Eliminate the opportunity; minimal control over motive or rationalization
- Internal Controls – Separation of duties
- Audits
- Anonymous alert line or box
- Employee support programs
- Fraud training for managers and employees
- Establish a Code of Conduct
- Mandatory vacation for all employees
- Use bonded external service providers especially janitorial and security
- Background checks, criminal history review



Check Fraud – AFP Fraud Survey Results

A 2008 national survey of 3950 members of the Association of Financial Professionals listed the following reasons organizations suffered financial losses from check fraud:

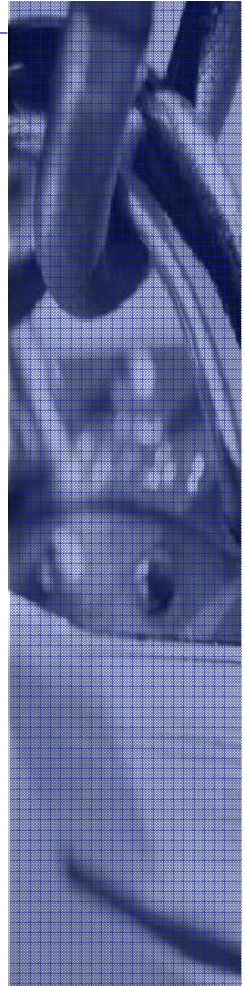
- Account reconciliation and/or check return not timely
- Internal fraud (employee responsible)
- Did not use payee positive pay
- Did not use Positive pay/reverse positive pay



Check Fraud – AFP Fraud Survey Results

The same survey listed the following fraud control measures that organizations used to prevent loss from check fraud:

- Positive pay/reverse positive pay
- Daily reconciliation
- Internal controls (separation of duties)
- Payee positive pay
- “Post no checks” restriction on depository accounts
- Timely check return



Check Fraud – Most Common Types

■ Stolen & Forged Checks

Legitimate bank checks with an imitation of the makers signature.

Barbara Betters
123 Benson Street
Bagel City, CA 51394

61-398 / 622

Date: 01/04/2004

1012

PAY TO THE ORDER OF Betty Bob Amount 23.00

Twenty-three & no/100 DOLLARS

Best Bank
123 Bone Street
Bagel City, CA 51394

Memo

10622039841 12345267901

Legitimate signature of customer

Forgery of customer's signature

Barbara Betters
123 Benson Street
Bagel City, CA 51394

61-398 / 622

Date: 2-2-04

1013

PAY TO THE ORDER OF Cash Amount 300.00

Three hundred dollars and 00/100 DOLLARS

Best Bank
123 Bone Street
Bagel City, CA 51394

Memo

10622039841 12345267901 1013

Check Fraud - Stolen & Forged Checks Red Flags

■ **Forgery Characteristics**

Fluidity in writing (also includes ink blots, pen lifts and uneven pressure)

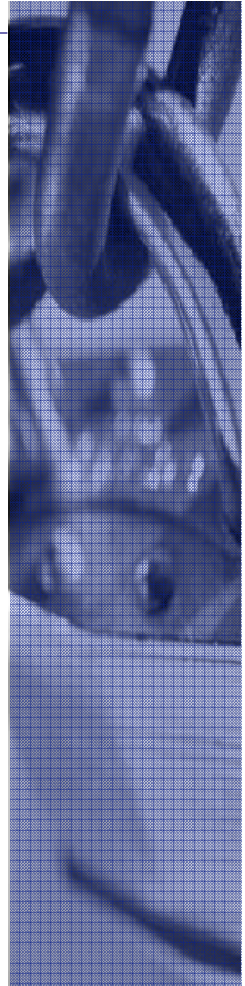
End to end signature line – begins fluid but letters become crunched at the end

