# Global Zero Military Incidents Study

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# Nuclear Weapons Countries: Military Incidents March 2014 – April 2017

Update of original study released January 2016<sup>1</sup>

On November 24, 2015, Turkey, a NATO member, shot down a Russian plane that had allegedly entered Turkish airspace while conducting air strikes on Syria. The day before, South Korea conducted live-fire drills in the Yellow Sea despite threats from North Korea. The day after the Russian plane was shot down, India successfully tested a missile launched from the country's first indigenously developed nuclear attack submarine, the Arihant. Around the world, nuclear weapons countries are participating more frequently in military activities that can escalate into dangerous situations with catastrophic consequences.

Global Zero analyzed over 650<sup>2</sup> of these publicly known military incidents, culled from online media sources, that occurred over the past 3 years and involved nuclear weapons countries, as well as those under the U.S. nuclear umbrella, in the West (Europe, Canada and the U.S.), East Asia, and South Asia. Each incident has been categorized by region and type of event: air incident (with intercepts indicated); sea incident (with intercepts indicated); military exercise; test launch, flight, or preparation; cross-border incidents or border clashes; and defense news (i.e. military deployment and new weapon announcements). Listed chronologically, this record of incidents is far from exhaustive.

It is important to note defense officials characterize many of the incidents below as routine events. But the growing frequency and at times aggressive nature are troubling and can provide a slippery slope to nuclear use whether by accident or miscalculation. Within each region, incidents that greatly increase the likelihood of a direct military conflict breaking out are categorized as "high-risk." Those that stray from the norm of routine incidents, resulting in more aggressive or confrontational interaction that can quickly escalate to high-risk incidents or even conflict, are categorized as "provocative."

This brief is an analytical expansion of the incidents list provided in the Global Zero Commission on Nuclear Risk Reduction report released in April 2015.<sup>3</sup> Chaired by former U.S. Vice Chairman of the Joint Chiefs of Staff General James E. Cartwright and comprised of international military experts, the commission provided frank analysis of nuclear risk in today's climate and proposed bilateral and multi-lateral steps that can be taken by these nuclear weapons countries to mitigate these risks, including (1) an urgent agreement between the United States and Russia to immediately eliminate "launch-on-warning" from their operational strategy, and to initiate a phased stand down of their high-alert strategic forces, beginning with taking 20% of both countries' nuclear forces off launch-ready alert within one year and 100% within 10 years; and (2) a longer-term global agreement requiring all nuclear weapons countries to refrain from putting nuclear weapons on high alert. With increases in air and maritime military activity and developing nuclear weapons programs in regions plagued with tense territorial disputes, nuclear weapons countries should take heed and reverse course to prevent catastrophe.

<sup>&</sup>lt;sup>1</sup> The original brief can be found at <a href="http://www.globalzero.org/files/military">http://www.globalzero.org/files/military</a> incidents updated 12.14.15.pdf.

<sup>&</sup>lt;sup>2</sup> The total number of incidents is slightly higher than the sum of the entries listed as some entries consist of multiple incidents (see entry 40 under Russia and the West for an example). If there are more than one of the same incident in one entry the number of incidents is next to the type in parentheses (see entry 107 under Russia and the West for an example).

<sup>&</sup>lt;sup>3</sup> The full Global Zero Commission on Nuclear Risk Reduction April 2015 report can be found online at <a href="http://www.globalzero.org/files/global">http://www.globalzero.org/files/global</a> zero commission on nuclear risk reduction report.pdf.

# Russia and the West

Tensions between Russia and the West are in a heightened state, having been so since the start of the conflict in Ukraine. We analyzed 331 incidents involving Russia and Western countries (members of NATO and Eastern and Northern Europe). The two maps (Figure 1 and 2 below) provide a snapshot of activity over the past 3 years.



**Figure 1. Map of Military Incidents between Russia and the West** Each incident is color coded by type: yellow indicates an air incident; orange indicates an air intercept; blue indicates a sea intercept; brown indicates a military exercise; green indicates a test (launch or flight); and grey indicates defense news. Balloon markers indicate routine incidents while diamonds indicate provocative incidents and stars indicate high-risk incidents. Incident locations are approximations.

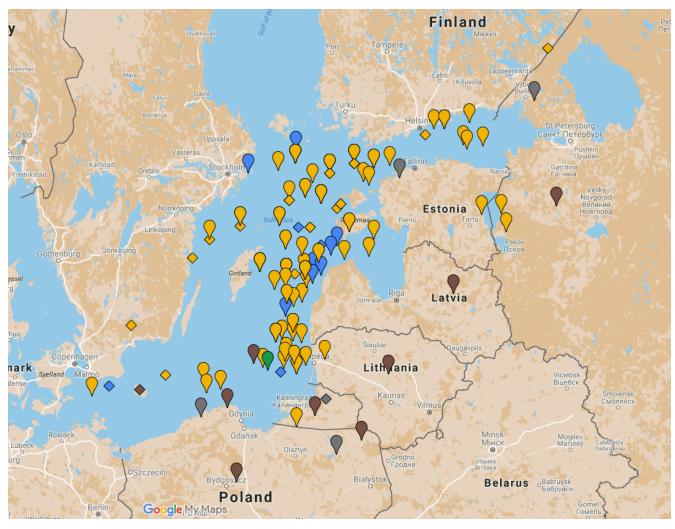


Figure 2. A closer look at incidents in the Baltic. Incident locations are approximations.

From the coast of Northwest United States to Eastern Europe, there has been a sharp increase in military incidents involving aircraft over the last three years. In 2014, NATO Sec. Gen. Jens Stoltenberg reported that Russian air activity had increased by 50 percent over the previous year, resulting in more than 400 intercepts of Russian aircraft by NATO fighter jets. By June 2015, NATO had scrambled aircraft deployments more than 250 times with over 120 of the 250 air intercepts that occurred in the first half of 2015 conducted by the Baltic Air Policing mission. The frequency of these intercepts has not been matched since the end of the Cold War.

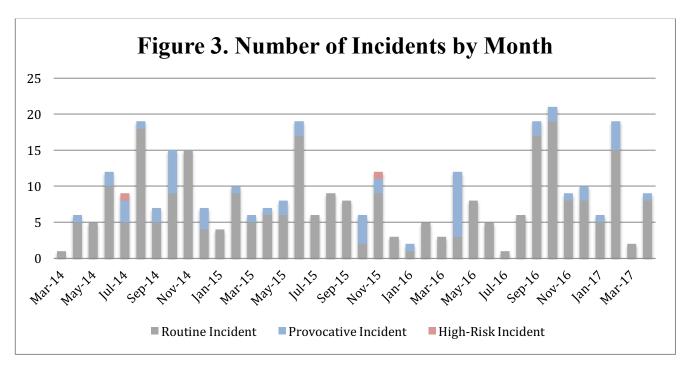
Of the 331 incidents between Russia and the West analyzed in this brief, 142 – or roughly 43 percent – were air intercepts, and 97 of those – roughly 68 percent of all air intercepts analyzed – were conducted over the Baltic.

<sup>&</sup>lt;sup>4</sup> Brad Lendon, "NATO jets scramble more than 400 times this year for Russian intercepts," *CNN World*, November 21, 2014, http://www.cnn.com/2014/11/21/world/europe/nato-russia-intercepts/.

<sup>&</sup>lt;sup>5</sup> Sam Jones, "Nato fighter jets intercept Russian aircraft," *Financial Times*, July 30, 2015, http://www.ft.com/cms/s/0/214bf25e-36ca-11e5-b05b-b01debd57852.html#ixzz3tNRhVxd7.

According to NATO officials, jets were scrambled 110 times to intercept Russian military aircraft over the Baltic in 2016. That's actually down from 2014 and 2015 when NATO jets were scrambled 140 and 160 times, respectively, but 2016 numbers still far exceed annual air incidents over the Baltic before the annexation of Crimea in 2014. NATO jets intercepted Russian aircraft just 43 times in 2013. Maj. Gen. Thierry Dupont, commander of NATO's Combined Air Operations Center, believes Russia's focus on activities in Syria could be responsible for the decrease from 2015 to 2016.

Almost half of the sea incidents analyzed – 12 of the 28 – also occurred in the Baltic Region, many of them consisting of reported sightings of Russian naval vessels near territorial waters. The Black Sea has also seen a heavier concentration of military incidents as both Russia and the West keep close watch on events in Crimea and Ukraine. According to Russian Navy Commander Adm. Viktor Chirkov, the number of patrols by Russian submarines, including nuclear submarines, from January 2014 to March 2015 rose by 50 percent. Amidst these more frequent air and sea patrols and escalating tensions, other mostly routine activities, such as military exercises and missile tests, can be mischaracterized, ratcheting tensions even higher.



Increases in military activity alone can be cause for alarm, but the nature of some incidents is also cause for concern, creating progressively dangerous situations that can more readily lead to confrontation. We have identified two high-risk incidents (those that have a high potential to lead to a direct military conflict) involving Russia and the West since March 2014: (1) the Turkish downing of a Russian plane near the Turkish-Syrian border in November 2015; (2) the downing of a commercial flight with nearly 300 onboard in Eastern Ukraine by an unclaimed Russian-made missile in July 2014. Either of these events could have easily triggered a military response or conflict.

<sup>9</sup> "Russian Nuclear Submarines Step Up Patrols Over Past Year – Navy Commander," *Sputnik International*, March 19, 2015, http://sputniknews.com/russia/20150319/1019714161.html.

<sup>&</sup>lt;sup>6</sup> Damien Sharkov, "NATO: Russian aircraft intercepted 110 times above Baltic in 2016," *Newsweek*, January 4, 2017 <a href="http://www.newsweek.com/nato-intercepted-110-russian-aircraft-around-baltic-2016-538444">http://www.newsweek.com/nato-intercepted-110-russian-aircraft-around-baltic-2016-538444</a>.

<sup>7</sup> Ibid.

<sup>&</sup>lt;sup>8</sup> Ibid.

We have also found 54 provocative incidents – those that stray from the norm of routine incidents, resulting in more aggressive or confrontational interaction that can quickly escalate to higher-risk incidents or even conflict. These incidents include 17 cases of Russian aircraft conducting intercepts at an abnormally close range, four instances of harassment of Turkish jets near the Syrian border, three searches for submerged foreign vessels spotted near or in territorial waters, a surge of US/NATO intercepts of Russian aircraft within a few days in October 2014, April 2016, and the repeated buzzing of a U.S. destroyer in the Black Sea. Provocative or high-risk incidents have occurred in 23 of the past 38 months.

Specifics of all incidents can be found in the incidents list below with high-risk and provocative incidents indicated

## 1. Provocative Incident

**Date:** April 20, 2017

**Type:** Air Incident: Intercept **Involving:** Russia and the U.S.

Location: off the coast of Alaska, USA

Summary: U.S F-22 and Canadian CS-18 fighters intercept two Russian Tu-95 Bear bombers near

Alaska.<sup>10</sup>

2. **Date:** April 19, 2017

**Type:** Air Incident: Intercept **Involving:** Russia and the U.S.

**Location:** off the coast of Alaska, USA

Summary: U.S. planes shadow a Russian IL-38 maritime patrol and anti-submarine plane near

Alaska.<sup>11</sup>

3. **Date:** April 18, 2017

**Type:** Air Incident: Intercept **Involving:** Russia and the U.S.

Location: off the coast of Alaska, USA

Summary: A U.S. AWACS E-3 surveillance plane intercepts two Russian Tu-95 Bear bombers

near Alaska. 12

4. **Date:** April 17, 2017

**Type:** Air Incident: Intercept **Involving:** Russia and the U.S.

Location: off the coast of Alaska, USA

Summary: Two U.S. F-22 fighters intercept two Russian Tu-95 Bear bombers near Alaska.<sup>13</sup>

<sup>10</sup> Paul McLeary, "Russian Planes Buzz Alaska Four Nights in a Row," *Foreign Policy*, April 21, 2017, http://foreignpolicy.com/2017/04/21/russian-planes-buzz-alaska-four-nights-in-a-row/.

<sup>11</sup> Paul McLeary, "Russian Planes Buzz Alaska Four Nights in a Row," *Foreign Policy*, April 21, 2017, http://foreignpolicy.com/2017/04/21/russian-planes-buzz-alaska-four-nights-in-a-row/.

<sup>12</sup> Paul McLeary, "Russian Planes Buzz Alaska Four Nights in a Row," *Foreign Policy*, April 21, 2017, http://foreignpolicy.com/2017/04/21/russian-planes-buzz-alaska-four-nights-in-a-row/. 5. **Date:** April 15, 2017

Type: Sea Incident: Intercept Involving: Russia and the U.K. Location: English Channel

**Summary**: The U.K.'s HMS *Sutherland* escorts two Russian warships, a support tanker and a tug

boat through the English Channel.<sup>14</sup>

6. **Date:** April 13, 2017 **Type:** Defense News **Involving:** NATO

Location: Orzysz, Poland

Summary: U.S. troops arrive in Poland as part of a multi-national force of over 1,100 soldiers

posted across the Baltic region to counter potential Russian threats. 15

7. **Date:** April 10-12, 2017

Type: Test Involving: U.S.

Location: F.E. Warren AFB, Wyoming, USA

Summary: The U.S. Air Force conducts a Simulated Electronic Launch of a Minuteman III

intercontinental ballistic missile.<sup>16</sup>

8. **Date:** April 7, 2017 **Type:** Defense News

**Involving:** Russia and the U.S.

**Location:** N/A

**Summary**: U.S. military officials say Russia has agreed to maintain a U.S.-Russia hotline aimed at preventing midair collisions in Syria despite earlier comments from Russia they were suspending "deconfliction" talks after U.S. missile strikes on a Syrian airbase.<sup>17</sup>

9. **Date:** Early April 2017

**Type:** Test

**Involving:** Russia **Location:** Baltic Sea

Summary: A Russian submarine starts cruise missile drills, successfully striking its target at a

training course belonging to the Russian Navy's Baltic Sea unit. 18

10. Date: March 17, 2017

<sup>13</sup> Paul McLeary, "Russian Planes Buzz Alaska Four Nights in a Row," *Foreign Policy*, April 21, 2017, <a href="http://foreignpolicy.com/2017/04/21/russian-planes-buzz-alaska-four-nights-in-a-row/">http://foreignpolicy.com/2017/04/21/russian-planes-buzz-alaska-four-nights-in-a-row/</a>.

sutherland-soobrazitelny-boiky-a7685751.html.

15 Lidia Kelly, "NATO deploys troops to Poland while concerns about country's army rise," April 13, 2017, http://www.reuters.com/article/us-nato-russia-poland-idUSKBN17F290.

Associated Press, "US officials say military hotline with Russia remains open," *Fox News*, April 7, 2017, http://www.foxnews.com/us/2017/04/07/us-officials-say-military-hotline-with-russia-remains-open.html.

<sup>&</sup>lt;sup>14</sup> Will Worley, "Russian warships escorted by Royal Navy through the English Channel," *The Independent*, April 16, 2017, <a href="http://www.independent.co.uk/news/uk/home-news/russian-warships-escorted-royal-navy-english-channel-hms-sutherland-soobrazitelny-boiky-a7685751.html">http://www.independent.co.uk/news/uk/home-news/russian-warships-escorted-royal-navy-english-channel-hms-sutherland-soobrazitelny-boiky-a7685751.html</a>.

http://www.reuters.com/article/us-nato-russia-poland-idUSKBN17F290.

16 Staff Sgt. Christopher Ruano, "ICBM test contributes to continued deterrence," *F.E. Warren Air Force Base online*, April 13, 2017, <a href="http://www.warren.af.mil/News/Article/1150747/icbm-test-contributes-to-continued-deterrence/">http://www.warren.af.mil/News/Article/1150747/icbm-test-contributes-to-continued-deterrence/</a>.

<sup>&</sup>lt;sup>18</sup> Damien Sharkov, "Russia Begins Submarine Cruise Missile Drills in Baltic Sea," *Newsweek*, April 10, 2017, http://www.newsweek.com/russian-baltic-sea-fleet-practices-submarine-cruise-missile-fire-581524.

**Type:** Defense News **Involving:** NATO

Location: Amari Airbase, Estonia

**Summary**: British-led troops arrive in Estonia as part of a multi-national force of over 1,100

soldiers posted across the Baltic region to counter potential Russian threats.<sup>19</sup>

11. Date: March 14, 2017

**Type:** Test **Involving:** U.S.

Location: Tonopah Test Range, Nevada, USA

Summary: The U.S. Air Force and National Nuclear Security Administration completes the first

qualification test of the B61-12 gravity bomb.<sup>20</sup>

12. **Date:** February 16, 2017 **Type:** Air Incident: Intercept **Involving:** NATO and Russia

Location: Baltic Sea

Summary: NATO fighter jets intercept a Russian Il-22 bomber and two Su-27 fighters.<sup>21</sup>

## 13. Provocative Incident

**Date:** February 15, 2017 **Type:** Sea Incident

**Involving:** Russia and the U.S.

Location: 30 miles off the coast of Groton, Connecticut, USA

**Summary**: A Russian Auxiliary, General Intelligence (AGI) spy ship is detected near a U.S.

submarine base.<sup>22</sup>

14. **Date:** February 14-16, 2017

**Type:** Test Fire (4) **Involving:** U.S.

Location: Pacific Missile Range, off the coast of California, USA

Summary: The U.S. conducts four successful tests of Trident II D5 ballistic missiles from an

*Ohio*-class ballistic missile submarine.<sup>23</sup>

15. **Date:** February 14, 2017 **Type:** Air Incident: Intercept **Involving:** NATO and Russia

<sup>19</sup> "British troops arrive in Estonia to deter Russian aggression in one of biggest deployments to region in decades," *The Telegraph*, March 18, 2017, <a href="http://www.telegraph.co.uk/news/2017/03/18/british-troops-arrive-estonia-deter-russian-aggression-one-biggest/">http://www.telegraph.co.uk/news/2017/03/18/british-troops-arrive-estonia-deter-russian-aggression-one-biggest/</a>.

