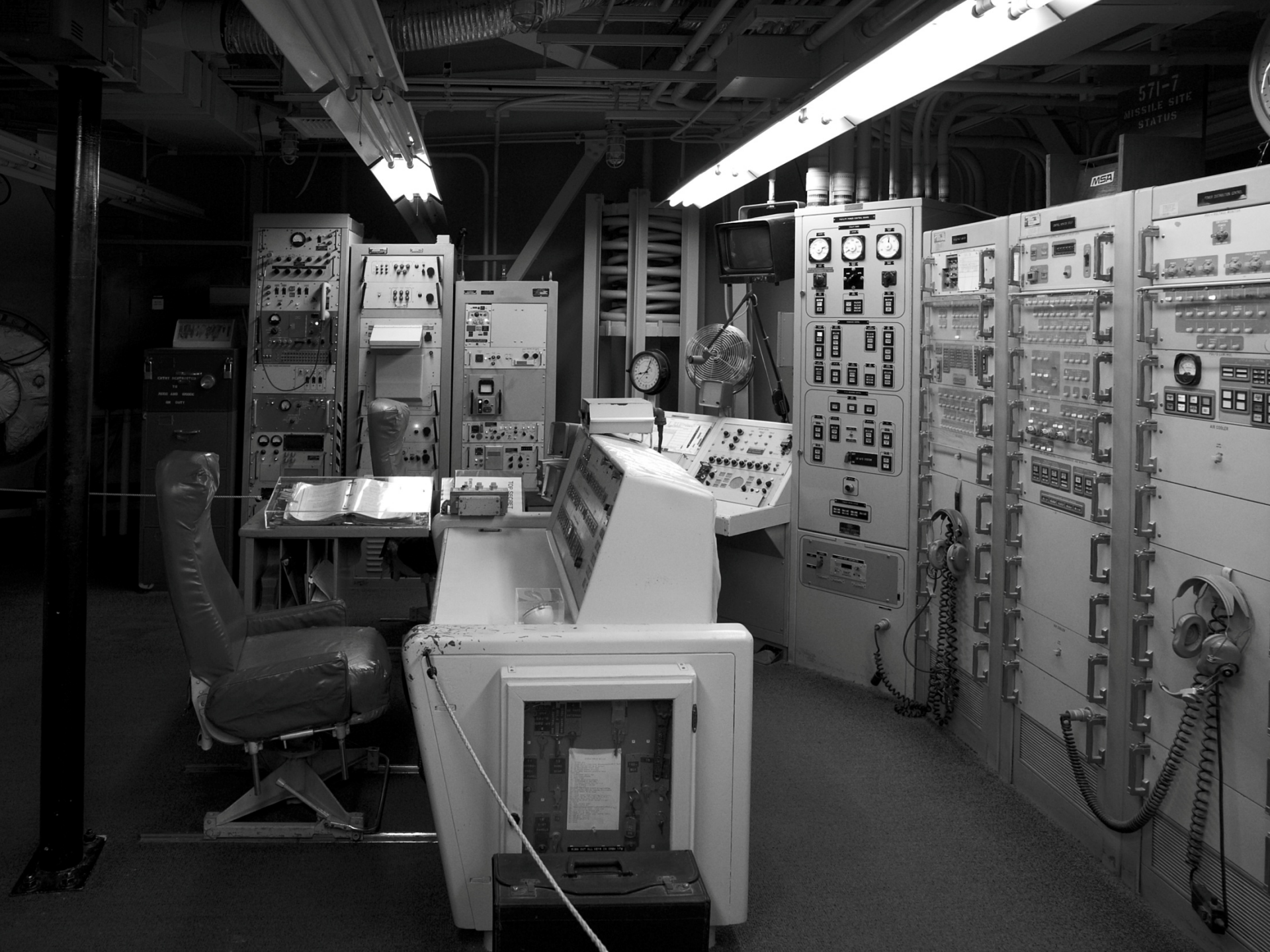
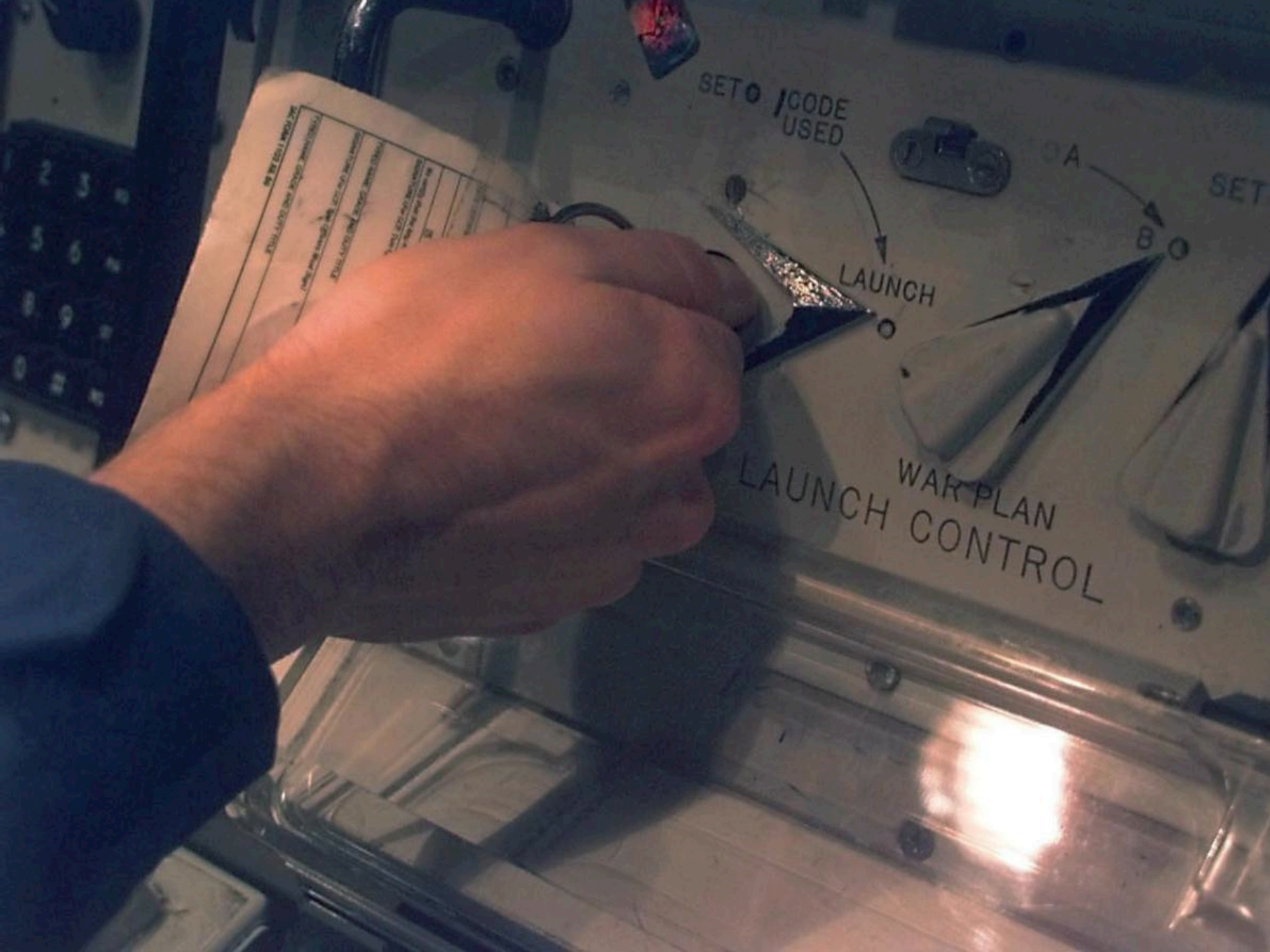
Software Security: Principles (Part Deux)

