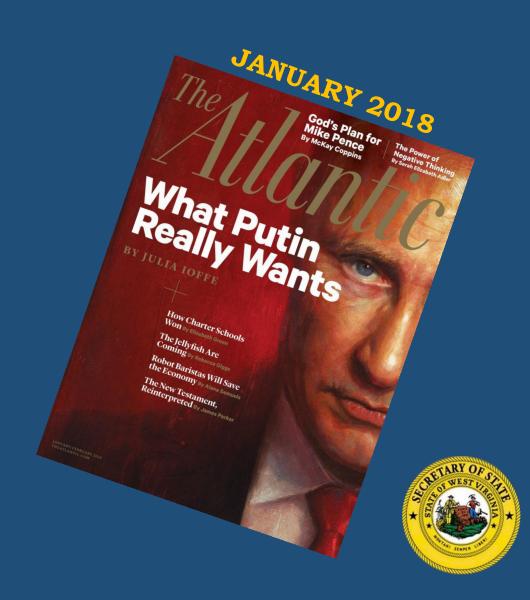




### Don't fall for it!















## Strategic

Employment of National Power

Resources Economic Political Military

Psychological Informational



### Who Is Behind It?

To Putin, ends justify the means

2016 - Russia spent \$millions distributing misleading & false info on social media to:

- Pit people against one another
- to doubt election systems & results
- Turn citizens against government

Create distrust, sow discord & generate chaos

### What are the Goals?

#### **Immediate**

- Affect popularity of candidates
- Question election legitimacy
- Promote a desired outcome

#### **Mid-Term**

- Turn us on <u>ourselves</u>
- Polarize political discourse
- Don't trust government

#### Long-Term

- Promote Russian interests
- Divide, Discredit, Distract the West
- Degrade NATO cohesiveness\*



# Degrade NATO Effectiveness Senator Rubio Hacked

Tries to divide U.S & U.K. Want us to turn on ourselves



### Subversion

### Distractive Aggressive Activity

- 85% Russian foreign budget (15% espionage)
  - Overt, Legitimate, Observable; not a crime!



### Why Are They Doing It?

Can't compete economically

Can't stand toe to toe militarily

Only hope: bring U.S. down from the inside

#### **Subversion Stages:**

#### 1. Demoralize (15-20 yrs); attack:

- ✓ Religion
- ✓ Education
- ✓ Employer/E'ee Rel'ns
- ✓ Social Norms
- ✓ Law & Order

#### 2. Destabilize (2-5 yrs)

- ✓ Economy
- ✓ Law & Order
- ✓ Media

3. Crisis: call for intervention

#### 4. Normalize New Corrupt System

- Stabilize by force
- Eliminate activists, no more use for "- liberators"





### Transformative Commodities



The Information Age



### Today's Strategic Center of Gravity

### The Internet





## Russia's Operational Means

### Social Media Campaign





### How? Information Operations

#### Propaganda is as old as war itself

- Scale is new, given the internet
- Russia has weaponized the internet
- Russia "Information Dominance" vs US openness, security



#### Intensified by Artificial Intelligence (AI)

- Bad actors now run mass influence campaigns
- AI **targets** people most vulnerable to manipulation



### "Great Game" Cyber Style

Today's Clash of Civilizations Takes Place on Social Media

- China's "Art of War" win without fighting
- Russia's great chess tradition win by out-smarting opponent

#### Khrushchev

"You Americans are so gullible. You won't accept Communism outright; but we'll feed you small doses of Socialism until you finally wake up & find you already have Communism. We shall conquer you without firing a shot!"



- · America's "Spirit of '76" -- win on ideas, human freedom, liberal democracy
- North Korea, Iran/Terrorist Organizations also quite active
- Groundwork laid for foreign & domestic attacks



### The New "Great Game"

#### Data is the new oil

Clive Humby



- World powers now struggle for data superiority
   5G, AI, machine learning, quantum computing
- Data economic, political, & military importance
- All data/information becomes strategic



# IoT, Blockchain, Bluetooth, Artificial Intelligence (AI)

...the rising philosophy of the day, I'd say it is Dataism. David Brooks, NY Times

