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Indicators and Warnings of Russian Military Offensives

By

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College of Emergency Preparedness, Homeland Security and Cybersecurity

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Abstract:

Russia’s invasion of Ukraine on February 24, 2022 was the only Russian military offensive that had adequate warning that the Russians would invade. The four previous instances of Russian military operations including intervention in Moldova (1992), invasion of Georgia (2008), annexation of Crimea (2014), and support for separatists in Eastern Ukraine (2014) all occurred without warning that Russia was going to invade and consequently, those target countries had no time to prepare. If NATO, allied combatant commanders, as well as their respective intelligence organizations want to be able to prepare and effectively respond in the future to Russian military operations, an understanding of potential indicators of pending Russian military actions including an estimate of when they can be expected to begin is required. Through an exploratory analysis approach, this thesis examined the four cases cited above along with the events that occurred prior to Russia’s invasion of Ukraine to examine and validate the following indicators of Russian military offensives: Tension, Military exercises, Passportization and the use/support of proxy forces. This thesis provides evidence that these indicators can be used to predict future Russian Military operations.

Key Words: Tension, Military exercises, Passportization, Proxy forces.
Acknowledgements:

I would like to acknowledge all three members of my committee: my Chair Dr. Michael Young, Dr. Brian Nussbaum, and Dr. Gary Ackerman. I want to thank you all not just for the help, advice, and support that you all provided me on my thesis but for all of the support and mentoring that you have provided me in the various classes that I have had with you since I started as a freshman.
Introduction:

Russia has intervened with conventional military forces in Eastern Europe in at least five cases since 1991: intervention in Moldova beginning in 1992 (Mackinlay & Cross, 2003), the Russian invasion of Georgia in 2008 (Kilcullen, 2020), annexation of Crimea in 2014 (Janes, 2020), support for separatists in Eastern Ukraine in 2014 (Brookings, 2020), and the February 2022 invasion of Ukraine. All but the last of these military interventions caught the West by surprise and in each case, largely unprepared to respond to Russia’s use of military force. No set of warnings or indicators of Russian military offensives has been identified and, as a result, target countries were unable to react until after Russia had initiated conventional military operations against them. Identifying a set of operationalizable indicators of Russian military offensives will provide NATO, allied combatant commanders as well as intelligence organizations with time to counter Russian military operations.

This paper presents the results of an exploratory analysis based on previous Russian military actions, review of previous case studies and reports of Russian military action, and review and analysis of speeches by Vladimir Putin and Dimitri Medvedev. Sources and Methods are addressed in Appendix A.

Definitions:

The following terms are used throughout this analysis

- Passportization: Passportization occurs when a country provides passports to members of a target population in another country, making them citizens of the country that issued the passport. The issuing country can claim that these people are citizens of their country and use this claim to justify actions to keep them safe.
• Tension: an ongoing economic or political disagreement that diplomatic efforts have been unable to resolve. Tension can be measured by statements from Russian officials that say a particular action is a current or potential threat to Russia. Examples of possible threats or indicators of elevated tensions between Russian and another country include cancellation of trade deals, expulsion of diplomats, threatening use of or imposing sanctions and detainment of foreign nationals.

• Escalation of Rhetoric: increase use of threatening language by a leader in speeches or written words that may indicate evolution of a crisis into military activity.

• Proxy forces: paramilitary forces controlled by one country that are used to attack another country.

Confidence Levels:

**High Confidence**: Generally, indicates that our judgements are based on high quality information and/or that the nature of the issue makes it possible to render a solid judgement. A “high confidence” judgment is not a fact it a certainty, however, and such judgments still carry the risk of being wrong.

**Moderate Confidence**: Generally, means that the information is credible sourced and plausible but not sufficient quality or corroborated sufficiently to warrant a higher level of confidence.

**Low confidence**: Generally, means that the information’s credibility and/or plausibility is questionable, or that the information is too fragmented or poorly corroborated to make solid analytic interferences, or that we have significant concerns or problems with the sources.

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1 Definitions come from NIE: Iran Nuclear capabilities and intentions, 2007
**Key Judgments:**

Russian military interventions can be predicted with the following indicators: Tension, Military exercises, Passportization and the use/support of proxy forces.

- I assess with high confidence that military exercises are an indicator of Russian military operations within 5 days of the conclusion of the exercise, when:
  - There is an ongoing tension between Russia and a target country that has been going on for at least 3 months.
  - Military exercises are held in or after the third month.
  - Military exercises are conducted in a region where both Russia and the target country share a border.
  - Military exercises occur within 77 miles of the target countries border.

- I assess with high confidence that Passportization is an indicator of Russian military intervention a year or more after passportization begins.

- I assess with high confidence that an increase in proxy force activity is an indicator of imminent (within 1 week) Russian military intervention when:
  - the Proxy Forces were already in existence
  - there is an ongoing tension between Russia and the target country.

- I assess with moderate confidence that proxy force activity is a indicator of Russian military intervention.

- I assess with low confidence that pro-Russian protests are an indicator of Russian military intervention.

- I assess with low confidence that escalation of rhetoric is an indicator of Russian military intervention.
• Information warfare is a potential indicator, but more research is required to determine whether it is predictive of Russian military intervention.