CS 161: Computer Security

Prof. David Wagner

February 5, 2014

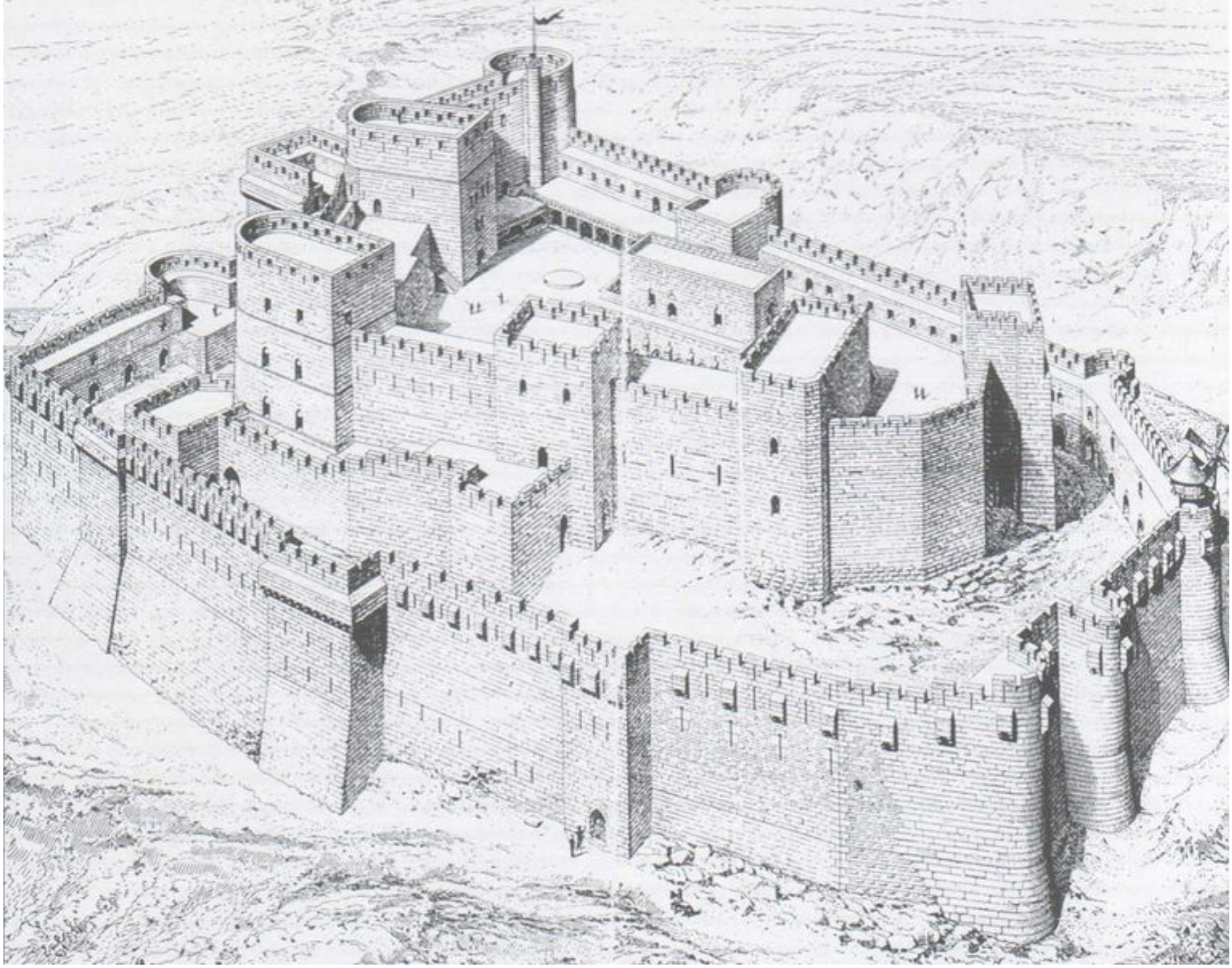

571-7
MISSILE SITE
STATUS
MSA
TOP SECRET


SET
CODE USED
A
SET
B
LAUNCH
WAR PLAN
LAUNCH CONTROL


NO LONE ZONE
SAC TWO MAN POLICY
MANDATORY
CAUTION
DO NOT KEY RTMX IN L/D
EXCEPT IN CASE OF AN
EMERGENCY-MUST BE AT
LEAST 5FT FROM MSL
E-F-G