<sup>20</sup> "NNSA, Air Force complete first B61-12 Life Extension Program qualification flight test at Tonopah Test Range," NNSA Press Release, April 13, 2017 <a href="https://nnsa.energy.gov/mediaroom/pressreleases/nnsa-air-force-complete-first-b61-12-life-extension-program-qualification">https://nnsa.energy.gov/mediaroom/pressreleases/nnsa-air-force-complete-first-b61-12-life-extension-program-qualification</a>.

<sup>22</sup> "Russia spy ship located near U.S. submarine base in Connecticut," *CBS News*, February 15, 2017, http://www.cbsnews.com/news/russia-spy-ship-us-submarine-base-connecticut/.

<sup>&</sup>lt;sup>21</sup> Julian Robinson, "NATO pilots intercept Russian fighter jets and bombers TWICE in three days above the Baltic Sea as Putin looks for weaknesses in Europe's defence," *Daily Mail*, February 21, 2017, <a href="http://www.dailymail.co.uk/news/article-4245806/NATO-pilots-intercept-Russian-jets-twice-three-days.html">http://www.dailymail.co.uk/news/article-4245806/NATO-pilots-intercept-Russian-jets-twice-three-days.html</a>.

<sup>22</sup> "Russia spy ship located near U.S. submarine base in Connecticut," *CBS News*, February 15, 2017,

<sup>&</sup>lt;sup>23</sup> Franz-Stefan Gady, "Pacific Ocean: US Navy Submarine Fires 4 Ballistic Missiles," *The Diplomat,* February 23, 2017, http://thediplomat.com/2017/02/pacific-ocean-us-navy-submarine-fires-4-ballistic-missiles/.

**Location:** Baltic Sea

Summary: NATO fighter jets intercept a Russian Il-22 bomber and two Su-27 fighters.<sup>24</sup>

## 16. Provocative Incident

Date: February 14, 2017 **Type:** Defense News **Involving:** Russia Location: Russia

Summary: Reports surface that Russia has secretly deployed a new ground-launched cruise missile

in violation of the Intermediated Nuclear Forces Treaty.<sup>25</sup>

## 17. Provocative Incident (1)

**Date:** February 10, 2017

**Type:** Air Incident: Intercept (5) **Involving:** Russia and the U.S.

Location: Baltic Sea

Summary: Russian aircraft intercept NATO aircraft four times, according to a U.S. Department of Defense official. The incidents involved Russian Su-24 Fencer and Il-38 aircraft. In another incident, a NATO aircraft intercepted a Russian aircraft. The DoD official noted aerial provocations by Russia are winding down.<sup>26</sup>

## 18. Provocative Incident (3)

Date: February 10, 2017 **Type:** Sea Incident (3)

**Involving:** Russia and the U.S.

**Location:** Black Sea

Summary: Russian aircraft conduct low passes of the USS Porter, a guided missile destroyer. The passes were characterized by a spokesman for U.S. European Command as "unsafe and unprofessional."<sup>27</sup> One armed Russian Su-24 flew within 200 yards of the destroyer, two other Su-24s later flew within 300 yards, and an IL-38 flew at low altitude. All of the aircraft flew without their transponders on.<sup>28</sup>

**19. Date:** February 8, 2017 **Type:** Test Launch **Involving:** U.S.

Location: Vandenberg Air Force Base, California, USA

<sup>24</sup> Julian Robinson, "NATO pilots intercept Russian fighter jets and bombers TWICE in three days above the Baltic Sea as Putin looks for weaknesses in Europe's defence," Daily Mail, February 21, 2017, http://www.dailymail.co.uk/news/article-4245806/NATO-pilots-intercept-Russian-jets-twice-three-days.html.

http://freebeacon.com/national-security/russian-jets-buzzed-u-s-destroyer/.

<sup>&</sup>lt;sup>25</sup> Michael R. Gordon, "Russia Deploys Missile, Violating Treaty and Challenging Trump," *The New York Times*, February 14, 2017, https://www.nytimes.com/2017/02/14/world/europe/russia-cruise-missile-arms-controltreaty.html?smprod=nytcore-iphone&smid=nytcore-iphone-share.

<sup>&</sup>lt;sup>26</sup> Oriana Pawlyk, "Russian Jets Buzz US Destroyer, Intercept NATO Planes," Military.com, March 3, 2017, http://www.military.com/daily-news/2017/03/03/russian-jets-buzz-us-destroyer-intercept-nato-planes.html <sup>27</sup> Bill Getz, "Russian jets buzzed U.S. destroyer," *The Washington Free Beacon*, February 14, 2017,

<sup>&</sup>lt;sup>28</sup> Courtney Kube and Don Melvin, "Russian Aircraft Buzzed a U.S. Destroyer in Black Sea: Pentagon," NBC News, February 15, 2017, http://www.nbcnews.com/news/world/russian-aircraft-buzzed-u-s-destroyer-black-sea-pentagonn721086.

**Summary**: The U.S. Air Force conducts a test of an unarmed Minuteman III intercontinental ballistic missile.<sup>29</sup>

20. **Date:** February 7-8, 2017 **Type:** Military Exercise **Involving:** Russia

Location: Around Moscow; Ashuluk, Russia

Summary: Russia conducts military drills, involving 45,000 troops and 200 air defense missile

systems. The exercises practice response to an air attack.<sup>30</sup>

21. **Date:** February 7, 2017 **Type:** Defense News **Involving:** NATO

Location: Rukla, Lithuania

Summary: German and NATO troops arrive in Lithuania as the first of four new battalions in the

region. The new battalions have no end dates, but will rotate every six months.<sup>31</sup>

22. **Date:** Early February 2017 **Type:** Air Incident: Intercept **Involving:** Russia and the U.K.

**Location:** Between the Faroe Islands and Shetland Islands

**Summary**: British Typhoon fighters intercept two Russian bombers. France and Spain take over the interception as the Russian bombers fly into the Bay of Biscay before turning back to Russia.<sup>32</sup>

## 23. Provocative Incident

**Date:** January 30, 2017 **Type:** Military Exercise

**Involving:** NATO and the U.S. **Location:** Zagan, Poland

**Summary:** U.S. Army tanks fire salvos to signal U.S. commitment to NATO. "The Iron Brigade," consisting of 87 tanks, 144 armed vehicles and 3,500 troops – the biggest deployment of U.S.

troops in Europe since the Cold War – carried out the drill.<sup>33</sup>

24. **Date:** January 30, 2017 **Type:** Military Exercise

**Involving:** U.K.

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http://www.nbcnews.com/news/world/nato-shows-firepower-poland-u-s-allies-worry-about-russia-n714156.

<sup>&</sup>lt;sup>29</sup> The Associated Press, "Air Force test-launches Minuteman missile from Vandenberg," *Air Force Times*, February 9, 2017, <a href="https://www.airforcetimes.com/articles/air-force-test-launches-minuteman-missile-from-vandenberg?utm">https://www.airforcetimes.com/articles/air-force-test-launches-minuteman-missile-from-vandenberg?utm</a> source=Sailthru&utm medium=email&utm campaign=EBB%202.10.17&utm term=Editorial%20-%20Early%20Bird%20Brief.

The Associated Press, "Russia deploys air defense missiles for massive drills, *Military Times*, February 9, 2017, <a href="http://www.militarytimes.com/articles/russia-deploys-air-defense-missiles-for-massive-drills?utm-source=Sailthru&utm-medium=email&utm-campaign=DFN%20EBB%202.9.17&utm-term=Editorial%20-%20Early%20Bird%20Brief.</a>

<sup>&</sup>lt;sup>31</sup> Andrius Sytas and Andrea Shalal, "NATO troops deploy in Lithuania, underscoring commitment to defense," *Reuters*, February 7, 2017, <a href="http://www.reuters.com/article/us-lithuania-nato-germany-idUSKBN15M2BZ">http://www.reuters.com/article/us-lithuania-nato-germany-idUSKBN15M2BZ</a>.

<sup>&</sup>lt;sup>32</sup> Joey Miller, "COLD WAR ALERT: RAF jets scrambled to intercept Russian bombers heading towards Britain," *Express*, February 9, 2017, <a href="http://www.express.co.uk/news/world/765268/raf-jets-scrambled-russian-bombers-uk-airspace">http://www.express.co.uk/news/world/765268/raf-jets-scrambled-russian-bombers-uk-airspace</a>.

<sup>33</sup> Bill Neely, "NATO Shows Firepower in Poland as U.S. Allies Worry About Russia," *NBC News*, Jnauary 30, 2017,

**Location:** Channel Tunnel

**Summary:** The U.K. military sends five tanks into the 30-mile "Chunnel" to test its effectiveness in deploying troops to Eastern Europe.<sup>34</sup>

**25. Date:** January 25, 2017 **Type:** Sea Incident

**Involving:** Russia and the U.K. **Location:** English Channel

**Summary:** U.K. warships and warplanes track Russia's aircraft carrier – Admiral Kuznetsov – through the English Channel. The ship, which is heading back to Russia from participating in air strikes in Syria, was called "a ship of shame whose mission has only extended the suffering of the Syrian people" by the British defence secretary. The Russian Defence Ministry "paid attention" to the remarks and commented that they "do not need escort services." 35

26. Date: January 23, 2017

Type: Air Incident: Intercept Involving: NATO and Russia

Location: Baltic Sea

**Summary**: NATO Typhoon fighters intercept a Russian IL-20 reconnaissance aircraft.<sup>36</sup>

27. **Date:** January 17, 2017 **Type:** Test Launch

**Involving:** Russia

Location: Plesetsk rocket site, Russia

**Summary:** Russia announces the successful test of the Topol-M intercontinental ballistic missile.<sup>37</sup>

# 28. Provocative Incident

**Date:** December 28, 2016 **Type:** Defense News **Involving:** Russia

Location: Russia's Hmeymin base in Latakia, Syria

**Summary:** An Israel satellite captures images of two Russian nuclear-capable Iskander ballistic

missiles in Syria.<sup>38</sup>

29. Date: December 19, 2016

Type: Test Fire Involving: U.S. Location: Hawaii

<sup>34</sup> Alexander Smith, "British Tanks Roll on Channel Tunnel Test Run Amid Trump, Russia Fears, *NBC News*, January 22, 2017, http://www.nbcnews.com/news/world/british-tanks-roll-channel-tunnel-test-run-amid-trump-russia-n708856.

<sup>&</sup>lt;sup>35</sup> IANS, "Russia angered as Britain's navy keeps eye on ship of shame," *The Hindu*, January 27, 2017, <a href="http://www.thehindu.com/news/international/Russia-angered-as-Britain%E2%80%99s-navy-keeps-eye-on-ship-of-shame/article17101771.ece">http://www.thehindu.com/news/international/Russia-angered-as-Britain%E2%80%99s-navy-keeps-eye-on-ship-of-shame/article17101771.ece</a>.

<sup>&</sup>lt;sup>36</sup> "NATO Scrambles Fighters After Russian II-20 Over Baltic Sea," *Sputnik*, January 23, 2017, <a href="https://sputniknews.com/military/201501231017279433/">https://sputniknews.com/military/201501231017279433/</a>.

<sup>37</sup> "Russian military conducts successful test launch of Topol-M ballistic missile," *RT*, January 17, 2017,

<sup>37 &</sup>quot;Russian military conducts successful test launch of Topol-M ballistic missile," *RT*, January 17, 2017, <a href="https://www.rt.com/news/374008-topol-missile-launch-russia/">https://www.rt.com/news/374008-topol-missile-launch-russia/</a>.

<sup>&</sup>lt;sup>38</sup> Barbara Opall-Rome, "Israeli Satellite Imagery Shows Russian Nuclear-Capable Missiles in Syria," *DefenseNews*, January 6, 2017, <a href="http://www.defensenews.com/articles/israeli-satellite-imagary-shows-russian-nuclear-capable-missiles-in-syria">http://www.defensenews.com/articles/israeli-satellite-imagary-shows-russian-nuclear-capable-missiles-in-syria</a>.

Summary: The U.S. test fires SM-6 missiles designed to intercept short-range and medium-range ballistic missile attacks at sea.<sup>39</sup>

30. **Date:** December 16, 2016

**Type:** Test Flight **Involving:** Russia

Location: Central Russia

Summary: Russia successful tests the PL-19 Nudol missile capable of knocking out strategic U.S. communications and navigation satellites. 40

### 31. Provocative Incident

Date: December 1-2, 2016 **Type:** Defense News **Involving:** Russia Location: Black Sea

Summary: Russian warships deploy to Crimea's western coastline to strengthen air defenses while Ukraine undertakes two days of missile tests. The tests also put Russian air defense forces on high

alert 41

### 32. Provocative Incident

Date: November 27, 2016

**Type:** Test Launch **Involving:** Russia **Location:** Undisclosed

**Summary:** Russia tests a nuclear-capable unmanned underwater vehicle, according to U.S.

Pentagon officials. The secret drone submarine was mistakenly disclosed by the Russian military in

late 2015.42

33. Date: Week of November 7, 2016

**Type:** Test Launch **Involving:** Russia

Location: Plesetsk rocket site, Russia

Summary: Russia successfully tests intercontinental ballistic missiles intended for the country's

"nuclear trains" program. 43

34. **Date:** November 3-9, 2016 **Type:** Military Exercise Involving: Russia and Serbia

<sup>&</sup>lt;sup>39</sup> Ryan Maass, "U.S. Navy test fires Raytheon SM-6 missile at sea," *UPI*, December 19, 2016, http://www.upi.com/Defense-News/2016/12/19/US-Navy-test-fires-Raytheon-SM-6-missile-at-sea/1221482172624/.

<sup>&</sup>lt;sup>40</sup> Bill Gerts, "Russia Conducts Fifth Test of New Anti-Satellite Missile," Washington Free Beacon, December 21, 2016, http://freebeacon.com/national-security/russia-conducts-fifth-test-new-anti-satellite-missile/.

<sup>&</sup>lt;sup>41</sup> Andrew Osborn, Andrey Ostroukh, Reuters, "Russia has deployed warships near Crimea in response to Ukrainian missile tests," Business Insiders, December 1, 2016, http://www.businessinsider.com/r-russia-deploys-warships-near-crimea-forukrainian-missile-tests-ria-2016-12.

<sup>&</sup>lt;sup>42</sup> Bill Gertz, "Russia Tests Nuclear-Capable Drone Sub," *The Washington Free Beacon*, December 8, 2016, http://freebeacon.com/national-security/russia-tests-nuclear-capable-drone-sub/.

<sup>&</sup>lt;sup>43</sup> Samuel Osborne, "Russia successfully tests missiles that fire from 'nuclear trains," *Independent*, November 23, 2016, http://www.independent.co.uk/news/world/europe/russia-putin-nuclear-train-missiles-tests-success-a7433861.html.

**Location:** Serbia

Summary: Russia and Serbia conduct joint military exercises as a five-day military NATO drill in

the area wraps up.<sup>44</sup>

35. **Date:** October 31- November 4, 2016

Type: Military Exercise Involving: NATO Location: Montenegro

Summary: NATO conducts emergency drills in Montenegro, involving 600 unarmed personnel

from 7 NATO counties and 10 partner states.<sup>45</sup>

36. Date: October 25, 2016

**Type:** Test Fire **Involving:** Russia

Location: Yasny, Orenburg region, Russia

Summary: Russia reportedly tests an RS-18 ballistic missile, which may have been a test of an

advanced nuclear-capable hypersonic glider warhead. 46

37. **Date:** October 20, 2016 **Type:** Military Exercise **Involving:** Russia **Location:** Luga, Russia

Location: Luga, Russia

Summary: The Russian defense ministry reports it conducted drills involving Iskander-M missiles

approximately 100 kilometers from the border of Estonia.<sup>47</sup>

38. **Date:** October 18, 2016 **Type:** Sea Incident

**Involving:** Russia and the U.K.

Location: North Sea, English Channel

**Summary:** Two U.K. warships escort a Russian fleet – the Admiral Kuznetsov aircraft carrier and seven additional vessels – through the North Sea and English Channel on their way to Syria.<sup>48</sup>

## 39. Provocative Incident

**Date:** October 17, 2016 **Type:** Air Incident: Intercept **Involving:** Russia and the U.S.

Location: eastern Syria

<sup>44</sup> Aleksander Vasovic, "Serbia hosts joint military exercises with Russia," *Reuters*, November 3, 2016, http://www.reuters.com/article/us-serbia-defence-russia-idUSKBN12Y1JX.

<sup>&</sup>lt;sup>45</sup> "NATO, Russia to hold parallel military drills in the Balkans," *CBS News*, October 31, 2016, http://www.cbsnews.com/news/nato-russia-hold-parallel-drills-balkans/.

<sup>&</sup>lt;sup>46</sup> "Russia reportedly tests nuclear-capable hypersonic glider warhead," *RT*, October 26, 2016, https://www.rt.com/news/364148-russia-tests-hypersonic-glider/.

<sup>&</sup>lt;sup>47</sup> Associated Press, "Russia says it conducted drills involving state-of-the art missiles near its western border," *Business Insider*, October 20, 2016, <a href="http://www.businessinsider.com/ap-russian-military-holds-missile-exercise-near-western-border-2016-10">http://www.businessinsider.com/ap-russian-military-holds-missile-exercise-near-western-border-2016-10</a>.

Tom Morgan, "Royal Navy warships escort Russian fleet as it steams towards UK," *The Telegraph*, October 19, 2016, <a href="http://www.telegraph.co.uk/news/2016/10/19/royal-navy-warships-on-trail-as-russian-fleet-steams-towards-uk/">http://www.telegraph.co.uk/news/2016/10/19/royal-navy-warships-on-trail-as-russian-fleet-steams-towards-uk/</a>.

