References

What the Terrorists Want

Incidents:

```
http://www.dailymail.co.uk/pages/live/articles/news/news.html?in_article_id=401419&in_page_id=1770 or http://tinyurl.com/k5njg
http://news.bbc.co.uk/2/hi/uk_news/england/5267884.stm
http://www.cbsnews.com/stories/2006/08/17/national/main1906433.shtml
http://www.cbc.ca/story/canada/national/2006/08/18/doctor-winnipeg.html or http://tinyurl.com/emnox
http://tinyurl.com/stories/06/08/16/100wir_port1.cfm
http://www.miami.com/mld/miamiherald/news/local/states/florida/counties/broward_county/15321870.htm or http://tinyurl.com/s5oxe
http://www.usatoday.com/news/nation/2006-08-20-fbi-passenger_x.htm
http://www.theage.com.au/articles/2006/08/17/1155407916156.html
http://www.guardian.co.uk/uklatest/story/0,,-6024132,00.html
http://news.bbc.co.uk/2/hi/europe/5283476.stm
http://forums.worldofwarcraft.com/thread.html?topicId=11211166
```

There have been many more incidents since I wrote this—all false alarms. I've stopped keeping a list.

The chemical unreality of the plot:

```
http://www.theregister.co.uk/2006/08/17/flying_toilet_terror_labs/print.html or http://tinyurl.com/eeen2
http://www.interesting-people.org/archives/interesting-people/
200608/msg00087.html or http://tinyurl.com/etrl8
http://www.boingboing.net/2006/08/14/tatp_about_that_pyro.html
http://www.timesonline.co.uk/article/0,,2-2306994,00.html
http://www.cnn.com/2006/US/08/10/us.security/index.html
http://www.wondermark.com/d/220.html
http://kfmonkey.blogspot.com/2006/08/wait-arent-you-scared.html
```

This essay also makes the same point that we're overreacting, as well as describing a 1995 terrorist plot that was remarkably similar in both materials and modus operandi—and didn't result in a complete ban on liquids:

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http://www.salon.com/opinion/feature/2006/08/17/airport_futility/
```

My previous related writings:

```
http://www.schneier.com/essay-096.html
http://www.schneier.com/essay-038.html
http://www.schneier.com/blog/archives/2006/08/terrorism secur.html
```

http://www.schneier.com/essay-087.html http://www.schneier.com/essay-045.html

This essay originally appeared in Wired:

http://www.wired.com/news/columns/0,71642-0.html

Movie-Plot Threats

This essay was originally published in Wired:

http://www.wired.com/news/business/0,1367,68789,00.html

Fixing Intelligence Failures

My original articles:

http://www.counterpane.com/crypto-gram-0109a.html#4 http://www.counterpane.com/crypto-gram-0109a.html#8

Data Mining for Terrorists

This essay originally appeared on Wired.com:

http://www.wired.com/news/columns/0,70357-0.html

TIA:

http://www.epic.org/privacy/profiling/tia/ http://www.fas.org/sgp/congress/2003/tia.html

Its return:

http://nationaljournal.com/about/njweekly/stories/2006/0223nj1.htm

GAO report:

http://www.epic.org/privacy/profiling/gao_dm_rpt.pdf

MATRIX:

http://www.aclu.org/privacy/spying/15701res20050308.html

Base rate fallacy:

http://www.cia.gov/csi/books/19104/art15.html#ft145

The New York Times on the NSA eavesdropping program:

http://www.schneier.com/blog/archives/2006/01/post_1.html

The Architecture of Security

The New York Times article about the change:

http://www.nytimes.com/2006/10/07/nyregion/nyregionspecial3/07bollard.html?_r=1&oref=slogin

This essay originally appeared on Wired.com.

http://www.wired.com/news/columns/0,71968-0.html

The War on the Unexpected

Ad campaigns:

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http://www.mta.info/mta/security/index.html
http://www.manchestereveningnews.co.uk/news/s/1000/1000981_help_us_spot_
terrorists police.html or http://tinvurl.com/27wuan
http://www.schneier.com/blog/archives/2007/04/citizencountert.html
```

Administration comments:

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http://www.washingtonpost.com/wp-srv/nation/attacked/transcripts/
ashcroft 100801.htm
http://www.usatoday.com/news/washington/2005-07-dc-londonblasts_x.htm
or http://tinyurl.com/25vf3y
http://guery.nytimes.com/gst/fullpage.html?res=
9C05E6DC1F3AF932A05752C0A9649C8B63 or http://tinyurl.com/2463aw
```

http://news.bbc.co.uk/1/hi/northern ireland/6387857.stm

Incidents:

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http://www.schneier.com/blog/archives/2007/09/woman_arrested.html
http://www.lineofduty.com/content/view/84004/128/
http://www.schneier.com/blog/archives/2007/05/uk police blow.html
http://www.startribune.com/462/story/826056.html
http://dir.salon.com/story/tech/col/smith/2004/07/21/
askthepilot95/index.html or http://tinyurl.com/2bn3go
http://www.schneier.com/blog/archives/2006/10/this is what vi.html
http://www.schneier.com/blog/archives/2007/10/latest_terroris.html
http://www.msnbc.msn.com/id/20441775/
http://www.thisisbournemouth.co.uk/display.var.1717690.0.seized by the
police.php or http://tinyurl.com/36dgj8
http://alternet.org/rights/50939/
http://www.schneier.com/blog/archives/2007/04/english profess.html
http://www.mercurynews.com/breakingnews/ci_7084101?nclick_check=1
http://www.boston.com/news/globe/city_region/breaking_news/2007/01/
bomb squad remo.html or http://tinyurl.com/ywumfl
http://www.postgazette.com/pg/06081/674773.stm
http://www.schneier.com/blog/archives/2007/04/another_boston.html
CYA:
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Public campaigns:

http://www.schneier.com/blog/archives/2005/12/truckers_watchi.html

http://www.schneier.com/blog/archives/2007/02/cya_security_1.html

http://www.winnipegfirst.ca/article/2007/09/24/report_suspicious_ behaviour_u_of_m_tells_students or http://tinyurl.com/2c2t2a http://www.underwatertimes.com/print.php?article_id=64810251370 http://en.wikipedia.org/wiki/Operation_TIPS

Law protecting tipsters:

http://www.post-gazette.com/pg/07245/813550-37.stm

Successful tips:

http://www.washingtonpost.com/wp-dyn/content/article/2007/05/08/ AR2007050800465.html or http://tinyurl.com/38t6vd http://www.pe.com/localnews/publicsafety/stories/PE_News_Local_D_ honor06.3ee3472.html or http://tinyurl.com/2g26xv

This essay originally appeared on Wired.com:

http://www.wired.com/politics/security/commentary/securitymatters/2007/11/ securitymatters_1101 or http://tinyurl.com/yqvoy6

Some links didn't make it into the original article. There's this creepy "if you see a father holding his child's hands, call the cops" campaign:

http://www.bloggernews.net/18108

There's this story of an iPod found on an airplane:

http://forums.worldofwarcraft.com/thread.html?topicId=11211166&pageNo=1 or http://tinyurl.com/ogpbv

There's this story of an "improvised electronics device" trying to get through airport security:

http://www.makezine.com/blog/archive/2007/09/microcontroller programme.html?CMP=OTC-OD6B48984890 or http://tinyurl.com/2ynbru

This is a good essay on the "war on electronics":

http://www.cnet.com/surveillance-state/8301-13739 1-9782861-46.html

Portrait of the Modern Terrorist as an Idiot

There are a zillion links associated with this essay. You can find them on the online version:

http://www.schneier.com/blog/archives/2007/06/portrait_of_the.html

This essay originally appeared on Wired.com:

http://www.wired.com/politics/security/commentary/securitymatters/2007/06/ securitymatters_0614 or http://tinyurl.com/29mxc5

Correspondent Inference Theory and Terrorism

http://www.mitpressjournals.org/doi/pdf/10.1162/isec.2006.31.2.42 http://en.wikipedia.org/wiki/Correspondent_inference_theory

Cognitive biases:

 $\label{lem:http://www.healthbolt.net/2007/02/14/26-reasons-what-you-think-is-right-is-wrong/\ or\ http://tinyurl.com/2005nk$

This essay originally appeared on Wired.com:

http://www.wired.com/politics/security/commentary/securitymatters/2007/07/securitymatters_0712 or http://tinyurl.com/3y322f

The Security Threat of Unchecked Presidential Power

This essay was published on December 21, 2005 as an op-ed in the *Minneapolis Star Tribune*:

http://www.startribune.com/562/story/138326.html

Here's the opening paragraph of the Yoo memo. Remember, think of this power in the hands of your least favorite politician when you read it:

"You have asked for our opinion as to the scope of the President's authority to take military action in response to the terrorist attacks on the United States on September 11, 2001. We conclude that the President has broad constitutional power to use military force. Congress has acknowledged this inherent executive power in both the War Powers Resolution, Pub. L. No. 93-148, 87 Stat. 555 (1973), codified at 50 U.S.C. §§ 1541-1548 (the "WPR"), and in the Joint Resolution passed by Congress on September 14, 2001, Pub. L. No. 107-40, 115 Stat. 224 (2001). Further, the President has the constitutional power not only to retaliate against any person, organization, or State suspected of involvement in terrorist attacks on the United States, but also against foreign States suspected of harboring or supporting such organizations. Finally, the President may deploy military force preemptively against terrorist organizations or the States that harbor or support them, whether or not they can be linked to the specific terrorist incidents of September 11."

There's a similar reasoning in the Braybee memo, which was written in 2002 about torture:

Yoo memo:

http://www.usdoj.gov/olc/warpowers925.htm

Braybee memo:

http://www.washingtonpost.com/wp-srv/nation/documents/dojinterrogationmemo20020801.pdf

This story has taken on a life of its own. But there are about a zillion links and such listed here:

http://www.schneier.com/blog/archives/2005/12/the_security_th_1.html

I am especially amused by the bit about NSA shift supervisors making decisions legally reserved for the FISA court.

NSA and Bush's Illegal Eavesdropping

A version of this essay originally appeared in Salon:

http://www.salon.com/opinion/feature/2005/12/20/surveillance/

Text of FISA:

http://www.law.cornell.edu/uscode/html/uscode50/usc_sup_01_50_10_36_20_ I.html or http://tinyurl.com/d7ra4

Summary of annual FISA warrants:

http://www.epic.org/privacy/wiretap/stats/fisa_stats.html

Rockefeller's secret memo:

http://talkingpointsmemo.com/docs/rock-cheney1.html

Much more here:

http://www.schneier.com/blog/archives/2005/12/nsa_and_bushs_i.html

Private Police Forces

 $\label{lem:http://www.washingtonpost.com/wp-dyn/content/article/2007/01/01/AR2007010100665.html \ or \ http://tinyurl.com/y26xgr \ http://www.nlg-npap.org/html/research/LWprivatepolice.pdf$

This op-ed originally appeared in the Minneapolis Star-Tribune:

http://www.startribune.com/562/story/1027072.html

Recognizing "Hinky" vs. Citizen Informants

Hinky:

http://www.schneier.com/blog/archives/2005/07/profiling.html

RIT story:

http://www.nj.com/news/ledger/morris/index.ssf?/base/news-2/1177047289122820.xml&coll=1 or http://tinyurl.com/228zm8

Casino security and the "Just Doesn't Look Right (JDLR)" principle:

http://www.casinosurveillancenews.com/jdlr.htm

Commentary:

http://www.cato-at-liberty.org/2007/04/26/id-be-ok-with-hinky-given-post-hoc-articulation/ **or** http://tinyurl.com/2b3bfz

The blog post has many more links to the specific things mentioned in the essay:

http://www.schneier.com/blog/archives/2007/04/recognizing_hin_1.html

When I posted this on my blog, I got a lot of negative comments from Libertarians who believe that somehow, the market makes private policemen more responsible to the public than government policemen. I'm sorry, but this is nonsense. Best Buy is going to be responsive to its customers; an apartment complex is going to be responsive to its renters. Petty criminals who prey on those businesses are an economic externality; they're not going to enter into the economic arguments. After all, people might be more likely to shop at Best Buy if their security guards save them money by keeping crime down—who cares if they crack a few non-customer heads while doing it.

None of this is meant to imply that public police forces are magically honorable and ethical; just that the economic forces are different. So people can consider carefully which is the lesser of two evils, here's Radley Balko's paper "Overkill: The Rise of Paramilitary Police Raids in America":

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http://www.cato.org/pub_display.php?pub_id=6476
```