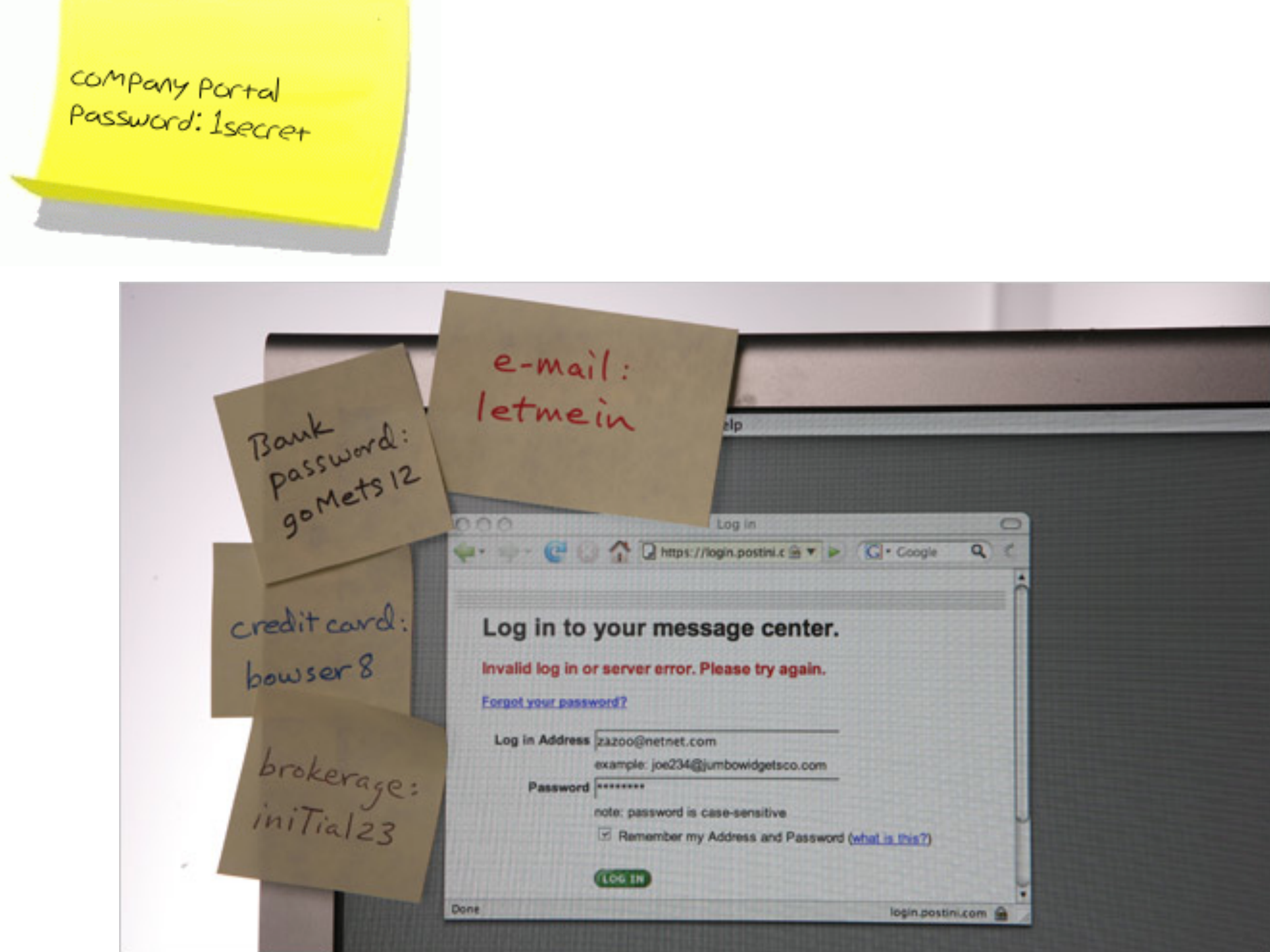
“Separation of responsibility.”


California
THE IDES OF MARCH
PARANORMAL ACTVITY 3
THE RUM DIARY



“Defense in depth.”

“Company policy: passwords must be at least 10 characters long, contain at least 2 digits, 1 uppercase character, 1 lowercase character, and 1 special character.”


company portal
Password: 1secret
e-mail:
letmein
Bank
password:
goMets12
credit card:
bowser8
brokerage:
iniTial23
Log in
https://login.postini.c
Google
Log in to your message center.
Invalid log in or server error. Please try again.
Forgot your password?
Log in Address
zazoo@netnet.com
example: joe234@jumbowidgetsco.com
Password
note: password is case-sensitive
Remember my Address and Password (what is this?)
LOG IN
Done
login.postini.com

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Last Updated: Tuesday, 20 April, 2004, 01:44 GMT 02:44 UK

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Passwords revealed by sweet deal

More than 70% of people would reveal their computer password in exchange for a bar of chocolate, a survey has found.

Security crumbles in the face of sweet bribes

It also showed that 34% of respondents volunteered their password when asked without even needing to be bribed.

A second survey found that 79% of people unwittingly gave away information that could be used to steal their identity when questioned.

Security firms predict that the lax security practices will fuel a British boom in online identity theft.