Substantiation

As shown in Table 1, Tension, Military exercises (4/5 cases), and Passportization (3/5 cases) are all strongly associated with Russian military intervention and the use/support of proxy forces is moderately associated (3/5 cases) with Russian military intervention.
Table 1: Breakdown of Cases and Indicators

<table>
<thead>
<tr>
<th>Case</th>
<th>Tension (&gt;= 3 months)</th>
<th>Military Exercises (3rd month or later)</th>
<th>Passportization (1 year or more)</th>
<th>Proxy Forces</th>
<th>Information Technical Warfare</th>
<th>Information Psychological Warfare</th>
<th>Escalation of Rhetoric</th>
<th>Pro-Russia Protests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention in Moldova</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Invasion of Georgia (2008)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Annexation of Crimea (2014)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Separatist Support Eastern Ukraine (2014-)</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Russo-Ukraine War (2022-)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
Military exercises are an indicator of Russian military intervention. In four of the five cases of Russia conducted a military exercise prior to military intervention. This included the invasion of Georgia, the annexation of Crimea, the support of separatists in Eastern Ukraine and before the invasion of Ukraine, Russia conducted military exercises within 77 miles of the target’s border before conducting conventional military operations (See Table 2 for a listing of military exercises conducted before Russian military intervention).

Table 2 Location and Timing of Russian military exercises prior to Initiation of military action

<table>
<thead>
<tr>
<th>Case</th>
<th>Exercise Dates</th>
<th>Name of Base / Russian Military District Location</th>
<th>Distance from border</th>
<th>Target Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invasion of Georgia 2008</td>
<td>July 15 - Aug 2</td>
<td>Borzoy / Southern Military District</td>
<td>25 miles</td>
<td>Georgia</td>
</tr>
<tr>
<td>Annexation of Crimea 2014</td>
<td>Feb 27</td>
<td>N/A</td>
<td>N/A</td>
<td>Ukraine</td>
</tr>
<tr>
<td>Eastern Ukraine 2014</td>
<td>Mar 13 - Mar 31</td>
<td>Belgorod / Western Military District</td>
<td>20.9 miles</td>
<td>Ukraine</td>
</tr>
<tr>
<td>Eastern Ukraine 2014</td>
<td>Mar 13 - Mar 31</td>
<td>Kursk / Western Military District</td>
<td>59.7 miles</td>
<td>Ukraine</td>
</tr>
<tr>
<td>Eastern Ukraine 2014</td>
<td>Mar 13 - Mar 31</td>
<td>Tambov Airbase/ Western Military District</td>
<td>230 miles</td>
<td>Ukraine</td>
</tr>
<tr>
<td>Eastern Ukraine 2014</td>
<td>Mar 13 - Mar 31</td>
<td>Chkalov / Southern Military District</td>
<td>44.3 miles</td>
<td>Ukraine</td>
</tr>
<tr>
<td>Ukraine 2022</td>
<td>Feb 10 - Feb 20</td>
<td>Obuz-Lesnovsky / Belarus</td>
<td>76.9 miles</td>
<td>Ukraine</td>
</tr>
<tr>
<td>Ukraine 2022* (Note 1)</td>
<td>Feb 10 – Feb 20</td>
<td>Pribytki Air Base / Belarus</td>
<td>16.15 miles</td>
<td>Ukraine</td>
</tr>
</tbody>
</table>

* Pribytki airbase was not one of the bases that Russia and Belarus said they would be using during exercise Allied-Resolve (2022), however, Russian forces were sighted there on February 17th, 2022 (Janes, 2022, TASS, 2022).
Maps of Russian military bases used prior to military action:
Russo-Georgian War

(Google, n.d.), [Map of Russian Invasion of Georgia], Retrieved May 12, 2022, from https://www.google.com/maps/d/u/0/edit?mid=1hWKFQ13q3x3sjpraqTTTr-mF8dbiFOCak&ll=42.8426324149645%2C44.11122645235588&z=8

Support for Separatist in Eastern Ukraine
(Google, n.d.), [Map of Russian Support for Separatists in Eastern Ukraine], Retrieved May 12, 2022, from https://www.google.com/maps/d/u/0/edit?mid=1v5TbFBF6Shl3eh-Hz5ayYnvv-4ct4ld8&ll=49.870698925493826%2C38.83789210000002&z=6

Russo-Ukrainian War

(Google, n.d.), [Russian invasion of Ukraine], Retrieved May 12, 2022, from, https://www.google.com/maps/d/u/0/edit?mid=1c6VVsbsD9iOLEB7BZs2GTuZzldvtnFEB&ll=52.77545382108458%2C27.0647726947357&z=7
On Jan 5th, 2008, Georgia voted to join NATO (Thai News Service, 2007). Tension between Russia and Georgia was observed on April 4th at the Russia-NATO Summit, after Georgia secured a plan from NATO for eventual membership (RFE, 2008). In response to this President Putin commented that “The appearance on our border of a powerful military bloc… will be taken in Russia as a direct threat to our security” (RFE, 2008; Kremlin RU, 2008). Starting on July 15th the Russian Army held the “Kavkaz” (Caucasus) exercises. The exercise was officially about counter terrorism operations (Cohen & Hamilton, 2011). However, during the exercise, the drills conducted involved invading another country and identification cards with images of Georgian soldiers, equipment and key personnel were passed out to the Russian units (Cohen & Hamilton, 2011). Kavkaz ended on Aug 2nd, and the war itself started on Aug 7th, 2008, when Georgian forces shelled south Ossetin separatists positions and invaded South Ossetia. The Russian army engaged the Georgian military the next day (Aug 8th) when they
captured the city of Tskhinvali, (in South Ossetia) and defended it from the Georgian Army (U.S. Army, 2015; CRS, 2008; Cohen & Hamilton, 2011).