And an interactive map of public police raids gone bad:

http://www.cato.org/raidmap/

Dual-Use Technologies and the Equities Issue

Estonia's cyberwar:

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http://www.wired.com/politics/security/magazine/15-09/ff_estonia
http://blog.wired.com/27bstroke6/2008/01/we-traced-the-c.html
```

Cyberwar, cyberterrorism, etc.:

http://www.schneier.com/blog/archives/2007/06/cyberwar.html

NSA and DHS cybersecurity initiatives:

```
http://www.schneier.com/blog/archives/2007/01/nsa_helps_micro_1.html
http://www.nsa.gov/selinux/
http://www.eweek.com/c/a/Security/DHS-Funds-OpenSource-Security-Project/
or http://tinyurl.com/3ggg5g
http://www.schneier.com/blog/archives/2007/01/us_government_t.html
```

This essay originally appeared on Wired.com:

```
http://www.wired.com/politics/security/commentary/securitymatters/2008/05/
blog_securitymatters_0501 or http://tinyurl.com/68zj7m
```

Identity-Theft Disclosure Laws

California's SB 1386:

```
http://info.sen.ca.gov/pub/01-02/bill/sen/sb_1351-1400/sb_1386_bill_
20020926_chaptered.html or http://tinyurl.com/dgh0
```

Existing state disclosure laws:

http://www.pirg.org/consumer/credit/statelaws.htm

http://www.cwalsh.org/cgi-bin/blosxom.cgi/2006/04/20#breachlaws

HR 4127 - Data Accountability and Trust Act:

http://thomas.loc.gov/cgi-bin/query/C?c109:./temp/~c109XvxF76

HR 3997:

http://thomas.loc.gov/cgi-bin/query/C?c109:./temp/~c109gnLQGA

ID Analytics study:

http://www.idanalytics.com/news_and_events/20051208.htm

My essay on identity theft:

http://www.schneier.com/blog/archives/2005/04/mitigating_iden.html

A version of this essay originally appeared on Wired.com:

http://www.wired.com/news/columns/0,70690-0.html

Academic Freedom and Security

This essay was originally published in the San Jose Mercury News:

http://www.mercurynews.com/mld/mercurynews/9710963.htm?1c

Sensitive Security Information (SSI)

Background on SSI:

http://www.cjog.net/background_ssi_sensitive_security_in.html

TSA's Regulation on the Protection of SSI:

http://www.fas.org/sgp/news/2004/05/fr051804.html

Controversies surrounding SSI:

http://www.fas.org/sgp/crs/RS21727.pdf

My essay explaining why secrecy is often bad for security:

http://www.schneier.com/crypto-gram-0205.html#1

The Director of the National Security Archive at George Washington University on the problems of too much secrecy:

http://www.gwu.edu/

Fingerprinting Foreigners

A version of this essay originally appeared in *Newsday*:

http://www.newsday.com/news/opinion/ny-vpsch143625202jan14,0,1880923.story or http://tinyurl.com/2yy7t

Office of Homeland Security webpage for the program:

http://www.dhs.gov/dhspublic/interapp/editorial/editorial_0333.xml

News articles:

 $\verb|http://www.washtimes.com/national/20031201-115121-4339r.htm|$

http://www.washtimes.com/national/20031027-112510-5818r.htm

http://www.nytimes.com/reuters/news/news-security-usa-visas.html

http://gcn.com/vol1_nol/daily-updates/24536-1.html

http://www.sunspot.net/news/custom/attack/bal-airport0106,0,42711.story

http://www.cnn.com/2004/US/01/04/visit.program/

http://www.nytimes.com/2004/01/05/national/05CND-SECU.html

http://www.ilw.com/lawyers/immigdaily/doj_news/2004,0106-hutchinson.shtm

http://www.theage.com.au/articles/2004/01/06/1073268031785.html

http://www.thestar.co.za/index.php?fSectionId=132&fArticleId=318749

http://www.ilw.com/lawyers/articles/2003,1231-krikorian.shtm

Opinions:

http://news.mysanantonio.com/story.cfm?xla=saen&xlb=1020&xlc=1074396

http://www.rockymountainnews.com/drmn/opinion/article/0,1299,DRMN_38_

2475765,00.html or http://tinyurl.com/3bqze

http://www.shusterman.com/pdf/advocacy61703.pdf

http://www.washingtontechnology.com/ad_sup/homeland-coalition/2.html

Brazil fingerprints U.S. citizens in retaliation:

http://reprints.msnbc.com/id/3875747/

U.S. Medical Privacy Law Gutted

News article:

http://www.nytimes.com/2005/06/07/politics/07privacy.html

Swire's essay:

http://www.americanprogress.org/site/pp.asp?c=biJRJ80VF&b=743281

Airport Passenger Screening

http://archives.cnn.com/2002/US/03/25/airport.security/

http://www.msnbc.msn.com/id/11863165/

http://www.msnbc.msn.com/id/11878391/

A version of this essay originally appeared on Wired.com:

http://www.wired.com/news/columns/0,70470-0.html

No-Fly List

Additional information:

http://www.aclu.org/SafeandFree/SafeandFree.cfm?ID=12740&c=206

http://www.wired.com/news/privacy/0,1848,58386,00.html

http://www.salon.com/tech/feature/2003/04/10/capps/index.html

http://www.commondreams.org/headlines02/0927-01.htm

http://www.truthout.org/cgi-bin/artman/exec/view.cgi/6/3520

http://www.belleville.com/mld/newsdemocrat/8371700.htm

Kennedy's story:

http://www.msnbc.msn.com/id/5765143

http://abcnews.go.com/wire/US/reuters20040820_78.html

Getting off the list by using your middle name:

http://www.contracostatimes.com/mld/cctimes/news/world/9466229.htm

This essay originally appeared in Newsday:

http://www.newsday.com/news/opinion/ny-vpsch253941385aug25,0,3252599.story or http://makeashorterlink.com/?W29816849

Trusted Traveler Program

This essay originally appeared in The Boston Globe:

http://www.boston.com/news/globe/editorial opinion/oped/articles/2004/0 8/24/an_easy_path_for_terrorists/ or http://makeashorterlink.com/?E2E224939

Screening People with Clearances

This essay originally appeared on Wired.com:

http://www.wired.com/news/columns/1,71906-0.html

Forge Your Own Boarding Pass

This is my 30th essay for Wired.com:

http://www.wired.com/news/columns/0,72045-0.html

News:

http://j0hn4d4m5.bravehost.com

http://slightparanoia.blogspot.com/2006/10/post-fbi-visit.html

http://slightparanoia.blogspot.com/2006/10/fbi-visit-2.html

http://blog.wired.com/27bstroke6/2006/10/congressman_ed_.html

http://markey.house.gov/index.php?option=content&task=view&id=

2336&Itemid=125 or http://tinyurl.com/ymjkxa

http://blog.wired.com/27bstroke6/2006/10/boarding_pass_g.html

Older mentions of the vulnerability:

 $\label{lem:http://www.csoonline.com/read/020106/caveat021706.html http://www.slate.com/id/2113157/fr/rss/ http://www.senate.gov/~schumer/SchumerWebsite/pressroom/press_releases/2005/PR4123.aviationsecurity021305.html <math display="inline">\mbox{Or}\ http://tinyurl.com/yzoon6 http://www.schneier.com/crypto-gram-0308.html $\#6$$

No-fly list:

http://www.schneier.com/blog/archives/2005/12/30000_people_mi.html http://www.schneier.com/blog/archives/2005/09/secure_flight_n_1.html http://www.schneier.com/blog/archives/2006/10/nofly_list.html http://www.schneier.com/blog/archives/2005/08/infants_on_the.html

Our Data, Ourselves

This essay previously appeared on Wired.com:

http://www.wired.com/politics/security/commentary/securitymatters/2008/05/securitymatters_0515

The Value of Privacy

A version of this essay originally appeared on Wired.com:

http://www.wired.com/news/columns/0,70886-0.html

Daniel Solove comments:

 $\label{linear_constraint} http://www.concurringopinions.com/archives/2006/05/is_there_a_good.html\ or \\ http://tinyurl.com/nmj3u$

The Future of Privacy

This essay was originally published in the Minneapolis Star-Tribune:

http://www.startribune.com/562/story/284023.html

Privacy and Power

The inherent value of privacy:

http://www.schneier.com/essay-114.html

Erik Crespo story:

http://www.nytimes.com/2007/12/08/nyregion/08about.html http://abcnews.go.com/TheLaw/wireStory?id=3968795

Cameras catch a policeman:

 $\label{lem:http://www.officer.com/web/online/Top-News-Stories/Cameras-Turn-Lens-on-Police-Activities-/1$40169\ or\ http://tinyurl.com/21tqcy$

Security and control:

http://www.schneier.com/essay-203.html

This essay originally appeared on Wired.com:

http://www.wired.com/politics/security/commentary/securitymatters/2008/03/ securitymatters_0306 or http://tinyurl.com/2xrcnn

Commentary/rebuttal by David Brin:

http://www.wired.com/politics/security/news/2008/03/brin_rebuttal

Security vs. Privacy

McConnell article from New Yorker:

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http://www.newyorker.com/reporting/2008/01/21/080121fa fact wright
http://arstechnica.com/news.ars/post/20080117-us-intel-chief-wants-carte-
blanche-to-peep-all-net-traffic.html or http://tinyurl.com/2xkwvu
http://blog.wired.com/27bstroke6/2008/01/feds-must-exami.html
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Trading off security and privacy:

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http://www.huffingtonpost.com/ka-taipale/privacy-vs-security-se_b_71785
.html or http://tinyurl.com/2gdqbn
http://www.huffingtonpost.com/marc-rotenberg/privacy-vs-security-pr_b_
71806.html or http://tinyurl.com/2hozm8
http://findarticles.com/p/articles/mi_m0GER/is_2002_Winter/ai_97116472/
pg_1 or http://tinyurl.com/2yk23v
http://www.rasmussenreports.com/public_content/politics/current_events/
general_current_events/51_say_security_more_important_than_privacy or
http://tinyurl.com/ypcen8
http://www.scu.edu/ethics/publications/briefings/privacy.html
http://www.csmonitor.com/2002/1015/p11s02-coop.html
```