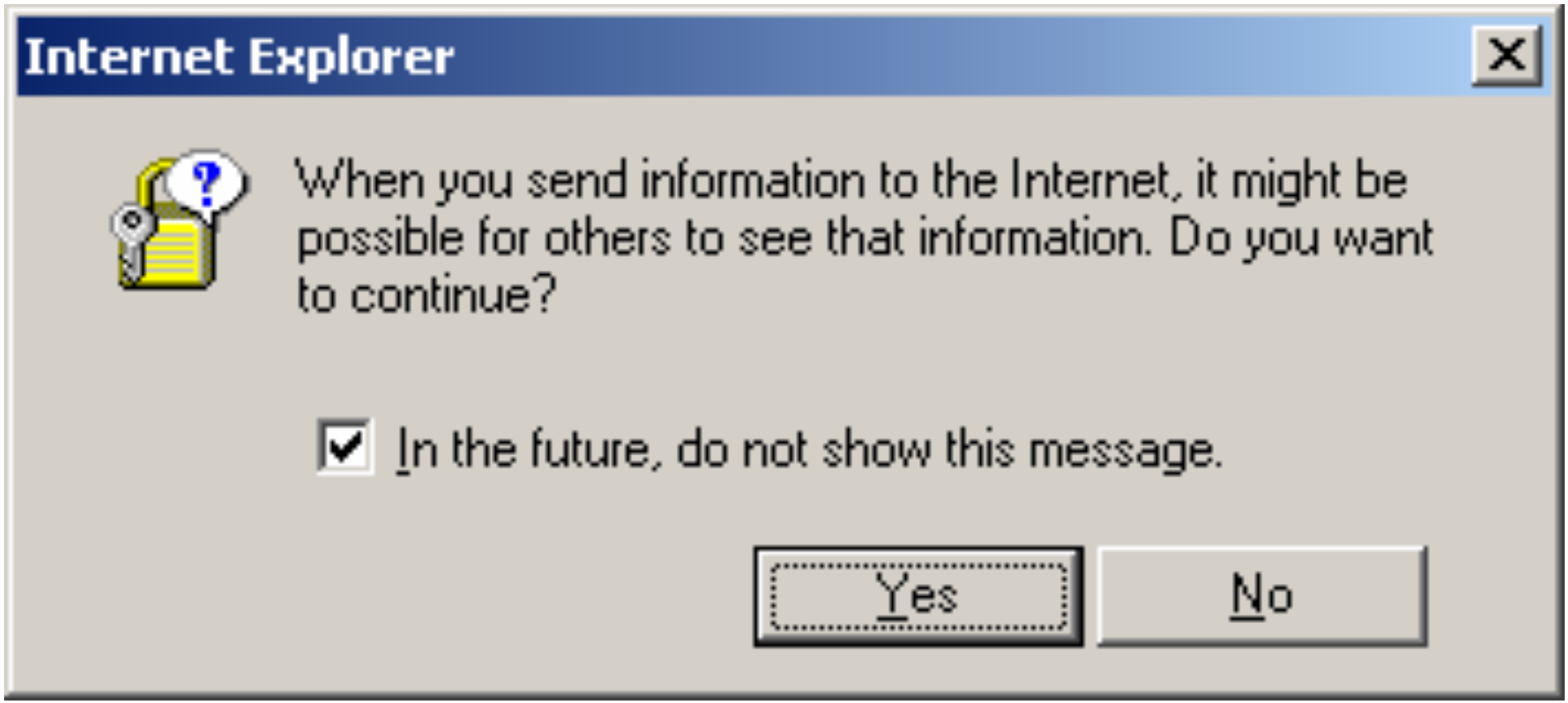
What a piece of work is a man! how Noble in
Reason! how infinite in faculty! in form and moving
how express and admirable! in Action, how like an Angel!
in apprehension, how like a God!