**Summary:** A Russian fighter jet escorting a larger spy plane flies inside of half a mile of a U.S. warplane over Syria. The incident was attributed to lack of necessary situational awareness.<sup>49</sup>

40. **Date:** October 12, 2016 **Type:** Test Launch (3) **Involving:** Russia

Location: Sea of Okhotsk; Barents Sea; Plesetsk Space Center, Russia

Summary: Russia successfully tests two submarine-launched ballistic missiles and one RS-12M

intercontinental ballistic missile.<sup>50</sup>

## 41. Provocative Incident

Date: October 8, 2016 Type: Defense News Involving: Russia Location: Kaliningrad

**Summary:** The Russian defense ministry confirms deployment of the nuclear-capable Iskander

missiles in Kaliningrad.51

42. **Date:** October 6, 2016 **Type:** Air Incident

Involving: Estonia/NATO and Russia

Location: Estonia

**Summary:** Estonia's ambassador to NATO claims a Russian Su-27 fighter jet violated Estonian

airspace. The Russian ambassador was called to the Estonian foreign ministry. 52

43. Date: October 6, 2016

Type: Air Incident: Intercept (2) Involving: Finland and Russia Location: Bay of Finland

**Summary:** Finnish Air Force planes intercept a Russian Su-27 fighter jet twice within 24 hours. Finland's defense ministry claims the Russian jet violated Finnish airspace, but Russia asserts the

plane staying in international airspace.<sup>53</sup>

44. **Date:** October 6, 2016 **Type:** Defense News **Involving:** Russia

Location: Russian Far East

<sup>49</sup> Thomas Watkins, "Russian, US jets had near miss over Syria: US officials," *Yahoo News*, October 28, 2016, <a href="https://www.yahoo.com/news/russian-us-jets-had-near-miss-over-syria-140424292.html">https://www.yahoo.com/news/russian-us-jets-had-near-miss-over-syria-140424292.html</a>.

<sup>&</sup>lt;sup>50</sup> "Russian submarines, strategic missile troops test fire 3 long-range ballistic rockets," *RT*, October 12, 2016, https://www.rt.com/news/362569-russia-ballistic-missiles-tests/.

Raf Sanchez, "Russia deploys nuclear-capable missiles in Kaliningrad as tensions between US and Russia become 'more dangerous than Cold War'," *The Telegraph*, October 8, 2016, <a href="http://www.telegraph.co.uk/news/2016/10/08/tensions-between-us-and-russia-more-dangerous-than-cold-war-as-t/">http://www.telegraph.co.uk/news/2016/10/08/tensions-between-us-and-russia-more-dangerous-than-cold-war-as-t/</a>.

<sup>&</sup>lt;sup>52</sup> Stephen Feller, "Finland monitors Russian jets after making airspace violation accusations," *UPI*, October 7, 2017, <a href="http://www.upi.com/Top\_News/World-News/2016/10/07/Finland-monitors-Russian-jets-after-making-airspace-violation-accusations/1841475845438/">http://www.upi.com/Top\_News/World-News/2016/10/07/Finland-monitors-Russian-jets-after-making-airspace-violation-accusations/1841475845438/</a>.

<sup>&</sup>lt;sup>53</sup> Stephen Feller, "Finland monitors Russian jets after making airspace violation accusations," *UPI*, October 7, 2017, <a href="http://www.upi.com/Top\_News/World-News/2016/10/07/Finland-monitors-Russian-jets-after-making-airspace-violation-accusations/1841475845438/">http://www.upi.com/Top\_News/World-News/2016/10/07/Finland-monitors-Russian-jets-after-making-airspace-violation-accusations/1841475845438/</a>.

**Summary:** A Russian defense representative confirms that formation of a new division of strategic bombers is almost complete. The division will be deployed in the Eastern and Central military districts and patrol the area over the Western Pacific Ocean.<sup>54</sup>

45. **Date:** October 5, 2016 **Type:** Defense News **Involving:** Russia **Location:** Russia

**Summary:** The Russian government announces the launch of a three-day nationwide civil defense training exercise to "rehearse radiation, chemical and biological protection of the personnel and population during emergencies at crucial and potentially dangerous facilities." The exercise involved 200,000 emergency personnel and 40 million citizens. <sup>55</sup>

46. **Date:** Early October 2016 **Type:** Test Flight (2)

Involving: U.S.

Location: Tonopah Test Range, Nevada, U.S.

**Summary:** The U.S. successfully tests the B61-7 and B61-11 gravity bombs. <sup>56</sup>

47. **Date:** September 27, 2016 **Type:** Test Launch (2) **Involving:** Russia **Location:** White Sea

**Summary:** Russia test fires two Bulava intercontinental ballistic missiles from the *Yuri Dolgoruky* 

ballistic missile submarine. One missile self-destructs in flight.<sup>57</sup>

# 48. Provocative Incident (1)

Date: September 22, 2016

**Type:** Air Incident: Intercept (5 incidents, including 4 intercepts) **Involving:** Iceland, Norway, France, Spain, the U.K., and Russia

**Location:** Northwest Europe

**Summary:** Fighter jets from Norway, France, Spain and the U.K. separately intercept two Russian Blackjack bombers flying close to the airspace of each country. Iceland later complained the

bombers flew too close to civilian aircraft, coming within 6,000-9,000 feet.<sup>58</sup>

49. **Date:** September 21, 2016 **Type:** Defense News **Involving:** Russia

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<sup>58</sup> "Nato jets scrambled as Russian bomber fly south," *BBC News*, October 5, 2016, <a href="http://www.bbc.com/news/world-europe-37562499">http://www.bbc.com/news/world-europe-37562499</a>.

<sup>&</sup>lt;sup>54</sup> Russian Tu-95 and Tu-22M3 Bombers to Patrol Airspace Between Hawaii and Japan," *Sputnik*, October 6, 2016, <a href="https://sputniknews.com/russia/201610061046060723-russia-bombers-division/">https://sputniknews.com/russia/201610061046060723-russia-bombers-division/</a>.

Matt Payton, "Russia launches massive nuclear war training exercise with '40 million people'," *Independent*, October 5, 2016, <a href="http://www.independent.co.uk/news/world/europe/russia-nuclear-weapon-training-attack-radiation-moscow-vladimir-putin-a7345461.html">http://www.independent.co.uk/news/world/europe/russia-nuclear-weapon-training-attack-radiation-moscow-vladimir-putin-a7345461.html</a>.

putin-a7345461.html.

56 "NNSA and Air Force conduct two successful joint flight tests," National Nuclear Security Administration Blog, October 6, 2016, https://nnsa.energy.gov/blog/nnsa-and-air-force-conduct-two-successful-joint-flight-tests.

Franz-Stefan Gady, "Russia's Deadliest Sub Test Fires 2 Nuclear-Capable Ballistic Missiles," *The Diplomat*, September 30, 2016, <a href="http://thediplomat.com/2016/09/russias-deadliest-sub-test-fires-2-nuclear-capable-ballistic-missiles/">http://thediplomat.com/2016/09/russias-deadliest-sub-test-fires-2-nuclear-capable-ballistic-missiles/</a>

Location: Leningrad Region, Russia

Summary: A spokesman for Russia's Western Military District reports two S-400 anti-aircraft

missile systems have been moved close to the Finnish border.<sup>59</sup>

50. **Date:** September 17, 2016 **Type:** Air Incident: Intercept **Involving:** NATO and Russia

Location: Baltic Sea

**Summary:** NATO fighter jets intercept a Russian Il-20 aircraft flying close to the Latvian border. <sup>60</sup>

51. **Date:** September 9, 2016

**Type:** Test Launch **Involving:** Russia

Location: Plesetsk rocket site, Russia

Summary: Russia announces the successful test of an intercontinental ballistic missile (the exact

missile type was not specified).<sup>61</sup>

## 52. Provocative Incident

Date: September 7, 2016 **Type:** Air Incident: Intercept **Involving:** Russia and the U.S.

Location: Black Sea

Summary: A Russian fighter jet intercepts a U.S. Poseidon plane coming within 10 feet of the

aircraft 62

53. **Date:** September 5-10, 2016 **Type:** Military Exercise

**Involving:** Russia

Location: Southern, Central, and Western Military District. Russia

Summary: Russia conducts the Kavkaz-2016 military exercise, involving over 120,000 people, but no more than 12,500 at one time. <sup>63</sup> Kavkaz-2016 also included the biggest military exercises in Crimea since it was annexed in 2014. <sup>64</sup>

54. **Date:** September 5, 2016

**Type:** Test Launch **Involving:** U.S.

Location: Vandenberg AFB, California, U.S.

**Summary:** The U.S. successfully tests a Minuteman III intercontinental ballistic missile. 65

<sup>61</sup> Franz-Stefan Gady, "Russia Test Fires Intercontinental Ballistic Missile," *The Diplomat*, September 13, 2016, http://thediplomat.com/2016/09/russia-test-fires-intercontinental-ballistic-missile/.

<sup>&</sup>lt;sup>59</sup> "Russia Moves Long Range Startegic Anti-Aircraft Missiles to Finnish Border," EU Today, September 21, 2016, http://eutoday.net/news/russia-36487.

<sup>60 &</sup>quot;NATO jets scramble to intercept Russian warplane over Baltics," Unian Information Agency. September 17, 2-16, https://www.unian.info/world/1526884-nato-jets-scramble-to-intercept-russian-warplane-over-baltics.html.

<sup>&</sup>lt;sup>62</sup> Ryan Browne and Barbara Starr, "Russian fighter jet makes 'unsafe' intercept of US aircraft," *CNN*, September 8, 2016, http://www.cnn.com/2016/09/07/politics/russia-us-jet-intercept/.

<sup>&</sup>lt;sup>63</sup> TASS, "More than 120,000 people take part in Kavkaz-2016 exercise," Russia Beyond the Headlines, September 9, 2016, http://rbth.com/news/2016/09/09/more-than-120000-people-took-part-in-kavkaz-2016-exercise 628471.

<sup>&</sup>lt;sup>64</sup> "Russia launches final stage of massive drills in Crimea," *PressTV*, September 9, 2016, http://www.pressty.com/Detail/2016/09/09/483955/Russia-massive-drills-Crimea.

55. Date: September 2016-January 2017 **Type:** Air Incident: Intercept (23) **Involving:** NATO and Russia

**Location:** Baltic Sea

Summary: French Mirage jets intercept Russian aircraft 23 times over a four-month period while on a tour of duty in Lithuania. A French official makes it clear the Russian aircraft "take care to remain in international airspace."66

56. Date: September 2016 **Type:** Defense News **Involving:** Russia

Location: Kamchatka Peninsula, Russia

**Summary:** Russia deploys *Vladimir Monomakh*, its latest nuclear submarine, to a deployment base

in the Kamchatka Peninsula.<sup>67</sup>

57. **Date:** August 17-20, 2016

**Type:** Test Launch and Military Exercise

**Involving:** Russia

Location: Amur Region and Trans-Baikal Territory

**Summary:** Russia test fires the nuclear-capable Iskander-M short-range ballistic missile during large-scale military exercise in the Far East, involving 400 officers and 100 pieces of military

equipment.<sup>68</sup>

58. Date: August 12, 2016 **Type:** Defense News **Involving:** Russia **Location:** Crimea

**Summary:** Russia deploys the S-400 Triumph air defense system in Crimea. World powers

caution Russia and Ukraine against raising tensions in the region.<sup>69</sup>

59. **Date:** August 1-12, 2016 **Type:** Military Exercise **Involving:** NATO Location: Lithuania

**Summary:** Lithuania, Estonia, Poland, and the U.S. conduct live-fire exercises to focus on artillery

and mortar fire. 70

<sup>65</sup> Carla Pampe, "Malstrom tests Minutemann III with launch from Vandenberg," U.S. Air Force, September 6, 2016, http://www.af.mil/News/ArticleDisplay/tabid/223/Article/935294/malmstrom-tests-minuteman-iii-with-launch-fromvandenberg.aspx.

<sup>67</sup> Damien Sharkov, "Russia's Newest Nuclear Submarine Arrives in Pacific Ocean," Newsweek, September 26, 2016,

http://www.newsweek.com/russias-newest-nuclear-submarine-arrives-pacific-ocean-502851.

68 Franz-Stefan Gady, "Russia Test Fires Nuclear-Capable Ballistic Missile in Far East," *The Diplomat*, August 19, 2016, http://thediplomat.com/2016/08/russia-test-fires-nuclear-capable-ballistic-missile-in-far-east/.

<sup>&</sup>lt;sup>66</sup> As there is no indication of what specific date each of the 23 incidents occurred, we allotted 5-6 incidents to each month in the graph above. AFP, "NATO, Russia Play Cat-and-Mouse in Baltic Skies," Military.com, January 7, 2017, http://www.military.com/daily-news/2017/01/07/nato-and-russia-play-cat-and-mouse-baltic-skies.html.

<sup>&</sup>lt;sup>69</sup> Kateryna Choursina and Stepan Kravchenko, "Putin deploys Russia's most advanced air-defence missiles in Crimea as alarm grows war is imminent," National Post, August 15, 2016, http://news.nationalpost.com/news/world/putin-deploysrussias-most-advanced-air-defence-missiles-in-crimea-as-alarm-grows-war-is-imminent.

60. **Date:** July 27 – September 4, 2016

Type: Military Exercise Involving: Russia

Location: Astrakhan, Orenburg and Chelyabinsk, Russia; Tajikistan

**Summary:** Russia conducts military exercises involving more than 3,000 anti-aircraft gunners,

over 800 military units and special air defense equipment.<sup>71</sup>

61. **Date:** June 21, 2016 **Type:** Test Launch **Involving:** Russia

Location: Sary-Shagan testing ground, Kazakhstan

**Summary:** Russia successfully test fires a short-range anti-ballistic missile.<sup>72</sup>

62. **Date:** June 20, 2016 **Type:** Test Launch **Involving:** U.K.

**Location:** Off the coast of Florida, U.S.

**Summary:** A U.K. test of an unarmed Trident II D5 missile fails due to a malfunction. The government withholds news of the failure and, weeks later, Parliament passes a motion in favor of

the Trident Replacement plan.<sup>73</sup>

63. **Date:** June 14-22, 2016 **Type:** Military Exercise **Involving:** Russia **Location:** Russia

**Summary:** Russia conducts unannounced military drills to test battle readiness. The number of

units involved was not specified.<sup>74</sup>

64. **Date:** June 7-17, 2016 **Type:** Military Exercise **Involving:** NATO **Location:** Poland

**Summary:** Poland leads NATO and non-NATO troops in Anakonda 2016, "the biggest military exercise in eastern Europe since the Cold War." The training exercise involves over 30,000

military personnel from 24 countries.<sup>75</sup>

http://tass.com/defense/890912.

Russia successfully test-fires anti-ballistic missile – Defense Ministry," *Russia Today (RT)*, June 21, 2016,

https://www.rt.com/news/347577-russia-missile-defense-test/.

investigations?CMP=Share\_iOSApp\_Other.

74 "Putin calls snap drill to test battle-readiness of Russia military," *Newsweek*, June 14, 2016, http://www.newsweek.com/putin-calls-snap-drill-russia-military-nato-470224.

 <sup>&</sup>quot;Key NATO & Allied Exercises," North Atlantic Treaty Organization Fact Sheet, July 2016,
 <a href="http://www.nato.int/nato\_static\_fl2014/assets/pdf/pdf\_2016\_07/20160704\_1607-factsheet\_exercises\_en.pdf">http://www.nato.int/nato\_static\_fl2014/assets/pdf/pdf\_2016\_07/20160704\_1607-factsheet\_exercises\_en.pdf</a>.
 "Russian anti-aircraft gunners hold firing drills in Russia, Tajikistan," TASS, July 27, 2016,

<sup>&</sup>lt;sup>73</sup> Haroon Siddique and Rowena Mason, "MPs accuse Theresa May of covering up Trident malfunction," *The Guardian*, January 22, 2017, <a href="https://www.theguardian.com/uk-news/2017/jan/22/ltrident-malfunction-cover-up-claims-labour-urges-investigations?CMP=Share iOSApp Other.">https://www.theguardian.com/uk-news/2017/jan/22/ltrident-malfunction-cover-up-claims-labour-urges-investigations?CMP=Share iOSApp Other.</a>

<sup>&</sup>lt;sup>75</sup> Thomas Gibbons-Neff, "U.S., NATO countries begin largest military exercise in eastern Europe since Cold War," *The Washington Post*, June 7, 2016, <a href="https://www.washingtonpost.com/news/checkpoint/wp/2016/06/07/u-s-nato-countries-begin-largest-military-exercise-in-europe-since-cold-war/?utm\_term=.e38bce073d32.">https://www.washingtonpost.com/news/checkpoint/wp/2016/06/07/u-s-nato-countries-begin-largest-military-exercise-in-europe-since-cold-war/?utm\_term=.e38bce073d32.</a>

65. **Date:** June 7, 2016

Type: Sea Incident: Intercept Involving: Russia and the U.K.

Location: North Sea

Summary: The U.K. frigate HMS *Kent* intercepts what is believed to be the Kilo-class Russian

submarine Stary Oskol.<sup>76</sup>

66. **Date:** May 17, 2016

Type: Air Incident: Intercept Involving: Russia and the U.K. Location: Near the border of Estonia

**Summary:** British Typhoon fighter jets intercept five Russian aircraft approaching the Baltic States. The Russian aircraft were not transmitting an identification code and were unresponsive.<sup>77</sup>

67. **Date:** May 13, 2016 **Type:** Defense News

**Involving:** NATO and the U.S. **Location:** Redzikowo, Poland

**Summary:** The U.S. starts construction of a second site for the European missile defense shield.<sup>78</sup>

68. Date: May 12, 2016

Type: Air Incident: Intercept Involving: Russia and the U.K. Location: near the border of Estonia

Summary: British Typhoon fighter jets intercept three Russian transport aircraft approaching the

Baltic States. The Russian aircraft were not transmitting an identification code and were

unresponsive.<sup>79</sup>

69. **Date:** May 12, 2016 **Type:** Air Incident

**Involving:** Poland and Russia

Location: Poland-Russian border near Kaliningrad

Summary: Polish Defense Minister Antoni Macierewicz claims Russian unmanned aerial vehicles

repeatedly violate Poland's airspace.<sup>80</sup>

70. **Date:** May 12, 2016 **Type:** Defense News

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http://www.reuters.com/article/us-nato-shield-idUSKCN0Y217M.