False dichotomy:

```
http://www.schneier.com/crypto-gram-0109a.html#8
http://www.wired.com/politics/law/commentary/circuitcourt/2006/05/70971
```

Donald Kerr's comments:

http://www.schneier.com/blog/archives/2007/11/redefining_priv.html

Related essays:

```
http://www.schneier.com/essay-008.html
http://www.schneier.com/essay-096.html
http://www.schneier.com/essay-036.html
http://www.schneier.com/essay-160.html
http://www.schneier.com/essay-100.html
http://www.schneier.com/essay-108.html
http://www.schneier.com/essay-163.html
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http://arstechnica.com/news.ars/post/20080119-analysis-metcalfes-law-realid-more-crime-less-safety.html or http://tinyurl.com/23h88d http://www.schneier.com/blog/archives/2007/09/more_on_the_ger_1.html http://www.schneier.com/blog/archives/2007/06/portrait_of_the_1.html http://www.schneier.com/blog/archives/2006/05/the_value_of_pr.html"

This essay originally appeared on Wired.com:

http://www.wired.com/politics/security/commentary/securitymatters/2008/01/ securitymatters_0124 or http://tinyurl.com/yr98nf

Is Big Brother a Big Deal?

This essay appeared in the May 2007 issue of Information Security, as the second half of a point/counterpoint with Marcus Ranum:

http://informationsecurity.techtarget.com/magItem/0,291266,sid42_ gci1253144,00.html or http://tinyurl.com/2a8wpf

Marcus's half:

http://www.ranum.com/security/computer_security/editorials/pointcounterpoint/bigbrother.html or http://tinyurl.com/2cfuwy

How to Fight

Privacy International's Stupid Security Awards:

http://www.privacyinternational.org/activities/stupidsecurity/

Stupid Security Blog:

http://www.stupidsecurity.com/

Companies Cry 'Security' to Get A Break From the Government:

http://online.wsj.com/article_email/0,,SB10541572621041000,00.html

Gilmore's suit:

http://freetotravel.org/

Relevant Minnesota pharmacist rules:

http://www.revisor.leg.state.mn.us/arule/6800/3110.html

How you can help right now:

Tell Congress to Get Airline Security Plan Under Control!

http://actioncenter.ctsg.com/admin/adminaction.asp?id=2557

TIA Update: Ask Your Senators to Support the Data-Mining Moratorium Act of 2003!

http://actioncenter.ctsg.com/admin/adminaction.asp?id=2401

Congress Takes Aim at Your Privacy

http://actioncenter.ctsg.com/admin/adminaction.asp?id=1723

Total Information Awareness: Public Hearings Now!

http://actioncenter.ctsg.com/admin/adminaction.asp?id=2347

Don't Let the INS Violate Your Privacy

http://actioncenter.ctsg.com/admin/adminaction.asp?id=2436

Demand the NCIC Database Be Accurate

http://www.petitiononline.com/mod_perl/signed.cgi?ncic

Citizens' Guide to the FOIA

http://www.fas.org/sqp/foia/citizen.html

Toward Universal Surveillance

This essay originally appeared on CNet:

http://news.com.com/2010-1028-5150325.html

Kafka and the Digital Person

The book's website:

http://www.law.gwu.edu/facweb/dsolove/Solove-Digital-Person.htm

Order the book on Amazon:

http://www.amazon.com/exec/obidos/ASIN/0814798462/counterpane

CCTV Cameras

CCTV research:

http://electronics.howstuffworks.com/police-camera-crimel.htm

http://www.scotcrim.u-net.com/researchc2.htm

http://news.bbc.co.uk/1/hi/uk/2192911.stm

http://www.homeoffice.gov.uk/rds/pdfs05/hors292.pdf

http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2007/08/14/MNIPRHRPE.DTL

http://www.temple.edu/cj/misc/PhilaCCTV.pdf

http://archives.cnn.com/2002/LAW/10/21/ctv.cameras/

http://www.guardian.co.uk/uk/2008/may/06/ukcrime1

London's cameras:

http://www.channel4.com/news/articles/society/factcheck+how+many+cctv+ cameras/2291167

http://www.ico.gov.uk/upload/documents/library/data_protection/practical_ application/surveillance_society_full_report_2006.pdf

CCTV abuses:

http://news.bbc.co.uk/2/hi/uk_news/england/merseyside/4609746.stm

http://www.timesonline.co.uk/tol/news/uk/article743391.ece

http://community.seattletimes.nwsource.com/archive/?date=19960324&

slug=2320709

http://news.bbc.co.uk/2/hi/europe/4849806.stm

Orwellian cameras:

http://wuntvor.mirror.waffleimages.com/files/44/

44cb4b91287cfcd8111d471867502a3cac861ab0.jpg

http://lifeandhealth.guardian.co.uk/family/story/0,,2280044,00.html

Privacy concerns:

http://epic.org/privacy/surveillance/

http://www.aclu.org/privacy/spying/14863res20020225.html

Surveillance in China:

http://www.rollingstone.com/politics/story/20797485/chinas_allseeing_eye

This essay was:

http://www.guardian.co.uk/technology/2008/jun/26/politics.ukcrime

Anonymity and Accountability

This essay originally appeared in Wired:

http://www.wired.com/news/columns/0,70000-0.html

Kelly's original essay:

http://www.edge.org/q2006/q06_4.html

Gary T. Marx on anonymity:

http://web.mit.edu/gtmarx/www/anon.html

Facebook and Data Control

This essay originally appeared on Wired.com:

http://www.wired.com/news/columns/0,71815-0.html

http://www.danah.org/papers/FacebookAndPrivacy.html

http://www.motherjones.com/interview/2006/09/facebook.html

http://www.nytimes.com/2006/09/10/fashion/10FACE.html?ei=5090&en=

ccb86e3d53ca671f&ex=1315540800&adxnnl=1&partner=rssuserland&emc=

rss&adxnnlx=1160759797-MRZvPT2RgJLviJ0Z11NuRQ or http://tinyurl.com/ycwl6o

http://blog.facebook.com/blog.php?post=2208197130

http://blog.facebook.com/blog.php?post=2208562130

http://mashable.com/2006/08/25/facebook-profile

Facebook privacy policy:

http://www.facebook.com/policy.php

The Death of Ephemeral Conversation

This essay originally appeared on Forbes.com:

```
http://www.forbes.com/security/2006/10/18/nsa-im-foley-tech-security-
cx_bs_1018security.html or http://tinyurl.com/ymmnee
```

Automated Targeting System

News articles:

```
http://news.yahoo.com/s/ap_travel/20061208/ap_tr_ge/travel_brief_
traveler_screening or http://tinyurl.com/yygbda
http://www.washingtonpost.com/wp-
dyn/content/article/2006/11/02/AR2006110201810.html or
http://tinyurl.com/yl92on
http://www.ledger-enquirer.com/mld/ledgerenquirer/news/local/16196947.htm
or http://tinyurl.com/y7lbnp
```

Federal Register posting:

http://edocket.access.gpo.gov/2006/06-9026.htm

Comments from civil liberties groups:

```
http://www.epic.org/privacy/pdf/ats_comments.pdf
http://www.eff.org/Privacy/ats/ats_comments.pdf
http://www.aclu.org/privacy/gen/27593leg20061201.html
http://www.epic.org/privacy/travel/ats/default.html
http://www.epic.org/privacy/surveillance/spotlight/1006/default.html
```

Automated terror profiling:

```
http://www.schneier.com/essay-108.html
http://www.schneier.com/essay-115.html
http://www.newyorker.com/fact/content/articles/060206fa_fact
http://www.cato.org/pub_display.php?pub_id=6784
```

No-fly list:

```
http://alternet.org/story/42646/
http://www.aclu.org/safefree/resources/17468res20040406.html
```

Secure Flight:

http://www.schneier.com/blog/archives/2005/07/secure_flight.html

Total Information Awareness:

http://www.epic.org/privacy/profiling/tia/

ATS may be illegal:

http://hasbrouck.org/IDP/IDP-ATS-comments.pdf

```
http://www.washingtonpost.com/wp-dyn/content/article/2006/12/08/
AR2006120801833.html or http://tinyurl.com/u2j9s
http://www.wired.com/news/technology/0,72250-0.html
http://www.ledger-enquirer.com/mld/ledgerenquirer/news/local/16196947.htm
http://leahy.senate.gov/press/200612/120606.html
```

This essay, without the links, was published in *Forbes*:

http://www.forbes.com/forbes/2007/0108/032_print.html

They also published a rebuttal by William Baldwin, although it doesn't seem to rebut any of the actual points. "Here's an odd division of labor: a corporate data consultant argues for more openness, while a journalist favors more secrecy." It's only odd if you don't understand security.

http://www.forbes.com/forbes/2007/0108/014.html

Anonymity and the Netflix Dataset

```
http://www.cs.utexas.edu/~shmat/shmat_netflix-prelim.pdf
http://www.cs.utexas.edu/~shmat/netflix-faq.html
http://www.securityfocus.com/news/11497
http://arxivblog.com/?p=142
```

2001 IEEE paper:

http://people.cs.vt.edu/~naren/papers/ppp.pdf

De-anonymizing the AOL data:

```
http://query.nytimes.com/gst/fullpage.html?res=
9E0CE3DD1F3FF93AA3575BC0A9609C8B63 or http://tinyurl.com/2dhgot
http://www.securityfocus.com/brief/286
```

Census data de-anonymization:

```
http://privacy.cs.cmu.edu/dataprivacy/papers/LIDAP-WP4abstract.html
http://crypto.stanford.edu/~pgolle/papers/census.pdf
```

Anonymous cell phone data:

http://arxivblog.com/?p=88

Wholesale surveillance and data collection:

```
http://www.schneier.com/blog/archives/2006/03/the_future_of_p.html
http://www.schneier.com/blog/archives/2007/05/is_big_brother_1.html
```

This essay originally appeared on Wired.com:

```
http://www.wired.com/politics/security/commentary/securitymatters/2007/12/
securitymatters_1213 or http://tinyurl.com/2gkl8a
```

Does Secrecy Help Protect Personal Information?

This essay appeared in the January 2007 issue of Information Security, as the second half of a point/counterpoint with Marcus Ranum:

http://informationsecurity.techtarget.com/magItem/0,291266,sid42_gci 1238789,00.html or http://tinyurl.com/2h5y5u

Marcus's half:

http://www.ranum.com/security/computer_security/editorials/pointcounterpoint/personal_info.html or http://tinyurl.com/27e2gj

Risks of Data Reuse

Individual data and the Japanese internment:

```
http://www.sciam.com/article.cfm?articleID=A4F4DED6-E7F2-99DF-
32E46B0AC1FDE0FE&sc=I100322 or http://tinyurl.com/33kcy3
http://www.usatoday.com/news/nation/2007-03-30-census-role_N.htm
http://www.homelandstupidity.us/2007/04/05/census-bureau-gave-up-wwii-
internment-camp-evaders/ or http://tinyurl.com/2haky8
http://rawstory.com/news/afp/Census_identified_Japanese_American_03302007
.html or http://tinyurl.com/2ctnl3
```

Marketing databases:

http://www.wholesalelists.net http://www.usdatacorporation.com/pages/specialtylists.html

Secure Flight:

http://www.epic.org/privacy/airtravel/secureflight.html

Florida disenfranchisement in 2000:

http://www.thenation.com/doc/20010430/lantigua

This article originally appeared on Wired.com:

http://www.wired.com/politics/onlinerights/commentary/securitymatters/ 2007/06/securitymatters_0628 or http://tinyurl.com/34mr2g

National ID Cards

This essay originally appeared in the Minneapolis Star Tribune:

http://www.startribune.com/stories/1519/4698350.html

Kristof's essay in the The New York Times:

http://www.nytimes.com/2004/03/17/opinion/17KRIS.html?ex=1394946000&en= 938b60e9bdb051f7&ei=5007&partner=USERLAND or http://tinyurl.com/26fg2

My earlier essay on National ID cards:

http://www.schneier.com/crypto-gram-0112.html#1

My essay on identification and security:

http://www.schneier.com/crypto-gram-0402.html#6

REAL-ID: Costs and Benefits

REAL-ID:

http://thomas.loc.gov/cgi-bin/bdquerytr/z?d109:HR01268:

The REAL-ID Act: National Impact Analysis:

http://www.nga.org/Files/pdf/0609REALID.pdf

There's REAL-ID news. Maine became the first state to reject REAL-ID. This means that a Maine state driver's license will not be recognized as valid for federal purposes, although I'm sure the Feds will back down over this. My guess is that Montana will become the second state to reject REAL-ID, and New Mexico will be the third.

http://www.northcountrygazette.org/articles/2007/012807RealID.html http://www.usatoday.com/news/nation/2007-01-30-realID_x.htm

More info on REAL-ID:

http://www.realnightmare.org

RFID Passports

http://news.com.com/E-passports+to+put+new+face+on+old+documents/ 2100-7337 3-5313650.html http://www.theregister.co.uk/2004/05/20/us_passports/

The Security of RFID Passports

Government announcement:

http://edocket.access.gpo.gov/2005/05-21284.htm

RFID privacy problems:

http://www.epic.org/privacy/rfid/ http://rfidkills.com/

My previous writings on RFID passports:

http://www.schneier.com/essay-060.html

http://www.schneier.com/blog/archives/2005/04/rfid_passport_s.html http://www.schneier.com/blog/archives/2005/08/rfid_passport_s_1.html

This essay previously appeared on Wired.com:

http://www.wired.com/news/privacy/0,1848,69453,00.html

Multi-Use ID Cards

This essay originally appeared on Wired.com:

http://www.wired.com/news/technology/0,70167-0.html

Giving Driver's Licenses to Illegal Immigrants

This op-ed originally appeared in the *Detroit Free Press*:

http://www.schneier.com/essay-205.html

Voting Technology and Security

This essay originally appeared on Forbes.com:

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http://www.forbes.com/home/security/2006/11/10/voting-fraud-
security-tech-security-cz_bs_1113security.html
http://www.schneier.com/essay-068.html
http://www.schneier.com/blog/archives/2004/11/the_problem_wit.html
http://www.votingintegrity.org/archive/news/e-voting.html
http://www.verifiedvoting.org/article.php?id=997
http://www.ecotalk.org/VotingMachineErrors.htm
http://evote-mass.org/pipermail/evote-discussion_evote-mass.org/
2005-January/000080.html or http://tinyurl.com/yhvb2a
http://avirubin.com/vote/analysis/index.html
http://www.freedom-to-tinker.com/?p=1080
http://www.freedom-to-tinker.com/?p=1081
http://www.freedom-to-tinker.com/?p=1064
http://www.freedom-to-tinker.com/?p=1084
http://www.bbvforums.org/cgi-bin/forums/board-auth.cgi?file=/1954/
15595.html or http://tinyurl.com/9ywcn
http://itpolicy.princeton.edu/voting
http://www.ss.ca.gov/elections/voting systems/security analysis of the
diebold_accubasic_interpreter.pdf or http://tinyurl.com/eqpbd
http://www.blackboxvoting.org
http://www.brennancenter.org/dynamic/subpages/download_file_38150.pdf
http://avirubin.com/judge2.html
http://avirubin.com/judge.html
http://www.usatoday.com/news/washington/2006-10-29-voting-systems-probe_
x.htm or http://tinvurl.com/vlnba6
```

How to Steal an Election:

http://arstechnica.com/articles/culture/evoting.ars

Florida 13:

```
http://www.heraldtribune.com/apps/pbcs.dll/article?AID=/20061111/NEWS/
611110643 or http://tinyurl.com/ygo731
```

http://www.heraldtribune.com/apps/pbcs.dll/article?Date=20061108&Category =NEWS&ArtNo=611080506 or http://tinyurl.com/yahvve http://www.heraldtribune.com/apps/pbcs.dll/article?AID=/20061109/NEWS/ 611090343 or http://tinyurl.com/yhkwdt http://www.nytimes.com/2006/11/10/us/politics/10florida.html http://www.lipsio.com/SarasotaFloridaPrecinct22IncidentPhotos/

Value of stolen elections:

http://www.schneier.com/essay-046.html

Perception:

http://www.npr.org/templates/story/story.php?storyId=6449790

Voter suppression:

http://blackprof.com/stealingd.html

ID requirements:

http://www.lwvwi.org/cms/images/stories/PDFs/VR%20Photo%20ID.pdf http://www.demos.org/page337.cfm

Foxtrot cartoon:

http://www.gocomics.com/foxtrot/2006/10/29

Avi Rubin wrote a good essay on voting for Forbes as well:

http://www.forbes.com/home/free forbes/2006/0904/040.html

Computerized and Electronic Voting

CRS Report on Electronic Voting:

http://www.epic.org/privacy/voting/crsreport.pdf

Voting resource pages:

http://www.epic.org/privacy/voting/ http://www.eff.org/Activism/E-voting/ http://www.verifiedvoting.org/ http://electioncentral.blog-city.com/index.cfm

Bills in U.S. Congress to force auditable balloting:

http://graham.senate.gov/pr120903.html http://holt.house.gov/issues2.cfm?id=5996

Virginia story:

http://www.washingtonpost.com/ac2/wp-dyn?pagename=article&node= &contentId=A6291-2003Nov5 or http://tinyurl.com/z9uc

Indiana story:

http://www.indystar.com/articles/1/089939-1241-014.html

Nevada story:

http://www.lasvegassun.com/sunbin/stories/ly-gov/2003/dec/10/ 515999082.html or http://tinyurl.com/z9ud

California Secretary of State's statement on e-voting paper trail requirement:

http://www.ss.ca.gov/executive/press_releases/2003/03_106.pdf

Maryland story:

http://www.gazette.net/200350/montgomerycty/state/191617-1.html

More opinions:

http://www.pbs.org/cringely/pulpit/pulpit20031204.html http://www.securityfocus.com/columnists/198 http://www.sacbee.com/content/opinion/story/7837475p-8778055c.html

Voter Confidence and Increased Accessibility Act of 2003

http://www.wired.com/news/print/0.1294.61298.00.html http://www.theorator.com/bills108/hr2239.html

My older essays on this topic:

http://www.schneier.com./crvpto-gram-0012.html#1 http://www.schneier.com./crypto-gram-0102.html#10

Why Election Technology is Hard

This essay originally appeared in the San Francisco Chronicle:

http://www.sfgate.com/cgibin/article.cgi?file=/chronicle/archive/2004/10/31/EDG229GREK1.DTL or http://makeashorterlink.com/?J353212C9

Also read Avi Rubin's op-ed on the subject:

http://www.avirubin.com/vote/op-ed.html

Electronic Voting Machines

A version of this essay appeared on openDemocracy.com:

http://www.opendemocracy.com/debates/article-8-120-2213.jsp http://avirubin.com/judge2.html http://www.eff.org/deeplinks/archives/cat_evoting.php http://votingintegrity.org/archive/news/e-voting.html http://www.blackboxvoting.org/ http://www.verifiedvoting.org/ http://www.dailykos.com/story/2004/11/3/04741/7055 http://www.alternet.org/election04/20416/ http://www.newstarget.com/002076.html

http://ustogether.org/Florida_Election.htm

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http://www.washingtondispatch.com/spectrum/archives/000715.html
http://www.michigancityin.com/articles/2004/11/04/news/news02.txt
http://edition.cnn.com/2004/ALLPOLITICS/11/05/voting.problems.ap/index.html
or http://makeashorterlink.com/?B283122C9
http://www.palmbeachpost.com/politics/content/news/epaper/2004/11/05/
a29a_BROWVOTE_1105.html or http://makeashorterlink.com/?X3A323CB9
http://www.ansiblegroup.org/furtherleft/index.php?option=content&task=
view&id=51 or http://makeashorterlink.com/?C593122C9
http://www.truthout.org/docs 04/110504V.shtml
http://www.truthout.org/docs 04/110604Z.shtml
http://www.commondreams.org/views04/1106-30.htm
http://www.truthout.org/docs_04/110804A.shtml
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Revoting

Florida 13th:

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http://www.heraldtribune.com/apps/pbcs.dll/article?AID=/20061111/NEWS/
611110643 or http://tinyurl.com/ygo731
http://www.nytimes.com/2006/11/10/us/politics/10florida.html
http://www.newsbackup.com/about496345.html
```

This essay originally appeared on Wired.com:

http://www.wired.com/news/columns/0,72124-0.html

Hacking the Papal Election

Rules for a papal election:

```
http://www.vatican.va/holy_father/john_paul_ii/apost_constitutions/
documents/hf_jp-ii_apc_22021996_universi-dominici-gregis_en.html or
http://tinyurl.com/3ldzm
```

There's a picture of choir dress on this page:

http://dappledphotos.blogspot.com/2005/01/biretta-sightings.html

First Responders

This essay originally appeared on Wired.com:

```
http://www.wired.com/politics/security/commentary/securitymatters/2007/08/
securitymatters 0823
```

In blog comments, people pointed out that training and lack of desire to communicate are bigger problems than technical issues. This is certainly true. Just giving first responders interoperable radios won't automatically solve the problem; they need to want to talk to other groups as well.

Minneapolis rescue workers:

```
http://www.cnn.com/2007/US/08/02/bridge.responders/
http://www.ecmpostreview.com/2007/August/8irprt.html
http://www.cnn.com/2007/US/08/02/bridge.collapse/index.html
http://michellemalkin.com/2007/08/01/minneapolis-bridge-collapse/
http://www.cnn.com/2007/US/08/02/bridge.collapse.schoolbus/index.html
```

Utah rescue-worker deaths:

```
http://www.boston.com/news/nation/articles/2007/08/17/rescue_worker_killed
_at_utah_mine/ or http://tinyurl.com/ywdg6q
```

1996 report:

http://ntiacsd.ntia.doc.gov/pubsafe/publications/PSWAC_AL.PDF

Dennis Smith:

```
http://www.amazon.com/Report-Ground-Zero-Dennis-Smith/dp/0452283957/
ref=pd_bbs_sr_3/104-8159320-0735926?ie=UTF8&s=books&qid=1187284193&sr=8-3
or http://tinyurl.com/223cwb
```

http://www.9-11commission.gov/hearings/hearing11/smith_statement.pdf

9/11 Commission Report:

http://www.gpoaccess.gov/911/index.html

Wasted security measures:

```
http://www.schneier.com/blog/archives/2006/03/80 cameras for.html
http://blog.wired.com/defense/2007/08/armed-robots-so.html
http://www.cnsnews.com/ViewPolitics.asp?Page=/Politics/archive/200702/
POL20070223b.html or http://tinyurl.com/2qv5tb
http://sfgate.com/cgi-bin/article.cgi?f=/c/a/2006/02/19/INGDDH8E311.DTL or
http://tinyurl.com/yvpw5w
```

Minnesota and interoperable communications:

```
https://www.dps.state.mn.us/comm/press/newPRSystem/viewPR.asp?PR Num=244
or http://tinyurl.com/2765hp
```

Stanek quote:

```
http://www.washingtonpost.com/wp-dyn/content/article/2007/08/02/
AR2007080202262.html or http://tinyurl.com/yuf6se
```

Katrina:

```
http://www.nationaldefensemagazine.org/issues/2006/jan/inter-agency.htm or
http://tinyurl.com/233778
http://katrina.house.gov/
```

Conference of Mayors report:

http://www.usmayors.org/72ndAnnualMeeting/interoperabilityreport_062804.pdf or http://tinyurl.com/yv7ocj

Collective action problem:

http://en.wikipedia.org/wiki/The_Logic_of_Collective_Action

Jerry Brito paper:

Me on overly specific terrorism defense:

http://www.schneier.com/essay-087.html

More research:

http://www.infospheres.caltech.edu/crisis_web/executive-summary.html

Security at the Olympics

News articles:

http://www.cnn.com/2004/TECH/08/10/olympics.security.ap/index.html http://www.elecdesign.com/Articles/ArticleID/8484/8484.html http://cryptome.org/nyt-athens.htm http://www.smh.com.au/olympics/articles/2004/07/27/1090693966896.html http://www.news24.com/News24/Olympics2004/OutsideTrack/0,,2-1652-1655_1574262,00.html Or http://makeashorterlink.com/?V1E651849

A version of this essay originally appeared in the *Sydney Morning Herald*, during the Olympics:

http://smh.com.au/articles/2004/08/25/1093246605489.html

Blaster and the August 14th Blackout

A preliminary version of this essay appeared on news.com:

http://news.com.com/2010-7343-5117862.html

Interim Report: Causes of the August 14th Blackout in the United States and Canada:

https://reports.energy.gov/814BlackoutReport.pdf

The relevant data is on pages 28-29 of the report.

FirstEnergy was hit by Slammer:

http://www.securityfocus.com/news/6868 http://www.computerworld.com/securitytopics/security/recovery/story/ 0,10801,84203,00.html or http://tinyurl.com/z9to

How worms can infect internal networks:

http://www.networm.org/faq/#enterprise

Blackout not caused by worm:

http://news.com.com/2100-7355_3-5111816.html

News article on the report:

http://www.iht.com/articles/118457.html

Geoff Shively talked about possible Blaster/blackout links just a few days after the blackout:

http://seclists.org/lists/bugtraq/2003/Sep/0053.html

Avian Flu and Disaster Planning

http://www.computerworld.com/action/article.do?command=viewArticleBasic& taxonomyName=security&articleId=275619 or http://tinyurl.com/ymlmz4

http://www.computerworld.com/action/article.do?command=viewArticleBasic& articleId=9026179 or http://tinyurl.com/2crd9n

http://www.computerworld.com/action/article.do?command=viewArticleBasic& articleId=298413&pageNumber=1 or http://tinyurl.com/2xtgdq

http://www.computerworld.com/blogs/node/5854

Family disaster planning:

http://nielsenhayden.com/makinglight/archives/005763.html http://nielsenhayden.com/makinglight/archives/006539.html http://www.sff.net/people/doylemacdonald/emerg_kit.htm

Disaster Recovery Journal:

http://www.drj.com

Bird flu:

http://www.cdc.gov/flu/avian/

http://infectiousdiseases.about.com/od/fags/f/whynot1918.htm

http://www.msnbc.msn.com/id/6861065/

http://news.bbc.co.uk/2/hi/health/4295649.stm

http://www.cnn.com/2004/HEALTH/11/25/birdflu.warning/index.html

Blogger comments:

http://www.computerworld.com/blogs/node/5854

Man-eating badgers:

http://news.bbc.co.uk/1/hi/world/middle_east/6295138.stm

A good rebuttal to this essay:

http://www.computerweekly.com/blogs/david_lacey/2007/07/no-disaster-istoo-large-to-pl.html or http://tinyurl.com/288ybo

This essay originally appeared on Wired.com:

http://www.wired.com/print/politics/security/commentary/securitymatters/ 2007/07/securitymatters_0726 or http://tinyurl.com/2mb8bg

Economics and Information Security

Links to all the WEIS papers are available here:

http://weis2006.econinfosec.org

Ross Anderson's, "Why Information Security Is Hard-An Economic Perspective":

http://www.cl.cam.ac.uk/ftp/users/rja14/econ.pdf

Aligning Interest with Capability

This essay originally appeared on Wired.com:

http://www.wired.com/news/columns/0,71032-0.html

National Security Consumers

This essay originally appeared, in a shorter form, on News.com:

http://news.com.com/2010-7348-5204924.html

Liabilities and Software Vulnerabilities

Schmidt's comments:

http://news.zdnet.co.uk/software/developer/0,39020387,39228663,00.htm

SlashDot thread on Schmidt's concerns:

http://developers.slashdot.org/article.pl?sid=05/10/12/1335215&tid=172 &tid=8 or http://tinyurl.com/dvpd7

Dan Farber has a good commentary on my essay:

http://blogs.zdnet.com/BTL/?p=2046

This essay originally appeared on Wired.com:

http://www.wired.com/news/privacy/0,1848,69247,00.html

There has been some confusion about this in the comments—both in Wired and on my blog—that somehow this means that software vendors will be expected to achieve perfection and that they will be 100% liable for anything short of that. Clearly that's ridiculous, and that's not the way liabilities work. But equally ridiculous is the notion that software vendors should be 0% liable for defects. Somewhere in the middle there is a reasonable amount of liability, and that's what I want the courts to figure out.

Howard Schmidt writes: "It is unfortunate that my comments were reported inaccurately; at least Dan Farber has been trying to correct the inaccurate reports with his blog I do not support PERSONAL LIABILITY for the developers NOR do I support liability against vendors. Vendors are nothing

more than people (employees included) and anything against them hurts the very people who need to be given better tools, training and support."

Howard wrote this essay on the topic, to explain what he really thinks. He is against software liabilities.

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http://news.com.com/Give+developers+secure-coding+ammo/2010-1002_3-5929364
.html or http://tinyurl.com/dmlgh
```

But the first sentence of his last paragraph nicely sums up what's wrong with this argument: "In the end, what security requires is the same attention any business goal needs." If security is to be a business goal, then it needs to make business sense. Right now, it makes more business sense not to produce secure software products than it does to produce secure software products. Any solution needs to address that fundamental market failure, instead of simply wishing it were true.

Lock-In

Apple and the iPhone:

```
http://www.nytimes.com/2007/09/29/technology/29iphone.html
http://www.bloomberg.com/apps/news?pid=20601087&sid=aWmgi08ZjbpM
http://www.engadget.com/2007/10/17/apple-planning-iphone-sdk-for-february/
or http://tinyurl.com/yvx5hr
http://www.engadget.com/2008/01/28/iphone-sdk-key-leaked/
```

Shapiro and Varian's book:

```
http://www.amazon.com/Information-Rules-Strategic-Network-
Economy/dp/087584863X/ref=sr_1_1?ie=UTF8&s=books&qid=1202236504&sr=1-1 or
http://tinyurl.com/2eo23e
```

Microsoft and Trusted Computing:

```
http://schneier.com/crypto-gram-0208.html#1
http://www.cl.cam.ac.uk/~rja14/Papers/tcpa.pdf
http://www.microsoft.com/technet/archive/security/news/ngscb.mspx
http://www.schneier.com/blog/archives/2005/08/trusted_computi.html
```

Commentary:

```
http://yro.slashdot.org/yro/08/02/07/2138201.shtml
http://stumble.kapowaz.net/post/25792347
http://www.kryogenix.org/days/2008/02/08/there-can-be-no-fud
http://girtby.net/archives/2008/2/8/vendor-lock-in
```

This essay previously appeared on Wired.com:

```
http://www.wired.com/politics/security/commentary/securitymatters/2008/02/
securitymatters_0207 or http://tinyurl.com/2mf82q
```

Third Parties Controlling Information

Internet Archive:

http://www.archive.org/

Greatest Journal:

 $\label{lem:http://dropbeatsnotbombs.vox.com/library/post/farewell-gj-youll-kind-of-be-missed.html \ or \ http://tinyurl.com/2t2yg5$

http://barry095.vox.com/library/post/greatest-journal-death.html

Other hacks:

http://www.schneier.com/blog/archives/2005/02/tmobile_hack_1.html http://www.wired.com/politics/security/news/2008/01/myspace_torrent

This essay originally appeared on Wired.com:

http://www.wired.com/politics/security/commentary/securitymatters/2008/02/securitymatters 0221 or http://tinyurl.com/2a4go3

Who Owns Your Computer?