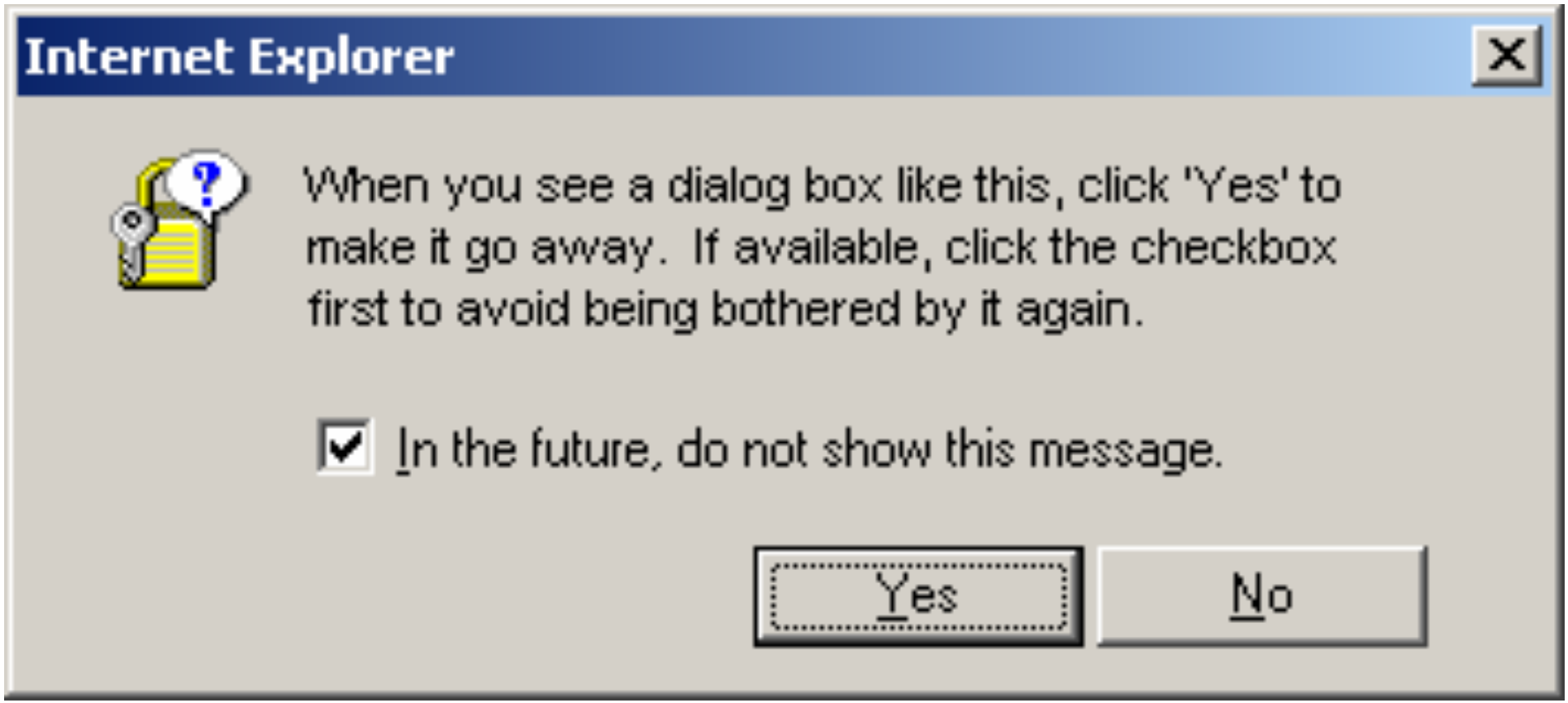
-- *Hamlet* Act II, Scene II

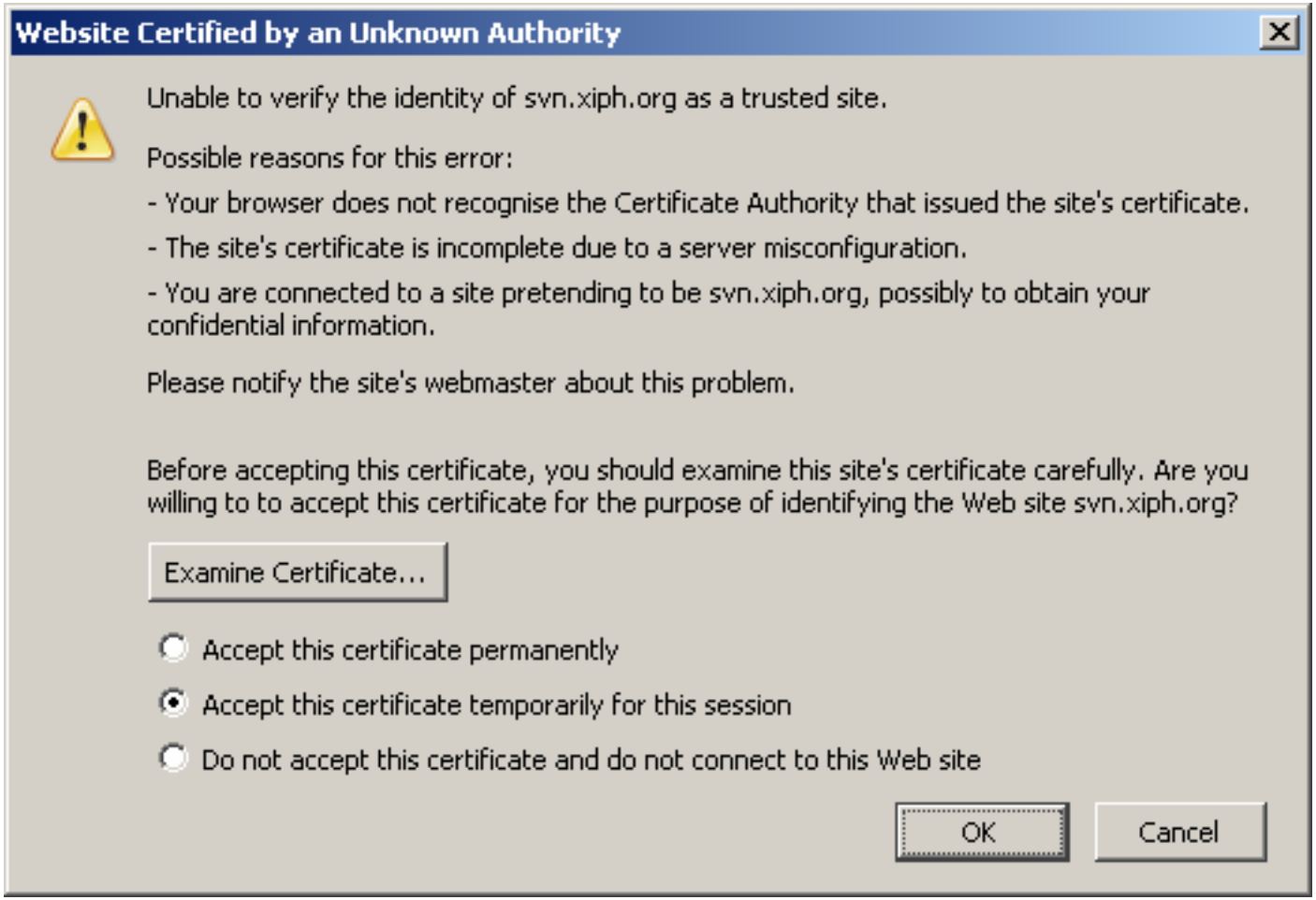
"Humans are incapable of securely storing high-quality cryptographic keys, and they have unacceptable speed and accuracy when performing cryptographic operations.

