Social Media Roundup

Geotags and Location-Based Social Networking

Applications, OPSEC
and protecting unit safety

Introduction

- In August of 2010, Adam Savage, of "MythBusters," took a photo of his vehicle using his smartphone. He then posted the photo to his Twitter account including the phrase "off to work."

- Since the photo was taken by his smartphone, the image contained metadata reveling the exact geographical location the photo was taken.

- So by simply taking and posting a photo, Savage revealed the exact location of his home, the vehicle he drives and the time he leaves for work.

Read the full story here: http://nyti.ms/917hRh

Introduction

The following was published in Wired Magazine in 2009

- "I ran a little experiment. On a sunny Saturday, I spotted a woman in Golden Gate Park taking a photo with a 3G iPhone. Because iPhones embed geodata into photos that users upload to Flickr or Picasa, iPhone shots can be automatically placed on a map. At home I searched the Flickr map, and score—a shot from today. I clicked through to the user's photostream and determined it was the woman I had seen earlier. After adjusting the settings so that only her shots appeared on the map, I saw a cluster of images in one location. Clicking on them revealed photos of an apartment interior—a bedroom, a kitchen, a filthy living room. Now I know where she lives."

Read the full story here:
http://bit.ly/bJqYmm

Introduction

- As the stories above indicate, privacy and security aren't what they used to be. With advancements in technology, enhanced GPS capabilities and smartphones with built-in GPS, managing privacy and security is a fulltime job.

- The Army is always working to protect itself against security breaches, but with new technologies come new risks. Today, more than ever, it is vitally important that Army leaders, Soldiers and Army civilians understand what kind of data they are broadcasting and what they can do to protect themselves and their families.
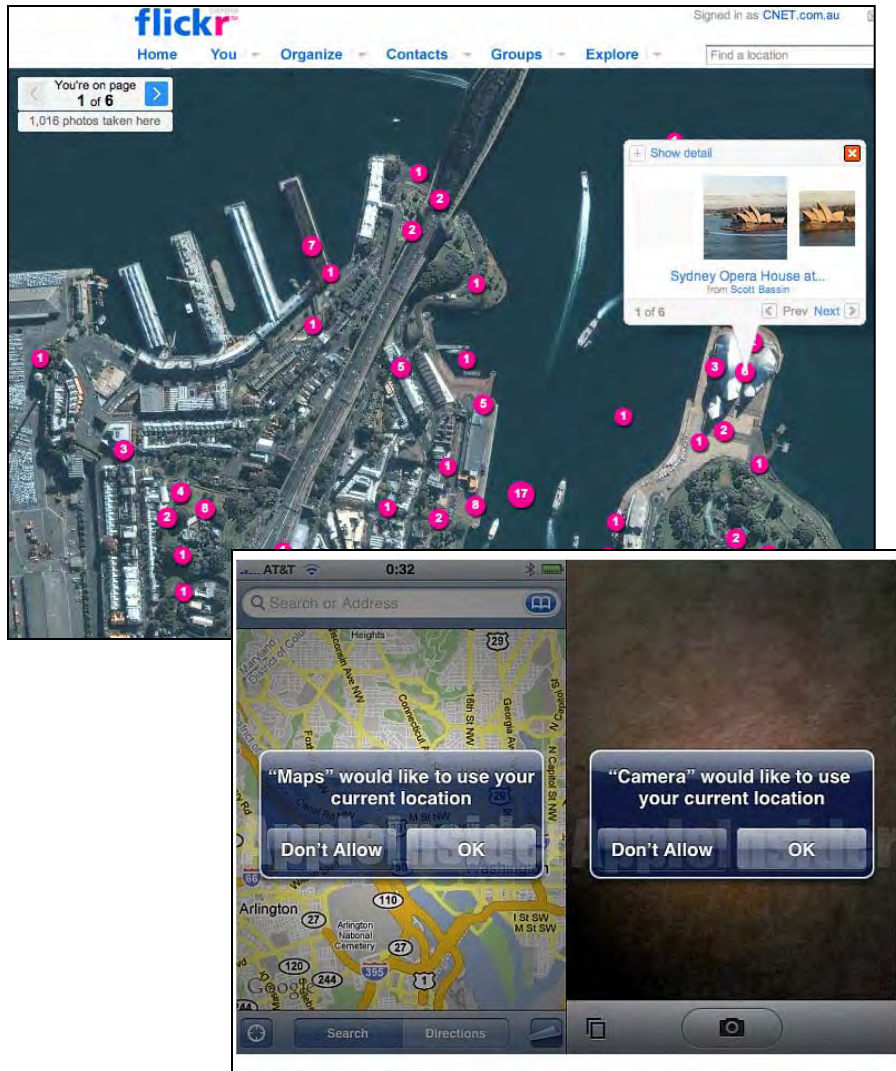
What is geotagging?

