

Cyber Security & Scams

Protect Yourself!!



KRACK WiFi Hack

Fall 2017

- ▶ Dangerous WiFi Flaw Opens all Systems to Hackers. KRACK is a total breakdown of the WPA2 security protocol.
- ▶ All WiFi routers are vulnerable to a flaw in their software.
- ▶ The hacker must be close enough to connect to your WiFi to gain access to everything that is transferred through it. For example, parked in your driveway or in front of your house, or in front of one of your neighbors houses who your WiFi reaches.

More things to know about the KRACK Hack

- ▶ The Hacker can see your logins and passwords to your bank or stock brokerage firm, etc.
- ▶ This is **not only** a problem for your computer, it is also a problem for cell phones and tablets, and any device connected to a wireless router.
- ▶ **Routers manufactures** are working to fix this flaw in their products. The fixes are only now beginning to appear.

Things to do

- ▶ Keep using WPA2 protocol for your networks.
- ▶ Update all your devices and operating systems as patches come available to the latest versions.
 - ▶ Microsoft - has already released a security update to patch the vulnerability. (The 10/10/2017 Fall Creators update included the patch).
 - ▶ Google - (Android based devices) said in a statement that it "will be patching any affected devices in the coming weeks." (Oct 17, 2017 web article)
 - ▶ Linux's hostapd and WPA Supplicant - patches are also available. (Same web article as above)
 - ▶ Apple - Apple has already created a patch for the exploit in betas for iOS, MacOS, WatchOS and TVOS.
- ▶ Run update for your firmware on your router.

More Things to do or not do

- ▶ Changing Passwords won't help.
- ▶ Using a virtual private network (VPN) will encrypt all your internet traffic and could protect you from such an attack. Not to mention, it's good practice to use a VPN if you care about your online privacy or security anyway.
- ▶ Strictly using sites that use HTTPS can help protect you against KRACK, but HTTPS isn't totally impervious either.

Available Updates & Patches Available

- ▶ Available updates as of Oct 20 2017:

<https://www.cnet.com/how-to/krack-affects-everyone-heres-what-to-do-now/>

- ▶ List of every patch available as of Oct 17, 2017:

<http://www.zdnet.com/article/here-is-every-patch-for-krack-wi-fi-attack-available-right-now/>

- ▶ A list of vendors that have patched the vulnerability: can be found on the CERT Website: <http://www.kb.cert.org/vuls/id/228519>

List of routers that have issued patches & List of affected hardware and software makers

- ▶ **List of routers that have issued patches as of Oct 20 2017:**

<https://www.windowcentral.com/vendors-who-have-patched-krack-wpa2-wi-fi-vulnerability>

- ▶ **List of affected hardware and software makers:**

<https://www.kb.cert.org/vuls/byvendor?searchview&Query=FIELD+Reference=228519&SearchOrder=4>

SCAMS

Be Cautious!!!
Always assume it's a scam!





Long Term Parking

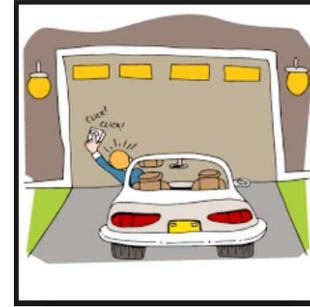
Car Registration & Garage Remote & Insurance Card

- ▶ Car Registration & Garage Remote & Insurance Card left in car at long term parking at airport
- ▶ Bad guy/gal broke into car and used info from Registration and/or Insurance Card to find and go to address
- ▶ Used Garage Remote to enter house and burglarize it
- ▶ SO
- ▶ Don't leave Car Registration & Insurance Card & Garage Remote in car when Long Term Parking, or anytime leave car for extended time.





GPS device left in car while at football game



- ▶ GPS, money, and Garage Remote stolen
- ▶ GPS used to find "Home"
- ▶ Garage Remote used to gain entry to house
- ▶ House ransacked and a lot of stuff stolen
- ▶ So
- ▶ Don't leave GPS & remote in car - take with you!
- ▶ Home - Use different address - near by store or gas station!
- ▶ Clear memory if leave in car



Cell Phone Scam



- ▶ Purse stolen with cell phone & Bank cards inside
- ▶ Bad guy used Wife's cell phone and texted "Hubby" - couldn't remember PIN for bank card
- ▶ "Hubby" texted PIN back
- ▶ Wife called home from pay phone and told Hubby her purse was stolen including her cell phone and bank cards
- ▶ Hubby said "But I received your text asking about our Pin number and I replied a little while ago."
- ▶ Couple went to bank and found their accounts empty



- ▶ So
- ▶ Avoid using names like Hubby, Home, Honey, Sweetie, Dad, Mom, etc. in your cell phone Contacts
- ▶ When sensitive info is being asked through texts, CALL TO VERIFY!

Purse/Wallet in Grocery Cart Scam

- ▶ Wallet stolen out of purse in grocery cart while lady was reaching for item with back turned
- ▶ Lady reported to Store Security
- ▶ Lady received call from "Security" saying they had her purse
- ▶ Lady went to Security to get purse - was told they did NOT call
- ▶ While lady went to store, her house was burglarized
- ▶ Burglars knew when lady would be gone from home



- ▶ So
- ▶ Hang on to purse while in a grocery cart, OR . . .
- ▶ Hold onto purse

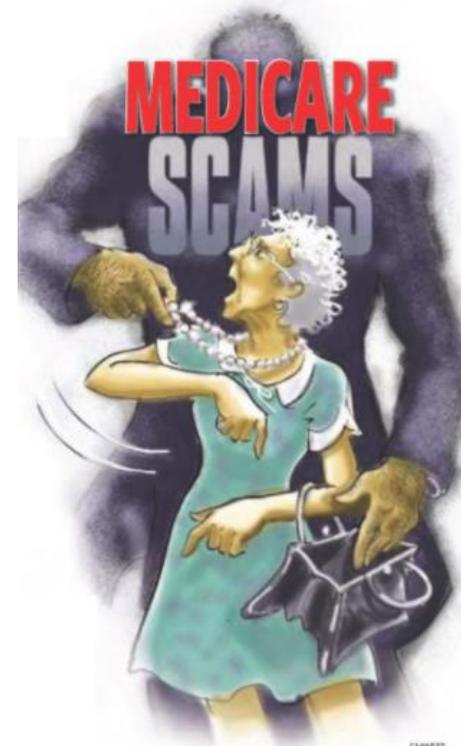
IRS Scams

- ▶ Email or phone call from "IRS" stating YOU owe lots of money
- ▶ Phone call says Sheriff is on way to YOUR HOUSE to take you to jail
- ▶ Email has Link for you to click on to verify info, etc



- ▶ So
- ▶ NEVER click on any links in these kind of emails!
- ▶ NEVER believe calls such as these!
- ▶ These CALLS and EMAILS are SCAMS! The IRS will not use calls or emails to contact anyone!

Be Wary and Smart!!



Drones used to test Cyber Hacking threat

▶ CBS Oct 27 2017



▶ <http://www.azfamily.com/clip/13855405/new-drone-threat-hacking-from-the-air>