<sup>&</sup>lt;sup>76</sup> "UK Navy Intercepts Russian Submarine in North Sea," *Sputnik*, June 8, 2016,

https://sputniknews.com/military/201606081040983609-uk-navy-russian-submarine-north-sea/#ixzz4AywisnQm.

<sup>&</sup>lt;sup>77</sup> "RAF fighters intercept Russian jets near Estonia for second time in a week," *The Guardian*, May 17, 2016, <a href="https://www.theguardian.com/world/2016/may/17/raf-fighters-intercept-russian-jets-estonia-second-time-week">https://www.theguardian.com/world/2016/may/17/raf-fighters-intercept-russian-jets-estonia-second-time-week</a>.

Robin Emmott, "U.S. to switch on European missile shield despite Russian alarm," *Reuters*, May 11, 2016,

<sup>&</sup>lt;sup>79</sup> "Typhoon jets intercept Russian planes that committed 'act of aggression," *The Guardian*, May 13, 2016, https://www.theguardian.com/uk-news/2016/may/13/typhoon-jets-intercept-russian-planes-that-committed-act-of-aggression.

<sup>80 &</sup>quot;Polish Defense Minister: Russian drones repeatedly violate Poland's airspace," *Unian Information Agency*, May 13, 2016, <a href="https://www.unian.info/world/1344381-polish-defense-minister-russian-drones-repeatedly-violate-polands-airspace.html">https://www.unian.info/world/1344381-polish-defense-minister-russian-drones-repeatedly-violate-polands-airspace.html</a>.

**Involving:** NATO and the U.S. Location: Deveselu, Romania

**Summary:** The U.S. declares the missile defense shield in Romania operational.<sup>81</sup>

# 71. Provocative Incident

**Date:** April 29, 2016

**Type:** Air Incident: Intercept **Involving:** Russia and the U.S.

**Location:** Baltic Sea

**Summary:** A Russian Su-27 intercepts and subsequently conducts a barrel roll over a U.S.

reconnaissance plane in international airspace.<sup>82</sup>

# 72. Provocative Incident (5)

**Date:** April 26-29, 2016

**Type:** Air Incident: Intercept (5) **Involving:** NATO and Russia

**Location:** Baltic Sea

Summary: NATO fighter jets intercept Russian military aircraft over the Baltic Sea on five separate occasions:<sup>83</sup>

- April 26: NATO fighters intercept a Russian Su-27 aircraft flying without a flight plan, with its transponder off, and without maintaining communication with air traffic control centers
- April 27: NATO fighters intercept a Russian Il-38 aircraft flying with its transponder off
- April 28: NATO fighters intercept a Russian II-18 aircraft flying without a flight plan, with its transponder off, and without maintaining communication with air traffic control centers
- April 28: NATO aircraft intercept a Russian Il-38 aircraft flying without a flight plan and its transponder off
- April 29: NATO fighters intercept a Russian Il-20 aircraft flying with its transponder off

73. **Date:** April 25, 2016 **Type:** Military Exercise **Involving:** Russia **Location:** Baltic Sea

**Summary:** Ten Russian warships participate in sea exercises involving artillery and torpedo firing

drills.84

74. Date: April 21, 2016 **Type:** Test Launch **Involving:** Russia

Location: Dombarovsky missile base, Orenberg, Russia

<sup>81</sup> Robin Emmott, "U.S. to switch on European missile shield despite Russian alarm," *Reuters*, May 11, 2016, http://www.reuters.com/article/us-nato-shield-idUSKCN0Y217M.

82 Barbara Starr, "First on CNN: Russians 'barrel roll' over another U.S. Air Force plane," CNN, April 29, 2016,

http://www.cnn.com/2016/04/29/politics/russians-barrel-roll-air-force-plane/.

<sup>83 &</sup>quot;Lithuania reports five Russian aircraft intercepted by NATO in last week," Unian Information Agency, May 2, 2016, https://www.unian.info/world/1336254-lithuania-reports-five-russian-aircraft-intercepted-by-nato-in-last-week.html. 84 "More than 10 Russian Baltic Fleet ships put to sea for exercises," TASS, April 25, 2016, http://tass.com/defense/872298.

**Summary:** Russia tests a hypersonic glider able to deliver nuclear or conventional warheads through advanced missile defenses. The glider was launched atop a SS-19 intercontinental ballistic missile.<sup>85</sup>

75. Date: April 21, 2016

Type: Air Incident: Intercept Involving: Russia and the U.S.

Location: near the Kamchatka Peninsula, Russia

**Summary:** A Russia MiG-31 jet intercepts a U.S. reconnaissance aircraft. The Russian jet reportedly flew within 50 feet of the U.S. plane, though officials say the intercept was

"characterized as safe and professional."86

## 76. Provocative Incident

Date: April 14, 2016

**Type:** Air Incident: Intercept **Involving:** Russia and the U.S.

Location: Baltic Sea

**Summary:** A Russian Su-27 fighter jet intercepts a U.S. reconnaissance plane flying over the Baltic Sea in international airspace coming within 50 feet and performing a barrel roll over the top of the U.S. aircraft.<sup>87</sup>

## 77. Provocative Incident

**Date:** April 12, 2016 **Type:** Sea Incident

**Involving:** Russia and the U.S.

Location: Baltic Sea

**Summary:** Two Russian helicopters fly circles around the USS *Donald Cook* after which two Russian jets make multiple close passes. Officials describe the incident as having a "Simulated

Attack Profile."88

# 78. Provocative Incident

**Date:** April 11, 2016 **Type:** Sea Incident

**Involving:** Russia and the U.S.

Location: Baltic Sea

**Summary:** Two Russian SU-24 fighters buzz by the USS *Donald Cook* multiple times, at one

point coming within approximately 30 feet of the U.S. destroyer.<sup>89</sup>

79. **Date:** March 29, 2016

. . . .

<sup>&</sup>lt;sup>85</sup> Bill Gertz, "Russia Tests Hypersonic Glide Vehicle on Missile," *Washington Free Beacon*, April 22, 2016, <a href="http://freebeacon.com/national-security/russia-tests-hypersonic-glide-vehicle/">http://freebeacon.com/national-security/russia-tests-hypersonic-glide-vehicle/</a>.

<sup>&</sup>lt;sup>86</sup> Bill Gertz, "Russian Warplane Flies Within 50 Feet of U.S. Spy Plane in Asia," *The Washington Free Beacon*, April 28, 2016, http://freebeacon.com/national-security/russian-warplane-flies-within-50-feet-u-s-spy-plane-asia/.

<sup>87</sup> Bill Gertz, "Russia Jet Threatened U.S. Recon Aircraft," *The Washington Free Beacon*, April 16, 2016, http://freebeacon.com/national-security/russian-jet-threatened-u-s-recon-aircraft/

http://freebeacon.com/national-security/russian-jet-threatened-u-s-recon-aircraft/.

88 "USS Donald Cook buzzed again by Russian jets in Baltic," *CBS News*, April 13, 2016, http://www.cbsnews.com/news/uss-donald-cook-buzzed-again-by-russian-jets-in-baltic/.

<sup>&</sup>lt;sup>89</sup> Jim Michaels and Tom Vanden Brook, "Russian war planes buzz U.S. destroyer in Baltic," *USA Today*, April 13, 2016, http://www.usatoday.com/story/news/2016/04/13/reports-russian-war-planes-buzz-us-destroyer/82977844/.

**Type:** Military Exercise

**Involving:** Belarus and Russia

**Location:** Russian Central Military District

Summary: Joint Belarus-Russian military exercises begin in the Central Military District of

Russia. 90

80. Date: March 28, 2016 Type: Air Incident

**Involving:** NATO and Russia

**Location:** Baltic Sea

**Summary:** Media reports that the Russian defense minister's plane, which was escorted by several

Su-27 fighter jets, was shadowed by Eurofighter Typhoons designed for NATO. 91

81. Date: March 17, 2016 **Type:** Test Launch **Involving:** Russia Location: Russia

> **Summary:** According to a senior defense industry source, Russia's Navy has begun testing the hypersonic Zircon cruise missile, which has an expected speed of Mach 5-6 and will be mounted on the Husky-class nuclear submarines. 92

82. **Date:** February 25, 2016

**Type:** Test Launch **Involving:** U.S.

Location: Vandenberg Air Force Base, CA, U.S.

Summary: The U.S. test-fires an unarmed Minuteman III intercontinental ballistic missile as a demonstration of its nuclear arms capability. The missile flew 4,200 miles before landing in a target area in the Marshall Islands. 93

83. **Date:** February 22, 2016

**Type:** Defense News **Involving:** Russia Location: Washington

**Summary:** Russia files a request to fly a spy plane with advanced digital cameras over the U.S.<sup>94</sup>

84. **Date:** February 22, 2016 **Type:** Test Launch

**Involving:** United States

91 "Russian defense minister's plane followed by NATO jets over Baltic Sea," RT, March 28, 2016, https://www.rt.com/news/337472-shoigu-plane-nato-jets/.

<sup>90 &</sup>quot;Russia-Belarus military drills begin in Russian Central Military District," Tass, March 29, 2016, http://tass.ru/en/defense/865783.

<sup>92 &</sup>quot;Russia Test-Firing New Hypersonic Zircon Cruise Missiles for 5th-Gen Subs," Sputnik International, March 17, 2016, http://sputniknews.com/military/20160317/1036437650/zircon-hypersonic-cruise-missiles.html.

David Alexander, "U.S. test-fires ICBMs to stress its power to Russia, North Korea," *Reuters*, February 26, 2016,

http://www.reuters.com/article/us-usa-defense-nuclear-idUSKCN0VZ02R.

<sup>&</sup>lt;sup>94</sup> Dan Lamothe, "Russia wants to fly more spy planes over the U.S., and the Pentagon can't stop it," *The Washington Post*, February 23, 2016, https://www.washingtonpost.com/news/checkpoint/wp/2016/02/23/russia-wants-to-fly-more-spyplanes-over-the-u-s-and-the-pentagon-cant-stop-it/.

Location: Vandenberg Air Force Base, CA, U.S.

Summary: The U.S. successfully tests an unarmed Minuteman III intercontinental ballistic

missile.95

85. **Date:** February 17, 2016

Type: Air Incident: Intercept Involving: Russia and the U.K.

Location: North Sea

**Summary:** Royal Air Force Typhoon jets intercept two Russian bombers heading toward U.K.

airspace.96

**86. Date:** February 8, 2016 **Type:** Military Exercise **Involving:** Russia

Location: Southwest Russia

**Summary:** Russia announces a surprise military exercise, ordering troops in the southwest region

to full combat readiness.<sup>97</sup>

## 87. Provocative Incident

**Date:** January 25, 2016 **Type:** Air Incident: Intercept **Involving:** Russia and the U.S.

Location: Black Sea

**Summary:** A U.S. Air Force RC-135U reconnaissance plane is intercepted by a Russian Su-27 fighter jet over the Black Sea. U.S. officials claim the jet performed "an aggressive maneuver,"

coming within 20 feet after flying alongside the reconnaissance plane for some time. 98

88. **Date:** January 11, 2016 **Type:** Defense News

**Involving:** Russia and NATO **Location:** Baltic States

**Summary:** In 2015, NATO fighters were scrambled 160 times to intercept Russian aircraft violating the airspace of Baltic NATO members. This is a 14 percent increase from the previous

year.99

89. **Date:** December 19, 2015 **Type:** Air Incident: Intercept **Involving:** NATO and Russia

<sup>95</sup> Associated Press, "U.S. Air Force test-launches Minuteman missile from California," *Military Times*, February 22, 2016, <a href="http://www.militarytimes.com/story/military/tech/2016/02/21/us-air-force-test-launches-minuteman-missile-california/80699124/">http://www.militarytimes.com/story/military/tech/2016/02/21/us-air-force-test-launches-minuteman-missile-california/80699124/</a>.

<sup>96</sup> Press Association, "RAF jets intercept two Russian bombers nearing UK airspace," *The Guardian*, February 17, 2016, http://www.theguardian.com/world/2016/feb/17/raf-fighters-intercept-two-russian-bombers-uk-airspace.

<sup>97</sup> Andrew E. Kramer, "Russia Announces Surprise Military Drills in South," *The New York Times*, February 8, 2016, <a href="http://www.nytimes.com/2016/02/09/world/europe/russia-announces-surprise-military-drills-in-south.html">http://www.nytimes.com/2016/02/09/world/europe/russia-announces-surprise-military-drills-in-south.html</a>.

<sup>98</sup> "Russian fighter jet intercepts US recon aircraft over Black Sea 'in unsafe manner' – Navy," *RT*, January 29, 2016,

<sup>36</sup>"Russian fighter jet intercepts US recon aircraft over Black Sea 'in unsafe manner' – Navy," *RT*, January 29, 2016, https://www.rt.com/usa/330650-russian-us-aricraft-intercept/.

<sup>99</sup> Richard Tomkins, "NATO interception of Russian planes in Baltics rise," *UPI*, January 11, 2016, http://www.upi.com/Business\_News/Security-Industry/2016/01/11/NATO-interception-of-Russian-planes-in-Baltics-rise/3031452534461/. Location: Baltic Sea

Summary: NATO patrol aircraft intercept Russian Il-20 aircraft over the Baltic Sea. The Russian

plane did not violate the airspace of any of the Baltic countries. 100

90. Date: December 15, 2015

Type: Test Launch Involving: Russia

Location: Nyonoksa, Arkhangelsk, Russia

Summary: A cruise missile falls near a village in Russia after a test launch goes astray. No one

was hurt. 101

91. **Date:** December 12, 2015

Type: Test Launch Involving: Russia Location: Barents Sea

Summary: Russia successfully test-fires an intercontinental ballistic missile from a submerged

nuclear-powered submarine. 102

# 92. High-Risk Incident

Date: November 24, 2015

Type: Air Incident

**Involving:** Russia and Turkey **Location:** Syrian-Turkish Border

**Summary:** Turkish F-16s shoot down a Russian Su-24 warplane near the Syrian border, claiming the jet violated its air space. Turkish officials report that the aircraft was warned 10 times to change direction. Russian President Vladimir Putin said the plane was 1 km inside Syria when it was

attacked. 103

## 93. Provocative Incident

Date: November 22, 2015

Type: Sea Incident

**Involving:** Russia and the U.K.

Location: North Sea

**Summary:** The Royal Air Force launches a search for a Russian submarine spotted off the coast of

<sup>100</sup> "NATO jets again intercept Russian plane over Baltic near Latvia," *Ukraine Today*, December 20, 2015, http://uatoday.tv/politics/nato-jets-again-intercept-russian-plane-over-baltic-near-latvia-557546.html.

Associated Press, "Cruise missile lands in Russian village after test launch goes astray," *The Guardian*, December 15, 2015, <a href="http://www.theguardian.com/world/2015/dec/15/russia-cruise-missile-lands-village-nyonoksa-arkhangelsk-test-launch">http://www.theguardian.com/world/2015/dec/15/russia-cruise-missile-lands-village-nyonoksa-arkhangelsk-test-launch</a>

launch.

102 "Russian nuclear sub successfully test-fires strategic Sineva missile (video)," *RT*, December 12, 2015, https://www.rt.com/news/325744-russia-ballistic-missile-launch/.

Tulay Karadeniz and Maria Kiselova, "Turkey downs Russian warplane near Syria border, Putin warns of 'serious consequences," *Reuters*, November 25, 2015, <a href="http://www.reuters.com/article/2015/11/25/us-mideast-crisis-syria-turkey-idUSKBN0TD0IR20151125#8lzOAxMIFL3JKa3E.97">http://www.reuters.com/article/2015/11/25/us-mideast-crisis-syria-turkey-idUSKBN0TD0IR20151125#8lzOAxMIFL3JKa3E.97</a>.

Scotland. Canada and France send maritime patrol aircraft to aid in the search. 104

94. **Date:** November 19, 2015

**Type:** Air Incident: Intercept **Involving:** Russia and the U.K.

Location: North Atlantic

Summary: U.K. Typhoon fighter jets intercept two Russian Tu-160 Blackjack bombers flying in

international airspace over the Atlantic. 105

95. **Date:** November 19, 2015

Type: Test Launch Involving: U.S.

**Location:** White Sands Missile Range, New Mexico, U.S.

Summary: A Patriot Advanced Capability (PAC-3) missile successfully intercepts a target rocket

in an air defense test. 106

96. Date: November, 18, 2015

Type: Test Flight Involving: Russia Location: Russia

Summary: Russia completes the first successful test flight of the Nudol anti-satellite missile. 107

97. **Date:** November 17, 2015

Type: Defense News Involving: Russia Location: Syria

**Summary:** The Russian Tupolev Tu-160 Blackjack strategic bomber and the Raduga Kh-101 cruise missile make their combat debut in Russian strikes against Syrian targets. The Kh-101 is the conventional variant of the cruise missile, which also has a nuclear variant – the Kh-102. 108

98. **Date:** November 14, 2015

Type: Test Launch Involving: Russia Location: White Sea

Summary: Russia carries out a successful double test launch of the Bulava ballistic missile from

<sup>104</sup> "RAF search after 'Russian submarine spotted off Scotland," *BBC News*, November 22, 2015, http://www.bbc.com/news/uk-34896956.

<sup>105 &</sup>quot;RAF Lossiemouth fighter jets scrambled over Russian planes," *BBC News*, November 20, 2015, http://www.bbc.com/news/uk-scotland-north-east-orkney-shetland-34880523.

<sup>106 &</sup>quot;US Patriot PAC-3 Intercept Missile Destroys Test Target - Lockheed Martin," *Sputnik International*, November 25, 2015, http://sputniknews.com/military/20151125/1030701221/patriot-intercept-missile.html.

Bill Gertz, "Russia Flight Tests Anti-Satellite Missile," *The Washington Free Beacon*, December 2, 2015, http://freebeacon.com/national-security/russia-conducts-successful-flight-test-of-anti-satellite-missile/.