- Internet of Things (IoT) quantum leap in available data
  - Involves our whole lives; Siri & Alexa are "listening in"
- Bluetooth everything connected => data exchange
- Blockchain Unchangeable, permanent data storage
- AI Unfathomable capacity to retrieve/process data

#### **Enhances "Dataism"**

- Big Data 50 Billion devices
- "Universe consists of data flows"
- Value determined by contribution to data processing





### AI, Algorithms, Bots

#### AI is the new electricity

**Andrew Ng** 



- AI turns data into actionable intelligence
  - · National Security, Economic Competitiveness, Scientific Discovery
- AI allows micro-targeting to influence decision-making
- Algorithms set rules to get directed jobs done
- Bots "Web Robots" run tasks on internet, social media
- · Data-driven social media is key to public opinion
  - To Influence, Decide, Create, Communicate
  - Connection Between Markets & Citizens





### Bluetooth

Wireless connecting technology using radio waves to send data But, **does not directly connect to Internet** like cellular

#### **Vulnerabilities**

- Bluejacking people can send unwanted messages to others
- Bluesnarfing can access people's private information
- Blueborne can allow attacker to install malware or steal credentials.

#### **Bluetooth Devices**

- Smartphones
- Tablets
- Appliances
- Health-tracking devices
- GPS trackers
- Headphones

- Cameras
- Televisions
- Automobiles
- Window and door locks
- Security systems
- HVAC Systems



### How Does This Apply to Us?

IDENTIFY DEMOGRAPHIC

CREATE TARGETED
CONTENT



they achieve goals on softer targets using AI, algorithms, bots, & micro-targeting



**ANALYZE & ADJUST** 

**DEPLOY CONTENT** 



# Using Our Strengths Against Us

#### Freedom is the American Spirit

2016 - Russia's meddling in U.S. elections  $cost < \frac{1}{2}$  expense of a single fighter jet.

#### <u>US Strengths = Freedoms</u>

- Freedom of press
- Freedom of speech
- Freedom of religion
- Freedom of assembly

Russia has leveraged all of these via social media!



### Uses Human Emotions/Frailties

Psychological factors used to get people to click...

Panic - "Your bank account is compromised. Verify your # ..."

Fear - "Your credit card shows irregular activity..."

Hope - "You have won..."

Charity - "You can help..."

Concern - "You do not have the latest upgrade..."

Security - "Your system has been compromised..."

Social need - "Join your friends..."

Esteem - "Be the first..."

Solution: Stop, Consider Options, Risk Analysis, Verify, then Act

### The Power of Social Media

Total Population



7.5 BILLION Using social media, easy for Russia to:

- Reach millions w/ minimal costs
- Masquerade as your friend
- Exploit divisive/heated issues in U.S.
- Diminish front-runner, sow discord
- Incite opposition, protests

Internet Users

Generate mistrust



Push the fringes

BILLION 59%

Active Social Media Users



BILLION 40%

Unique **Mobile Users** 



BILLION 67%



### 2016 Russian Social Media

Known false or misleading activity



Twitter: 10 Million Tweets



Instagram: 116,000 posts



Facebook: 61,000 posts



Additional Videos: 1,000+

10,178,000



 $\Rightarrow$  = 28,000 actions per day



### Russia Scanned All 50 States

> 20 had "extra penetrating measures"

#### **States Targeted** According to DHS

1. Alabama

2. Alaska

3. Arizona

4. California

5. Colorado

7. Delaware

8. Florida

9. Illinois

10. Iowa

11. Maryland

12.Minnesota

13.North Dakota

14.Ohio

15.Oklahoma

16.Oregon

6. Connecticut 17.Pennsylvania

18.Texas

19. Virginia

20.Washington

21.Wisconsin



# Russias Tactical Employment

Focused on You!



### Why YOU?

It starts with **YOU!** You are **1 of 4 billion** internet users.

- 18-24 Social media presence is highest
- You're most likely to share posts
- High school seniors newest generation of voters





2020 first-time voters – be educated & prepared!



### Russia's Target the American Spirit





### Disinformation

Altered candidate's photo to manipulate public

**Pro-Stacey Abrams** 



**Anti-Stacey Abrams** 





### Competing Rallies

Creation & promotion of competing protests

**Pro-Trump Rally** 



**Anti-Trump Rally** 

Both on Nov 12, 4 days after election!





