What you need to know before we start

The following presentation is based on analysis of many reliable and credible sources

- U.S. Government documents (all UNCLASSIFIED)
- Documented analysis by academics, think tanks, independent researchers
- Multiple U.S., European, and Russian media sources
- References are included on most slides
- A reference list is available on request

The presentation is told from a Russian point of view

- This part is based on “informed speculation”
- Translation: A lot of guesswork
April 2016

The Kremlin

Our Plan for the U.S. Presidential Election

Speakers:
- Sergei Ivanov, Chief of Staff to President Putin
- “Tom”
Operation *Lakhta*

**Computer Network Operations**
- Use military and security agency hackers to penetrate DNC and DNCC
- Use Bitcoin to establish virtual private networks and data storage in U.S.
- Establish distribution channels for material collected by hackers
- Hack state election systems
- Create bots to help promote content on social media
- Develop a plausible deniability plan if our hackers are caught

**Social Media Operations**
- Task IRA with developing social media attack plan
- Create Facebook and Twitter accounts using stolen IDs and SSNs
- Register accounts on Facebook, Instagram and Twitter with fake names
- Buy ads on Facebook, taking advantage of lack of regulation and control
- Coordinate a disinformation campaign to include social media and print and TV to promote Donald Trump and disparage Hillary Clinton

*Source: Mueller Report*
The Panama Papers may have triggered the Russian cyber attack on the 2016 election

April 2016

- Putin’s involvement exposed by Russian reporters working with an international team
- Investigation exposed millions of dollars in offshore accounts of Sergei Roldugin, musician and Putin friend
- Putin already worried that Hillary would win the election and is determined to stop her

Source: The Red Web
Photo: Christian Science Monitor
The Soviet Union used overt and covert disinformation during the Cold War.

- Part of broader campaign of “active measures”
- Focus on NATO and discrediting U.S.
- Goal was to mislead policymakers and public
- Trust was the main casualty

1986 poster from Philippines,
Source: The Guardian, June 14, 2017
Ivan Rybkin – Candidate for President (2004)

- Chairman, Duma (1994-96)
- Secretary, Security Council (1996-98)
- Opposition candidate in presidential election
- Criticized Putin’s United Russia party after 2011 parliamentary elections
- Criticized Putin for staging terrorist attacks in Moscow
- Drops out of election after being victimized by “kompromat”

Source: Russian, UK, and U.S. media
Russia’s online media environment was quite open in the early 2000s.
Russian Presidents

• Boris Yeltsin (1991-99)
• Vladimir Putin (2000-2008)
• Dmitry Medvedev (2008-2012)
• Vladimir Putin – Since 2012
2011-13 protests target Putin and the fraudulent election process

- Massive protests against Putin’s reelection
- Putin blamed the Internet and uncontrolled information
- Response included more surveillance, additional regulations, and take-over of Russian Internet companies

Photo: Reuters/Sergei Karpukhin via The Atlantic
Russian disinformation efforts targeted Maidan Square protests (2013-14)

Photo: Brendan Hoffman Getty Images via Wired.com
Snowden revelations reinforced Russian thinking about the Internet

- Russian security services distrusted the Internet because of its U.S. origins
- Viewed the Internet as a “battleground for information warfare”
- Early efforts focused on UN treaty
- Later efforts used ITU to promulgate Russian ideas about “digital sovereignty”
- Putin declares the Internet a “CIA project” in February 2014

Source: Multiple
Russia’s strategic thinkers focus on the “information space”

“Gerasimov Doctrine”

- Lines between “war” and “peace” are blurred
- Non-military means of achieving goals more important
- Information conflict and special operations are key
- “Long distance actions” can defeat the enemy
- Information space creates asymmetrical options

Source: “Getting Gerasimov Right”
Russia’s Military Doctrine includes “information” and “popular opposition” as components of modern conflict

15. Characteristic features and attributes of modern military conflicts:

a. The coordinated application of military force and political, economic, information and other non-military measures, achieved with the broad utilization of popular opposition and special operations forces. (Emphasis added)

15. Характерные черты и особенности современных военных конфликтов:

а) комплексное применение военной силы, политических, экономических, информационных и иных мер невоенного характера, реализуемых с широким использованием протестного потенциала населения и сил специальных операций.