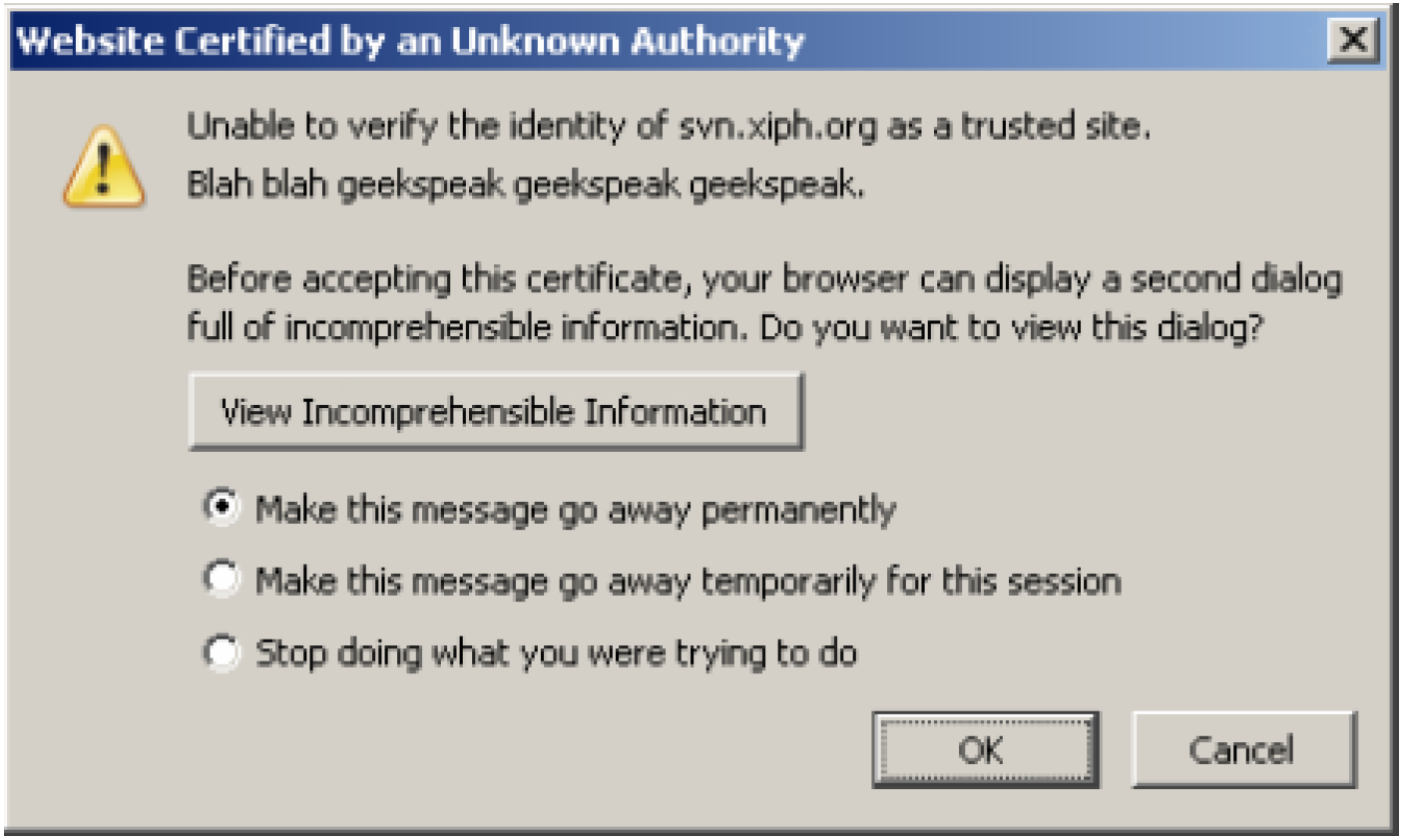
-- *Network Security: Private Communication in a Public World*,
Charlie Kaufman, Radia Perlman, & Mike Speciner, 1995

“Psychological acceptability.”

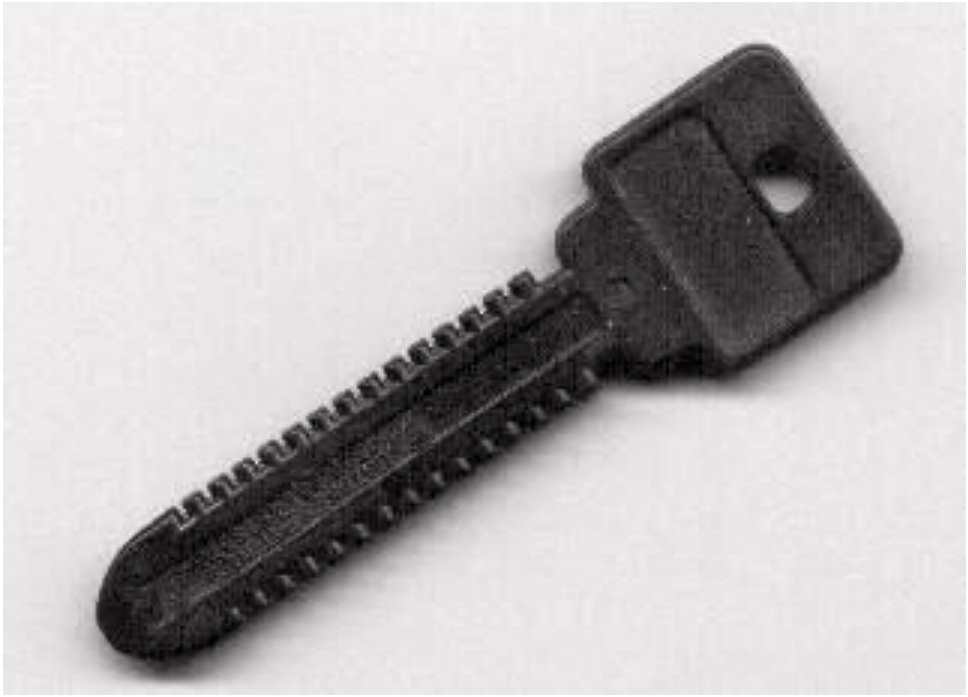

Internet Explorer
When you send information to the Internet, it might be possible for others to see that information. Do you want to continue?
In the future, do not show this message.
Yes
No