Criminal tremor – fuzzy letters from shaking hands

Carbon residue – carbon traces or smudges

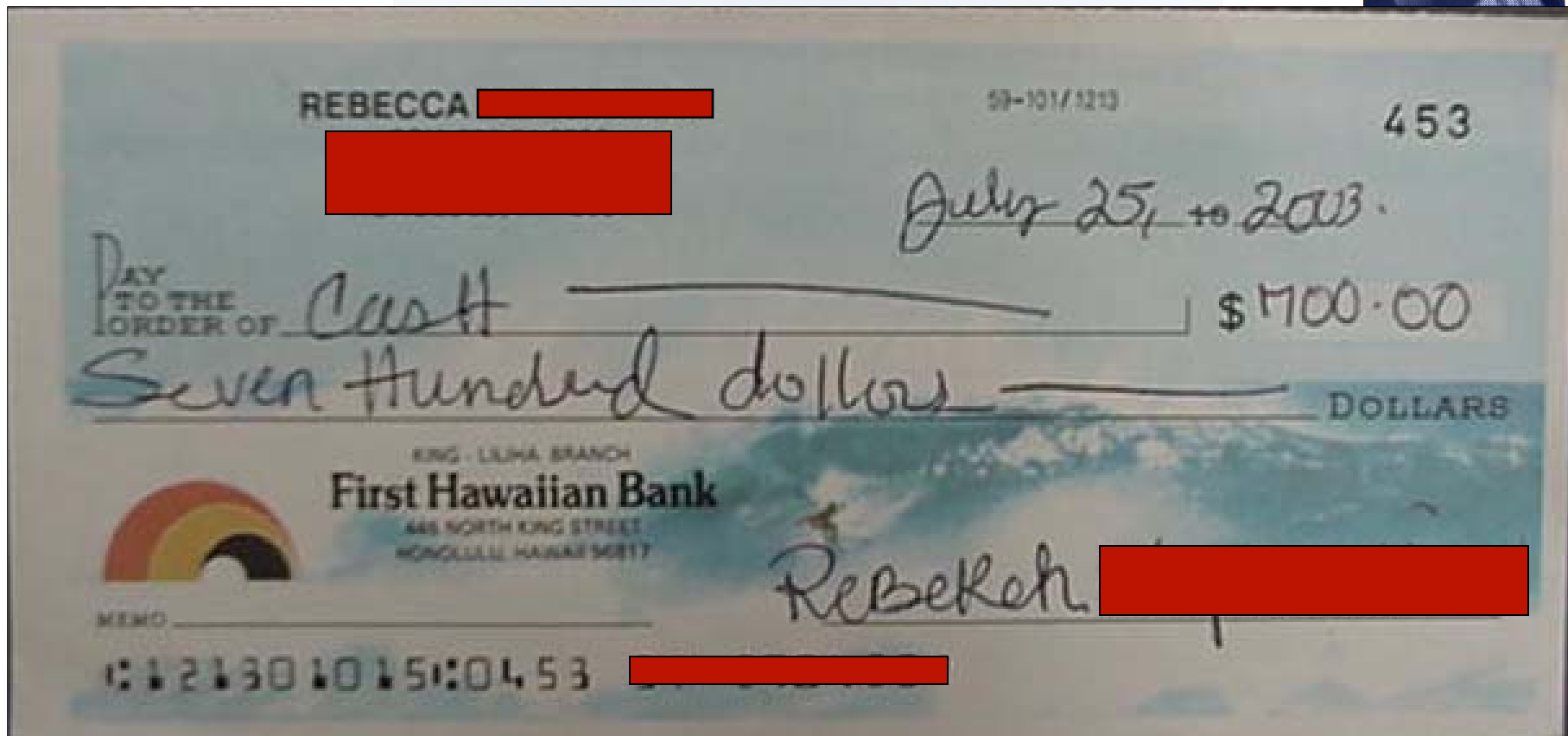
Worn or weathered – Is the check worn and/or contain a recent date?

Lack of spontaneity – letter forms too carefully or neat



Forged Signature Check Fraud

- Misspelling – obvious misspelling of a signature or endorsement



Check Fraud – Most Common Types

- **Altered Items**

Information on a legitimate check such as payee or amount is changed to benefit the perpetrator.