- Geotagging is the process of adding geographical identification to photographs, video, websites and SMS messages. It is the equivalent of adding a 10-digit grid coordinate to everything you post on the internet.

- Geotags are automatically embedded in pictures taken with smartphones. Many people are unaware of the fact that the photos they take with their smartphones and load to the Internet have been geotagged.

- Photos posted to photo sharing sites like Flickr and Picasa can also be tagged with location, but it is not an automatic function.

Geotagging photos

- Photos have used geotagging for quite some time. Certain formats like the JPEG format allow for geographical information to be embedded within the image and then read by picture viewers. This shows the exact location where a picture was taken.

- Most modern digital cameras do not automatically add geolocation metadata to pictures, but that is not always true. Camera owners should study their camera's manual and understand how to turn off GPS functions.

- On photo sharing sites, people can tag a location on their photos, even if their camera does not have a GPS function. A simple search for "Afghanistan" on Flickr reveals thousands of location tagged photographs that have been uploaded.

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OPSEC Concerns

- Tagging photos with an exact location on the Internet allows random people to track an individual's location and correlate it with other information.

- Soldiers deploy to areas all over the world. Some locations are public, others are classified. Soldiers should not tag their uploaded photos with a location. Publishing photos of classified locations can be detrimental to mission success, and such actions are in violation of the Uniform Code of Military Justice.

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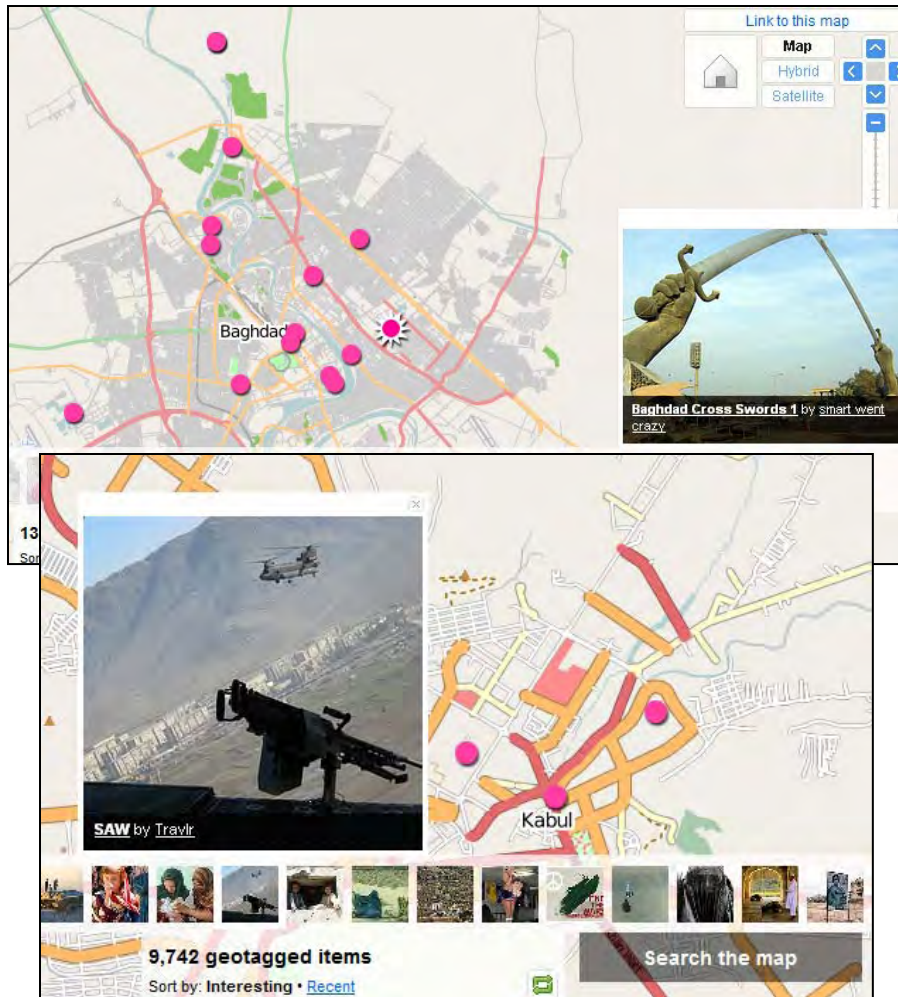
Location-based social networking applications
Foursquare, Facebook Places and other applications