The annexation of Crimea and the support of separatists in Eastern Ukraine both evolved from former Ukrainian president Victor Yanukovych’s refusal to sign a trade deal between Ukraine and the EU on November 21, 2013 (RAND, 2017A; FPRI, 2014). Tension between Russia and Ukraine was observed on Nov 25th when Vladimir Putin, in a press conference with Italy said, “If Ukraine signs a trade deal with Europe….This poses a threat to our economy” (Kremlin RU, 2014). On February 26th Russia announced a snap military exercise in the Southern and Central Military districts and on February 27th Little Green Men (Russian Special Forces) were sighted in Crimea (CSIS, 2020, CNN; 2014A; Reuters, 2014).
After Russia annexed Crimea in March 2014, The Russian military conducted another snap drill involving the Southern and Central Military Districts (Business Insider, 2014). Starting on March 13th, 2014, the Russian army conducted an exercise that included the use of artillery, rocket launchers and anti-tank weapons (CNN, 2014B; RFE, 2014). Tension between Russia and Ukraine was observed on March 14th, 2014, when, in response to accusations from Ukraine that Russia had sponsored the Pro-Russian protesters, the Russian foreign ministry responded by saying “The Kiev authorities have no control over the situation in the country. Russia is aware of its responsibilities for the lives of its compatriots and nationals in Ukraine and reserves the right to defend these people” (RFM, 2014). On April 7th, a week after the exercise ended, Separatists in Donetsk and Luhansk occupied government buildings in these provinces, declared independence and asked Russia to send peacekeepers (WSJ, 2014A; WSJ, 2014B). Russia’s
military intervened in Eastern Ukraine on August 14th, 2014, by entering Ukraine with a convoy of two dozen armored personnel carriers and other vehicles all equipped with Russian military identification plates (U.S. Army, 2014). On April 15th the Ukrainian army started combat operations against the Separatist forces (FPRI, 2014).

<table>
<thead>
<tr>
<th>Days Between Key Actions and Invasion of Ukraine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drone Strike 26 Oct 21</td>
</tr>
<tr>
<td>Statement from Kremlin 27 Oct 21</td>
</tr>
<tr>
<td>Russia invades 24 Feb 22</td>
</tr>
</tbody>
</table>

On Oct 26th, 2021, the Ukrainian army used a Turkish drone to destroy a Russian artillery piece being used by separatist forces in Eastern Ukraine (RFE, 2021). This was the first time that the Ukrainians had used drones in the conflict against the Russian backed Separatists (RFE, 2021). Tension was observed immediately between Russia and Ukraine, with Kremlin Spokesman Dimitry Pskov commenting on October 27th “We see that as such weapons fall into the hands of the Ukrainian military…this leads to destabilization. This does not contribute to the settlement of this internal Ukrainian problem” (Reuters, 2021). Following the use of drones by
Ukraine against the separatists, Russian began a period of significant military buildup along the Russian-Ukrainian border from November 2021 - February 2022 (Washington Post, 2021; RFE, 2021; Business Insider, 2021). On January 20th, 2022, it was first reported that Russia would conduct a joint military exercise with Belarus that was originally scheduled to run from February 9th - 19th (RFE, 2022), however, the dates for the exercise were later changed and the exercise was held from Feb 10th - Feb 20th (TASS, 2022). On February 20th, Belarusian officials announced that Russian troops involved in the exercise would stay past the 20th (Washington Post, 2022). Four days later (Feb 24th, 2022) Russia began its invasion of Ukraine (PBS, 2022; NPR, 2022).

**Passportization:**

In three of the five cases, Russia conducted passportization in targeted regions before it began a military intervention.

Russia issued passports to the citizens of South Ossetia and Abkhazia in early 2007, one year before the Russo-Georgian war (Kilcullen, 2020; REF, 2007; BBC, 2007). Russia also issued passports starting eight days before Russia annexed Crimea on February 27th, 2014 (RFE, 2014; TASS, 2014). The most recent occurrence of Russian passportization began in April 2019 when passports were issued in Donetsk and Luhansk provinces in Eastern Ukraine, three years before the start of the Russo-Ukraine war in 2022 (RFE, 2021). Although the timing of passportization has varied greatly, the act of issuing passports to citizens/residents of another country is assessed to signal an increased level of Russian interest and future military activity.

**Use of / Support of Proxy Forces:**

Detecting proxy forces in a country is difficult because equipping, training, and recruiting proxy forces is done in secret (Kilcullen, 2020; Mackinlay & Cross, 2003). Russian proxy groups
including The Night Wolves and Vostok Battalion, Russian Orthodox Army were active in Crimea and Eastern Ukraine beginning in February 2014 (ABC, 2014). However, the Night Wolves arrived after Russia annexed Crimea (ABC, 2014) and groups such as the Vostok Battalion, Russian Orthodox Army participated in fighting in Eastern Ukraine after the war started (NBC, 2014; RFE, 2014).