Dave Majumdar, "Ready for War: Russia's Stealthy Kh-101 Cruise Missile Debuts in Syria," *The Diplomat*, November 18, 2015, <a href="http://nationalinterest.org/blog/the-buzz/ready-war-russias-stealthy-kh-101-cruise-missile-debuts-14387">http://nationalinterest.org/blog/the-buzz/ready-war-russias-stealthy-kh-101-cruise-missile-debuts-14387</a>.

the submerged strategic submarine, Vladimir Monomakh. 109

99. Date: November 12, 2015

Type: Test Launch Involving: U.S.

Location: White Sands Missile Range, New Mexico, U.S.

Summary: A PAC-3 missile successfully intercepts an airborne missile in an air defense test. 110

## 100. Provocative Incident

Date: November 10, 2015 Type: Defense News Involving: Russia Location: Russia

**Summary:** Kremlin-controlled channels show confidential plans for a nuclear torpedo system on

T.V. 111

101. **Date:** November 9, 2015

**Type:** Test Launch **Involving:** U.S.

Location: Pacific Ocean near southern California, U.S.

**Summary:** The U.S. successfully conducts a test launch of the Trident II missile from a ballistic

submarine. 112

102. **Date:** November 7, 2015

Type: Test launch Involving: U.S.

Location: Pacific Missile Range Facility, Hawaii, U.S.

Summary: The U.S. Navy successfully tests an unarmed W88 warhead launched atop a Trident II

missile from the USS Kentucky. 113

103. **Date:** November 3, 2015 **Type:** Military Exercise

**Involving:** Russia

Location: Northern and Eastern Russia

**Summary:** Russian Defense Minister announces that each leg of the strategic nuclear forces triad and high-precision long-range weapons demonstrated high levels of combat readiness when test-

<sup>109</sup> "Submerged Russian nuclear sub test-fires 2 ballistic Bulava missiles," *RT*, November 15, 2015, https://www.rt.com/news/322120-russia-borei-bulava-test/.

<sup>110 &</sup>quot;US Patriot PAC-3 Intercept Missile Destroys Test Target - Lockheed Martin," *Sputnik International*, November 25, 2015, http://sputniknews.com/military/20151125/1030701221/patriot-intercept-missile.html.

<sup>111 &</sup>quot;Russian TV stations broadcast secret nuclear torpedo plans," *The Guardian*, November 11, 2015, http://www.thoguardian.com/world/2015/nov/12/russian.tv.stations.broadcast secret nuclear torpedo n

http://www.theguardian.com/world/2015/nov/12/russian-tv-stations-broadcast-secret-nuclear-torpedo-plans.

112 W.J. Hennigan, "Navy launches second test missile off Southern California coast," *Los Angeles Times*, November 9,

<sup>2015,</sup> http://www.latimes.com/local/lanow/la-me-ln-second-missile-launch-pentagon-20151109-story.html.

<sup>&</sup>lt;sup>113</sup> "Fourth flight test for W88 Alt 370 successful," *NNSA Blog*, March 16, 2016, <a href="http://nnsa.energy.gov/blog/fourth-flight-test-w88-alt-370-successful">http://nnsa.energy.gov/blog/fourth-flight-test-w88-alt-370-successful</a>.

fired during planned military exercises. 114

104. Date: October 20, 2015

**Type:** Test Flight **Involving:** U.S.

Location: Tonopah Test Range, Nevada, U.S.

Summary: The U.S. completes a development flight test of the B61-12, an upgraded nuclear

gravity bomb. 115

105. **Date:** October 16, 2015 **Type:** Air Incident

**Involving:** Russia and Turkey

Location: Turkey

**Summary:** Turkish jets shoot down a Russian-made drone that had entered Turkish airspace.

Russia denied ownership of the drone. 116

## 106. Provocative Incident

**Date:** October 6, 2015 **Type:** Air Incident

**Involving:** Russia and Turkey **Location:** Syrian-Turkish Border

Summary: Turkish officials claim a Russian MiG-29 "harassed" its jets. As a protest, the Russian

ambassador was summoned three times. 117

## 107. Provocative Incidents (2)

**Date:** October 4, 2015 **Type:** Air Incidents (2)

**Involving:** Russia and Turkey **Location:** Syrian-Turkish Border

Summary: Russian fighter aircraft enter Turkish airspace despite repeated warnings from

Turkey. 118 The same day, a Russian-made MiG-29, used by both Russia and Syria, locks its radar

on two Turkish F-16s along the Syrian border.

<sup>114</sup> "Recent drills demonstrate high combat readiness of Russia's strategic nuclear forces," *Tass Russian News Agency*, November 3, 2015, <a href="http://tass.ru/en/defense/833689">http://tass.ru/en/defense/833689</a>.

 $\underline{\text{http://www.defensenews.com/story/defense/2015/10/11/us-begins-removing-patriot-missiles-from-turkey/73787688/.}$ 

Richard Tomkins, "U.S. tests new unarmed nuclear gravity bomb," *UPI*, November 18, 2015, <a href="http://www.upi.com/Business">http://www.upi.com/Business</a> News/Security-Industry/2015/11/18/US-tests-new-unarmed-nuclear-gravity-bomb/6191447871463/.

<sup>116</sup> Oren Dorell, "Turkey shot down Russian jet after escalating warnings," *USA Today*, November 24, 2015, <a href="http://www.usatoday.com/story/news/world/2015/11/24/turkey-shot-down-russian-jet-after-escalating-warnings/76337502/">http://www.usatoday.com/story/news/world/2015/11/24/turkey-shot-down-russian-jet-after-escalating-warnings/76337502/</a>.

117 Burak Ege Bekdil, "US Begins Removing Patriot Missiles from Turkey," *Defense News*, October 11, 2015,

Oren Dorell, "Turkey shot down Russian jet after escalating warnings," *USA Today*, November 24, 2015, <a href="http://www.usatoday.com/story/news/world/2015/11/24/turkey-shot-down-russian-jet-after-escalating-warnings/76337502/">http://www.usatoday.com/story/news/world/2015/11/24/turkey-shot-down-russian-jet-after-escalating-warnings/76337502/</a>.

## 108. Provocative Incident

Date: October 3, 2015

Type: Air Incident: Intercept Involving: Russia and Turkey Location: Syrian-Turkish Border

Summary: Two Turkish F-16s intercept a Russian aircraft that had entered into Turkish airspace

during a mission over Syria. The Russian Defense Ministry stated that the Russian Su-30

mistakenly entered Turkish airspace "for a few seconds" due to bad weather. 119

109. Date: September 28, 2015

Type: Test Launch Involving: Russia

Location: Astrakhan Region, Russia

**Summary:** Russia conducts a successful test launch of an Iskander-M missile. 120

110. **Date:** September 14, 2015 **Type:** Military Exercise

**Involving:** Russia

Location: Central Russia

**Summary:** Russia begins its largest military exercise of the year, involving approximately 95,000 troops, 7,000 pieces of military equipment, 170 warplanes and 20 ships. The drills are testing the military's readiness for a potential international conflict and the destruction of illegal armed

groups. 121

111. **Date:** September 12, 2015 **Type:** Air Incident: Intercept **Involving:** Russia and Denmark

**Location:** Baltic Sea

**Summary:** Two Danish F-16 fighter jets intercept two Russian Tupolev Tu-22M bombers flying over the Baltic. A Danish military spokesman said the intercept was in "no way dramatic." <sup>122</sup>

112. **Date:** September 11, 2015

**Type:** Air Incident: Intercept **Involving:** Russia and the U.K.

Location: North Sea

**Summary:** British Royal Air Force Typhoon fighter jets intercept two Russian Tu-160 bombers

<sup>&</sup>lt;sup>119</sup> Suzannah Cullinane and Zeynep Blilginsoy, "Russia says Turkish airspace violation 'a mistake,' Turkish media report," *CNN*, October 5, 2015.

<sup>&</sup>lt;sup>120</sup> "Live-firing of Iskander-M tactical missile successfully completed in southern Russia," *Tass Russian News Agency*, September 28, 2015, http://tass.ru/en/defense/824133.

Conor Gaffey, "Russia Begins Biggest Military Exercises of 2015, Involving 95,000 Troops," *Newsweek*, September 14, 2015, <a href="http://europe.newsweek.com/russia-begins-biggest-military-exercises-2015-involving-95000-troops-332958">http://europe.newsweek.com/russia-begins-biggest-military-exercises-2015-involving-95000-troops-332958</a>.

<sup>&</sup>lt;sup>122</sup> AP, "Danes scramble fighters to intercept Russian bombers," *Yahoo! News*, September 12, 2015, http://news.yahoo.com/danes-scramble-fighters-intercept-russian-bombers-141843148.html.

flying near U.K. airspace. 123

113. **Date:** September 7, 2015

Type: Test Flight **Involving:** Russia **Location:** Crimea

**Summary:** Russia tests its new Su-30SM fighter aircraft, which can be used as a bomber, over

Crimea. 124

114. **Date:** September 5, 2015

**Type:** Air Incident: Intercept **Involving:** Russia and NATO

Location: Baltic Sea

Summary: NATO fighter jets intercept a Russian IL-78 refueling tanker aircraft flying with its

transponder switched off. 125

115. **Date:** September 4, 2015

**Type:** Air Incident: Intercept **Involving:** Russia and NATO

**Location:** Baltic Sea

**Summary:** NATO fighter jets intercept a Russian II-38 maritime patrol and anti-submarine warfare

aircraft flying with its transponder switched off and no pre-filed flight plan. 126

116. **Date:** September 3, 2015

**Type:** Sea Incident

**Involving:** Russia and the U.S.

Location: off the coast of Florida, USA

Summary: Yanter, a Russian research ship is spotted off the coast of Florida after sailing down the

U.S. east coast. The ship is believed to be mapping U.S. communications cables. 127

117. Date: August-September 2015

**Type:** Military Exercise

**Involving:** NATO

Location: Germany, Bulgaria

<sup>123</sup> "Britain scrambles fighter jets to escort Russian bombers," *Reuters*, September 11, 2015, http://www.reuters.com/article/2015/09/11/us-britain-russia-jets-idUSKCN0RB1XP20150911.

http://en.delfi.lt/lithuania/defence/nato-jets-in-baltics-perform-5-scrambles-to-intercept-russian-planes.d?id=68935110.

126 "NATO jets in Baltics perform 5 scrambles to intercept Russian planes," Delfi, September 7, 2015, http://en.delfi.lt/lithuania/defence/nato-jets-in-baltics-perform-5-scrambles-to-intercept-russian-planes.d?id=68935110.

<sup>&</sup>lt;sup>124</sup> David Hookstead, "Russian Military Conducts Practice Bombings In Crimea With New Fighter Aircraft," *The Daily* Caller, September 8, 2015, http://dailycaller.com/2015/09/08/russian-military-conducts-practice-bombings-in-crimea-with-

new-fighter-aircraft/.

125 "NATO jets in Baltics perform 5 scrambles to intercept Russian planes," *Delfi*, September 7, 2015,

<sup>127 &</sup>quot;Russian ship off the coast of Florida," CBS News, September 3, 2015 http://www.cbsnews.com/news/russian-ship-maybe-mapping-united-states-commucations-cables-florida/.

**Summary**: NATO troops conduct the participate in the military exercise Swift Response 2015, the largest combined airborne training in Europe since the Cold War. 128

118. **Date:** August 31, 2015

Type: Air Incident: Intercept Involving: Russia and NATO

Location: Baltic Sea

Summary: NATO fighter jets intercept two Russian SU-27 fighters, two Russian Tu-22 strategic

bombers and one An-26 transport aircraft. 129

119. Date: August 22, 2015

Type: Test Launch Involving: Russia

Location: Astrakhan Region, Russia

**Summary:** Russia completes a successful test-fire of a RS-12M Topol intercontinental ballistic

missile. 130

120. **Date:** August 19, 2015

**Type:** Test Launch **Involving:** U.S.

Location: Vandenberg Air Force Base, California, U.S.

Summary: The U.S. test launches a Minuteman III intercontinental ballistic missile (ICBM) in

California. 131

121. Date: August 17, 2015

Type: Air Incident: Intercept Involving: Russia and NATO

Location: Baltic Sea

**Summary:** NATO jets intercept Russian Air Force II-20 flying in international airspace above the

Baltic Sea. 132

<sup>128</sup> "Major NATO and NATO-related exercises conducted since 2014 in Central Europe and adjacent areas," European Leadership Network, February 2016,

 $\underline{\text{http://www.europeanleadershipnetwork.org/medialibrary/2016/02/05/03c89dff/Major\%20NATO\%20Exercises\%20TABLE}\\ ELN.ndf.$ 

"129 "NATO jets in Baltics perform 5 scrambles to intercept Russian planes," *Delfi*, September 7, 2015,

http://en.delfi.lt/lithuania/defence/nato-jets-in-baltics-perform-5-scrambles-to-intercept-russian-planes.d?id=68935110.

130a Russia successful test fires Topol ballistic missile," *RT*, August 23, 2015, <a href="https://www.rt.com/in-motion/313160-russia-tests-topol-missile/">https://www.rt.com/in-motion/313160-russia-tests-topol-missile/</a>.

tests-topol-missile/.

Tall Capt. Christopher Mesnard, "45 years on alert: Minot conducts Minuteman III test launch," *U.S. Air Force*, <a href="http://www.af.mil/News/ArticleDisplay/tabid/223/Article/614112/45-years-on-alert-minot-conducts-minuteman-iii-test-launch.aspx">http://www.af.mil/News/ArticleDisplay/tabid/223/Article/614112/45-years-on-alert-minot-conducts-minuteman-iii-test-launch.aspx</a>.

<sup>132</sup> "NATO jets intercept Russian military aircraft near Latvia," *Censor.net*, August 17, 2015, http://en.censor.net.ua/news/348026/nato jets intercept russian military aircraft near latvia. 122. Date: August 15, 2015

**Type:** Air Incident: Intercepts (3) **Involving:** Russia and NATO

**Location:** Baltic States

Summary: NATO aircraft make three intercepts: a Russian Su-24 tactical bomber and three An-26

transport aircraft; an An-26 airport aircraft; and an An-12 transport aircraft. 133

123. **Date:** August 14, 2015

**Type:** Air Incident: Intercept **Involving:** Russia and NATO

**Location:** Baltic States

Summary: NATO fighter jets intercept an Il-20 reconnaissance aircraft over the Baltic. 134

124. Date: August 13, 2015

**Type:** Air Incident: Intercept **Involving:** Russia and NATO

**Location:** Baltic States

Summary: NATO fighter jets escort an Il-20 reconnaissance aircraft over the Baltic. 135

125. Date: July 29, 2015

Type: Air Incident: Intercept Involving: Russia and NATO

**Location:** Baltic States

Summary: Norwegian F-16 fighters intercept 12 Russia planes, including four MiG-32 fighters,

four Su-242 fighters, two An-26 and one Il-76 transport aircraft. <sup>136</sup>

126. **Date:** July 29, 2015 **Type:** Test Launch **Involving:** Russia

Location: Central Military District, Russia

**Summary:** Russia conducts a successful test-fire of the Iskander-M tactical missile. 137

127. **Date:** July 24, 2015

Type: Air Incident: Intercept

<sup>133</sup> "NATO fighters perform five scrambles times to intercept Russian planes," *DELFI* August 18, 2015, http://m.en.delfi.lt/article.php?id=68760848.

<sup>134</sup> "NATO fighters perform five scrambles times to intercept Russian planes," *DELFI* August 18, 2015, http://m.en.delfi.lt/article.php?id=68760848.

135 "NATO fighters perform five scrambles times to intercept Russian planes," *DELFI* August 18, 2015, http://m.en.delfi.lt/article.php?id=68760848.

<sup>136</sup> Sam Jones, "Nato fighter jets intercept Russian aircraft," *Financial Times*, July 30, 2015, http://www.ft.com/cms/s/0/214bf25e-36ca-11e5-b05b-b01debd57852.html#ixzz3tNRhVxd7.

<sup>137</sup> Kukil Bora, "Russia Successfully Test-Fires Iskander-M Tactical Missile Systems," *International Business Times*, July 29, 2015, <a href="http://www.ibtimes.com/russia-successfully-test-fires-iskander-m-tactical-missile-systems-2029195">http://www.ibtimes.com/russia-successfully-test-fires-iskander-m-tactical-missile-systems-2029195</a>.

**Involving:** Russia and NATO

Location: Baltic Sea

**Summary:** British fighter jets intercept 10 Russian aircraft approaching Baltic airspace near Finland, including four Su-34 fighters, four MiG-31 fighters and two An-26 transport aircraft. The

Russian aircraft had turned off their flight transponders. 138

128. Date: July 4, 2015

**Type:** Air Incident: Intercept **Involving:** Russia and the U.S. **Location:** Alaskan Coast

Summary: U.S. fighter jets intercept two Russian Tu-95 bombers off the southern coast of

Alaska. 139

129. Date: July 4, 2015

**Type:** Air Incident: Intercept **Involving:** Russia and the U.S.

Location: Pacific Ocean near California, U.S.

Summary: U.S. F-15 fighter jets intercept two Russian Tu-95 bombers flying about 40 miles off

the coast of central California. 140

130. **Date:** July 1, 2015 **Type:** Test Flight

**Involving:** U.S.

Location: Tonopah Test Range, Nevada, U.S.

Summary: The U.S. successfully flight tests a B61-12 nuclear gravity bomb without a warhead. 141

#### 131. Provocative Incident

**Date:** June 26, 2015

**Type:** Air Incident: Intercept **Involving:** Russia and Finland

**Location:** Finland

Summary: Finland's Air Force intercepts Russian Il-76 transport plane after the aircraft entered one kilometer into Finnish territory. The plane was flying without transponders on and failed to

<sup>138</sup> Sam Jones, "Nato fighter jets intercept Russian aircraft," Financial Times, July 30, 2015, http://www.ft.com/cms/s/0/214bf25e-36ca-11e5-b05b-b01debd57852.html#ixzz3tNRhVxd7.