Russia’s annexation of Crimea in 2014 relied heavily on information operations

- Russian justification based on fear of “de-Russification” of Crimea
  - “Banderist could storm into Crimea”
  - “Black Sea bases could be taken by NATO”
- All government media used to spread disinformation
  - Politicians and diplomats engaged in the campaign
- Information “spetsnaz” groups used “swarm technology” to reinforce Moscow’s messages
  - Supplemented by other active measures including the “Little Green Men”

Source: “Anatomy of Russian Information Warfare”
Graphic: economist.com
Russian joint operations involving hacking and disinformation increased in 2014-2015.

And so, the stage was set for 2016.
Operation *Lakhta*

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**Social Media Operations**
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Source: *Mueller Report*
Russian military intelligence hacked the DNC and DNCC

- Units 26165 and 74455 engaged in hacking and distributing stolen material
- Unit 26165 primarily involved in hacking
- Unit 74455 assisted in development of distribution channels
  - Guccifer 2.0
  - DCLeaks
- Unit 74455 also hacked computers in several states

Source: Mueller Report
Photo: Stars and Stripes
Russian intelligence developed an operational infrastructure to gain access and implant remote access tools

- 2015 - APT29 entered DNC and DNCC
- 2016 - APT28 entered those systems

**Figure 1:** The tactics and techniques used by APT29 and APT28 to conduct cyber intrusions against target systems

**Source:**
- DHS “Grizzly Steppe” Report
- Mueller Report
The Russians used multiple social media platforms, and several methods to get their message across:

<table>
<thead>
<tr>
<th>Platforms</th>
<th>Tactics, Techniques, Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>• Sending operatives to the U.S. to obtain first-hand knowledge of key issues</td>
</tr>
<tr>
<td>YouTube</td>
<td>• Registering accounts with fictitious U.S. persons and groups (e.g. “@jenn_abrams”)</td>
</tr>
<tr>
<td>Twitter</td>
<td>• Purchasing over 3,500 ads on Facebook</td>
</tr>
<tr>
<td>Instagram</td>
<td>• Creating Facebook groups favorable to Trump campaign, e.g.</td>
</tr>
<tr>
<td></td>
<td>• “Being Patriotic”</td>
</tr>
<tr>
<td></td>
<td>• “Stop All Invaders”</td>
</tr>
<tr>
<td></td>
<td>• “Secured Borders”</td>
</tr>
<tr>
<td>Tumbler</td>
<td></td>
</tr>
<tr>
<td>Reddit</td>
<td></td>
</tr>
</tbody>
</table>

Source: Mueller Report
The Internet Research Agency in St. Petersburg

- Troll farm identified by Russian newspaper as early as 2013
- Staff paid $900 monthly to post comments on blogs and news articles
- Affiliated with pro-government youth groups
- New IRA HQ near St Petersburg established in 2014
The Internet Research Agency is close to the Kremlin and may take direction from there

- Confidante of Vladimir Putin ("Putin’s Chef")
- Owner of IRA
- Indicted for funding and organizing operations for the purpose of interfering with the 2016 U.S. presidential election

Source: Red Web; Mueller Report
Photo: Moscow Times
This is Sasha

- 20 years old
- “Commenter”
- High-school education
- Needs Russian language help
- Enters comments in online versions of local/regional newspapers in Russia
- Provided guidance on which opposition figures to attack

Source: This is Not Propaganda; Like War
This is Lena

- 24 years old
- College degree, philosophy major
- Excellent English
- “Blogger” focused on liberal causes
- Targets American social media
- Creates and manages multiple Facebook accounts
- Specializes in social issues

Source: This is Not Propaganda; Like War
We know something about the interworkings of the IRA thanks to this person

- TV reporter recruited by the IRA to join a project “for the good of the Motherland”
- Two Russian newspapers helped her with technology and a place to publish
- Lyudmila became “Cantadora,” a mystic blogger
- Political themes provided daily by her editors
- Documented IRA organizational structure

Source: *This is Not Propaganda*
Photo: Charles Maynes/The World via Public Radio International
Russian youth learn social media skills at summer camp

Camp Seliger, 2011

Source: Like War
Photo: RT
Russian disinformation used in European elections

• RT and Sputnik launch in France and Germany in 2014-15, including social media accounts
• Russian trolls (“sock puppets”) provide stories on several themes via Facebook
  • Western military aggression
  • Social unrest in EU countries
  • Western media hypocrisy
  • Merits of populism
  • Praise of Russia
  • Migrant or Muslim chaos
• All of these topics received multiple “likes,” “shares,” and “comments”