Russia’s Proxy force activity is assessed to be indicative of future Russian military intervention, provided proxy groups have already been established, and there is an ongoing tension between Russia and the target country. Russian proxy activity is likely will increase approximately one week before Russia conducts military operations. During the runup to the Russo-Georgian war in 2008, Russia used its proxies (South Ossetian and Abkhazian separatist groups) to harass the Georgians by repeatedly shelling Georgian villages along the border (Kilcullen, 2022; Cohen & Hamilton, 2011). This repeated harassment escalated on August 1st when South Ossetin separatists increased their attacks with snipers and bombed a police station (Kilcullen, 2020; BBC, 2008). This escalation forced the Georgian military to respond by shelling South Ossetian militia positions on the night of Aug 7th, 2008 (U.S. Army, 2015; Cohen & Hamilton, 2011; Kilcullen, 2020). The Russians used this Georgian artillery strike and the threat posed to Russian citizens as a justification to intervene (in early 2007 Russia had issued passports to the residents of South Ossetia and Abkhazia including the members of the militias) (Cohen & Hamilton, 2011). Russia has been backing the separatists in Eastern Ukraine since 2014 by providing them with arms, equipment, and training (U.S. Army, 2014; RFE, 2014; RAND, 2017A). One week before the Russo-Ukrainian conflict began in 2022, the separatists in Donetsk and Luhansk started launching artillery strikes against targets in Ukraine (CNBC, 2022) following the pattern in Georgia in 2008.
**Information Warfare:**

Information Warfare (IW) is a tactic that has been used by the Russians during previous conflicts (RAND, 2017). Russia’s IW operations are assessed to indicate Russian military intervention although the lag time is uncertain. Russia information warfare involves *information technical warfare* (attacking information systems that collect, process, and transmit information), as well as *information psychological warfare* (information that affects people) (Giles & Saeboyer, 2014).

**Information Technical Warfare:**

In four of the five cases examined, Russia used information warfare before conducting military intervention. During the Russo-Georgian war, Russia first used Information technical warfare (IWT) on July 20th, 2008, by launching Distributed Denial of Service (DDOS) attacks against governmental websites (White, 2018; Iasiello, 2017). The IW technical campaign against Crimea and supporting Separatists in Eastern Ukraine started in June 2013 a year prior to the annexation. (Looking Glass, 2015). Before the 2022 invasion of Ukraine, Russia launched DDOS attacks against various government websites on January 14th, 2022 (BBC, 2022) and again starting on February 15th, 2022, this time targeting both government websites and financial institutions (Janes, 2022).

**Information Psychological Warfare:**

In one of five cases Russia used IPW prior to conducting military operations. Starting on February 15th, 2022, Vladimir Putin accused Ukraine of “Systematically violating human rights on a large scale and continues to endorse discrimination against Russian speakers at the legislative level” (Kremlin RU, 2022). After this accusation, stories began to appear in Russian news that there were acts of genocide occurring in the Donbass (TASS, 2022). These
accusations were in addition to stories that were coming out of the Donbass that the Ukrainian military was bombarding Donetsk and Luhansk and had launched artillery strikes into Russia (TASS, 2022; Janes 2022). These news stories and accusations from Vladimir Putin and other members of the Russian government are assessed to have been part of a disinformation campaign that Russia launched before the start of hostilities to control the narrative surrounding the conflict and give their military a pretext for invading Ukraine.

**Pro-Russian Protests:**

In one of the five cases pro-Russian protests occurred before Russian military intervention. Starting in March of 2014, there were protests in Kharkov, Donetsk, and Luhansk where pro-Russian activists demonstrated and said that they wanted these respective regions to join Russia (WSJ, 2014; Guardian, 2014; Washington Post, 2014; NY Times, 2014).

**Escalation of Rhetoric:**

In one of five cases Escalation of Rhetoric was observed before Russian military intervention. Escalation of Rhetoric is not just the words that are used by a leader of a country but the meaning behind the words that are used (Post, 2005). The indicators that were used to look for an escalation in Putin’s rhetoric were need for power, need for affiliation, P1 (how Putin viewed the world around him) and I1 (strategic approach to political goals) and need for achievement, however, these indicators were not predictive of future Russian military offensives, despite a prior expectation that an increase in need for power and a decrease in need for affiliation are associated with a leader escalating a crisis and declaring war and that a leader with a more conflictual view of the nature of the political universe (low P1 scores) is more likely to escalate during an international crisis than those higher P1 scores (Young, 2021; Winter 1993, George, 2014). Escalation of Rhetoric can be used to determine when a leader will further
escalate a crisis or attack a target country (Post, 2005). An analysis of speeches given by Vladimir Putin before the Russian annexation of Crimea, support for Separatists in Eastern Ukraine and the invasion of Ukraine, as well as speeches made by Dimitri Medvedev before the Russian invasion of Georgia suggest that Operational Code Analysis\(^2\) indices are potential indicators of future Russian military offensives.