### 3

### Inciting Tensions

Advertised competing protests at <u>same location & date</u>

Pro-Islam

Anti-Islam



Both May 21 in Houston

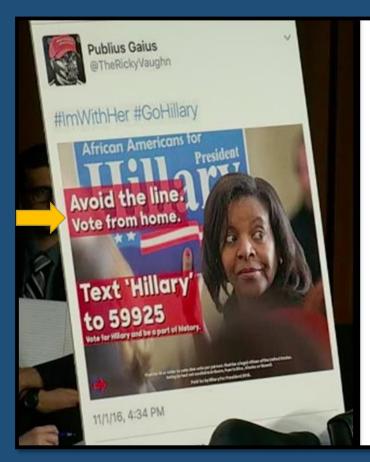


4

### Discouraging Voters

**Targeting Race** 

Black Liberation Flag





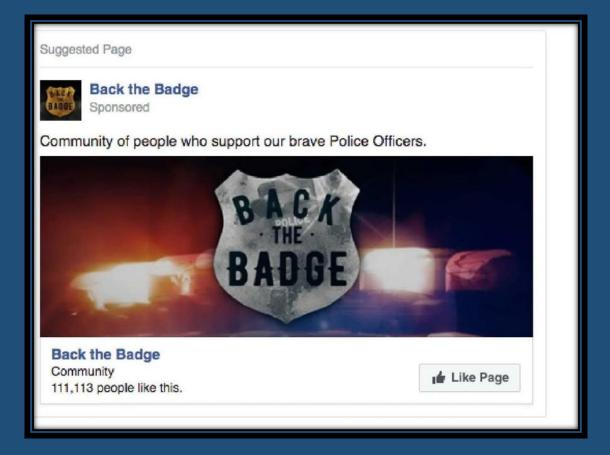


All out assault on African American voters using social media!

### Oppression

Social media ads that divide American society

Pro-Law Enforcement Anti-Law Enforcement







### Other Major Foreign Cyber Adversaries of U.S.



**IRAN** INTELLIGENCE **INFLUENCE** 

INTELLIGENCE & THEFT

**NORTH KOREA** RANSOMEWARE FOR \$



# Deep Fakes Now Extremely Hard to Spot

- · Super-imposing other peoples' faces onto real videos
- · Anybody can be impersonated on social media
- · Completely falsified videos, can be made to say anything



Real Barack Obama





Jordan Peele

### Altered Videos

Real video is slowed down, sped up, etc. to alter perception

<u>Unlike deep fakes, subject</u> <u>matter is not changed</u>







**Facebook:** "We don't have a policy that stipulates the information you post on Facebook must be **true.**"



### Misinformation vs Disinformation

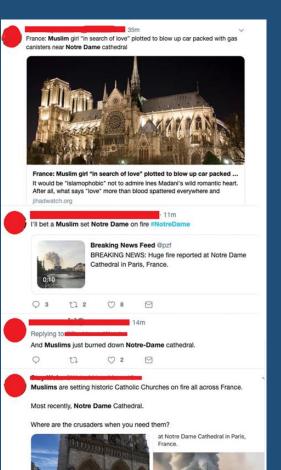
- Misinformation: inaccurate info, regardless of intent
- Disinformation: deliberately misleading, incorrect, or biased info; manipulated narratives, facts, propaganda, spread w/ intent to deceive or mislead
  - Ex: deep fakes, altered or augmented videos, partial truths



Appears "REAL", but consists totally of "FAKES"



## Misinformation Is Everywhere AI Failure





YouTube's defenses against misinformation just backfired in a big way -- and ended up contributing to baseless speculation online that the Notre Dame cathedral fire resulted from a terrorist attack.



## Anyone Can Spread Misinformation







### "Half-Truths"

Covington High School Students exploited by news & social media

There are always *two* sides to a story



1st reports
made student
appear as
aggressor;
yet, full video
shows man with
drum purposely
confronted
students



## Nancy Pelosi on Fake News Smear Propaganda

Used by both sides; as shown

it appears she is advocating for "WRAP-UP SMEAR" In context, she says this is what Reps are doing to her.

In either event, this is exactly what Russians are doing!