- **Altered Characteristics**

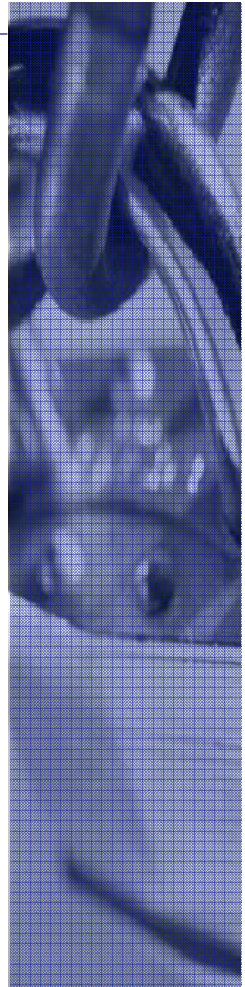
Ink that smears when rubbed residue

Dollar amounts – Numeric vs. Written different

Different color pen ink

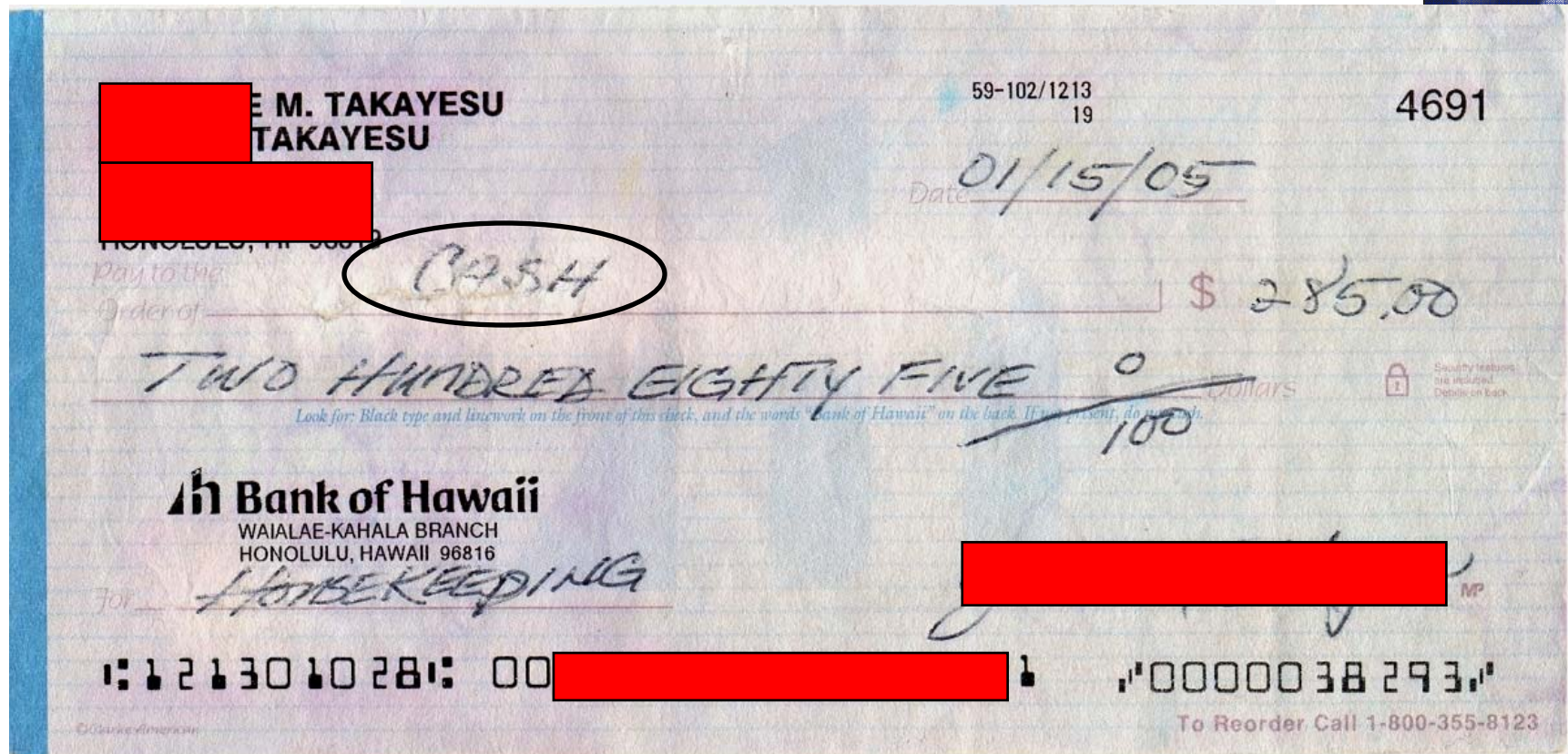
Inconsistent spacing where the numeric portion has been altered

Inconsistent type from different printers or typewriters used



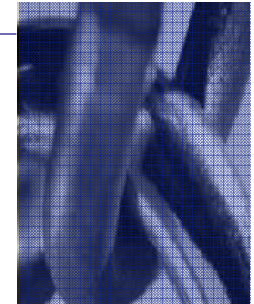
Altered (Washed) Check Fraud

- Erasures, washed or other obvious blemishes
- Uneven or faded printing or color



Altered Payee Check Fraud

- Payee originally was K.C.F.C.U. and written over with the fraudster's last name.



Check number: 394
Date: 5-2-08

Pay To The Order Of: P. R. R. RETRA ~~XXXXXXXXXX~~ \$ 297.24

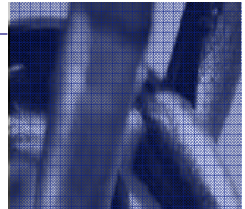
TWO HUNDRED NINETY SEVEN and 24/100 Dollars

First Hawaiian Bank.
KAPAA BRANCH
4100 KULUEO HIGHWAY
KAPAA, HAWAII 96746

For: [Redacted]

⑆12130 [Redacted] 4344⑈ ⑈0000029724⑈

Added Payee Check Fraud



- Additions to the payee and misspelled words

ALUMINUM PRODUCTS INC. HONOLULU, HAWAII 96818
SSN.# [REDACTED] 7351 4471
59-177/1213
CHECK NO. 4471

PAY FIVE HUNDRED NINETY-ONE AND 68/100 DOLLARS
DATE 04/29/98 AMOUNT *****\$591.68

*** ELPIDIO P. [REDACTED].***
c/off
TO THE ORDER OF Hawaii Mgmt. Alliance [REDACTED]
[REDACTED]

[REDACTED]

AUTHORIZED SIGNATURE

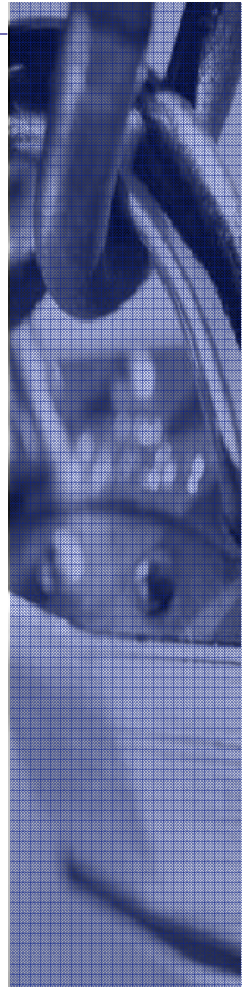
⑈004471⑈ ⑈121⑈ [REDACTED] 023⑈

“c/off” added and misspelled

Name added

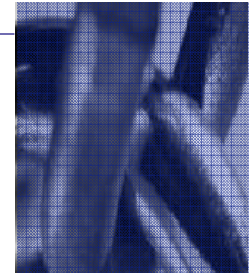
Check Fraud – Most Common Types

- **Counterfeit Checks** - Checks created by an entity not authorized by the account holder and issued without the account holder's authorization.
- **Counterfeit Characteristics**
 - Poor quality paper stock
 - Absence of one serrated edge or check printer's name or trademark
 - Misspelled printed information
 - Check number ranges inconsistent or out of range