This essay originally appeared on Wired.com:

http://www.wired.com/news/columns/1,70802-0.html

Trusted computing:

http://www.schneier.com/crypto-gram-0208.html#1

A Security Market for Lemons

Risks of data in small packages:

 $http://www.wired.com/politics/security/commentary/securitymatters/2006/01/70044 \ \ or \ http://tinyurl.com/ypqntk$

Secustick and review:

http://www.secustick.nl/engels/index.html http://tweakers.net/reviews/683

Snake oil:

http://www.schneier.com/crypto-gram-9902.html#snakeoil http://www.schneier.com/crypto-gram-9810.html#cipherdesign

"A Market for Lemons":

http://en.wikipedia.org/wiki/The_Market_for_Lemons http://www.students.yorku.ca/~siccardi/The%20market%20for%20lemons.pdf

Kingston USB drive:

http://www.kingston.com/flash/dt_secure.asp

Slashdot thread:

http://it.slashdot.org/article.pl?sid=07/04/19/140245

This essay originally appeared in Wired:

http://www.wired.com/politics/security/commentary/securitymatters/2007/04/securitymatters_0419 or http://tinyurl.com/2fh325

Websites, Passwords, and Consumers

Phishing:

http://www.msnbc.msn.com/id/5184077/

http://www.internetweek.com/e-business/showArticle.jhtml?articleID=22100149

The Trojan:

 $\label{lem:http://news.com.com/Pop-up+program+reads+keystrokes \% 2C+steals+passwords/2100-7349_3-5251981.html$

http://www.pcworld.com/news/article/0%2Caid%2C116761%2C00.asp

A shorter version of this essay originally appeared in IEEE Security and Privacy:

http://csdl.computer.org/comp/mags/sp/2004/04/j4088abs.htm

The Feeling and Reality of Security

Getting security trade-offs wrong:

http://www.schneier.com/essay-162.html

Cognitive biases that affect security:

http://www.schneier.com/essay-155.html

"In Praise of Security Theater":

http://www.schneier.com/essay-154.html

The security lemon's market:

http://www.schneier.com/essay-165.html

Airline security and agenda:

http://www.schneier.com/blog/archives/2005/08/airline_securit_2.html

This essay originally appeared on Wired.com:

http://www.wired.com/politics/security/commentary/securitymatters/2008/04/securitymatters_0403 or http://tinyurl.com/2xu2zb

Behavioral Assessment Profiling

This article originally appeared in The Boston Globe:

http://www.boston.com/news/globe/editorial_opinion/oped/articles/2004/11/24/profile_hinky/ **Or** http://makeashorterlink.com/?X2071260A http://news.airwise.com/stories/2004/11/1100157618.html http://www.usatoday.com/travel/news/2004-01-27-logan-security_x.htm

In Praise of Security Theater

This essay appeared on Wired.com, and is dedicated to my new godson, Nicholas Quillen Perry:

http://www.wired.com/news/columns/0,72561-0.html

Infant abduction:

http://www.saione.com/ispletter.htm

Blog entry URL:

http://www.schneier.com/blog/archives/2007/01/in_praise_of_se.html

CYA Security

http://www.schneier.com/blog/archives/2007/02/nonterrorist_em.html

Airplane security:

http://www.schneier.com/blog/archives/2006/08/terrorism_secur.html

Searching bags in subways:

http://www.schneier.com/blog/archives/2005/07/searching_bags.html

No-fly list:

http://www.schneier.com/essay-052.html

More CYA security:

http://entertainment.iafrica.com/news/929710.htm

http://www.news24.com/News24/Entertainment/Oscars/0,,2-1225-1569_

1665860,00.html or http://tinyurl.com/24uuuo

http://www.schneier.com/blog/archives/2005/09/major_security.html

http://www.schneier.com/blog/archives/2006/03/80_cameras_for.html

http://www.schneier.com/blog/archives/2007/01/realid costs an.html

http://www.slate.com/id/2143104/

Commentary:

http://www.networkworld.com/community/?q=node/11746

http://yro.slashdot.org/yro/07/02/22/214246.shtml

This essay originally appeared on Wired.com:

http://www.wired.com/news/columns/0.72774-0.html

Copycats

http://www.philly.com/mld/inquirer/news/local/16824777.htm

http://kyw1060.com/pages/254744.php?contentType=4&contentId=340063

http://www.delawareonline.com/apps/pbcs.dll/article?AID=/20070222/NEWS/

702220360/1006/NEWS or http://tinyurl.com/2f3gyj

http://www.nbc10.com/news/11155984/detail.html?subid=10101521

Dan Cooper and the Cooper Vane:

http://www.crimelibrary.com/criminal mind/scams/DB Cooper/index.html http://en.wikipedia.org/wiki/Cooper_Vane

Green-card lawyers:

http://www.wired.com/news/politics/0,1283,19098,00.html

This essay originally appeared on Wired.com:

http://www.wired.com/news/columns/0,72887-0.html

Blog entry URL:

http://www.schneier.com/blog/archives/2007/03/post.html

Rare Risk and Overreactions

Irrational reactions:

http://arstechnica.com/news.ars/post/20070502-student-creates-counterstrike-map-gets-kicked-out-of-school.html or http://tinyurl.com/2db167 http://www.boingboing.net/2007/05/03/webcomic_artist_fire.html http://www.yaledailynews.com/articles/view/20843 http://yaledailynews.com/articles/view/20913 http://www.msnbc.msn.com/id/18645623/

Risks of school shootings from 2000:

http://www.cdc.gov/HealthyYouth/injury/pdf/violenceactivities.pdf

Crime statistics—strangers vs. acquaintances:

http://www.fbi.gov/ucr/05cius/offenses/expanded_information/data/shrtable_ 09.html or http://tinyurl.com/2qbtae

Me on the psychology of risk and security:

http://www.schneier.com/essay-155.html

Risk of shark attacks:

http://www.oceanconservancy.org/site/DocServer/fsSharks.pdf

Ashcroft speech:

http://www.highbeam.com/doc/1G1-107985887.html

Me on security theater:

http://www.schneier.com/essay-154.html

Baseball beer ban:

http://blogs.csoonline.com/baseballs_big_beer_ban

Nicholas Taub essay:

http://www.fooledbyrandomness.com/nyt2.htm http://www.telegraph.co.uk/opinion/main.jhtml?xml=/opinion/2007/04/22/

do2201.xml or http://tinyurl.com/3bewfy

VA Tech and gun control:

http://abcnews.go.com/International/wireStory?id=3050071&CMP=OTC-RSSFeeds

0312 or http://tinyurl.com/25js4o

http://www.cnn.com/2007/US/04/19/commentary.nugent/index.html

VA Tech hindsight:

http://news.independent.co.uk/world/americas/article2465962.ece http://www.mercurynews.com/charliemccollum/ci_5701552

John Stewart video:

http://www.comedycentral.com/motherload/player.jhtml?ml_video=85992

Me on movie-plot threats:

http://www.schneier.com/essay-087.html

Another opinion:

http://www.socialaffairsunit.org.uk/blog/archives/000512.php

This essay originally appeared on Wired.com, my 42nd essay on that site:

http://www.wired.com/politics/security/commentary/securitymatters/2007/05/ securitymatters_0517 **or** http://tinyurl.com/26cxcs

French translation:

http://archilogue.net/spip.php?rubrigues2&periode=2007-06#

Tactics, Targets, and Objectives

Safari security advice:

http://www.cybertracker.co.za/DangerousAnimals.html

School shooter security advice:

http://www.ucpd.ucla.edu/ucpd/zippdf/2007/Active%20Shooter%20Safety%20Tips .pdf or http://tinyurl.com/2qvgyg

Burglar security advice:

http://www.pfadvice.com/2007/02/05/the-best-place-to-hide-moneyconversation-with-a-burglar/ or http://tinyurl.com/ywdoy9 http://www.pfadvice.com/2007/03/06/dont-hide-money-in-the-toilet-moreconversation-with-a-burglar/ or http://tinyurl.com/236wbs

Me on terrorism:

http://www.schneier.com/essay-096.html

http://www.schneier.com/blog/archives/2006/08/terrorism secur.html

http://www.schneier.com/blog/archives/2005/09/katrina_and_sec.html

http://www.schneier.com/blog/archives/2006/08/what_the_terror.html

Learning behavior in tigers:

http://www.cptigers.org/animals/species.asp?speciesID=9

This essay originally appeared on Wired.com:

http://www.wired.com/print/politics/security/commentary/securitymatters/ 2007/05/securitymatters_0531 or http://tinyurl.com/2zdghw

The Security Mindset

SmartWater:

http://www.smartwater.com/products/securitySolutions.html http://www.schneier.com/blog/archives/2005/02/smart_water.html

CSF484:

http://www.cs.washington.edu/education/courses/484/08wi/ http://cubist.cs.washington.edu/Security/2007/11/22/why-a-computersecurity-course-blog/ or http://tinyurl.com/3m94ag

CSE484 blog:

http://cubist.cs.washington.edu/Security/ http://cubist.cs.washington.edu/Security/category/security-reviews/ http://cubist.cs.washington.edu/Security/2008/03/14/security-reviewmichaels-toyota-service-center/ or http://tinyurl.com/456b5y

Britney Spears's medical records:

http://www.msnbc.msn.com/id/23640143

This essay originally appeared on Wired.com:

http://www.wired.com/politics/security/commentary/securitymatters/2008/03/ securitymatters_0320 or http://tinyurl.com/21kg5f

Comments:

http://www.freedom-to-tinker.com/?p=1268 http://blog.ungullible.com/2008/03/hacking-yourself-to-ungullibilitypart.html or http://tinyurl.com/3fl9np http://www.daemonology.net/blog/2008-03-21-security-is-mathematics.html or http://tinyurl.com/34y2en

My Open Wireless Network

RIAA data:

http://www.sptimes.com/2007/10/02/Business/Minn_woman_takes_on_r.shtml http://www.npd.com/press/releases/press_0703141.html http://www.quardian.co.uk/technology/2007/mar/22/musicnews.newmedia

Rulings on "stealing" bandwidth:

http://www.ibls.com/internet_law_news_portal_view_prn.aspx?s=latestnews &id=1686 or http://tinyurl.com/35wwl6 http://arstechnica.com/news.ars/post/20080103-the-ethics-of-stealing-a-

wifi-connection.html or http://tinyurl.com/yseb8v

Amusing story of someone playing with a bandwidth stealer:

http://www.ex-parrot.com/~pete/upside-down-ternet.html

ISPs:

 $\label{lem:http://w2.eff.org/Infrastructure/Wireless_cellular_radio/wireless_friendly_isp_list.html \ or \ http://tinyurl.com/216pmn \ http://www.nytimes.com/2007/04/14/technology/14online.html?_r=1&ex=1181188 \ 800\&en=06978eela8aa9cde&ei=5070&oref=slogin \ or \ http://tinyurl.com/2t5cjw$

Fon:

http://www.iht.com/articles/2006/01/30/business/wireless31.php http://www.fon.com/en/

This essay originally appeared on Wired.com:

http://www.wired.com/politics/security/commentary/securitymatters/2008/01/securitymatters_0110 or http://tinyurl.com/22s3wx

It has since generated a lot of controversy:

http://hardware.slashdot.org/article.pl?sid=08/01/10/1449228

Opposing essays:

http://wifinetnews.com/archives/008126.html
http://www.dslreports.com/shownews/Bruce-Schneier-Wants-You-To-Steal-His-WiFi-90869 or http://tinyurl.com/2nqg4s
http://www.networkworld.com/community/node/23714

And here are supporting essays:

http://www.boingboing.net/2008/01/10/why-its-good-to-leav.html http://techdirt.com/articles/20080110/100007.shtml http://blogs.computerworld.com/open_wireless_oh_my

Presumably there will be a lot of back and forth in the blog comments section here as well:

http://www.schneier.com/blog/archives/2008/01/my_open_wireles.html#comments

Debating Full Disclosure

This essay originally appeared on CSOOnline:

http://www2.csoonline.com/exclusives/column.html?CID=28073

It was part of a series of essays on the topic. Marcus Ranum wrote against the practice of disclosing vulnerabilities:

http://www2.csoonline.com/exclusives/column.html?CID=28072

Mark Miller of Microsoft wrote in favor of responsible disclosure:

http://www2.csoonline.com/exclusives/column.html?CID=28071

These are sidebars to a very interesting article in CSO Magazine, "The Chilling Effect," about the confluence of forces that are making it harder to research and disclose vulnerabilities in web-based software:

http://www.csoonline.com/read/010107/fea vuln.html

All the links are worth reading in full.