NANCY PELOSI ON
FAKE NEWS SMEAR PROPAGANGA



# Russian Disinformation Methodology Disinformation is like a virus

- Pick divisive issues (ex: race, religion)
- Plant fake news: specific area, or in 4 corners of world
- Use social media via legal purchase, hack, impersonation
- Boost original disinformation; plant 2nd report citing 1st fake
- Amplify conversation via extreme fringes (other Russian trolls!)
- Create controversy to get mainstream media coverage
- Organize protests to create disarray in the Western world



## Russia Wrap-Around Smear Operation Infektion

Infiltrated far more than just Facebook & Twitter



Targeted
internet
platforms
across <u>the</u>
world, posting
in at least
6 languages



## Taking Advantage of Chaos Russia weaponizing breaking news

- To bad actors, a crisis is an opportunity
  - In times of distress, people don't know what to believe
- Russian AI, Trolls, Bots
  - Programmed to act immediately upon strategic opportunities
- Opportunities for disinformation
  - Jeffery Epstein
  - Parkland, Florida Shooting
  - Ferguson, Missouri
  - Baltimore riots
  - Las Vegas mass shooting
  - Charlottesville



# Louisiana Chemical Plant Explosion Hoax Russian disinformation at work

- Announced fake chemical plant explosion in Centerville, LA
- Purposely spread false information
  - AI distributed false text messages to Centerville residents
  - Used social media accounts to spread false stories
  - Impersonated news outlets to amplify fear
- Created hysteria
  - News stories claimed ISIS was to blame
  - Intended to cause panic & confusion





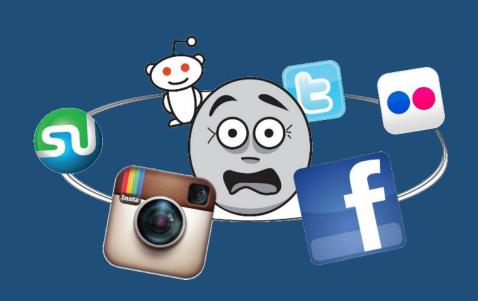
### Ransomware

### funding nefarious activities

- Harrison County Courthouse: West Virginia
  - Attack encrypted public records; City forced to pay ransom
  - Initially paid \$1,500; more payment was demanded
  - · Takes weeks to recover, prevents access to vital information
- North Korean cyber attacks
  - Reported in 15 countries; raised as much as 2 billion
  - \$ placed towards WMD
  - Will see more of this in future



### What Can You Do?







Protect

Detect

Correct



## 1ST

## First: Protect

- Be proactive; learn to spot fake news
  - Question validity of social media posts
  - Verify information using reputable sources to fact-check
- Protect yourself, your devices, & internet accounts:
  - Always use multi-factor authentication & complex passwords
  - Use a different password for every account
  - Think before you link, click or share anything questionable



## 1ST

### Protect

#### Examine the Web Link – *red flags*:

- A "5" in place of an "S", or a "0" in place of an "o"
- An extension on a legitimate site

#### Watch for

- Misspelled words
- Awkward/improper language
- Jokes, parodies, etc. from satire/humor sources
- Shocking, exaggerated headlines

Check sources & evidence!





### Second: Detect

- Identify phishing attempts & website impersonation
- Read <u>all</u> unauthorized access notices or alerts (email, texts, etc.)
- Don't ignore suspicious activity
- Ransomware locks all data, pay \$ to regain access

#### U.S.A EMBASSY

From American Embassy cuterribuscy@us got or Add to Contains
To

#### U.S.A. EMBASSY

Embassy of United States of America in Abuja 7, Mambilla Street Off Aso Drive Matanna District, Abuja

Greeting to you, I am Mr. Fred Williams, extrary American Embassy Abuja-Nigeria, thank you so much a get back to my e-mail regarding the money you have lost based a rigiding scam activities in Africa especially Nigeria, the US, UN, Extra AU has admit with the federal government of Nigeria to combat a secent increasing in fraud by the dubious observe of the third process.