Location-based Social Networking
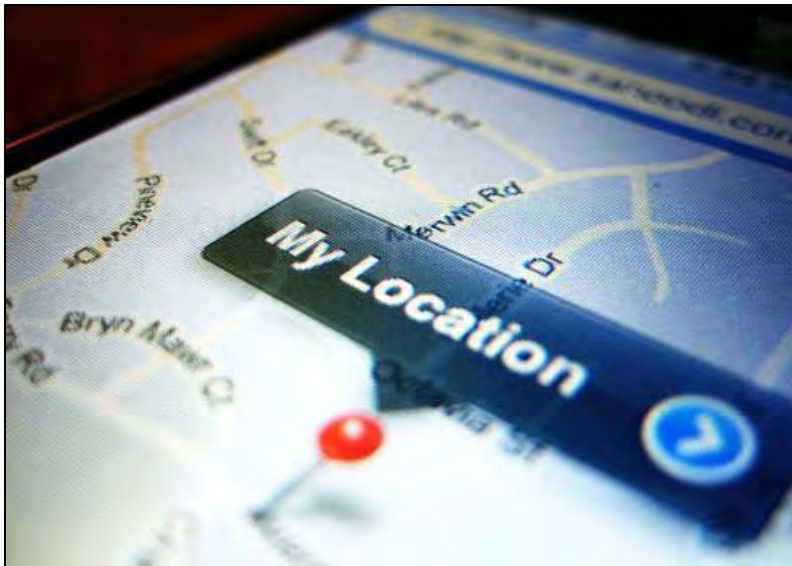
- Location-based social networking is quickly growing in popularity. A variety of applications are capitalizing on users' desire to broadcast their geographic location.

- Most location-based social networking applications focus on "checking in" at various locations to earn points, badges, discounts and other geo-related awards.

- The increased popularity of these applications is changing the way we as a digital culture view security and privacy on an individual level. These changes in perception are also creating OPSEC concerns on an Army level.

foursquare

http://foursquare.com/

▪ Foursquare is a location-based social networking website for mobile devices. Users "check-in" at various places using a mobile website. They are then awarded points and sometimes "badges."

▪Users of foursquare use the service to share their location with friends, meet new people and get coupons. Users can also connect and publish their "check ins" to Facebook and Twitter. If someone is not a friend on foursquare they can still track your whereabouts through Facebook.

▪ Foursquare has over 4 million users.

▪ Foursquare currently has iPhone, Android, webOS, Windows Phone 7 and BlackBerry applications.

Facebook places

• Facebook's "Places" is similar to Foursquare in that it gives an individual's location when the users posts information using a mobile application.

• This feature is available by using the Facebook application for iPhone, touch.facebook.com and Android.

• This function is automatically active on all Facebook accounts until disabled.

Gowalla

• Gowalla is another location-based social networking application that functions much like Foursquare and Facebook Places.

• Users can build a Passport which includes a collection of stamps from the places users have been.

• Gowalla users can also post photos and submit tips at various locations.

SCVNGR

http://www.scvngr.com/

• SCVNGR is a location-based social networking application that takes "checking in" a step further by allowing companies, educational institutions and organizations to build challenges inside the platform.