Check Fraud - Counterfeit

- Fraudsters use actual signatures of famous people



FOR SECURITY PURPOSES, THE FACE OF THIS DOCUMENT CONTAINS A COLORED BACKGROUND AND MICROPRINTING IN THE BORDER

Controls Corporation
house Way

WELLS FARGO BANK, NA
11-4288/1210

CHECK NO. **78025**

Check Date	Check Amount
06/25/08	\$ **4,880.55

PAY EXACTLY Four-Thousand Eight-Hundred-Eighty And 55/100 Dollars

TO THE ORDER OF VIRGINIA D

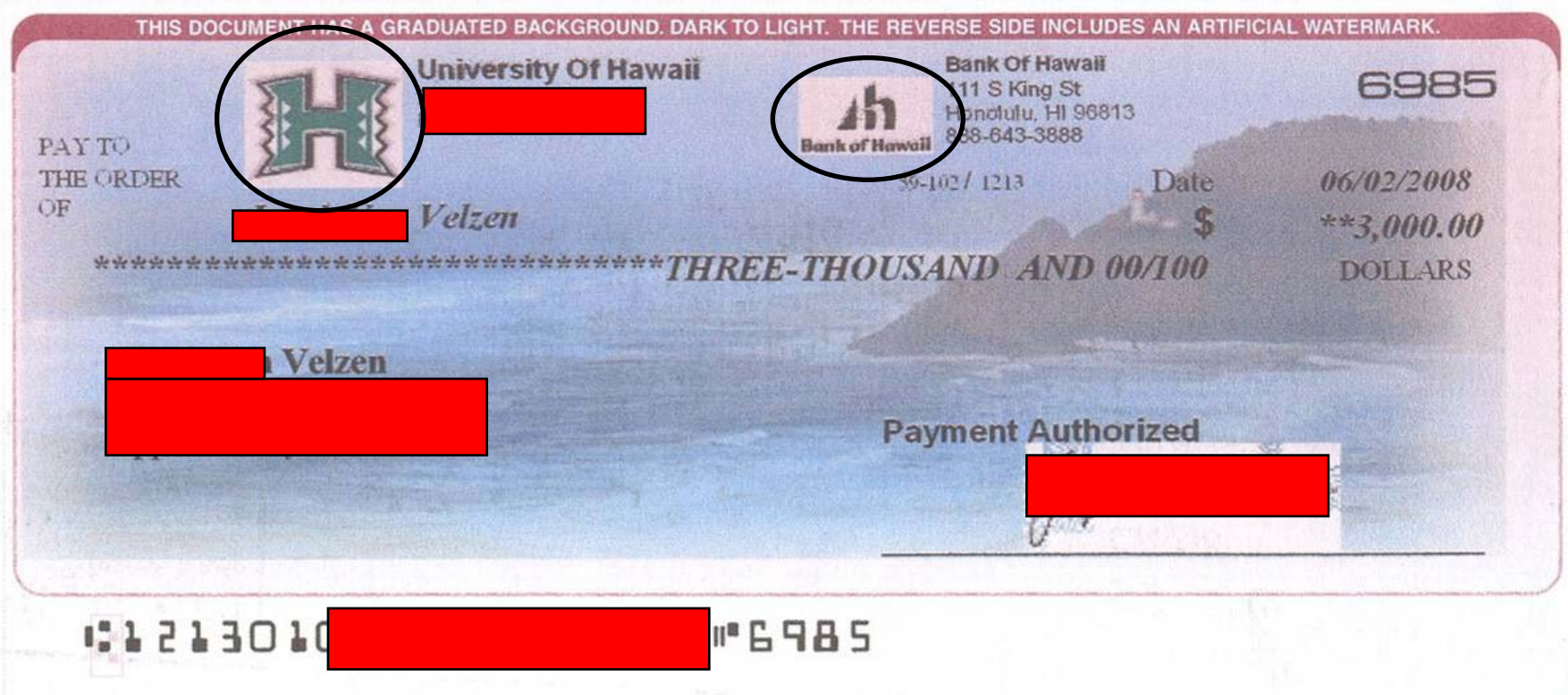
Dwight D. Davis

SECURITY FEATURES INCLUDED. DETAILS ON BACK

⑈078025⑈ ⑆12104⑈

Check Fraud - Counterfeit

- Borders and printing not sharp or professional in quality
- Logos not clear or crisp

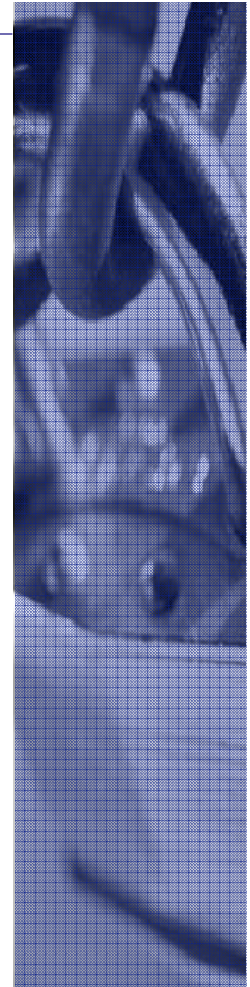


Best Practices to Prevent Check Fraud

- Order Checks & Deposit Slips from reputable sources
 - Secure your blank check stock
 - Use watermark and other anti-counterfeit check stock technologies (Ex: check safety paper)
-
- Promote Direct Deposit of Payroll
 - Utilize Positive Pay services
 - Perform timely reconciliations of your disbursement accounts
 - Frequent audits of your disbursement processes and personnel
 - Implement strong internal controls and procedures
 - Used Anti-washing ink