**Figure 1** Analysis of Vladimir Putin’s speeches

<table>
<thead>
<tr>
<th>Date</th>
<th>Days before Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-Nov-21</td>
<td>-103</td>
</tr>
<tr>
<td>1-Feb-22</td>
<td>-23</td>
</tr>
<tr>
<td>14-Feb-22</td>
<td>-10</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>21-Feb-22</td>
<td>-3</td>
</tr>
<tr>
<td>23-Feb-22</td>
<td>-1</td>
</tr>
<tr>
<td>24-Feb-22</td>
<td>0</td>
</tr>
</tbody>
</table>

An analysis of Putin’s speeches before the 2022 invasion of Ukraine (Figure 1) shows a series of drops in how Putin viewed the world around him (P1) and strategic approach to political goals (I1) (the graphs all end on the 24\(^{th}\) when Russia invaded Ukraine). The drops start on February 15\(^{th}\) when Putin spoke with German Chancellor Olaf Schultz. Putin expressed concern over NATO’s eastward expansion, blamed Kiev for violating the Minsk peace agreement, and accused them of violating Russian speakers rights in the Donbass. In the speech that was given on the 21\(^{st}\) of February Putin had a meeting with his entire security council, where they discussed

\(^{2}\) Operational Code Analysis focuses on “a leaders philosophical beliefs about the nature of the political universe and those concerned with the leaders choices and instrumental tactics” (Post, 2005, p. 26)
the situation in Ukraine (how the situation has deteriorated, blamed NATO and Ukraine for the escalation of the crisis and accused the Ukrainians of conducting genocide in the Donbass). On February 23rd Putin announced that he would recognize Donetsk and Luhansk and further blamed the Ukrainians for causing the crisis to escalate and on February 24th Putin invaded Ukraine. The Spike on the 23rd is due to Putin and the leaders of Donetsk and Luhansk signing the agreement that the Donbass would become part of Russia and saw a possible way to take control of those territories without a war, however that did not happen as both P1 and I1 dropped when Putin announced that he was conducting a special military operation to demilitarize and “de-Nazify” Ukraine.

Moldova:

The Russian intervention in Moldova in 1991 was different than the other cases of Russian military intervention. When Russia intervened in Moldova, the Russian 14th Guards Army was already stationed there before the people living in Transdniestria (a region in Moldova that has a heavy ethnic Russian population) rebelled and tried to break away (Mackinlay & Cross, 2003). Because the 14th Guards army was already stationed in Moldova, it enabled them to provide support for the people living in Transdniestria by initially providing them with covert weapons transfers and later fighting on their behalf during the battle of Bendery (Mackinlay & Cross, 2003).
Hypothetical Scenario 1: High Confidence

Below is a hypothetical scenario in which all high confidence indicators have been seen along with ITW and IPW.
Appendix A: Sources and Methods

Review of Potential indicators

Previous articles on Russian military operations have either focused on tactics that the Russians used (CSIS, 2021; RAND, 2017B; DOD, 2019; ISW, 2020A; ISW, 2015B; U.S. Army, 2015; U.S. Army, 2020) or on a Russian military operation (RAND, 2017A; ISW, 2022C; U.S. Army, 2013). Although these discussions are beneficial, they provide little information regarding what activities preceded Russian military intervention or only focus on a single instance of Russian military intervention. Although an in-depth analysis of a single case may reveal the potential indicators in that instance, there has been no comparison of indicators of Russian military operations across all known cases. The following potential indicators have been identified from various articles on Russian military intervention: Passportization (Kilcullen, 2020; Littlefield, 2007), Military Exercises (Radio Free Europe, 2020), Escalation of rhetoric (CNN, 2021), Information Warfare (NATO, 2015; White, 2018; Kilcullen, 2020), Creation of Protests (NYT, 2014), and Use of Separatist/Proxy Forces (Mackinlay & Cross, 2003).

Passportization

Passportization occurs when a country provides passports to members of a target population, making them citizens of the country that issued the passport (Kilcullen, 2020). The issuing country can claim that these people as citizens of the passport issuing country and can take certain actions to keep the citizens safe. In his book “The Dragons and the Snakes”, Kilcullen discusses the issue of passportization as a proxy for establishing legitimacy for involvement of one county in another (Kilcullen, 2020). Kilcullen’s reference to Russia’s use of Passportization in South Ossetia and Abkhazia served as an impetus for inclusion of this action as a possible indicator for this analysis. Russia issued passports to residents of South Ossetia and
Abkhazia (parts of Georgia that wanted to break away and join Russia) prior to the 2008 Russo-Georgian war (Littlefield, 2007; Kilcullen, 2020) and to separatist groups who were also in the region (militia groups who wanted their regions to become part of Russia). By giving both groups passports, they became “Russian” citizens. This provided Russia the ability to claim that their “citizens” were being attacked after the Georgian military shelled the separatists positions on Aug 7th, 2008. Russia continued the practice of issuing passports before the annexation of Crimea (Radio Free Europe, 2014; The Atlantic, 2014), and was allegedly conducting passportization in the Donbas before the separatists called for independence and requested Russian support on April 7th 2014 (Wrighton, 2018; Coalson, 2014; RAND, 2017, Basora & Fisher, 2014).

Military Exercises

Russia has conducted military exercises prior to military intervention in the war with Georgia in 2008, the annexation of Crimea in 2014, and the support of the separatists in Ukraine in 2014 (RAND, 2017A; Radio Free Europe, 2020; RAND, 2017B). Subsequent analysis (Dibb, 2014) suggests Russia used the snap military drills to conceal their military movements before the annexation of Crimea (Dibb, 2014).