A Simplified Chinese translation by Xin Li:

http://blog.delphij.net/archives/001694.html

Doping in Professional Sports

http://www.msnbc.msn.com/id/14059185/

Armstrong's case:

http://www.schneier.com/blog/archives/2005/09/lance_armstrong.html

Baseball and HGH:

http://sports.yahoo.com/mlb/news?slug=jp-hgh061206&prov=yhoo&type=lgns http://sports.yahoo.com/mlb/news?slug=jp-hgh060706&prov=yhoo&type=lgns

This essay originally appeared on Wired.com:

http://www.wired.com/news/columns/0,71566-0.html

Do We Really Need a Security Industry?

http://software.silicon.com/security/0,39024655,39166892,00.htm http://www.techworld.com/security/blogs/index.cfm?blogid=1&entryid=467 http://techdigest.tv/2007/04/security_guru_q.html http://www.itbusinessedge.com/blogs/top/?p=114

Complexity and security:

http://www.schneier.com/crypto-gram-0003.html#8

Commentary on essay:

http://www.networkworld.com/community/?q=node/14813 http://it.slashdot.org/it/07/05/03/1936237.shtml http://matt-that.com/?p=5

This essay originally appeared in Wired:

http://www.wired.com/politics/security/commentary/securitymatters/2007/05/ securitymatters_0503 or http://tinyurl.com/23b3av

Basketball Referees and Single Points of Failure

This is my 50th essay for Wired.com:

http://www.wired.com/politics/security/commentary/securitymatters/2007/09/ securitymatters_0906 or http://tinyurl.com/2kl98z

http://sports.espn.go.com/espn/page2/story?page=simmons/070722

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http://sports.espn.go.com/nba/columns/story?columnist=munson_lester&id
=2976241 or http://tinyurl.com/24mvha
http://sports.espn.go.com/nba/columns/story?columnist=stein_marc&id=2947543
or http://tinyurl.com/yq9h9x
http://sports.espn.go.com/nba/columns/story?columnist=sheridan_chris
&id=2948746 or http://tinyurl.com/2ahge3
http://msn.foxsports.com/nba/story/7047984
http://sports.espn.go.com/espn/blog/index?entryID=2979711&name=sheridan_
chris or http://tinyurl.com/2aa6nb
http://www.eog.com/news/industry.aspx?id=28416
http://sports.espn.go.com/nba/news/story?page=expertexplainsNBAbets
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Chemical Plant Security and Externalities

Risks:

```
http://www.usatoday.com/news/washington/2007-04-23-chlorine-truck-bomb_N
.htm or http://tinyurl.com/2zk2a5
http://www.chemsafety.gov/index.cfm?folder=news_releases&page=news&NEWS_
ID=379 or http://tinyurl.com/23bokt
http://www.bt.cdc.gov/agent/phosgene/basics/facts.asp
http://www.opencrs.com/document/M20050627/2005-06-27%2000:00
http://digital.library.unt.edu/govdocs/crs/permalink/meta-crs-9917
http://www.washingtonmonthly.com/features/2007/0703.levine1.html
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Regulations:

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http://www.boston.com/news/nation/washington/articles/2007/04/03/chemical_
plants_at_risk_us_agency_says/ or http://tinyurl.com/2babz5
http://www.usatoday.com/printedition/news/20070427/a_chemplant27.art.htm
or http://tinyurl.com/22xwab
```

This essay previously appeared on Wired.com:

http://www.wired.com/politics/security/commentary/securitymatters/2007/10/ securitymatters_1018 or http://tinyurl.com/yr2cd2

Mitigating Identity Theft

This essay was previously published on CNet:

http://www.news.com/Mitigating-identity-theft/2010-1071_3-5669408.html

LifeLock and Identity Theft

LifeLock:

http://www.lifelock.com

FACTA:

http://www.ftc.gov/opa/2004/06/factaidt.shtm

http://www.treasury.gov/offices/domestic-finance/financial-institution/ cip/pdf/fact-act.pdf

Fraud alerts:

http://www.consumersunion.org/creditmatters/creditmattersfactsheets/ 001626.html

The New York Times article:

http://www.nytimes.com/2008/05/24/business/yourmoney/24money.html?8dpc

Lawsuits:

http://www.networkworld.com/news/2008/022108-credit-reporting-firm-sueslifelock.html

http://www.insidetech.com/news/2148-id-protection-ads-come-back-to-bitelifelock-pitchman

Identity theft:

http://www.schneier.com/crypto-gram-0504.html#2 http://www.ftc.gov/opa/2007/11/idtheft.shtm http://www.consumer.gov/sentinel/pubs/top10fraud2007.pdf http://www.privacyrights.org/ar/idtheftsurveys.htm#Jav2007

Free credit reports:

http://www.annualcreditreport.com/

http://blog.washingtonpost.com/securityfix/2005/09/beware_free_credit_ report_scam_1.html

http://www.msnbc.msn.com/id/7803368/

http://ezinearticles.com/?The-Free-Credit-Report-Scam&id=321877

Defending yourself:

http://www.nytimes.com/2008/05/24/business/yourmoney/24moneyside.html http://www.savingadvice.com/blog/2008/06/04/102143_never-pay-someone-toprotect-your-identity.html

This essay originally appeared in Wired:

http://www.wired.com/politics/security/commentary/securitymatters/2008/06/ securitymatters_0612

Phishing

California law:

http://www.msnbc.msn.com/id/9547692/

Definitions:

http://en.wikipedia.org/wiki/Phishing

http://en.wikipedia.org/wiki/Pharming

http://www-03.ibm.com/industries/financialservices/doc/content/

news/magazine/1348544103.html or http://tinyurl.com/b32dh

http://www-03.ibm.com/industries/financialservices/doc/content/

news/pressrelease/1368585103.html or http://tinyurl.com/9rkas

Who pays for identity theft:

http://www.informationweek.com/showArticle.jhtml?articleID=166402700

Me on semantic attacks:

http://www.schneier.com/crypto-gram-0010.html#1

Me on economics and security:

http://www.schneier.com/book-sandl-intro2.html

Me on identity theft:

http://www.schneier.com/blog/archives/2005/04/mitigating_iden.html

Discussion of my essay:

http://it.slashdot.org/article.pl?sid=05/10/06/199257&tid=172&tid=98

This essay originally appeared in Wired:

http://www.wired.com/news/politics/0,1283,69076,00.html

Bot Networks

This essay originally appeared on Wired.com:

http://www.wired.com/news/columns/0.71471-0.html

Distributed.net:

http://www.distributed.net

SETI@home:

http://setiathome.berkeley.edu

MafiaBoy:

http://www.infoworld.com/articles/hn/xml/01/01/18/010118hnmafiaboy.html

1.5-million-node bot network:

http://www.techweb.com/wire/security/172303160

Cyber-Attack

http://www.fcw.com/article98016-03-22-07-Web

Allowing the entertainment industry to hack:

http://www.politechbot.com/docs/berman.coble.p2p.final.072502.pdf

http://www.freedom-to-tinker.com/?cat=6

Clarke's comments:

http://www.usatoday.com/tech/news/2002/02/14/cyberterrorism.htm

This essay originally appeared in Wired:

http://www.wired.com/politics/security/commentary/securitymatters/2007/04/ securitymatter_0405 or http://tinyurl.com/2dkpcc

Counterattack

Automated law enforcement:

http://www.foxnews.com/story/0,2933,64688,00.html

Mullen's essay:

http://www.hammerofgod.com/strikeback.txt

Berman legislation:

http://www.counterpane.com/crypto-gram-0208.html#5

Cyberwar

My previous essay on cyberterrorism:

http://www.schneier.com/crypto-gram-0306.html#1

Militaries and Cyberwar

My interview in the Iranian newspaper (to be honest, I have no idea what it says):

http://www.jamejamdaily.net/shownews2.asp?n=26454&t=com

The Truth About Chinese Hackers

Article originally published in Discovery Tech:

http://dsc.discovery.com/technology/my-take/computer-hackers-china.html

Safe Personal Computing

Others have disagreed with these recommendations:

http://www.getluky.net/archives/000145.html

http://www.berylliumsphere.com/security_mentor/2004/12/heres-another-

really-good-twelve.html or http://makeashorterlink.com/?Z3772560A

My original essay on the topic:

http://www.schneier.com/crypto-gram-0105.html#8

This essay previously appeared on CNet:

http://news.com.com/Who+says+safe+computing+must+remain+a+pipe+dream/2010- $1071_3-5482340.$ html or http://makeashorterlink.com/?V6872560A

How to Secure Your Computer, Disks, and Portable Drives

This essay previously appeared on Wired.com:

http://www.wired.com/politics/security/commentary/securitymatters/2007/11/ securitymatters 1129

Why was the U.K. event such a big deal? Certainly the scope: 40% of the British population. Also the data: bank account details; plus information about children. There's already a larger debate on the issue of a database on kids that this feeds into. And it's a demonstration of government incompetence (think Hurricane Katrina). In any case, this issue isn't going away anytime soon. Prime Minister Gordon Brown has apologized. The head of the Revenue and Customs office has resigned. More fallout is probably coming. U.K.'s privacy Chernobyl:

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http://www.timesonline.co.uk/tol/news/uk/article2910705.ece
http://news.bbc.co.uk/1/hi/uk_politics/7104945.stm
http://politics.guardian.co.uk/economics/story/0,,2214566,00.html
http://www.timesonline.co.uk/tol/news/uk/article2910635.ece
http://www.theregister.co.uk/2007/11/21/response_data_breach/
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U.S. VA privacy breach:

http://www.wired.com/techbiz/media/news/2006/05/70961

PGP Disk:

http://www.pgp.com/products/wholediskencryption/

Choosing a secure password:

http://www.schneier.com/blog/archives/2007/01/choosing secure.html http://www.iusmentis.com/security/passphrasefaq/

Risks of losing small memory devices:

http://www.schneier.com/blog/archives/2005/07/risks of losing.html

Laptop snatching:

http://www.sfgate.com/cgi-bin/article.cgi?file=/chronicle/archive/2006/04/ 08/MNGE9I686K1.DTL or http://tinyurl.com/fszeh

Microsoft BitLocker:

http://www.schneier.com/blog/archives/2006/05/bitlocker.html

TrueCrypt:

http://www.truecrypt.org/

Crossing Borders with Laptops and PDAs

My advice on choosing secure passwords:

http://www.schneier.com/essay-148.html

This essay originally appeared in *The Guardian*:

http://www.guardian.co.uk/technology/2008/may/15/computing.security

Choosing Secure Passwords

Analyzing 24,000 MySpace passwords:

http://www.wired.com/news/columns/0,72300-0.html

Choosing passwords:

http://psychology.wichita.edu/surl/usabilitynews/81/Passwords.htm

http://www.microsoft.com/windows/IE/community/columns/passwords.mspx

http://www.brunching.com/passwordguide.html

AccessData:

http://www.accessdata.com

Password Safe:

http://www.schneier.com/passsafe.html

This essay originally appeared on Wired.com:

http://www.wired.com/news/columns/1,72458-0.html

Secrecy, Security, and Obscurity

Kerckhoffs' Paper (in French):

http://www.cl.cam.ac.uk/~fapp2/kerckhoffs/la_cryptographie_militaire_i.htm

Another essay along similar lines:

http://online.securityfocus.com/columnists/80

More on Two-Factor Authentication

This essay previously appeared in Network World as a "Face Off":

http://www.nwfusion.com/columnists/2005/040405faceoff-counterpane.html or http://tinyurl.com/5nuod

Joe Uniejewski of RSA Security wrote an opposing position:

http://www.nwfusion.com/columnists/2005/040405faceoff-rsa.html

Another rebuttal:

http://www.eweek.com/article2/0,1759,1782435,00.asp

My original essay:

http://www.schneier.com/essay-083.html

Home Users: A Public Health Problem?