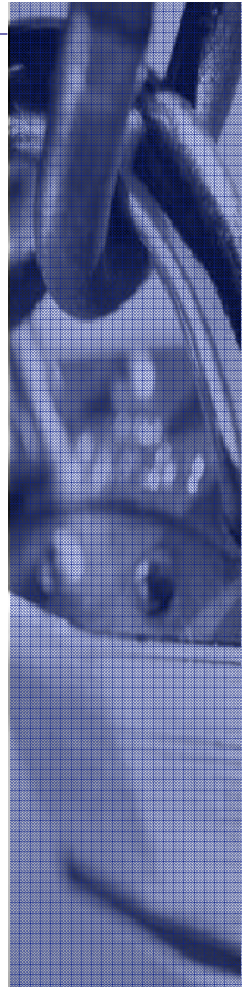


Let's Go Phishing



What is Phishing?

The act of sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.



What Is It?

Fraudulent e-mail that attempts to trick you into giving up personal information.

Bank of Hawaii

Your credit/debit card information must be updated

Dear Bank Of Hawaii Member,

We recently noticed one or more attempts to log in to your account from a foreign IP address and we have reasons to believe that your account was used by a third party without your authorization. If you recently accessed your account while traveling, the unusual login attempts may have been initiated by you

The login attempt was made from:
IP address: 172.25.210.66
ISP Host: cache66.proxy.aol.com

By now, we used many techniques to verify the accuracy of the information our users provide us when they register on the Site. However, because user verification on the Internet is difficult and cannot does not confirm each user's purported identity. Thus, we have established a verification system to help you evaluate with who you are dealing with.

click on the link below, fill the form and then submit as we will verify

<https://www.boh.com/ebankoh/login/login.asp>

Please save this fraud alert ID for your reference

Please Note - If you choose to ignore our request, you leave us no choice but to temporarily suspend your account.

* Please do not respond to this e-mail as your reply will not be received.

Respectfully,
Trust and Safety Department
Bank Of Hawaii Inc.

Note: Bank of Hawaii customers charges to their accounts.

IMPORTANT CUSTOMER SUPPORT INFORMATION

We are committed to delivering you a quality service that is reliable and highly secure. This email is one of many components designed to ensure your information is safeguarded at all times.

Please do not reply to this message. For any inquiries, contact Customer Service.

Document Reference: (92051208).

© Copyright Bank of Hawaii.

Bank of Hawaii

e-BANKOH - Unauthorized

We recently reviewed your account. Therefore, we have limited access to sensitive Bank of Hawaii features to your e-BANKOH Online Banking. Reactivated by our system.

SERVICE: e-BANKOH Online Banking

What you need to do:

- Go to: www.boh.com/personal
- Enter your user ID and Password (process).
- Enter the requested information and your account will be reactivated.

Note: Bank of Hawaii customers charges to their accounts.

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Please do not reply to this message. For any inquiries, contact Customer Service.

Document Reference: (92051208).

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Bank of Hawaii

Bank of Hawaii is constantly working to ensure security by regularly screening the accounts in our system. We recently reviewed your account, and we need more information to help us provide you with secure service. Until we can collect this information, your access to sensitive account features will be limited. We would like to restore your access as soon as possible, and we apologize for the inconvenience.

Why is my account access limited?

Your account access has been limited for the following reason(s):

- April 28, 2006: We would like to ensure that your account was not accessed by an unauthorized third party. Because protecting the security of your account is our primary concern, we have limited access to sensitive Bank of Hawaii account features. We understand that this may be an inconvenience but please understand that this temporary limitation is for your protection.

(Your case ID for this reason is NSRA04-410-321-4364.)

At Bank of Hawaii, one of our most important responsibilities to you, our customer, is the safekeeping of the nonpublic personal ("confidential") information you have entrusted to us and using this information in a responsible manner. Appropriate use of the confidential information you provide us is also at the heart of our ability to provide you with exceptional personal service whenever you contact us.

Please confirm your identity here: <https://www.boh.com/ebankoh/login/login.asp>

Completing all of the checklist items will automatically restore your account access.

• Copyright © 2006 Bank of Hawaii

Note: Bank of Hawaii customers charges to their accounts.

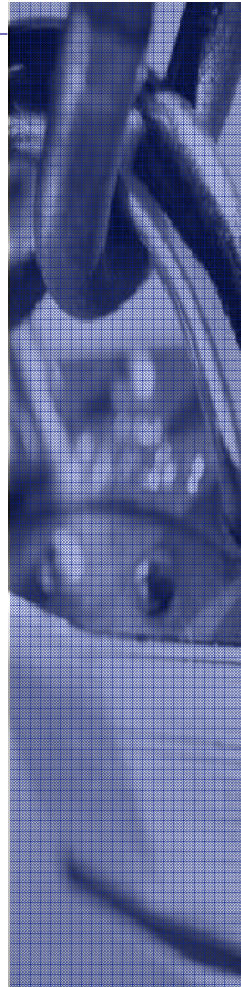
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Please do not reply to this message. For any inquiries, contact Customer Service.