Escalation of Rhetoric

Escalation of Rhetoric is not just the words that are used by a leader of a country but the meaning behind the words that are used (Post, 2005). Recent articles discussing the potential for Russia to invade Ukraine have suggested that escalation of rhetoric is a potential indicator of Russian military intervention (Washington Post, 2021A; Washington Post 2021B; Radio Free Europe 2021; CNN 2021). The decision to research Escalation of Rhetoric as an indicator was
due to news reporting from November 2021. In an article discussing the Russian military buildup at the Ukrainian border, U.S. Secretary of Defense Lloyd Austin said that the U.S. would continue to provide security assistance to Ukraine as well as help them with their “Euro- Atlantic aspirations”. Russia’s Deputy foreign minister, Andrey Rudenko responded to this by saying “Ukraine joining NATO would be an extremely dangerous move that would trigger retaliatory measures” (CNN, 2021). The Russian foreign minister’s response to Secretary Austin indicates Russia’s willingness to engage in potentially escalatory activities. Although no specific forms of retaliation were specified, the intimation by Minister Rudenko that Russia would consider broad actions in response to activities that it considered to be hostile or threatening represents use of escalatory rhetoric. Other articles that have focused on escalation of rhetoric include, “Escalation of Rhetoric Six simple steps” (The Atlantic, 2013), “Uncertainty in the South China Sea in the Wake of Trump’s inauguration (Geneva Graduate Institute, 2016) and “Macron warns of Escalation of Rhetoric after Biden genocide comment (The Hill, 2022). The articles from the Atlantic and The Geneva Graduate institute demonstrate how a leaders words can drive another country to take actions that could either turn a crisis into a war. Examples of this include or in the article by The Hill, how a leaders words can decrease the likelihood of both countries using diplomacy to end the conflict, in the article French President Macron said that his goal was to “stop war and rebuild peace and not use rhetoric like genocide to escalate tensions with Russia” (The Hill, 2022) Preliminary research has suggested that when a leader’s rhetoric has a high need for power, then it is likely that a leader will escalate a crisis a (Winter, 1993; Young, 2021).
Table 3 Analysis of Rhetoric before Russian invasion of Georgia

Table 4 Analysis of Rhetoric before Russian support of separatists in Eastern Ukraine
Information warfare

Information warfare (IW) is “an operation conducted in order to gain an information advantage over the opponent. It consists of controlling one’s information space….while acquiring and using the opponent’s information, destroying their information systems, and disrupting the information flow” (NATO, 2020, P.1). Information warfare can involve disrupting an enemy’s information space.
ability to communicate and disseminate information and inciting fear and distrust among that
country’s population. Russia used information warfare campaigns before the war with Georgia,
the annexation of Crimea, and the support of separatists in Ukraine in 2014 (RAND, 2017A;
NATO, 2015; White, 2018; ISW, 2015; Kilcullen, 2020).

Dissemination of propaganda from Russian news sources was another potential indicator
that was considered for this analysis. However, this potential indicator was dismissed since
Russian media is largely controlled by the government and is overwhelmingly Pro-Putin / Pro-
Kremlin in its reporting, making it difficult to determine what was actual news coverage vs
Russian propaganda.

Creation of Protests

Before the separatists in Ukraine revolted, there were allegations that Pro-Russian
protests in Ukraine (particularly in Kharkov) were being conducted by suspected Russian
operatives (New York Times, 2014; Buzz Feed, 2014; PBS, 2014; Slate, 2014; The Guardian,
2014). These allegations included demonstrators being bused in from Russia into Ukraine (PBS,
2014; The Guardian, 2014) and a Russian citizen from Moscow who was later confirmed via
posts to his social media to being among the protesters in Kharkov (Buzzfeed, 2014). Because
protests are easy to observe, and there are many ways, including posts to social media, to
confirm an individual’s participation in a protest, they are a plausible indication of future
Russian military intervention.

Use of Separatist/Proxy Forces

The Russo-Georgian war, the annexation of Crimea, and the war in Ukraine that started
in 2014 all involved separatist forces /proxy forces fighting alongside the Russian military.
However, in the case of Georgia, the proxy forces were involved before Russia intervened. (Mackinlay & Cross, 2003; Kilcullen, 2020; RAND, 2017B). Additionally, the ODNI report provided information regarding how Russia has been supporting Neo-Nazi groups in the U.S. and around the world. Russia’s support for Racially Motivated Violent Extremist (RMVE) has included, “amplifying politically devise issues that probably contribute to RMVE radicalization” (ODNI, 2022). Russia’s promotion of issues that can lead towards further radicalization and potential increase in recruitment among RMVE groups in the U.S. and the West demonstrates Russia’s willingness to use outside groups to promote their strategic goals. Therefore, proxy activity is determined to be a plausible predictor of future Russian military intervention (Mackinlay & Cross, 2003; Kilcullen, 2020; RAND, 2017B; ODNI, 2022).

**Research Methods**

Five cases of Russian military intervention were examined in detail to understand the background, including Russian use of passportization, participation in military exercises, escalation of rhetoric, use of information warfare, creation of protests and proxy force activity which preceded Russian military operations.