This essay is the first half of a point/counterpoint with Marcus Ranum in the September 2007 issue of Information Security. You can read his reply here:

http://www.ranum.com/security/computer security/editorials/pointcounterpoint/homeusers.htm.

Security Products: Suites vs. Best-of-Breed

This essay originally appeared as the second half of a point/counterpoint with Marcus Ranum in Information Security:

http://searchsecurity.techtarget.com/magazineFeature/0,296894,sid14_gci130 3850 idx2.00.html

Marcus's half:

http://searchsecurity.techtarget.com/magazineFeature/0,296894,sid14_gci130 3850,00.html or http://tinyurl.com/36zhml

Separating Data Ownership and **Device Ownership**

New timing attack on RSA:

http://www.newscientisttech.com/article/dn10609 http://eprint.iacr.org/2006/351.pdf

My essay on side-channel attacks:

http://www.schneier.com/crypto-gram-9806.html#side

My paper on data/device separation:

http://www.schneier.com/paper-smart-card-threats.html

Street-performer protocol: an alternative to DRM:

http://www.schneier.com/paper-street-performer.html

Ontario lottery fraud:

http://www.cbc.ca/canada/toronto/story/2006/10/26/ombudsman-probe.html

This essay originally appeared on Wired.com:

http://www.wired.com/news/columns/0.72196-0.html

Assurance

California reports:

http://www.sos.ca.gov/elections/elections vsr.htm

Commentary and blog posts:

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http://www.freedom-to-tinker.com/?p=1181
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http://blog.wired.com/27bstroke6/2007/07/ca-releases-res.html

http://www.schneier.com/blog/archives/2007/07/california_voti.html

http://www.freedom-to-tinker.com/?p=1184

http://blog.wired.com/27bstroke6/2007/08/ca-releases-sou.html

http://avi-rubin.blogspot.com/2007/08/california-source-code-study-results

.html or http://tinyurl.com/2bz7ks

http://www.crypto.com/blog/ca_voting_report/

http://twistedphysics.typepad.com/cocktail_party_physics/2007/08/caveat-

voter.html or http://tinyurl.com/2737c7

http://www.schneier.com/blog/archives/2007/08/more_on_the_cal.html

California's recertification requirements:

http://arstechnica.com/news.ars/post/20070806-california-to-recertifyinsecure-voting-machines.html or http://tinyurl.com/ytesbj

DefCon reports:

http://www.defcon.org/

http://www.physorg.com/news105533409.html

http://blog.wired.com/27bstroke6/2007/08/open-sesame-acc.html

http://www.newsfactor.com/news/Social-Networking-Sites-Are-

Vulnerable/story.xhtml?story_id=012000EW8420 or http://tinyurl.com/22uoza

http://blog.wired.com/27bstroke6/2007/08/jennalynn-a-12-.html

US-VISIT database vulnerabilities:

http://www.washingtonpost.com/wp-

dyn/content/article/2007/08/02/AR2007080202260.html or

http://tinyurl.com/33cglf

RFID passport hacking:

http://www.engadget.com/2006/08/03/german-hackers-clone-rfid-e-passports/

or http://tinyurl.com/sy439

http://www.rfidjournal.com/article/articleview/2559/2/1/

http://www.wired.com/politics/security/news/2007/08/epassport

http://money.cnn.com/2007/08/03/news/rfid/?postversion=2007080314

How common are bugs:

http://www.rtfm.com/bugrate.pdf

Diebold patch:

http://www.schneier.com/blog/archives/2007/08/florida evoting.html

Brian Snow on assurance:

http://www.acsac.org/2005/papers/Snow.pdf

Books on secure software development:

Microsoft's SDL:

http://www.microsoft.com/MSPress/books/8753.asp

DHS's Build Security In program:

https://buildsecurityin.us-cert.gov/daisy/bsi/home.html

This essay originally appeared on Wired.com:

http://www.wired.com/politics/security/commentary/securitymatters/2007/08/securitymatters_0809 or http://tinyurl.com/2nyo8c

Sony's DRM Rootkit: The Real Story

This essay originally appeared in Wired:

http://www.wired.com/news/privacy/0,1848,69601,00.html

There are a lot of links in this essay. You can see them on Wired's page. Or here:

http://www.schneier.com/essay-094.html

These are my other blog posts on this:

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http://www.schneier.com/blog/archives/2005/11/sony_secretly_i_1.html http://www.schneier.com/blog/archives/2005/11/more_on_sonys_d.html http://www.schneier.com/blog/archives/2005/11/still_more_on_s_1.html http://www.schneier.com/blog/archives/2005/11/the_sony_rootki.html
```

There are lots of other links in these posts.

The Storm Worm

This essay originally appeared on Wired.com:

http://www.informationweek.com/showArticle.jhtml;jsessionid= SNSXKA7R004MM0SNDLRSKHSCJUNN2JVN?articleID=201805274 or http://tinyurl.com/3bb4f5 http://www.scmagazineus.com/Storm-Worm-uses-e-cards-to-push-spam-near-alltime-high/article/35321/ or http://tinyurl.com/33chht http://www.usatoday.com/tech/news/computersecurity/wormsviruses/2007-08-

Fast flux:

http://ddanchev.blogspot.com/2007/09/storm-worms-fast-flux-networks.html or http://tinyurl.com/2xwgln

Storm's attacks:

http://www.spamnation.info/blog/archives/2007/09/419eater_ddosd.html http://ddanchev.blogspot.com/2007/09/storm-worms-ddos-attitude.html http://www.disog.org/2007/09/opps-guess-i-pissed-off-storm.html

Stewart's analysis:

http://www.secureworks.com/research/threats/storm-worm/

Counterworms:

http://www.schneier.com/crypto-gram-0309.html#8

02-storm-spam_N.htm or http://tinyurl.com/2c6te7

The Ethics of Vulnerability Research

This was originally published in InfoSecurity Magazine, as part of a pointcounterpoint with Marcus Ranum. You can read Marcus's half here:

http://searchsecurity.techtarget.com/magazineFeature/0,296894,sid14_ gci1313268,00.html

Is Penetration Testing Worth It?

This essay appeared in the March 2007 issue of Information Security, as the first half of a point/counterpoint with Marcus Ranum:

http://informationsecurity.techtarget.com/magItem/0,291266,sid42_ gci1245619,00.html or http://tinyurl.com/yrjwol

Marcus's half:

http://www.ranum.com/security/computer_security/editorials/pointcounterpoint/pentesting.html or http://tinyurl.com/23ephv

Anonymity and the Tor Network

This essay previously appeared on Wired.com:

http://www.wired.com/politics/security/commentary/securitymatters/2007/09/ security_matters_0920 or http://tinyurl.com/2ux6ae

Tor:

https://tor.eff.org/
http://tor.eff.org/overview.html.en
http://wiki.noreply.org/noreply/TheOnionRouter/TorFAQ#ExitEavesdroppers or
http://tinyurl.com/2ozo2b

Onion routing:

http://www.onion-router.net/

Egerstad's work:

http://www.derangedsecurity.com/deranged-gives-you-100-passwords-to-governments-embassies/ or http://tinyurl.com/28ya72
http://www.heise-security.co.uk/news/95778
http://www.securityfocus.com/news/11486
http://www.derangedsecurity.com/time-to-reveal%e2%80%a6/
http://www.wired.com/politics/security/news/2007/09/embassy_hacks

Sassaman's paper:

http://www.cosic.esat.kuleuven.be/publications/article-896.pdf

Anonymity research:

http://www.cs.utexas.edu/~shmat/abstracts.html#netflix http://www.nd.edu/~netsci/TALKS/Kleinberg.pdf http://citeseer.ist.psu.edu/novak04antialiasing.html http://www.cl.cam.ac.uk/~sjm217/papers/oakland05torta.pdf http://www.nytimes.com/2006/08/09/technology/09aol.html

Dark Web:

http://www.nsf.gov/news/news_summ.jsp?cntn_id=110040

Tor users:

http://advocacy.globalvoicesonline.org/wp-content/plugins/wp-downloadMonitor/user_uploads/Anonymous_Blogging.pdf or http://tinyurl.com/2szyxw http://blog.wired.com/27bstroke6/2007/07/cyber-jihadists.html

Tor server operator shuts down after police raid:

http://www.heise.de/english/newsticker/news/96107

Tools for identifying the source of Tor data:

http://www.securityfocus.com/news/11447

Kill Switches and Remote Control

Kill switches:

http://www.informationweek.com/news/mobility/showArticle.jhtml?articleID= 202400922

314 Schneier on Security

 $\label{lem:http://www.nypost.com/seven/06082008/news/regionalnews/busting_terror_114567.htm$

http://blog.wired.com/defense/2008/06/the-pentagons-n.html

http://spectrum.ieee.org/may08/6171

Digital Manners Policies:

 $\label{lem:http://arstechnica.com/news.ars/post/20080611-microsoft-patent-brings-miss-manners-into-the-digital-age.html$

http://appft1.uspto.gov/netacgi/nph-

 $\label{lem:parser:sect1} Parser?Sect1=PT01\&Sect2=HIT0FF\&d=PG01\&p=1\&u=\%2Fnetahtml\%2FPT0\%2Fsrchnum.html\&r=1\&f=G\&l=50\&s1=\%2220080125102\%22.PGNR.\&OS=DN/20080125102\&RS=DN/20080125102$

This essay originally appeared on Wired.com:

http://www.wired.com/politics/security/commentary/securitymatters/2008/06/securitymatters_0626