Internet Explorer
When you see a dialog box like this, click 'Yes' to make it go away. If available, click the checkbox first to avoid being bothered by it again.
In the future, do not show this message.
Yes
No

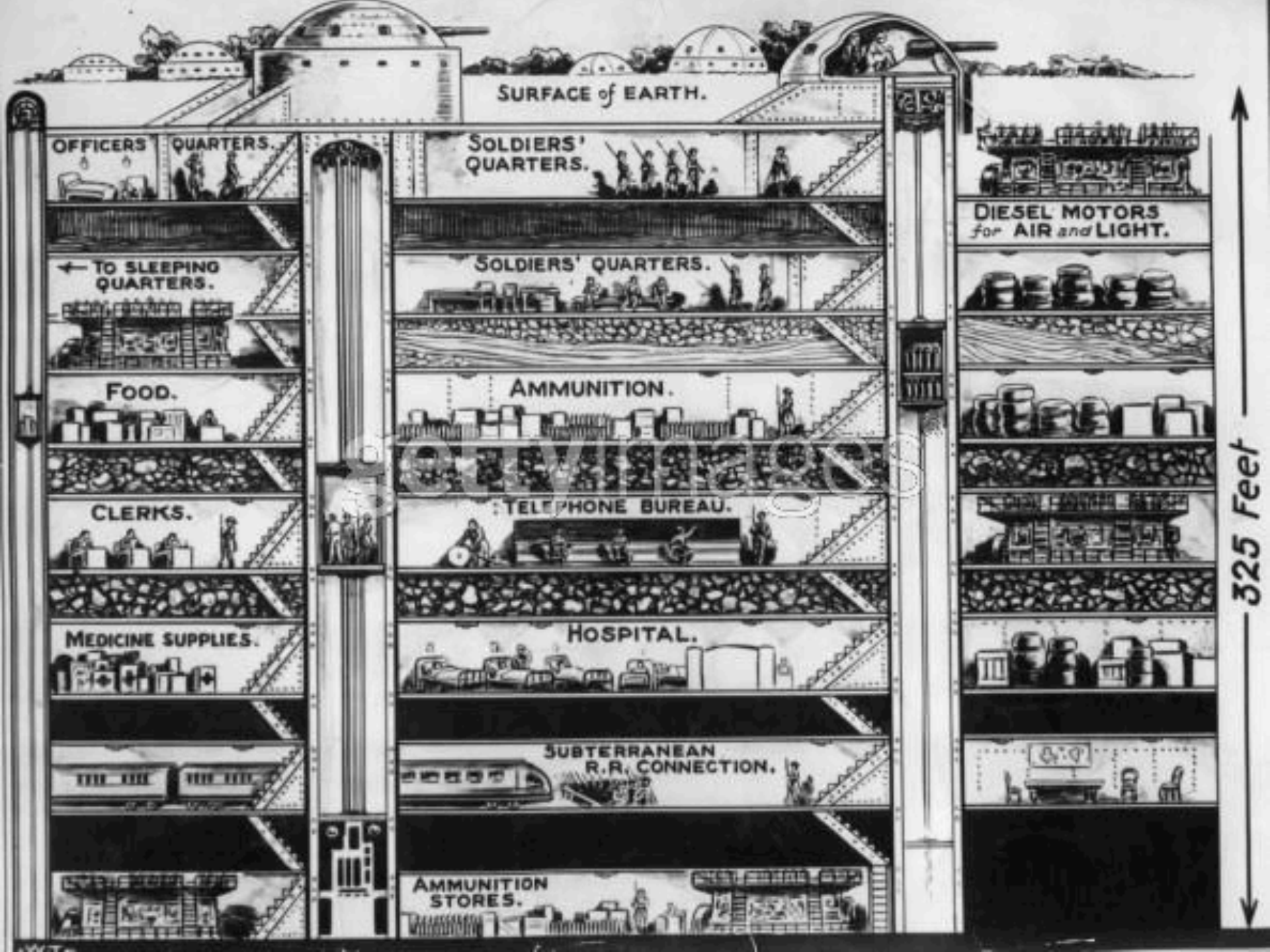

Website Certified by an Unknown Authority
Unable to verify the identity of svn.xiph.org as a trusted site.
Possible reasons for this error:
- Your browser does not recognise the Certificate Authority that issued the site's certificate.
- The site's certificate is incomplete due to a server misconfiguration.
- You are connected to a site pretending to be svn.xiph.org, possibly to obtain your confidential information.
Please notify the site's webmaster about this problem.
Before accepting this certificate, you should examine this site's certificate carefully. Are you willing to to accept this certificate for the purpose of identifying the Web site svn.xiph.org?
Examine Certificate...
Accept this certificate permanently
Accept this certificate temporarily for this session
Do not accept this certificate and do not connect to this Web site
OK
Cancel


Website Certified by an Unknown Authority
Unable to verify the identity of svn.xiph.org as a trusted site.
Blah blah geekspeak geekspeak geekspeak.
Before accepting this certificate, your browser can display a second dialog full of incomprehensible information. Do you want to view this dialog?
View Incomprehensible Information
Make this message go away permanently
Make this message go away temporarily for this session
Stop doing what you were trying to do
OK
Cancel