<sup>139</sup> Brian Todd and Jethro Mullen, "July Fourth message not the first from Russian bombers," CNN, July 23, 2015,

http://www.cnn.com/2015/07/23/politics/us-russian-bombers-july-4-intercept/.

Brian Todd and Jethro Mullen, "July Fourth message not the first from Russian bombers," CNN, July 23, 2015, http://www.cnn.com/2015/07/23/politics/us-russian-bombers-july-4-intercept/.

<sup>141 &</sup>quot;US Military Successfully Tests Nuclear Gravity Bomb," Sputnik, July 13, 2015, http://sputniknews.com/us/20150710/1024433025.html.

leave Finnish airspace when demanded. 142

132. **Date:** June 23, 2015 **Type:** Defense News **Involving:** U.S.

Location: Eastern and Central Europe

**Summary:** Defense Secretary Ash Carter announces that the U.S. will pre-position military

equipment including tanks and artillery in eastern and central Europe. 143

133. Date: June 21, 2015

Type: Air Incident: Intercept Involving: Russia and NATO

Location: Baltic Sea, near Lithuanian border

Summary: NATO aircraft intercept to a Russian Il-20 aircraft. 144

134. Date: June 17, 2015

Type: Air Incident: Intercept (4) Involving: Russia and NATO

Location: Baltic Sea, near Lithuanian border

Summary: NATO aircraft perform four intercepts of Russian aircraft, including an Il-22, a MiG-

31, an A-50 and An-26, and a Tu-22M bomber. 145

135. Date: June 17, 2015

**Type:** Air Incident: Intercept (3) and Military Exercise

**Involving:** Russia and NATO/U.K. **Location:** Baltic Sea; Northern Poland

**Summary:** Royal Air Force Typhoon fighter jets intercept Russian jets flying close to NATO

military exercise in the Baltic three times in 24 hours. 146

136. Date: June 16, 2015

**Type:** Air Incident: Intercept (3)

<sup>&</sup>lt;sup>142</sup> "Finland scrambles to intercept Russian military aircraft," *Ukraine Today*, July 9, 2015, <a href="http://uatoday.tv/news/finland-scrambles-to-intercept-russian-military-aircraft-453438.html">http://uatoday.tv/news/finland-scrambles-to-intercept-russian-military-aircraft-453438.html</a>.

<sup>&</sup>lt;sup>143</sup> Phil Stewart and David Mardiste, "U.S. to pre-position tanks, artillery in Baltics, eastern Europe," *Reuters*, June 23, 2015, <a href="http://www.reuters.com/article/2015/06/23/us-usa-europe-defense-idUSKBN0P315620150623">http://www.reuters.com/article/2015/06/23/us-usa-europe-defense-idUSKBN0P315620150623</a>.

Christopher Harress, "Russian Planes Intercepted By Norwegian F-16 And Italian Eurofighter NATO Jets 10 Times
 Over Last Week," *International Business Times*, June 23, 2015, <a href="http://www.ibtimes.com/russian-planes-intecepted-norwegian-f-16-italian-eurofighter-nato-jets-10-times-over-1979571">http://www.ibtimes.com/russian-planes-intecepted-norwegian-f-16-italian-eurofighter-nato-jets-10-times-over-1979571</a>.
 Christopher Harress, "Russian Planes Intercepted By Norwegian F-16 And Italian Eurofighter NATO Jets 10 Times

<sup>&</sup>lt;sup>145</sup> Christopher Harress, "Russian Planes Intercepted By Norwegian F-16 And Italian Eurofighter NATO Jets 10 Times Over Last Week," *International Business Times*, June 23, 2015, <a href="http://www.ibtimes.com/russian-planes-intecepted-norwegian-f-16-italian-eurofighter-nato-jets-10-times-over-1979571">http://www.ibtimes.com/russian-planes-intecepted-norwegian-f-16-italian-eurofighter-nato-jets-10-times-over-1979571</a>.

<sup>&</sup>lt;sup>146</sup> Paul Vale, "RAF Typhoons Dispatched 3 Times In 24 Hours To Intercept Russian Aircraft During NATO Exercises," *The Huffington Post UK*, June 17, 2015, <a href="http://www.huffingtonpost.co.uk/2015/06/17/raf-typhoons-intercept-russian-aircraft-nato-baltic">http://www.huffingtonpost.co.uk/2015/06/17/raf-typhoons-intercept-russian-aircraft-nato-baltic</a> n 7605070.html.

**Involving:** Russia and NATO

Location: Baltic Sea, near Lithuanian border

Summary: NATO aircraft perform three intercepts of Russian aircraft, including an A-50 warning

and control aircraft, an An-26 transport plane, and a MiG-31 fighter jet. 147

137. **Date:** June 16, 2015 **Type:** Defense News **Involving:** Russia **Location:** Russia

**Summary:** President Putin announces that Russia will add over 40 new intercontinental ballistic missiles (ICBMs) to its nuclear weapons arsenal in 2015. He also said Russia will start testing a new long-range radar system. Following the speech, Deputy Defense Minister Anatoly Antonov claimed NATO was pushing Russia into an arms race. 148

138. Date: June 15, 2015

Type: Air Incident: Intercept Involving: Russia and NATO

Location: Baltic Sea, near Lithuanian border

**Summary:** NATO aircraft intercept to two Russian reconnaissance planes. 149

## 139. Provocative Incident

**Date:** June 11, 2015 **Type:** Sea Incident

**Involving:** Russia and NATO

Location: Baltic Sea

Summary: A Russian military surveillance aircraft flies close to four NATO warships in the Baltic

Sea 150

140. **Date:** June 9, 2015

**Type:** Air Incident: Intercept (2) **Involving:** Russia and the U.K.

Location: Baltic Sea

**Summary:** Royal Air Force Typhoon fighter jets intercept a IL-20M surveillance aircraft flying

<sup>147</sup> Christopher Harress, "Russian Planes Intercepted By Norwegian F-16 And Italian Eurofighter NATO Jets 10 Times Over Last Week," *International Business Times*, June 23, 2015, <a href="http://www.ibtimes.com/russian-planes-intecepted-norwegian-f-16-italian-eurofighter-nato-jets-10-times-over-1979571">http://www.ibtimes.com/russian-planes-intecepted-norwegian-f-16-italian-eurofighter-nato-jets-10-times-over-1979571</a>.

Adam Withnall, "Vladimir Putin announces Russia will add more than 40 intercontinental ballistic missiles to nuclear arsenal in 2015," *The Independent*, June 16, 2015, <a href="http://www.independent.co.uk/news/world/europe/vladimir-putin-announces-russia-will-add-40-new-ballistic-missiles-to-nuclear-arsenal-in-2015-10323304.html">http://www.independent.co.uk/news/world/europe/vladimir-putin-announces-russia-will-add-40-new-ballistic-missiles-to-nuclear-arsenal-in-2015-10323304.html</a>.

announces-russia-will-add-40-new-ballistic-missiles-to-nuclear-arsenal-in-2015-10323304.html.

149 Christopher Harress, "Russian Planes Intercepted By Norwegian F-16 And Italian Eurofighter NATO Jets 10 Times Over Last Week," *International Business Times*, June 23, 2015, <a href="http://www.ibtimes.com/russian-planes-intecepted-norwegian-f-16-italian-eurofighter-nato-jets-10-times-over-1979571">http://www.ibtimes.com/russian-planes-intecepted-norwegian-f-16-italian-eurofighter-nato-jets-10-times-over-1979571</a>.

<sup>&</sup>lt;sup>150</sup> Barbara Starr, "Russian military aircraft buzzes NATO warships in Baltic," *CNN*, June 13, 2015, http://www.cnn.com/2015/06/13/politics/nato-russian-flyover-baltic-sea/.

near Baltic airspace and, later, a Russian An-26 transport plane flying from Kaliningrad. 151

## 141. Provocative Incident

**Date:** May 31, 2015

Type: Sea Incident: Intercept Involving: Russia and the U.S.

Location: Black Sea

**Summary:** Russian Su-24 attack aircraft head off a U.S. guided missile destroyer, the USS *Ross*, which an anonymous source from the Russian Army claimed was acting "aggressively" in the Black Sea. The Pentagon said the ship was carrying out routine operations in international waters. <sup>152</sup>

## 142. Provocative Incident

Date: May 30, 2015

**Type:** Air Incident: Intercepts (2) **Involving:** Russia and the U.S.

Location: Black Sea

**Summary:** Russian Su-27 Flankers intercept a U.S. RC-135 military intelligence aircraft twice as it flew over the international waters of the Black Sea near Ukraine. During the first intercept, the Russian fighter jet came within 10 feet of the U.S. plane. 154

143. **Date:** May 17-21, 2015 **Type:** Military Exercise **Involving:** Russia and China **Location:** Mediterranean Sea

**Summary:** Russian and China conduct their first-ever joint naval exercises, code named "Joint Sea 2015." Nine ships from both countries participated in the exercises, which a Russian naval deputy commander explained showed their "readiness to jointly face new threats and challenges at sea, and the ability to safeguard stability practically in any area of the World Ocean." <sup>155</sup>

144. **Date:** May 14, 2015

**Type:** Air Incident: Intercept **Involving:** Russia and the U.K.

<sup>151</sup> Kukil Bora, "Russian Military Aircraft Intercepted By RAF Typhoon Jets Over Baltic Sea," *International Business Times*, June 10, 2015, <a href="http://www.ibtimes.com/russian-military-aircraft-intercepted-raf-typhoon-jets-over-baltic-sea-1960068">http://www.ibtimes.com/russian-military-aircraft-intercepted-raf-typhoon-jets-over-baltic-sea-1960068</a>.

<sup>150</sup> Reuters, "Russia warplanes head off US destroyer in Black Sea," *Aljazeera*, May 31, 2015, <a href="http://www.aljazeera.com/news/2015/05/russia-warplanes-head-destroyer-black-sea-150531045733604.html">http://www.aljazeera.com/news/2015/05/russia-warplanes-head-destroyer-black-sea-150531045733604.html</a>.

153 Andrew Tilghman, "Russian fighter intercepts U.S. intel aircraft," *Military Times*, June 12, 2015, 12, 2015,

http://www.militarytimes.com/story/military/pentagon/2015/06/12/russian-intercept-us-intel-aircraft/71125316/.

http://www.militarytimes.com/story/military/pentagon/2015/06/12/russian-intercept-us-intel-aircraft/71125316/.

http://www.military.com/daily-news/2015/06/12/russian-fighter-jet-flew-within-10-feet-us-plane-officials-say.html.

<sup>&</sup>lt;sup>155</sup> Franz-Stefan Gady, "China and Russia Conclude Naval Drill in Mediterranean," *The Diplomat*, May 22, 2015, http://thediplomat.com/2015/05/china-and-russia-conclude-naval-drill-in-mediterranean/.

Location: North Sea

**Summary:** Royal Air Force Typhoon jets intercept two Russian Bear aircraft approaching U.K.

airspace north of Scotland. 156

145. Date: May 12, 2015

**Type:** Air Incident: Intercept

**Involving:** Russia and the U.K./NATO

Location: Gulf of Finland

Summary: Two RAF Typhoon jets intercept a Russian Ilyushin IL-20 spy plane flying close to

Estonian airspace. 157

146. **Date:** May 2015

**Type:** Military Exercise

**Involving:** Russia

Location: Komi Republic, Russia

Summary: Russia begins an unexpected 4-day air force exercise, involving 250 aircraft and

12,000 service personnel. 158

147. **Date:** May 2015

**Type:** Military Exercise

**Involving:** NATO and Sweden

Location: North Sea and Eastern Europe

**Summary:** NATO countries stage air, land and sea exercises in Lithuania, Estonia and Norway involving over 21,000 troops. Operation Hedgehog launches on May 4 and consists of the biggest ground maneuvers in Estonian history; Operation Lightning Strike in Lithuania tests the effectiveness of military-civilian cooperation with over 3,000 soldiers and police officers; and navies from the U.S., Germany, Norway and Sweden engage in anti-submarine maneuvers in the North Sea. 159

148. **Date:** April 24, 2015

Type: Test Launch Involving: Russia

Location: Bidzhan, Russia

Summary: Russia completes computer-simulated launches of Iskander-M tactical missile

<sup>156</sup> Tomas Hirst, "Britain scrambled fighter jets to intercept Russian military aircraft moving towards UK airspace," *Business Insider*, May 14, 2015, <a href="http://www.businessinsider.com/raf-jets-intercept-russian-aircraft-2015-5">http://www.businessinsider.com/raf-jets-intercept-russian-aircraft-2015-5</a>.

<sup>&</sup>lt;sup>157</sup> Corey Charlton, "RAF Typhoons scrambled to intercept Russian spy plane in latest high tension flashpoint," *Daily Mail Online*, May 12, 2015, <a href="http://www.dailymail.co.uk/news/article-3078812/RAF-Typhoons-scrambled-intercept-Russian-spy-plane-latest-high-tension-flashpoint.html">http://www.dailymail.co.uk/news/article-3078812/RAF-Typhoons-scrambled-intercept-Russian-spy-plane-latest-high-tension-flashpoint.html</a>.

plane-latest-high-tension-flashpoint.html.

158 Lucy Clarke-Billings, "Russia begins huge surprise air force drill on same day as Nato starts Artic training," *The Independent*, May 27, 2015, <a href="http://www.independent.co.uk/news/world/russia-begins-huge-surprise-air-force-drill-on-same-day-as-nato-start-arctic-training-10275692.html">http://www.independent.co.uk/news/world/russia-begins-huge-surprise-air-force-drill-on-same-day-as-nato-start-arctic-training-10275692.html</a>

To Carol J. Williams, "NATO military exercises aim to send message of resolve to Russia," *L.A. Times*, May 7, 2015, http://www.latimes.com/world/europe/la-fg-russia-nato-nuclear-threat-20150507-story.html#page=1.

system. 160

149. **Date:** April 22, 2015 **Type:** Air Incident

**Involving:** Russia and the U.S.

**Location:** Alaskan coast

Summary: Two Russian nuclear capable Tu-95 Bear H bombers flew into the U.S. air defense

zone near Alaska. No U.S. interceptor jets were sent to intercept the bombers. 161

150. Date: April 14, 2015

**Type:** Air Incident: Intercept and Military Exercise

**Involving:** Russia and the U.K./NATO

Location: North Sea

**Summary:** U.K. Royal Air Force Typhoon jets intercept Russian Bear bombers flying close to U.K. airspace at the same time as NATO warships gather in the region for naval war games, which are being inspected by Russian military experts during an official visit. <sup>162</sup>

151. **Date:** Mid-April 2015 **Type:** Military Exercise

**Involving:** Russia

Location: North Atlantic

Summary: The Russian destroyer Severomorsk, a tanker and a tug make their way through the

North Sea to anti-aircraft and anti-submarine drills in the northern Atlantic. 163

### 152. Provocative Incident

**Date:** April 7, 2015

Type: Air Incident: Intercept Involving: Russia and the U.S.

Location: Baltic Sea

**Summary:** A Russian Su-27 fighter intercepts a U.S. RC-135U reconnaissance plane over the Baltic Sea. The U.S. later issues a complaint stating that the Russian fighter's maneuvers were "unsafe and unprofessional" referencing the belief that the fighter approached the plane by a

<sup>160</sup> "Russia Conducts Simulated Launches of Iskander-M Missiles," *Sputnik International*, April 24, 2015, <a href="http://sputniknews.com/russia/20150424/1021328730.html">http://sputniknews.com/russia/20150424/1021328730.html</a>.

Bill Gertz, "Russia Conducts Nuclear Bomber Flight Near Alaska," *The Washington Free Beacon*, May 1, 2015, http://freebeacon.com/national-security/russia-conducts-nuclear-bomber-flight-near-alaska/.

<sup>&</sup>lt;sup>162</sup> Ben Farmer, "RAF Typhoon jets and Navy escort Russian military visitors around Britain," *The Telegraph*, April 14, 2015, <a href="http://www.telegraph.co.uk/news/uknews/defence/11535751/RAF-Typhoon-jets-launched-to-intercept-Russian-military-planes.html">http://www.telegraph.co.uk/news/uknews/defence/11535751/RAF-Typhoon-jets-launched-to-intercept-Russian-military-planes.html</a>.

<sup>&</sup>lt;sup>163</sup> Ben Farmer, "RAF Typhoon jets and Navy escort Russian military visitors around Britain," *The Telegraph*, April 14, 2015, <a href="http://www.telegraph.co.uk/news/uknews/defence/11535751/RAF-Typhoon-jets-launched-to-intercept-Russian-military-planes.html">http://www.telegraph.co.uk/news/uknews/defence/11535751/RAF-Typhoon-jets-launched-to-intercept-Russian-military-planes.html</a>.

distance of only 6 meters. 164

153. Date: April 3, 2015

**Type:** Military Exercise

**Involving:** U.S. **Location:** Black Sea

**Summary:** A U.S. destroyer arrives in the Black Sea in support of NATO drills designed to strengthen security in the region during the Ukraine crisis. The U.S. has also deployed 65 tanks and thousands of troops to Estonia, Latvia and Lithuania. 165

154. **Date:** March 24, 2015

**Type:** Air Incident: Intercept and Military Exercise

**Involving:** NATO and Russia

Location: Baltic, Sweden, and Poland

**Summary:** NATO fighter jets intercept two Russian Tu-22 nuclear-capable bombers and two Su -27 fighters flying with their transponders switched off near Sweden and the Baltic states. <sup>166</sup> That same day, U.S. Army troops crossed into Poland from Lithuania during a 1,100-mile trek through Eastern Europe meant to show NATO's commitment to the region. <sup>167</sup>

155. **Date:** Mid-March 2015

Type: Test Launch Involving: Russia Location: Russia

Summary: Russia completes a successful test launch of the RS-26, a solid-fueled ICBM that is

scheduled for combat duty in 2015. 168

156. Date: March 19, 2015 Type: Defense News Involving: Russia Location: Russia

**Summary:** Russian Navy Commander Adm. Viktor Chirkov reports that the number of patrols by Russian submarines, including nuclear submarines, from January 2014 to March 2015 rose by 50

<sup>164</sup> "US Protests 'Unsafe, Unprofessional' Russian Interception of US Recon Plane," *Sputnik International*, April 13, 2015, <a href="http://sputniknews.com/military/20150413/1020839776.html">http://sputniknews.com/military/20150413/1020839776.html</a>.