Source: The Economist, April 15, 2017
April 2017

The Kremlin

Looking Back at the Results
We assess with high confidence that Russian President Vladimir Putin ordered an influence campaign in 2016 aimed at the US presidential election, the consistent goals of which were to undermine public faith in the US democratic process, denigrate Secretary Clinton, and harm her electability and potential presidency. We further assess Putin and the Russian Government developed a clear preference for President-elect Trump.
We know many details about Russian interference in the 2016 presidential election

- “Multiple IRA Facebook groups and Instagram accounts had hundreds of thousands of U.S. participants. IRA-controlled Twitter accounts separately had tens of thousands of followers, including U.S. political figures who re-tweeted IRA content.”
- 470 Facebook accounts
  - 80,000 posts
  - 125,000 Americans
- 3,800+ IRA-controlled Twitter accounts
  - 1,400,000 Americans may have seen
- All social media operations were “highly organized” and “well-funded”
“Information manipulation” and themes in American social media

- Social and political topics of interest to U.S. audiences
  - Gun control, LGBT issues, Women’s march, NFL anthem issue

- Geopolitical topics of interest to the Kremlin
  - NATO, U.S. aggression in Syria, Support for Russian policies in Ukraine

- Apolitical topics used to attract and engage followers
  - Halloween costumes, recipes, pop culture

- Goal is to amplify the most corrosive voices and create bonds with “like-minded” groups to build trust

- Social media operations are not done in a vacuum, but part of a broader active-measures strategy involving many tools
Russian disinformation employed several tactics, techniques, and procedures

- Dismiss the critic
- Distort the facts
- Distract from the main issue
- Dismay the audience

- “The problem is ‘narrative warfare,’ not disinformation warfare. We have the facts, but they have the stories”

-- Ben Nimmo
“Sockpuppets” were very effective in social media accounts

- Pose as actual people with various functions
- Organizer of a trusted group (e.g. “@TEN_GOP”)
- Trusted news source (e.g. “@tpartynews”)
- Trustworthy individuals (e.g. grandmother or vet)
- Target extremes in U.S. politics

Source: *Like War*
Image: Sophos
Source: “View from the Digital Trenches”
Source: “View from the Digital Trenches”
SATAN: IF I WIN CLINTON WINS!
JESUS: NOT IF I CAN HELP IT!
America has always been hinged on hard-working people. If you remove jobs, you’ll remove our country from the world map. The state of Pennsylvania rose owing to multiple enterprises mining coal, producing steel, and creating the need for other jobs, groceries, doctors, dentists, insurance, gas, vehicles, mechanics and the list goes on. As far as Mr. Trump pursues the goal of creating more jobs and supports the working class. He said he would put miners back to work. We could... See More

Source: HPSCI Minority Report, “Exploring Russia’s Effort to Sow Discord”
NEW MODERN WARFARE BY BIRTH RATE TAKING OVER THE COUNTRIES WITHOUT SINGLE BULLET

BUT THEY WON'T TAKE OVER OUR COUNTRY IF WE DON'T LET THEM IN

NO THANKS

PRESIDENT TRUMP ENDS LONG TRADITION OF CELEBRATING END OF RAMADAN IN WHITE HOUSE LIKE IF YOU AGREE
Oxford’s Internet Research Institute analyzed data provided to the Senate Select Committee on Intelligence.

Table 1: The Volume of IRA Facebook Ads, Facebook Posts, Instagram Posts, and Tweets, Monthly Average

<table>
<thead>
<tr>
<th>Year</th>
<th>Facebook Ads</th>
<th>Facebook Posts</th>
<th>Instagram Posts</th>
<th>Twitter Posts</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>207</td>
<td>360</td>
<td>2,110</td>
<td>59,126</td>
</tr>
<tr>
<td>2016</td>
<td>564</td>
<td>2,442</td>
<td>2,611</td>
<td>57,247</td>
</tr>
<tr>
<td>2017</td>
<td>541</td>
<td>4,234</td>
<td>5,956</td>
<td>59,634</td>
</tr>
</tbody>
</table>

*Source: Authors’ calculations based on data provided by the SSCI.*

Source: The IRA, Social Media and Political Polarization in the United States, 2012-2018
Most IRA social media messaging targeted divisive topics or specific affinity groups.