We have carried out Investigation to many Office departments in African countri

Also, Regarding different emails you are receiving from people claiming to be President of Central Bank of Nigeria (CBN), we want you to stop any further communication with them. From: onlinebanking@ealerts bankofamerica.com

Subject: Bank Of America Alert: Account Suspended Date: Tue, 26 Apr 2011 05:41:38 +0200



Online Banking

#### Dear Valued Member,

We noticed invalid login attempts into you account online from an unknown IP address.

Due to this, we have temporarily suspended your account.

We need you to update your account information for your online banking to be re-activated please update your billing information today by clicking

here www.bankofamerica.com/account/re-activation/ After a few clicks,

just verify the information you entered is correct. Sincerely,

BOA Member Services Team

P.S. The link in this message will be expire within 24 Hours. You have to update your payment information

© 2010 BOA LLC. All Rights Reserved.



## **2** ND

### Detect:

#### Some Fact-Checking Resources

- Opensecrets.org
  - ✓ shows who receives \$ from Russia
- Realorfake.org
  - ✓ exposes fake news sites
- Politifact.com
  - ✓ fact checks US politics
- Factcheck.org
  - ✓ holds politicians accountable
- Stopfake.org
  - ✓ fact-check by Ukrainian profs & students

- Polygraph.info
  - ✓ fact check by Radio Free Europe, VOA
- Sunlightfoundation.com
  - ✓ nonprofit newsroom
- Propublica.org
  - ✓ nonprofit newsroom
- Bellingcat.org
  - ✓ distributed, collaborative investigating
- WhatsApp
  - ✓ new tip line for misinformation (India)



## Detect: Suspicious Emails

From: MS Settings Setup <officialsetin@micromsn365officials.org.com>

Sent: Monday, February 26, 2018 7:47 PM

To: Jackson County

Subject: Reset Password In Process

This message was identified as a phishing scam.

#### Microsoft Office Email365

#### Your New Password Request

Your password reset is in process and your current password will expire shortly, the password reset link will be forward to the new alternative email submitted

Ignore this email notification your request will takes effect shortly

#### If you did not request this password reset

Use Cancel Request button to cancel the password reset and keep your password unchanged

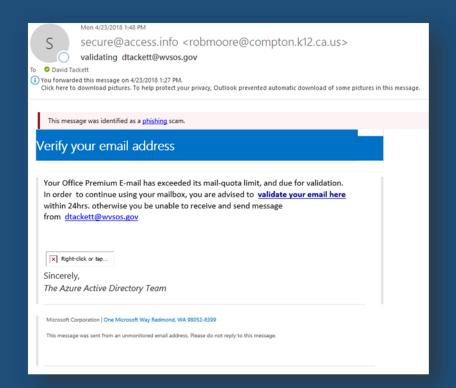
Cancel Request

#### This action will take a brief period before this request takes effect

This is a mandatory communication about the service. To set communication preferences for other cases.

This message was sent from the email address is not monitored. Do not reply to this message. Privacy | Legal Notices

Microsoft Corporation 600 Pine Street, Suite 352, Seattle, WA 98101, USA.



#### Spear Phishing, Whaling

Specific Targets/Credential Harvesting

\*Source: actual emails received by West Virginia officials



## **2** ND

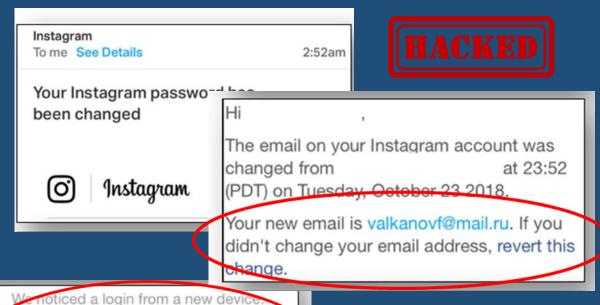
## Detect: Anyone Can Be Hacked

U.S. Senator's campaign, national news



Source: Washington Post

Personal social media compromised by Russia



MI 5s · Instagram app · Moscow, Russia
October 23 at 11:52 PM (PDT)





## Third: Correct

#### If you become a victim of a cyber incident:

- Take screen shot with cell phone (for IT to use)
- Turn-off devices & disconnect from internet
- Change passwords to ALL accounts on a different device
- Report to internet/social media providers
- If asked for ransom (\$ or other value), report to police