Lance M. Bacon, "Joint exercises put U.S. Navy at Russia's doorstep," *Navy Times*, April 4, 2015, <a href="http://www.navytimes.com/story/military/2015/04/04/russia-navy-exercises-aggression/25265193/">http://www.navytimes.com/story/military/2015/04/04/russia-navy-exercises-aggression/25265193/</a>.

<sup>&</sup>lt;sup>166</sup> Agence France-Presse, "Russian Bombers Spark NATO Scramble," *Defense News*, March 24, 2015, http://www.defensenews.com/story/defense/international/europe/2015/03/24/russian-bombers-spark-nato-scramble-protest-baltic/70405698/.

Nolan Peterson, "NATO Intercepts Russian Warplanes as US Convoy Enters Poland," *The Daily Signal*, March 26, 2015, <a href="http://dailysignal.com/2015/03/26/nato-intercepts-russian-warplanes-as-us-convoy-enters-poland/">http://dailysignal.com/2015/03/26/nato-intercepts-russian-warplanes-as-us-convoy-enters-poland/</a>.

<sup>&</sup>lt;sup>168</sup> "Final test launch of Russia's new RS-26 Rubezh ballistic missile successful – designer," *Tass*, March 31, 2015, http://tass.ru/en/russia/786100.

percent.169

157. Date: March 18, 2015

Type: Air Incident: Intercept **Involving:** NATO and Russia

**Location:** Baltic Sea

Summary: NATO jets intercept Russian military aircraft over the Baltic Sea. 170

### 158. Provocative Incident

**Date:** March 16-20, 2015 **Type:** Military Exercise **Involving:** Russia

Location: The Artic, Baltic, and Crimea

**Summary:** Russia conducts military exercises seemingly simulating a full-scale confrontation with NATO including forward-deployed nuclear submarines, strategic bombers, and ballistic missiles. There was no advanced notification of the exercise, which included around 45,000 servicemen. over 40 surface vehicles, 15 submarines and 110 aircraft. 171

159. Date: February 18, 2015

**Type:** Air Incident: Intercept **Involving:** Russia and the U.K.

Location: off the coast of Cornwall, U.K.

Summary: British fighter jets intercept two Russian Bear bombers. 172

160. **Date:** February 18, 2015

**Type:** Air Incident: Intercept **Involving:** Ireland and Russia Location: off the coast of Ireland

Summary: The Irish Aviation Authority reports two Tu-95 bombers came within 40 kilometers of

the Irish coast, disrupting commercial flight schedules. 173

161. Date: February 17, 2015 **Type:** Sea Incident

**Involving:** France, Russia and the U.K.

**Location:** English Channel

http://www.forbes.com/sites/stratfor/2015/03/20/russia-targets-nato-with-military-exercises/. 
172 "RAF jets scrambled after Russian bombers seen off Cornwall," *BBC News*, February 20, 2015,

<sup>169 &</sup>quot;Russian Nuclear Submarines Step Up Patrols Over Past Year – Navy Commander," Sputnik International, March 19, 2015, http://sputniknews.com/russia/20150319/1019714161.html.

<sup>&</sup>lt;sup>170</sup> Matthew Chance, Barbara Starr and Richard Greene, "NATO intercepts Russian military aircraft," CNN, March 19, 2015, http://www.cnn.com/2015/03/18/europe/nato-russia-aircraft-intercepted/.

<sup>171</sup> Stratfor "Russia Targets NATO With Military Exercises," *Forbes*, March 20, 2015,

http://www.bbc.com/news/uk-31530840.

Russian Bombers Fly Near Ireland," RadioFreeEurope, March 4, 2015, http://www.rferl.org/a/russian-bombersireland-/26880967.html.

**Summary**: Britain's HMS *Argyll* shadows a Russian frigate through the English Channel, taking over from French surveillance. <sup>174</sup>

### 162. Provocative Incident

**Date:** February 15, 2015 **Type:** Military Exercise **Involving:** NATO

Location: Western Ukraine

**Summary:** Troops from 15 countries, including the U.S., begin military exercises in western Ukraine that officials say were planned before the current crisis. NATO also announces the formation of a "spearhead" force of several thousand troops that can be deployed in a matter of days to protect member countries.<sup>175</sup>

163. **Date:** February 12, 2015 **Type:** Military Exercise

**Involving:** Russia

Location: Throughout Russia

**Summary:** Large-scale exercises involving Russia's nuclear missile force take place in 12 regions across the country. More than 30 regiments of the Strategic Missiles Force participate in drills to combat sabotage and chemical weapons attacks. <sup>176</sup>

164. **Date:** February 6, 2015

Type: Air Incident: Intercept Involving: Russia and NATO Location: Baltic Sea near Latvia

Summary: NATO Typhoon fighter jets intercept Russian Ilyushin IL-38 plane over the Baltic

Sea 177

165. **Date:** February 5, 2015 **Type:** Defense News **Involving:** NATO

**Location:** Eastern Europe

**Summary:** Members of NATO agree to establish six new command and control posts in Eastern

<sup>174</sup> "British warship monitors Russian naval vessel through Channel," *Reuters*, February 17, 2015, http://www.reuters.com/article/britain-defence-russia-idUSL5N0VR2S320150217

http://www.reuters.com/article/britain-defence-russia-idUSL5N0VR2S320150217.

175 "U.S. and Nato troops begin Ukraine military exercise," *BBC*, February 15, 2015, <a href="http://www.bbc.com/news/world-europe-29204505">http://www.bbc.com/news/world-europe-29204505</a>.

europe-29204505.

176 Dennis Lynch, "Russian Nuclear Missile Forces Conduct Large-Scale Exercises Across Country," *International Business Times*, February 12, 2015, <a href="http://www.ibtimes.com/russian-nuclear-missile-forces-conduct-large-scale-exercises-across-country-1814052">http://www.ibtimes.com/russian-nuclear-missile-forces-conduct-large-scale-exercises-across-country-1814052</a>.

<sup>177</sup> Kukil Bora, "NATO Typhoon Jets Scrambled To Intercept Russian Patrol Aircraft: Latvian Army," *International Business Times*, <a href="http://www.ibtimes.com/nato-typhoon-jets-scrambled-intercept-russian-patrol-aircraft-latvian-army-1808768">http://www.ibtimes.com/nato-typhoon-jets-scrambled-intercept-russian-patrol-aircraft-latvian-army-1808768</a>.

Europe. 178

166. **Date:** February 3, 2015

Type: Air Incident: Intercept Involving: Russia and NATO Location: Baltic Sea near Latvia

**Summary:** NATO Typhoon jets are sent by the Latvian military to escort a Russian IL-76 military

transport plane flying in neutral airspace. 179

167. **Date:** February 3, 2015

**Type:** Air Incident: Intercept **Involving:** Russia and NATO

Location: Baltic Sea

**Summary:** Italian Air Force Eurofighter jets deployed in Lithuania intercept a Russian warplane

after flying close to NATO airspace over the Baltic Sea. 180

168. **Date:** February 2015

**Type:** Military Exercise

**Involving:** Russia **Location:** The Artic

**Summary:** Russian naval nuclear units, including Borei-class submarines, engage in military exercises in international waters underneath the North Pole. A Russian officer reported the drills focused on "hazard and threat detection, but also on missile launching and navigation maneuvers, ice reconnaissance, submerging and emerging from ice, using torpedoes to undermine ice and many other issues." <sup>181</sup>

169. Date: January 30, 2015

Type: Air Incident: Intercept Involving: NATO and Russia

Location: Baltic Sea

**Summary:** Typhoon fighter jets intercept a Russian Il-78 refueling aircraft over the Baltic Sea. <sup>182</sup>

70

<sup>182</sup> "NATO Scrambles Jets After Russian Refueling Aircraft Flies Over Baltic Sea," *Sputnik*, January 30, 2015, <a href="https://sputniknews.com/europe/201501301017555513/">https://sputniknews.com/europe/201501301017555513/</a>.

<sup>&</sup>lt;sup>178</sup> "Lavrov slams NATO buildup in Eastern Europe," *PressTV*, February 7, 2015, http://www.presstv.ir/Detail/2015/02/08/396652/Lavrov-slams-NATO-buildup-in-E-Europe.

<sup>&</sup>lt;sup>179</sup> Kukil Bora, "NATO Typhoon Jets Scrambled To Intercept Russian Patrol Aircraft: Latvian Army," *International Business Times*, <a href="http://www.ibtimes.com/nato-typhoon-jets-scrambled-intercept-russian-patrol-aircraft-latvian-army-1808768">http://www.ibtimes.com/nato-typhoon-jets-scrambled-intercept-russian-patrol-aircraft-latvian-army-1808768</a>.

<sup>&</sup>quot;Italian jets stop Russian warplane over Baltic," *The Local*, February 3, 2015, <a href="http://www.thelocal.it/20150203/italian-jets-intercept-russian-warplane-over-baltic">http://www.thelocal.it/20150203/italian-jets-intercept-russian-warplane-over-baltic</a>.

181 Damien Sharkov, "Russia Sends Nuclear Submarine Troops on Arctic Exercise," *Newsweek*, February 6, 2015,

http://www.newsweek.com/russia-sends-nuclear-submarines-arctic-exercise-304931#.VNexDFJdYH0.twitter.

182 "NATO Scrambles Lets After Russian Refueling Aircraft Flies Over Baltic Sea." Sputnik, January 30, 2015

170. Date: January 30, 2015

**Type:** Air Incident: Intercept **Involving:** Russia and the U.K.

Location: North Sea

Summary: Royal Air Force Typhoon fighter jets intercept Russian fighter jets flying to near

Scotland. 183

171. Date: January 28, 2015

Type: Air Incident: Intercept Involving: Russia and the U.K. Location: English Channel

**Summary:** The Royal Air Forces' Euro Typhoon fighter jets intercept two Russian Tupolev Tu-95s after the Russian bombers, which have the ability to carry nuclear weapons, are seen flying

close to British airspace. 184

172. **Date:** Week of January 4, 2015

Type: Sea Incident

**Involving:** Russia, U.K. and the U.S. **Location:** off the coast of Scotland

**Summary**: Two U.S. Navy aircraft join Britain's HMS *Somerset* to conduct anti-submarine patrols

in search of a Russian vessel. 185

#### 173. Provocative Incident

Date: December 12, 2014

Type: Air Incident

**Involving:** Russia and Denmark/Sweden

Location: South of Sweden

**Summary:** A commercial flight leaving Copenhagen was almost hit by a Russian military jet the Swedish military reports. Russia's defence ministry denies the report saying the Russian plane was a safe distance of more than 70 kilometers from the flight path of the jet. <sup>186</sup>

a safe distance of more than 70 knometers from the fight path

#### 174. Provocative Incident

**Date:** December 8, 2014 **Type:** Air Incident: Intercept **Involving:** Russia and NATO

<sup>&</sup>lt;sup>183</sup> "Only Russia' dangerously probes British airspace, says source," *Euronews*, January 30, 2015, http://www.euronews.com/2015/01/30/only-russia-dangerously-probes-british-airspace-says-source.

<sup>184</sup> Damian Sharkov, "Two Russian Bombers Intercepted by RAF off Bournemouth," *Newsweek*, January 29, 2015 <a href="http://www.newsweek.com/two-russian-bombers-intercepted-raf-bournemouth-302944">http://www.newsweek.com/two-russian-bombers-intercepted-raf-bournemouth-302944</a>.

185 Jamie Merrill "MAD calls for American Intercepted and Intercepted

Jamie Merrill, "MoD asks for American help in searching for Russian submarine near Scotland," *The Independent*, January 8, 2015, <a href="http://www.independent.co.uk/news/uk/politics/mod-asks-for-american-help-in-searching-for-russian-submarine-near-scotland-9966080.html">http://www.independent.co.uk/news/uk/politics/mod-asks-for-american-help-in-searching-for-russian-submarine-near-scotland-9966080.html</a>.

<sup>&</sup>lt;sup>186</sup> "Russia denies near miss with Copenhagen flight," *The Local*, December 14, 2014, http://www.thelocal.dk/20141214/russia-denies-jet-near-miss-close-to-denmark.

Location: Baltic Sea

**Summary:** NATO releases a video showing alliance F-16s intercepting Russian military aircraft over the Baltic Sea. More than 30 types of Russian military aircraft were reported to be in the area <sup>187</sup>

175. Date: December 8, 2014

Type: Air Incident: Intercept Involving: Russia and Canada

Location: Alaskan Air Defense Zone

**Summary:** Two Canadian F-18s intercept two Russian Bear bombers that had entered into the Alaska air defense identification zone. The bomber never entered sovereign U.S. or Canadian

airspace. 188

176. Date: December 7, 2014

Type: Air Incident: Intercept Involving: Russia and NATO Location: Lithuanian airspace

Summary: Two Russian military transport aircraft and one bomber training aircraft are intercepted

by two Canadian CF-18 Hornets based in Lithuania. 189

177. **Date:** December 6-7, 2014

Type: Air Incident

**Involving:** Russia and NATO

Location: Baltic Sea

Summary: U.S. and NATO intelligence closely monitor about a dozen Russian aircraft including

bombers in the Baltic Sea. 190

#### 178. Provocative Incident

Date: December 1, 2014

Type: Air Incident: Intercept

Involving: Russia and Norway

Location: North of Norway

**Summary:** The Norwegian Armed Forces release video of a Russian MiG-31 cutting in front of two Norwegian F-16s sent to intercept the aircraft in international airspace by NATO. The actual

<sup>&</sup>lt;sup>187</sup> "Nato video shows Russian military jet being intercepted," *BBC*, December 11, 2014, <a href="http://www.bbc.com/news/world-europe-30427069">http://www.bbc.com/news/world-europe-30427069</a>.

Bill Gertz, "Russian Nuclear Bombers Again Buzz Guam," *The Washington Free Beacon*, December 19, 2014, http://freebeacon.com/national-security/russian-nuclear-bombers-again-buzz-guam/.

Hal Roberts, "Canadian CF-18s intercept three Russian aircraft over Lithuania," *Toronto Sun*, December 8, 2014, http://www.torontosun.com/2014/12/08/canada-signs-deal-to-help-ukraine-strengthen-security-against-russia.

<sup>&</sup>lt;sup>190</sup> Barbara Starr, "Russian military ramps up flights near Western airspace," *CNN*, December 8, 2014, <a href="http://www.cnn.com/2014/12/08/politics/russian-flights-near-nato/">http://www.cnn.com/2014/12/08/politics/russian-flights-near-nato/</a>.

date of the incident was not disclosed. 191

179. Date: Early December 2014

**Type:** Sea Incident

Involving: Canada, France, U.K., U.S. Location: off the west coast of Scotland

Summary: Planes from the U.S., France and Canada help the U.K. search for a submarine sighted

off the west coast of Scotland. 192

180. Date: November 28, 2014

**Type:** Test Launch **Involving:** Russia Location: Barents Sea

**Summary:** Russia's Borei-class submarine – the *Alexander Nevsky* – successfully test-launches the new submarine-launched Bulava intercontinental missile in the Barents Sea. 193 The *Alexander* Nevsky continues to undergo seat trials and will receive a full load of missiles in 2015. 194

181. Date: November 25, 2014 **Type:** Military Exercise

> **Involving:** Russia and the U.K. **Location:** English Channel

**Summary:** Russian warships are permitted to move through the English Channel under international law. The warships – a destroyer, a landing craft, a rescue tugboat and a tank ship – carry out exercises and are monitored by the U.K.'s HMS *Tyne* patrol boat, armed with a canon and machine guns. The Russian ships comply with all maritime reporting regulations. <sup>195</sup>

182. Date: November 21, 2014

**Type:** Defense News

**Involving:** Russia and NATO Location: Across NATO countries

**Summary:** NATO Sec. Gen. Jens Stoltenberg states that there have been more than 400 intercepts of Russian aircraft by NATO fighter jets this year – a 50% increase in Russian air activity over the

<sup>191</sup> Kjetil Malkenes Hovland, "Norwegian F-16 in Near-Miss With Russian Fighter Jet," *The Wall Street Journal*, December 1, 2014, http://online.wsj.com/articles/norwegian-f-16-in-near-miss-with-russian-fighter-jet-1417449268.

192 Jonathan Beale, "UK called on Nato help in sub search," *BBC News*, December 9, 2014, <a href="http://www.bbc.com/news/uk-">http://www.bbc.com/news/uk-</a>

scotland-30398114.

194 "Bulava missile to be launched from Alexander Nevsky submarine in late November – source," Tass Russian News Agency, November 25, 2014, http://en.itar-tass.com/russia/763514.

<sup>193</sup> Reuters, "Russian submarine test-launches Bulava intercontinental missile," Reuters, November 28, 2014, http://www.reuters.com/article/2014/11/28/us-russia-missile-idUSKCN0JC1SZ20141128.