Document Reference: (92051208).

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Anatomy of a Phish



e-BANKOH - Unauthorized charge to your credit card

We recently reviewed your account, and we suspect an unauthorized ATM based transaction on your account. Therefore as a preventive measure we have temporarily limited your access to sensitive Bank of Hawaii features. To ensure that your account is not compromised please login to your e-BANKOH [Online Banking](#), verify your identify and your online accounts will be reactivated by our system.

SERVICE: e-BANKOH [Online Banking](#) and Bill Pay services.

What you need to do:

- Go to: www.boh.com/personal
- Enter your user ID and Password (that you selected during the online enrollment process).
- Enter the requested information and your [Online Banking](#) and [Bill Pay](#) services will be reactivated.

Thank you for using e-BANKOH

Note: Bank of Hawaii customers are not held liable for any fraudulent charges to their accounts.

***** IMPORTANT CUSTOMER SUPPORT INFORMATION *****

We are committed to delivering you a quality service that is reliable and highly secure. This email is one of many components designed to ensure your information is safeguarded at all times.

Please do not reply to this message. For any inquiries, contact Customer Support.

Document Reference: (92051208).



Anatomy of a Phish

Bank of Hawaii - Microsoft Internet Explorer provided by Bank of Hawaii

File Edit View Favorites Tools Help

Back Forward Stop Reload Home Search Favorites Media

Address: https://www.boh.com/personal

Bank of Hawaii
ONLINE BANKING
For help, call 1-888-643-3888
TTY 1-888-643-9888

Online Bank Statements
Fast delivery of your statements

[CLICK HERE TO LEARN MORE](#)

Please update the information requested

* Social Security Number : (ie. 1234567890)

* Email Address:

* Card Number:

* Expiration Date: (ie. mm/yyyy)

* CVV2: (What's this?)

* ATM Pin Code: (Why is your PIN required?)

* Required Field

CONTINUE

<ul style="list-style-type: none">• Need Customer Support?• View e-Bankoh User Tips.• View System and Service Updates.• Not enrolled yet? Sign-up.	<p>Credit Card Holders: Need to pay your credit card bill? Click to LOG ON</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------

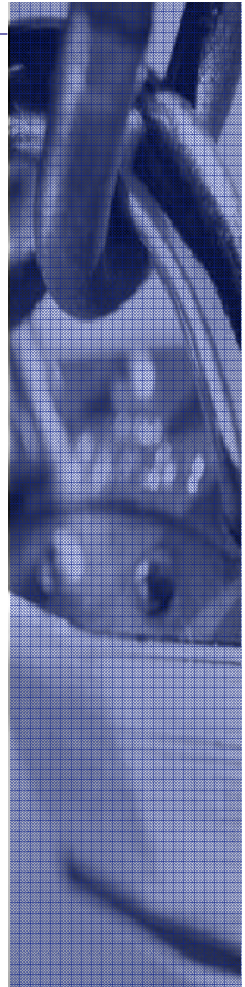
Help For This Page

https://www.boh.com/personal

Internet

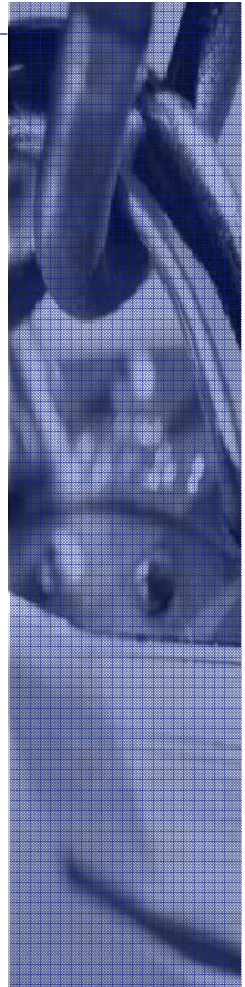
How to Avoid Being Phished

- Be suspicious of any email requesting your personal or financial info. Be aware that email can be forged.
- Watch out for urgent, upsetting or exciting (but false) statements in your emails to get you to react quickly.
- Don't click on images or links in email to get to any website, instead, type the URL directly in your browser.
- Avoid filling out forms in email messages.
- Use spam filters to keep phishing emails out of your inbox.
- Call the company to verify the email if you are unsure.
- Always look for the <https://> and the “lock” before submitting credit card or other sensitive info. If there is a security certificate “error message,” think twice about proceeding.