### The Power of Fake News

#### Everybody Sees it, Not Everybody Knows it

- Pew: 23% of adults shared a made-up news story
- Gets people to view news for "ammunition"
- To take what you believe, & believe it more. Moves people to fringes.
- Youth particularly targeted as vulnerable to misinformation
- Power of 1st impression: 60% continue to believe, even if corrected
- Bots & AI micro-targeting intensify effectiveness





## American Voting Machines

#### IMPORTANT FACT:

**NO EVIDENCE** that **ANY** Votes Were Changed In A U.S. Election!

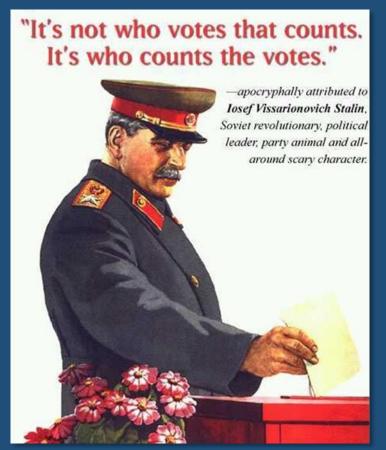
US voting machines are decentralized & maintained independently by *each state*.

#### **Voting machines:**

- 1. Are never connected to internet
- 2. Precincts managed independently by counties
- 3. Very difficult to hack; requires physical security breach
- 4. Produce paper ballots that are verified by each voter
- 5. Pre- & post-election audits ensure security & accuracy



## Media's Vital Role: They're a Target Too!



Former Soviet Dictator Joseph Stalin

#### Today, it's who reports the votes!

#### Food for thought

What if news agency is hacked & reports wrong winner? Can we trust reported outcomes today? Would public cry out for recount or new election? Would public question legitimacy of results?



## What's Going On?

Marvin Gaye

#### 3-Dimensional Chess

- 1. Body = Equipment, Ballots, Poll Books (no problems) TRUTH
- **2. Mind** = Process, Tabulation, Voter Registration, Reporting (some problems)
- 3. Spirit = American Psyche, Acceptance (real problems) TRUST
  This remains main vector of Russian attack
  Need both Truth AND Trust

When we buy into 
"America has never been so divided"
Russia wins!



### IT STARTS WITH YOU

"You can't fix stupid" Ron White

An Educated Public Protects Democracy (Ex: Face App)
Be Information Literate - Rely on the Human Dimension
Check sources; use Trusted Sources for critical info (elections!)
Seek accuracy over speed

Separate fact from opinion

Verify, confirm

Validate, authenticate

Don't depend on technology to solve fake news There is no algorithm to eliminate misinformation

You are our first line of defense!



## Connecting the Dots Election Meddling to US Legislation

#### **Russian Election Meddling in Western Democracies**

Sow discord in democratic processes

#### **Divide America by Pushing Fringes**

On-going social media effort to polarize America

#### What is Truth?

Government, Social media: both paralyzed

#### Social Media Self Regulate? US Government Legislate?

GDPR (individual owns) vs. US (market decides)



### Conclusion

#### Don't be a Russian Force Multiplier

- ✓ Stay alert: be conscious, aware & protect against false info.
  - Anticipate Russia's tactics; expose antics.
- ✓ Russia attacked minds/spirit;
  - > no success attacking voting machines.
- ✓ Race with no finish line: must stay ahead of bad actors.



# REMEMBER Russia Attacked Our Minds & Spirit, Not Our Machines

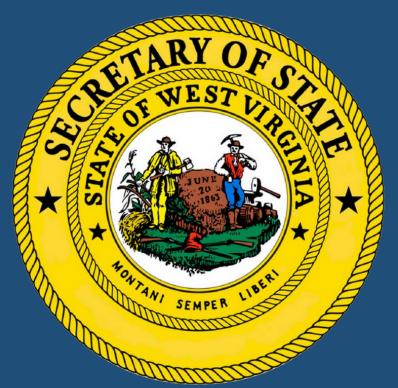
Summary Video



Full Video



## For more information, contact:



The Office of the Secretary of State
State Capitol
1900 Kanawha Blvd. East
Charleston, WV 25305
(304) 558-6000
Office Hours:
Monday - Friday 8:30 AM to 5:00 PM
Communications@wvsos.gov