After collecting information on the background of each of the cases, the indicators identified above were researched to determine if they were predictive of Russian Military operations. Researching the indicators involved the following steps:

**Passportization:**

The LexisNexis database was searched for all news articles, official statements or reports that mentioned or discussed Russian passports being issued to a group of people in Georgia, Crimean, and Ukraine and any articles that have Russian officials admitting to Russian passports
being issued (for the Ukraine case, specific emphasis was placed on searching for passports being issued in the provinces of Donetsk and Luhansk, and for Georgia, searching for passports being issued in South Ossetia and Abkhazia). Any news article that mentioned passports being issued were sorted by target country (Georgia, Ukraine, or Crimea) and the date that the article indicated passportization had occurred. The Search terms and dates that were used included:

Crimea - Date range 11/22/2013- 2/27/2014, search terms: Russian passports in Crimea

Georgia - Date range 1/1/2007-8/7/2008 (David Kilcullen has reported that passportization occurred in early 2007 (Jan, Feb, March timeframe) and due to the level of confidence that is held in his information, any search that was looking for passportization included the period January 2007 up to the start of the war on August 7, 2008). Search Terms: Russian passports in Abkhazia, Russian passports in South Ossetia

Ukraine - Date Range 11/22/2013 - 4/7/2014 (Both the Crimea annexation and Ukraine separatists receiving support started from the same event, the refusal of the former Ukrainian President Victor Yanukovych to sign a trade deal with the EU which happened on 11/22/2013). Search Terms: Russian passports in Ukraine, Russian Passports in Donetsk, Russian passports in Luhansk.

Military exercises:

The LexisNexis database was searched for any news article or report that mentioned Russian military exercises that occurred before the invasion of Georgia, the annexation of Crimea, as well as support for separatists in Ukraine. The date ranges for Crimea and Ukraine are the same as the range of dates that were used when looking for passportization (Crimea-11/22/2013- 2/27/2014 and Ukraine -11/22/2013 - 4/7/2014). For the Russo-Georgian war, the
focus of the search time frame began on January 1st, 2008 and stopped on Aug 7th, 2008. This range aligned with the Russian invasion of Georgia which occurred on Aug 7th, 2008, as well as Georgia’s vote to become a member of NATO on Jan 5th, 2008.

Terms: “Russian military exercises”, “Russian military drill”, “Russian military snap drill”

Search Criteria for Ukraine: Date Range - 11/22/2013- 4/7/2014
Terms: “Russian military exercises”, “Russian military drill”, “Russian military snap drill”

Search Criteria for Georgia: Date Range – 1/1/2008 – 8/7/2008
Terms: “Russian military exercise”, “Russian military drill”, “Russian military snap drill” and “Kavkaz 2008”

**Escalation of Rhetoric:**

Different studies have investigated when rhetoric can be indicative of an attack and when rhetoric indicates a leader of a country will further escalate a crisis (Bluck & Suedfeld, 1988; George, 2014; Winter, 1993; Young et.al., 2020). Bluck and Suedfeld (1998) found that “attackers showed a decline in [conceptual] complexity between 3 months and 2 - 4 weeks before the attack”. Thus, a drop in conceptual complexity would indicate an escalation of rhetoric. George found that “a leader with a more conflictual view of the nature of the political universe (low P1 scores) is more likely to escalate during an international crisis than those higher P1 scores” (George, 2014 P.52) and “a leader that with a more conflictual strategy (low 11
scores) will employ more escalatory crisis behavior” (George, 2014, P.52). Thus, a decrease in P1 and L1 would indicate an escalation in rhetoric. Winter found that “a motive with profile of high power and low affiliation is associated with subsequent war” (Winter, 1993, P.11) and Young, et.al found that a unit increase in “Need for power doubles the probability that a leader will initiate a crisis” (Young et al., 2020, P. 9). Thus, a rise in the need for power and/or a drop in the need for affiliation would indicate an escalation of rhetoric. Based upon these studies, all speeches or statements that were given by any member of the Russian government before Russia conducted military operations were coded for Integrative complexity, need for power, need for affiliation, need for achievement and operational code. A drop in Integrative Complexity (between 3 months and 2 - 4 four weeks before Russia conducted military operations) would indicate an escalation of rhetoric. A decrease in the P1 and L1 operational code measurements for Vladimir Putin's speeches indicates he is increasing the use of escalatory rhetoric in that specific situation. High scores in the need for power variable, along with a low score in the need for affiliation variable are also indicators of escalation of rhetoric.

The LexisNexis database and the Kremlin.RU website were searched for any news article that had speeches or statements from any official of the Russian government (not just President Putin). Any speech or statement that was found was marked with the date that the speech or statement was given as well as who gave the speech or made the statement. The speeches were than downloaded, collected, and ran through the profiler plus software to look for: need for power, need for affiliation, operational code, and need for achievement.

Search terms for speeches:

Georgia: Date Range Jan 1,2008 – Aug 7, 2008
Terms: “Putin statements / speeches Georgia” “Dimitri Medvedev statements / speeches Georgia” “Putin statements / speeches South Ossetia” “Putin statements / speeches Abkhazia”

“Dimitri Medvedev statements South Ossetia” “Dimitri Medvedev statements Abkhazia”, “Russian Foreign minister statements Georgia” “Russian Foreign minister statements South Ossetia” “Russian Foreign minister statements on Abkhazia” “Russian Defense Minister statements Georgia” “Russian Defense Minister statements South Ossetia” “Russian Defense Minister statements Abkhazia”


Ukraine – Date Range Nov 22nd, 2013 – Apr 7th, 2014

Search Terms: Putin Statements / Speeches on Ukraine” “Dimitri Medvedev statements / speeches on Ukraine” “Russian Foreign Minister statements / speeches on Ukraine” “Russian Defense Minister statements on Ukraine”

“Russian Defense Minister statements on Ukraine

Information warfare (IO) (Information operations):