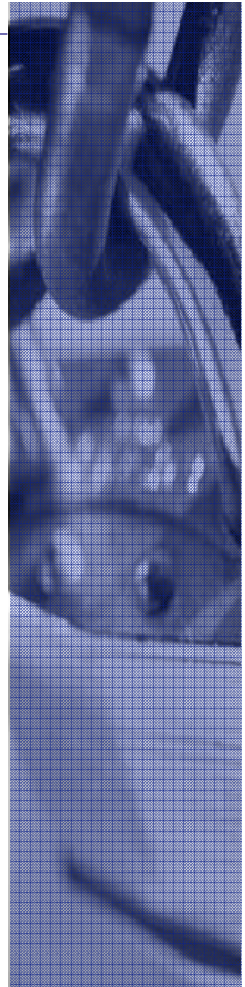


What to Do if You've Been Phished

- Contact the genuine company or organization and report the incident immediately.
- Close any fraudulent accessed or opened accounts.
- Change the passwords on all of your online accounts, starting with any that are related to financial institutions.
- File a report with your local police department and place a fraud alert on your credit reports.
- Scrutinize your monthly statements and monitor your accounts. Review your credit reports annually.
- If you merely visited a phishing site, you should scan your computer for any viruses, keystroke loggers, and other spyware.

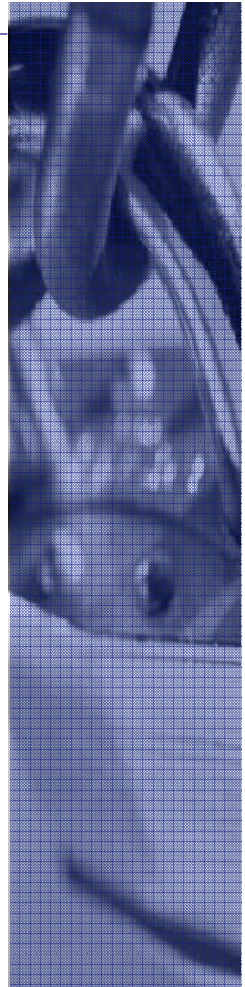


Credit & ATM Card Fraud

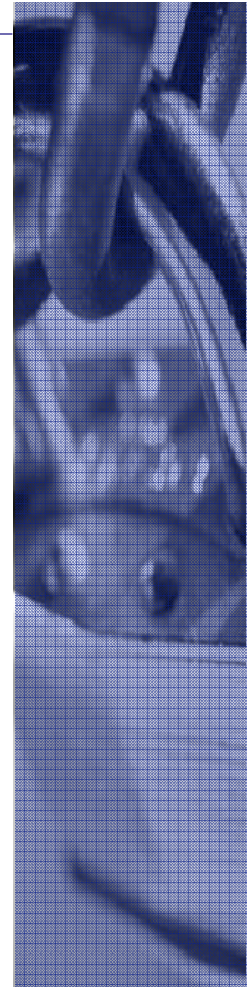


Card Skimming

Skimming is a method of counterfeiting the track data on a credit or debit card to allow valid authorizations to occur.



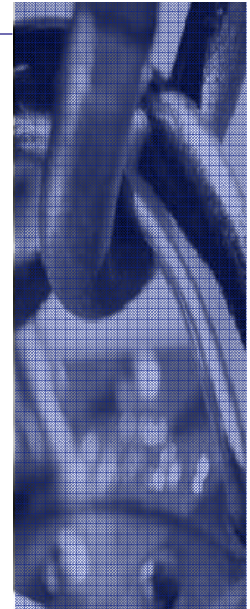
ATM with Skimming Device



Skimming Device



Covert Camera Placed by Fraudsters

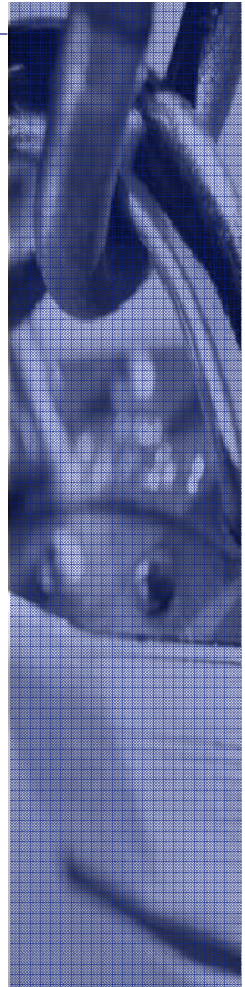


Skimming Devices



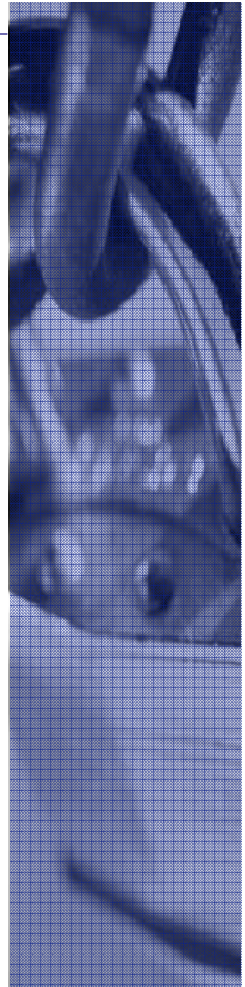
ATM Safety Tips

- Prepare in advance for your transaction – Be ready with your card and have your transaction deposit envelope ready to deposit. Take an extra envelope for next time, too.
- Take a look around – Check your surroundings and stay alert. Don't use an ATM if anyone suspicious is around. After dark, consider having a friend along.
- Don't hesitate to cancel your transaction and leave, if needed – If at any time something seems wrong, cancel your transaction, take your card and go to another ATM.
- Never display cash – Count your cash where you feel secure. If there's ever any discrepancy, you can always call our Customer Service Center at 1-888-643-3888.