Table 5: The Top 20 IRA Facebook Pages, Sorted by Number of Likes

<table>
<thead>
<tr>
<th>Facebook Pages Managed by the IRA (Top 20 Liked)</th>
<th>Number of Likes</th>
<th>Number of Shares</th>
<th>Number of Reactions</th>
<th>Number of Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being Patriotic</td>
<td>6,431,507</td>
<td>4,429,880</td>
<td>399,542</td>
<td>393,179</td>
</tr>
<tr>
<td>Stop A.I. (Stop All Immigrants)</td>
<td>6,050,989</td>
<td>5,202,716</td>
<td>552,684</td>
<td>778,924</td>
</tr>
<tr>
<td>Heart of Texas</td>
<td>5,489,337</td>
<td>4,986,384</td>
<td>590,664</td>
<td>414,599</td>
</tr>
<tr>
<td>Blacktivist</td>
<td>4,642,946</td>
<td>4,843,595</td>
<td>1,411,605</td>
<td>509,882</td>
</tr>
<tr>
<td>United Muslims of America</td>
<td>2,479,294</td>
<td>1,268,022</td>
<td>265,716</td>
<td>175,976</td>
</tr>
<tr>
<td>Army of Jesus</td>
<td>2,359,018</td>
<td>651,106</td>
<td>262,113</td>
<td>387,765</td>
</tr>
<tr>
<td>Brown Power</td>
<td>2,098,769</td>
<td>1,300,998</td>
<td>373,643</td>
<td>128,795</td>
</tr>
<tr>
<td>LGBT United</td>
<td>1,974,368</td>
<td>930,199</td>
<td>396,257</td>
<td>87,500</td>
</tr>
<tr>
<td>South United</td>
<td>1,419,503</td>
<td>2,263,031</td>
<td>101,931</td>
<td>72,461</td>
</tr>
<tr>
<td>BM (Black Matters)</td>
<td>1,333,173</td>
<td>1,797,479</td>
<td>325,864</td>
<td>146,254</td>
</tr>
<tr>
<td>Secured Borders</td>
<td>1,220,079</td>
<td>713,905</td>
<td>121,553</td>
<td>117,824</td>
</tr>
<tr>
<td>Defend the 2nd</td>
<td>986,969</td>
<td>551,847</td>
<td>90,228</td>
<td>39,530</td>
</tr>
<tr>
<td>Williams&amp;Kalvin</td>
<td>569,627</td>
<td>541,436</td>
<td>138,078</td>
<td>39,960</td>
</tr>
<tr>
<td>Woke Blacks</td>
<td>454,151</td>
<td>490,623</td>
<td>127,179</td>
<td>37,876</td>
</tr>
<tr>
<td>Back the Badge</td>
<td>410,364</td>
<td>155,524</td>
<td>63,765</td>
<td>26,274</td>
</tr>
<tr>
<td>Veterans Come First</td>
<td>330,662</td>
<td>307,021</td>
<td>45,057</td>
<td>33,302</td>
</tr>
<tr>
<td>Memopolis</td>
<td>135,704</td>
<td>78,996</td>
<td>21,061</td>
<td>13,002</td>
</tr>
<tr>
<td>Pan-African roots MOVE</td>
<td>124,938</td>
<td>152,931</td>
<td>44,929</td>
<td>15,655</td>
</tr>
<tr>
<td>Born Liberal</td>
<td>104,314</td>
<td>79,938</td>
<td>22,933</td>
<td>5,749</td>
</tr>
<tr>
<td>Black Matters</td>
<td>59,032</td>
<td>97,516</td>
<td>14,620</td>
<td>9,350</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>38,674,744</strong></td>
<td><strong>30,843,147</strong></td>
<td><strong>5,369,422</strong></td>
<td><strong>3,433,857</strong></td>
</tr>
</tbody>
</table>

Source: The IRA, Social Media and Political Polarization in the United States, 2012-2018
Facebook posts received high levels of audience engagement

Table 2: The Total Audience Engagement with Facebook Posts, by Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Shares</th>
<th>Likes</th>
<th>Emoji Reactions</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>1,388,390</td>
<td>2,104,487</td>
<td>478</td>
<td>131,082</td>
</tr>
<tr>
<td>2016</td>
<td>12,861,314</td>
<td>15,077,235</td>
<td>1,698,646</td>
<td>1,322,342</td>
</tr>
<tr>
<td>2017</td>
<td>16,714,594</td>
<td>21,644,714</td>
<td>3,695,278</td>
<td>2,001,882</td>
</tr>
<tr>
<td>Total</td>
<td>30,964,298</td>
<td>38,826,436</td>
<td>5,394,402</td>
<td>3,455,306</td>
</tr>
</tbody>
</table>

Source: Authors’ calculations based on data provided by the SSCI.