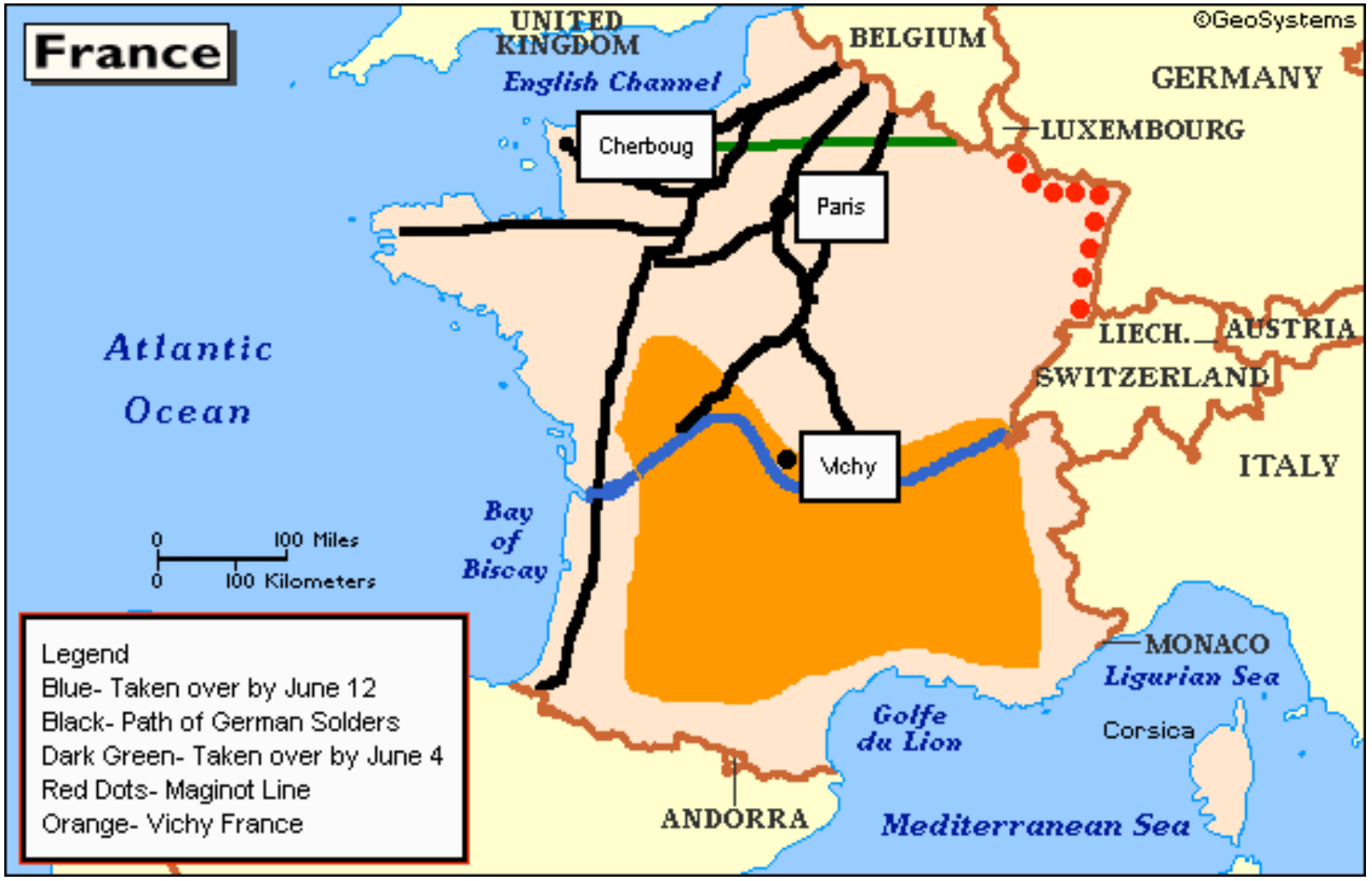
“Consider human factors.”




2


SURFACE of EARTH.
OFFICERS' QUARTERS.
SOLDIERS' QUARTERS.
DIESEL MOTORS for AIR and LIGHT.
← TO SLEEPING QUARTERS.
SOLDIERS' QUARTERS.
FOOD.
AMMUNITION.
CLERKS.
TELEPHONE BUREAU.
MEDICINE SUPPLIES.
HOSPITAL.
SUBTERRANEAN R.R. CONNECTION.
AMMUNITION STORES.
325 Feet


Dover
Antwerp
BELGIUM
Brussels
Maastricht
Essen
Cologne
GERMAN
Lille
Liège
Namur
Frankfurt
LUXEMBOURG
FRANCE
Paris
Strasbourg
Basel
Weak fortifications
Strong fortifications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LUXEMBOURG
Cherboug
Paris
Atlantic Ocean
LIECH.
AUSTRIA
SWITZERLAND
Vichy
ITALY
Bay of Biscay
0 100 Miles
0 100 Kilometers
MONACO
Ligurian Sea
Golfe du Lion
Corsica
ANDORRA
Mediterranean Sea
Legend
Blue- Taken over by June 12
Black- Path of German Solders
Dark Green- Taken over by June 4
Red Dots- Maginot Line
Orange- Vichy France

“Threat models change.”


ВТБ
VISA
VISA
Windows Product Activation
Your Windows product must be activated within 7 days.
Do you want to activate Windows now?
Yes
No

Wells Fargo Web-enables 6,200 ATMs

The Windows-based infrastructure enables remote upgrades

By Lucas Mearian

March 3, 2005 12:00 PM ET

Computerworld - Wells Fargo & Co. announced this week that it has completed a five-year project to Web-enable its 6,200 ATMs in 23 states. The Windows-based infrastructure is designed to allow Wells Fargo to update and add services such as new languages and envelope-free deposits to its entire network remotely.

Wells Fargo took all "the rational steps you'd take to harden any operating system," such as closing unused ports. But, "the reality is you can't buy a new ATM that runs OS/2. This is where the industry is," he said.

“Threat models change.”

“Design security in from the start.”

(Beware *bolt-on security*.)


ACCIDENT
ON
MOTORWAY


ACCIDENT
ON
MOTORWAY


CAUTION!
ZOMBIES!
AHEAD!!!

RUN FOR
COLD
CLIMATES

THE END
IS NEAR!
!!!!!!!!!


RAPTORS
AHEAD
CAUTION
MARSH


TRAPPED
IN SIGN
FACTORY


SEND
HELP!

“Don’t rely on security through obscurity.”


TICKET
356011