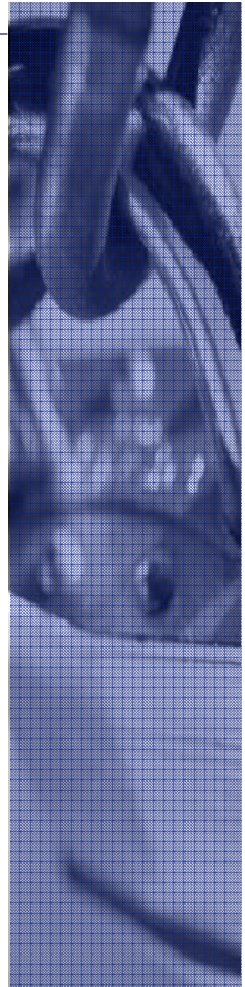
ATM Safety Tips

- Protect your card – Your card accesses your money, so keep your card safe at all times. If your card is lost or stolen, inform us immediately.
- Keep your personal identification number secret – Memorize your Personal Identification Number (PIN). Don't write it on the card. And don't lend your card or tell anyone your PIN. Stand close to the ATM and away from others in line to avoid detection of your PIN or other account information. Consider using your hand to block the view of the other entering your PIN to further protect your code.



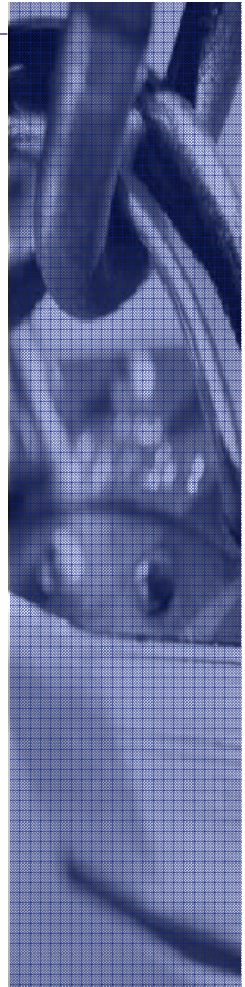
ATM Safety Tips

- Practice safety at a drive-up ATM – Keep your distance. Don't be blocked in. Let any car at the ATM completely pull away before you drive up. When waiting in line, leave space in front so you can pull out if necessary. Also, keep your car running and your doors locked both in line and at the machine.



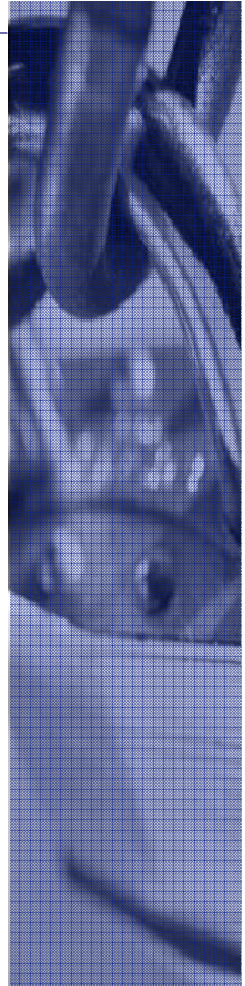
What You Can Do – Policies & Procedures

- Knowing your employees may not be enough
- Keep authorizations current
- Separation of duties and dual approval
- Protect your access information
- Separate Online Access Functions
- Protect you and your customer's payment assets
- Know your trading partners
- Account reconciliation is critical



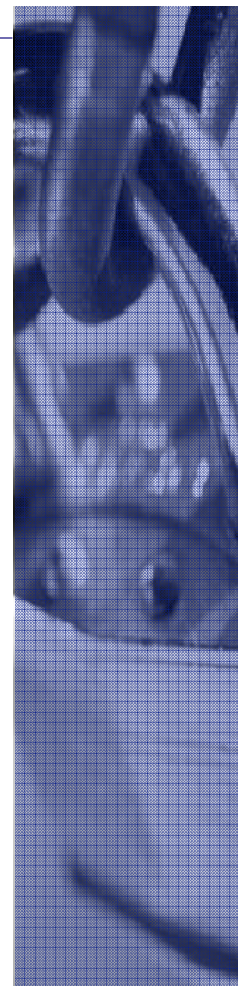
Financial Fraud Prevention – Top Ten List

1. Reconcile your account
2. Segregation of duties
3. Know your employees
4. Review Audit Trail reporting
5. Secure your computer, network, vendor/customer database and all data
6. Partner with your bank
7. Remain alert
8. Don't provide employees the opportunity
9. Listen to your employees
10. Always prosecute



Financial Fraud Prevention Resources

- Security Tips for Businesses
<http://www.ftc.gov/bcp/online/edcams/infosecurity/index.html>
<https://www.pcisecuritystandards.org/tech/index.htm>
- Breach Notification Laws
http://hawaii.gov/dcca/quicklinks/id_theft_info/
<http://www.perkinscoie.com/statebreachchart/>
- Internet Security
<http://www.onguardonline.gov>
<http://www.antiphishing.org>
- ACH Rules Compliance
<http://www.wespay.org>
- Association of Financial Professionals Payments Risk Survey
http://www.afponline.org/pub/pdf/PaymentsRiskSurvey_1.pdf





Mahalo!