• Users are encouraged to complete the challenges in order to earn points, badges or real-life discounts and coupons.

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Why are these applications potentially dangerous?

- **Establishes patterns**: Services like MotionX (on right) and other location-based social networking applications allow strangers to track your movements every day. If they watch someone long enough they will know exactly when and where to find that person on any given day.

- **Exposes places of duty and home:** By tracking movements and aggregating information, strangers can determine where someone lives and works.

- **Identifies location of Army personnel:** If certain applications are used daily around Army populations, an enemy can determine potential targets.

OPSEC Concerns

- The main function of location-based social networking applications is to broadcast a user's specific location. Exposing Soldier and unit locations gives the enemy the upper hand.

- One Soldier exposing his/her location can affect the entire mission.

- Deployed Soldiers, or Soldiers conducting operations in classified areas should not use location-based social networking services. These services will bring the enemy right to the Army's doorstep.

Protecting Army safety
How to avoid giving away too much

Avoid geotags on photosharing applications

Social Media Fact
Something as simple as loading a photo of your bunk in Afghanistan to Flickr, then geotagging it, can bring a mortar right into your area of operation.

- Many photosharing applications give the user the opportunity to geotag a photo. In some cases, these geotags can add context to a photo, but when it comes to Army operations, geotagging operational photos is not allowed.

- Users can delete geotagged photos, but once the information is out there, it's out of the user's hands. Even if posted briefly, the enemy can capture vital information and record exact grid coordinates of troop populations.

Turn off GPS function on phones
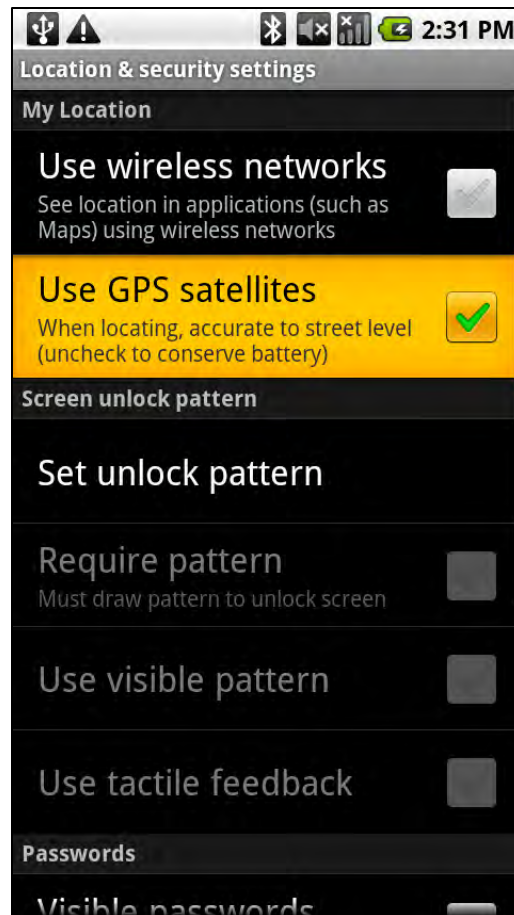
- One of the simplest ways to avoid displaying too much information is to disable the geotagging function on smartphones.

- Since most smartphones automatically display geographical information, it takes a little more effort on the user's part to protect their privacy.

- It's important that all users understand their specific systems and make efforts to turn off their phone's geotagging function.

Summary

- Geotagging photos and using location-based social networking applications is growing in popularity, but in certain situations, exposing specific geographical location can be devastating to Army operations.

- Soldiers should never tag photos with geographical location when loading to photo sharing sites like Flickr and Picasa.

- Soldiers should not use location-based social networking applications when deployed, at training or while on duty at locations where presenting exact grid coordinates could damage Army operations.

- It is advised that while Soldiers are engaged in Army operations, they should turn off the GPS function of their smartphones. Failure to do so could result in damage to the mission and even put families at risk.

- Users deciding to utilize location-based social networking sites should be aware of the default settings for the services and devises they use. It is recommend that the users customize settings to be mindful of OPSEC and success of Army operations.

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Contact information

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