Source: The IRA, Social Media and Political Polarization in the United States, 2012-2018
There are good reasons to believe that Russian disinformation impacted the election

- Russian disinformation most likely affected late deciders
- Voters in key states who decided in the week before the election voted for Trump over Clinton by significant margins
  - 14% more for Trump in Wisconsin
  - 17 points more for Trump in Pennsylvania
  - 11 points more for Trump in Michigan
- Nationally, late deciders favored Trump 47% to 42%
- And 22% of the electorate with unfavorable views of both candidates broke for Trump 60% to 23%
- Disinformation helped suppress minority participation

Source: - “Late Deciders Loomed Large”
  - Cyber War
Unwitting Americans also contributed to spreading Russian disinformation

“Some IRA employees, posing as U.S. persons and without revealing their Russian association, communicated electronically with individuals associated with the Trump Campaign and with other political activists to seek to coordinate political activities, including the staging of political rallies. The investigation did not identify evidence that any U.S. persons knowingly or intentionally coordinated with the IRA’s interference operation.”

Source: Mueller Report, p. 53, emphasis added
Why is Russian disinformation so effective?

- **Western hubris and mirror imaging**
  - “The Russians wouldn’t do that to us because we wouldn’t do it to them.”

- **Psychological aspects helped spread disinformation**
  - *Homophily* (“Love of the same”) – People share posts with the like-minded
  - *Confirmation bias* – People believe what they want to believe or what they expect to be true

- **Intense human and computer-based effort**
  - “Computational propaganda” – algorithms ensure people and their friends see like-minded posts

“Once, every village had an idiot. It took the Internet to bring them all together.”

-- Robert Bateman
There is concern about hacking state and local election systems

(U) While the Committee does not know with confidence what Moscow’s intentions were, Russia may have been probing vulnerabilities in voting systems to exploit later. Alternatively, Moscow may have sought to undermine confidence in the 2016 U.S. elections simply through the discovery of their activity.

“CISA is committed to working collaboratively with those on the front lines of elections—state and local governments, election officials, federal partners, and vendors—to manage risks to the Nation’s election infrastructure. CISA will remain transparent and agile in its vigorous efforts to secure America’s election infrastructure from new and evolving threats.”

Source: - Senate Intelligence Committee Report
- DHS/CISA website on election security
What to do about it? Ways to deal with disinformation or “information manipulation”

• Create organizations to look for and respond to disinformation
  • Cyber Defense League (Estonia)
  • NATO’s Strategic Communications Center of Excellence (Latvia)

• Study, analyze, communicate
  • NATO’s Cooperative Cyber Defense Center of Excellence (Estonia)
  • Oxford University Computational Propaganda Project
  • “Hamilton 68” (German Marshall Fund, Alliance for Securing Democracy)

• Increase monitoring of social media platforms
  • Improved Code of Practice and Duty of Care policies
  • “Naming and shaming” perpetrators through indictments and publicity

• Expand the regulatory environment for social media companies
• Develop and use cybersecurity exercises to prepare for attacks

Source: German Marshall Fund; Independent research
In 2018, the U.S. began a new form of deterrence against Russian information operations

- Offensive cyber operations consistent with new U.S. cyber strategy and presidential executive order
- USCYBERCOM targeted Russian information operations personnel in run-up to 2018 midterms
- Possible actions against Russian hackers and trolls:
  - Texts, emails, pop-up warnings
  - Note: specifics not confirmed by U.S. Government
- Actions “below the level of armed conflict” necessary to protect integrity of U.S. elections and theft of U.S. intellectual property

Source: Washington Post, October 23, 2018
At least 70 countries now use “computational propaganda” for domestic political purposes.

Source: “The Global Disinformation Order”
And some countries also use computational propaganda in foreign policy.

Source: “The Global Disinformation Order”
Back to the future? July-August 2019 Moscow protests about local elections

https://www.democracynow.org/2019/8/12/the_next_step_is_the_kremlin
Election 2020

Stay Tuned

Thanks for your attention!