The LexisNexis database and Google Scholar were searched for any news article or government report (e.g., NATO, U.S. Government, RAND, Institute for the Study of War) that mentioned information operations being conducted against Georgia, Crimea, and Ukraine. This included attacks on Georgian, Crimean, and Ukrainian Critical infrastructure (cell towers, Wi-Fi-networks, government websites). The date range for searching for Information Operations remained the same for Crimea and Ukraine (11/22/2013 – 2/27/2014) and (11/22/2013-
4/7/2014) respectively. For the Georgia invasion, the date range used was: (1/1/2008-8/7/2008). The search terms were changed to be as broad as possible to maximize the opportunity for collecting relevant information. The initial search terms included “Cyber-attacks against Ukraine” and “Cyber-attacks against Georgia”. Based upon the information that was collected, the search criteria were narrowed (i.e., if a report said that Ukrainian cell networks were targeted, then the search terms were narrowed to “Cyber-attacks against Ukraine cell networks”).

**Creation of Protests:**

The LexisNexis database and Google Scholar were searched for any article or report that mentioned if there were any Pro-Russia protests that occurred in all three countries (Crimea, Georgia, and Ukraine) before the Russian’s launched conventional military operations. The dates that were used for Crimea, Georgia, and Ukraine were previously mentioned. The search terms for protests included:

“Protests in Ukraine” “Protests in Crimea”

“Protests in South Ossetia”

“Protests on Abkhazia”

**Support of Separatist Groups / Proxy Forces:**

The LexisNexis database and Google Scholar were searched for news articles or reports that Russia supported, provided support to, or used Proxy forces / separatist groups before they conducted unconventional operations. While searching to see if Russia used proxy forces or separatist groups, this study did not attempt to find out when the groups were formed (that would be extremely difficult to detect and is not relevant to this project). The focus of research for this
indicator was on reports that included information on Russian support of separatist or proxy groups, or Russian efforts to provide material or other forms of support to these groups. Additionally, while searching for information on separatist groups and proxy forces, if any information regarding “Volunteer militias” or “Volunteer groups” in Georgia, Ukraine and Crimea was identified, these articles were saved for later analysis. The search terms and dates that were used were as follows:

Crimea- Date range 11/22/2013 - 2/27/2014, Search terms: “Russian use of Proxy’s in Crimea”

Ukraine- Date Range 11/22/2013 - 4/7/2014, search terms: “Russia use of Proxy forces in Ukraine”

Georgia – Date range 1/1/2007-8/7/2008, Search Terms: “Russian use of Proxy forces / Separatist in Georgia”

The search criteria identified above allowed collection of all-relevant background information on the specific cases and indicators. If any of the potential indicators were identified or observed in a minimum of three of the cases, then they were treated as being predictive (these actions are an indicator of Russian military operations). It should be noted that just because one or more of the indicators identified in this analysis were not or are not currently being observed in a given region, it does not mean that they, or other new indicators, will not be seen at a later date.

The initial scope of the study included the application of the indicators to the countries of Latvia, Estonia and Finland (all three share a border with Russia) to determine what level of activity was occurring and what was the likelihood of a Russia attack. However, the Russian
invasion of Ukraine on 24 February 2022 and the resulting focus on application of the indicators to Ukraine prevented this phase of the analysis from being completed.

**Proposed Analysis**

The indicators identified above were assessed using the following criteria: (1) were they predictive (yes or no), and (2) if they were predictive, what was the timespan between the indicator being observed and Russia launching conventional warfare operations (days, weeks, or months). If three or more indicators were observed simultaneously, and all have a short timespan (between one and seven days of Russia launching conventional warfare operations) this resulted in the generation of a warning message. Additionally, the threat level of Russia utilizing conventional warfare could have been raised or lowered depending on what indicators were observed, what was the timespan between them being observed and the date that Russian initiated military action.

The confidence level that was assigned to the various indicators was based upon the following criteria:

Low confidence was assigned to an indicator if the indicator was not observed at all or was only observed in one case and was not predictive. The indicator lacked specific observable events or periodicity that could provide reliable warning.

Moderate confidence was assigned to an indicator if it was observed more than once but its ability to be predictive was unclear. The indicator may have had specific observable events but lacked periodicity that could provide reliable warning.
High confidence was assigned to an indicator if it was observed 3 times or more and its ability to be predictive was clear. The indicator had specific observable events and periodicity that provided reliable warning.

While every attempt was made to collect as much information as possible, there was the possibility that some articles, reports, or other documents would be either missing information or have incomplete information. This may have been caused by some of the relevant information may have been classified; The news reporting that was used could have been incomplete or unclear with regard to what was going on in the target country at the time or only offer up rumors that could not be independently verified.

There was no anticipated need to go before the Institutional Review Board for this study because qualitative analysis of secondary documents was conducted, and no interviews of individuals were conducted. The research bias that will have to be accounted for was , the bias from the individual reporters. The bias from the authors of the reports or articles that are being used will attempt to countered by triangulating information (using multiple sources to collect information on a single event). By triangulating information, this allowed for multiple perspectives of an event and “removed” the authors respective biases while gaining a clear understanding of what happened during an event or before Russia invaded Georgia, Crimea, or Ukraine. Without using multiple sources, this could have created a situation where important information could be missed, and this could have caused the final customer to receive bad information and have been unable to react/respond to Russian military operations.
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