Lizzie Dearden, "Russian warships tailed by Royal Navy as they move through the English Channel," *The Independent*, November 28, 2014, http://www.independent.co.uk/news/uk/home-news/russian-warships-tailed-by-royal-navy-as-theymove-through-the-english-channel-9890681.html.

past year. 196

183. Date: November 19, 2014

Type: Air Incident: Intercept Involving: Russia and NATO Location: Baltic Sea near Latvia

Summary: NATO CF-18 Hornet fighters intercept a Russian IL-20 military surveillance plane

over international waters near Latvian seas. 197

184. **Date:** November 17, 2014 **Type:** Air Incident: Intercept **Involving:** Russia and NATO

Summary: NATO F-16 jets intercept a Russian Su-27 fighter plane over international waters near

Latvian seas. 198

185. Date: November 15 and 18, 2014

**Type:** Sea Incidents (2)

**Involving:** Russia and NATO **Location:** Baltic Sea near Latvia

**Location:** Baltic Sea near Latvia

**Summary:** A Russian navy tanker ship is spotted 11.6 nautical miles from Latvian waters – the

second sighting in the past three days. 199

186. Date: November 15, 2014

Type: Air Incident: Intercept Involving: Russia and NATO Location: Baltic Sea near Latvia

**Summary:** Eurofighter Typhoons intercept two Russian Su-27 fighter planes over international

waters near Latvian territory.<sup>200</sup>

187. **Date:** November 12, 2014 **Type:** Air Incident: Intercept **Involving:** Russia and NATO

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November 19, 2014, <a href="http://www.bloomberg.com/news/2014-11-19/nato-jets-track-russian-aircraft-over-baltic-latvia-says.html">http://www.bloomberg.com/news/2014-11-19/nato-jets-track-russian-aircraft-over-baltic-latvia-says.html</a>.

Ott Ummelas, "NATO Jets Intercept Two Russian Fighter Planes Over Baltic Sea," *Bloomberg News*, November 15, 2014, <a href="http://www.bloomberg.com/news/2014-11-15/nato-jets-intercept-two-russian-fighter-planes-over-baltic-sea.html">http://www.bloomberg.com/news/2014-11-15/nato-jets-intercept-two-russian-fighter-planes-over-baltic-sea.html</a>.

<sup>&</sup>lt;sup>196</sup> Brad Lendon, "NATO jets scramble more than 400 times this year for Russian intercepts," *CNN World*, November 21, 2014, <a href="http://www.cnn.com/2014/11/21/world/europe/nato-russia-intercepts/">http://www.cnn.com/2014/11/21/world/europe/nato-russia-intercepts/</a>.

<sup>&</sup>lt;sup>197</sup> Ott Ummelas and Milda Seputyte, "NATO Intercept Russian Planes Over Baltic For Third Day," *Bloomberg News*, November 19, 2014, <a href="http://www.bloomberg.com/news/2014-11-19/nato-jets-track-russian-aircraft-over-baltic-latvia-says.html">http://www.bloomberg.com/news/2014-11-19/nato-jets-track-russian-aircraft-over-baltic-latvia-says.html</a>.

<sup>198</sup> Ott Ummelas, "NATO Jets Intercept Russian Fighter Plane Over Baltic Sea," *Bloomberg News*, November 17, 2014, http://www.bloomberg.com/news/2014-11-17/nato-jets-scrambled-to-intercept-russian-plane-over-baltic-sea.html.
199 Ott Ummelas and Milda Seputyte, "NATO Intercept Russian Planes Over Baltic For Third Day," *Bloomberg News*,

Location: Baltic Sea

**Summary:** Two Dutch F-16 fighter jets intercept a Russian Ilyushin transport aircraft flying near Lithuania and Estonian airspace. The Dutch Foreign Ministry released a statement saying the Russian aircraft was flying in international airspace when it approached the airspace of the two countries without filing a flight plan.<sup>201</sup>

188. Date: November 12, 2014

Type: Defense News Involving: Russia

Location: Western Atlantic and Eastern Pacific

**Summary:** Russian Defense Minister Shoigu announces the country will send long-range bombers to patrol the western Atlantic and eastern Pacific in response to NATO's "anti-Russia inclinations." He does not say when the flights would start or how frequently they would be conducted. Shoigu also says conditions in Ukraine "dictate the necessity to maintain readiness of troops" along Russia's border with Ukraine and that defense reinforcements would continue to be provided to Crimea. 202

189. **Date:** November 8, 2014 **Type:** Air Incident: Intercept

Involving: Canada/NATO and Russia

Location: Baltic Sea

**Summary**: Two Canadian CF-18 Hornets intercept a Russian Il-20 aircraft inside Lithuanian

airspace.<sup>203</sup>

190. **Date:** November 6, 2014 **Type:** Air Incident: Intercept

**Involving:** Russia and NATO

Location: Baltic Sea

Summary: The Latvian Army announces NATO F-16 fighter jets intercepted a Russian IL-20

surveillance plane in the Baltic Region near Latvia's territorial waters. <sup>204</sup>

191. **Date:** November 6, 2014

**Type:** Defense News

Involving: Russia and Ukraine

Location: Luhansk Region, Ukraine

AFP, Reuters, "Russian plane intercepted by Dutch fighters over Baltic Sea," *The Sydney Morning Herald*," November 14, 2014, <a href="http://www.smh.com.au/world/russian-plane-intercepted-by-dutch-fighters-over-baltic-sea-20141113-11mf70.html">http://www.smh.com.au/world/russian-plane-intercepted-by-dutch-fighters-over-baltic-sea-20141113-11mf70.html</a>.

<sup>&</sup>lt;sup>202</sup> Carol J. Williams, "Russia resuming Cold War-era bomber flights close to U.S. shores," *Los Angeles Times*, November 12, 2014, <a href="http://www.latimes.com/world/europe/la-fg-russia-bomber-flights-20141112-story.html">http://www.latimes.com/world/europe/la-fg-russia-bomber-flights-20141112-story.html</a>.

<sup>&</sup>lt;sup>203</sup> Joe Warmington, "Canadian CF-18s intercept Russian jet over Lithuania," *Toronto Sun*, November 8, 2014, http://www.torontosun.com/2014/11/08/canadian-cf-18s-intercept-russian-jet-over-lithuania.

Ott Ummelas and Aaron Eglitis, "NATO F-16 Jets Intercept Russian Spy Plane, Latvia Says," *Bloomberg News*, November 6, 2014, <a href="http://www.bloomberg.com/news/2014-11-06/nato-f-16-jets-intercept-russian-spy-plane-latvia-says.html">http://www.bloomberg.com/news/2014-11-06/nato-f-16-jets-intercept-russian-spy-plane-latvia-says.html</a>.

**Summary:** Ukraine reports that Russia continues to supply military vehicles and manpower to the rebels in Eastern Ukraine. According to a military spokesman, "32 tanks, 16 howitzers and 30 trucks with ammunition and manpower crossed the border from Russia" into the Luhansk region. <sup>205</sup>

192. Date: November 4, 2014

Type: Sea Incident

**Involving:** Russia and Portugal

Location: Portugal's Exclusive Economic Zone

**Summary:** A Portuguese news site reports that a Russian hydrographic ship was detected in

Portugal's exclusive economic zone and escorted by a Portuguese navy ship. <sup>206</sup>

193. Date: November 1, 2014

Type: Test Launch Involving: Russia

Location: Plesetsk, Russia

**Summary:** Russia successfully tests the Topol-M ICBM. <sup>207</sup>

### 194. Provocative Incident

**Date:** October 31, 2014

**Type:** Air Incident: Intercept

**Involving:** Russia

**Location:** Norwegian and North Seas

**Summary:** Norwegian F-16s intercept 4 Russian Tu-95 strategic bombers and 4 II-78 tankers; two bombers fly on toward U.K. airspace and are intercepted and escorted out of U.K.-monitored

airspace by RAF Typhoons.<sup>208</sup>

#### 195. Provocative Incident

**Date:** October 30, 2014 **Type:** Air Incident: Intercept **Involving:** Russia and NATO

**Location:** Baltic, North and Black Seas

**Summary:** NATO F-16 jets intercept a Russian Su-27 fighter, and Eurofighter aircraft shadow an IL-76 military transport plane. "NATO warplanes (monitor) four groups of Russian military aircraft conducting 'significant' maneuvers in European airspace over the Baltic, North and Black

<sup>205</sup> Kateryna Choursina and Daryna Krasnolutska, "Ukraine Says Up to 200 Rebels Killed in Donetsk Fighting," *Bloomberg Businessweek*, November 7, 2014, <a href="http://www.businessweek.com/news/2014-11-07/ukraine-lurches-back-toward-open-war-on-east-fighting">http://www.businessweek.com/news/2014-11-07/ukraine-lurches-back-toward-open-war-on-east-fighting</a>.
 Ott Ummelas and Aaron Eglitis, "NATO F-16 Jets Intercept Russian Spy Plane, Latvia Says," *Bloomberg News*,

<sup>206</sup> Ott Ummelas and Aaron Eglitis, "NATO F-16 Jets Intercept Russian Spy Plane, Latvia Says," *Bloomberg News*, November 6, 2014, <a href="http://www.bloomberg.com/news/2014-11-06/nato-f-16-jets-intercept-russian-spy-plane-latvia-says.html">http://www.bloomberg.com/news/2014-11-06/nato-f-16-jets-intercept-russian-spy-plane-latvia-says.html</a>

says.html.

207 Thomas Nilsen, "Russia plays nuclear war-games in Barents Region," *Barents Observer*, November 1, 2014, http://barentsobserver.com/en/security/2014/11/russia-plays-nuclear-war-games-barents-region-01-11.

<sup>&</sup>lt;sup>208</sup> Lizzie Dearden, "RAF Typhoons scrambled to intercept Russian bomber 'approaching the UK'," *The Independent*, November 1, 2014, <a href="http://www.independent.co.uk/news/uk/home-news/raf-typhoons-scrambled-to-intercept-russian-bomber-approaching-the-uk-9833231.html">http://www.independent.co.uk/news/uk/home-news/raf-typhoons-scrambled-to-intercept-russian-bomber-approaching-the-uk-9833231.html</a>.

seas.",209

196. Date: October 29, 2014

Type: Test Launch Involving: Russia Location: Barents Sea

**Summary:** Russian SSBN *Yury Dolgoruky* completes a test launch of the Bulava missile while submerged in the Barents Sea. It is the first operational test launch of the Bulava and the first time a Borei-class sub was equipped with a full set of missiles on board when the test launch was

completed. 210

### 197. Provocative Incident (1)

**Date:** October 29, 2014

Type: Air Incident: Intercept (3) Involving: Russia and NATO

Location: North Sea and Portuguese Coast

**Summary:** Norwegian F-16s intercept 4 Tu-95 strategic bombers and 4 II-78 tanker aircraft over the North Sea; six of the Russian aircraft turn back toward Russia while two bombers continue south-west. U.K. Typhoon fighters are scrambled to intercept as the two bombers fly on to the Portuguese coast where Portuguese F-16s intercept them. The Russian bombers turn back toward the U.K. as NATO aircraft in the area track their progress. <sup>211</sup>

198. Date: October 29, 2014

Type: Air Incident: Intercept Involving: Russia and NATO

Location: Baltic Sea

**Summary:** Portuguese F-16s assigned to the NATO air-policing mission over the Baltic members

intercept two MiG-31s, two Su-34s, one Su-27 and two Su-24s over the Baltic Sea. <sup>212</sup>

199. **Date:** October 29, 2014

Type: Air Incident: Intercept Involving: Russia and NATO

Location: Baltic Sea

**Summary:** Turkish fighters intercept 2 Tu-95 Bear H-bombers and 2 Su-27 fighters over the Baltic

Sea. <sup>213</sup>

200. **Date:** October 28, 2014 **Type:** Air Incident: Intercept

20

<sup>&</sup>lt;sup>209</sup> Ott Ummelas, "NATO Baltic Jets Intercept Russian Airplanes for Third Day" *Bloomberg News*, October 30, 2014, <a href="http://www.bloomberg.com/news/2014-10-30/nato-baltic-jets-intercept-russian-military-planes-for-third-day.html?cmpid=yhoo.">http://www.bloomberg.com/news/2014-10-30/nato-baltic-jets-intercept-russian-military-planes-for-third-day.html?cmpid=yhoo.</a>

day.html?cmpid=yhoo.

210 Thomas Nilsen, "Russia plays nuclear war-games in Barents Region," *Barents Observer*, November 1, 2014, http://barentsobserver.com/en/security/2014/11/russia-plays-nuclear-war-games-barents-region-01-11.

<sup>&</sup>lt;sup>211</sup> "NATO tracks large-scale Russian air activity in Europe," *North Atlantic Treaty Organization*, October 30, 2014, <a href="http://www.nato.int/cps/en/natohq/news">http://www.nato.int/cps/en/natohq/news</a> 114274.htm.
<a href="http://www.nato.int/cps/en/natohq/news">212</a> "NATO tracks large-scale Russian air activity in Europe," *North Atlantic Treaty Organization*, October 30, 2014,

<sup>&</sup>lt;sup>212</sup> "NATO tracks large-scale Russian air activity in Europe," *North Atlantic Treaty Organization*, October 30, 2014. http://www.nato.int/cps/en/natohq/news 114274.htm.

<sup>&</sup>lt;sup>213</sup> "NATO tracks large-scale Russian air activity in Europe," *North Atlantic Treaty Organization*, October 30, 2014, http://www.nato.int/cps/en/natohq/news 114274.htm.

**Involving:** Russia and NATO

Location: Baltic Sea

**Summary:** German Typhoon fighter jets from Baltic air patrols intercept 2 Russian MiG-31s, 2

Su-34s, 1 Su-27 and 2 Su-24 jest in the Baltic Sea. 214

#### 201. Provocative Incident

**Date:** Late October 2014 **Type:** Military Exercise **Involving: NATO** 

Location: Ghedi airbase, Northern Italy

Summary: NATO holds an annual exercise – Steadfast Noon 2014 – to train units employing nuclear weapons. Polish F-16s, which are not known to be assigned a nuclear mission, are believed

to participate in the exercise for the first time. <sup>215</sup>

### 202. Provocative Incident

**Date:** October 21, 2014 **Type:** Air Incident: Intercept **Involving:** Russia and NATO

Location: Baltic Sea

**Summary:** A Russian maritime spy plane (an Ilyushin 20 "Coot") flies into Estonian territory. Fighters are scrambled from Lithuania, where NATO's Baltic air policing force is stationed, and from Denmark and Sweden as the aircraft circle the Baltic Sea. An Estonian official reports the Russian spy plane flew more than 500m into Estonian airspace for about a minute close to the large, inhabited islands of Hiiumaa and Saaremaa off the Baltic state's west coast. The spy plane is intercepted and escorted out of Estonian airspace by Portuguese F-16 fighters, based in Lithuania as part of NATO's Baltic air policing mission. 216

### 203. Provocative Incident

Date: October 18, 2014 **Type:** Sea Incident

**Involving:** Russia and Sweden

**Location:** Sweden

**Summary:** More than 100 reports of public sightings of near-coast activity by an "unknown craft" trigger the largest sub hunt by the Swedish Navy since the end of the Cold War. Sweden's operations commander clarified that they have not signaled out Russia, saying they are searching for a "foreign vessel." Sweden seemed to pull back on its search on October 24. Russia's reaction: all "underwater vessels are accounted for" and Russia has never violated Swedish territorial waters 217

204. Date: October 18, 2014 **Type:** Sea Incident

<sup>214</sup> "NATO tracks large-scale Russian air activity in Europe," North Atlantic Treaty Organization, October 30, 2014,

http://www.nato.int/cps/en/natohq/news\_114274.htm.

215 David Cenciotti, "[Photo] NATO Nuclear Exercise 'Steadfast Noon 2014," *The Aviationist*, November 15, 2014, http://theaviationist.com/2014/11/15/steadfast-noon-2014-exercise/.

NATO, Swedish fighters scrambled to intercept Russian plane," *Reuters*, October 22, 2014,

http://www.reuters.com/article/2014/10/22/us-nato-russia-idUSKCN0IB2AU20141022.

<sup>&</sup>lt;sup>217</sup> Gerard O'Dwyer, "Sub Search Highlights Growing Unease With Russia," *Defense News*, October 25, 2014, http://www.defensenews.com/article/20141025/DEFREG01/310250025.

**Involving:** Russia and Sweden

**Location:** Sweden

**Summary:** The Swedish Navy monitors – in coordination with Denmark and Finland – the movement of the *NS Concord*, a Russian-owned oil tanker that has been "zig-zagging" close to the Swedish coast despite having a listed port destination in Denmark. The last observed movements were reportedly consistent with "normal movements of a crude oil tanker."<sup>218</sup>

205. Date: October 7, 2014

Type: Air Incident: Intercept (2) Involving: Russia and NATO

**Location:** Baltic Sea

**Summary:** NATO planes intercept a Russian Su-27 fighter jet and an An-26 military transport plane over the Baltic Sea. A Swedish JAS Gripen fighter jet intercepts a foreign aircraft, but does not specify the nationality. <sup>219</sup>

#### 206. Provocative Incident

Date: September 19, 2014

Type: Sea Incident

**Involving:** Russia and Lithuania

Location: Baltic Sea

**Summary:** Lithuanian Ministry of Foreign Affairs send a note to the Russian embassy protesting the detainment of a Lithuanian fishing vessel in international waters. Russian officers accused the vessel of illegal crab fishing in Russia's exclusive economic zone. <sup>220</sup>

207. Date: September 18, 2014Type: Air Incident: InterceptInvolving: Russia and Canada

Location: Beaufort Sea

**Summary:** A patrol of Russian bombers flies within 40 nautical miles of Canada's northern landmass the day after Ukraine's President received a "hero's welcome" in Ottawa for his struggle to defend his country from Moscow's aggression. Canada scrambles CF-18s to intercept the two Russian long-range bombers at about 4:30 a.m. ET. The Canadian planes encounter Russia's planes in the Beaufort Sea.<sup>221</sup>

208. Date: September 17, 2014

Type: Air Incident: Intercept
Involving: Russia and the U.S.
Location: Alaskan coast

<sup>218</sup> Gerard O'Dwyer, "Sub Search Highlights Growing Unease With Russia," *Defense News*, October 25, 2014, http://www.defensenews.com/article/20141025/DEFREG01/310250025.

<sup>&</sup>lt;sup>2</sup>19 "Sweden scrambles plane in Baltic," *The Local*, October 8, 2014, <a href="https://www.thelocal.se/20141008/sweden-scrambles-planes-in-baltic">https://www.thelocal.se/20141008/sweden-scrambles-planes-in-baltic</a>.

<sup>&</sup>lt;sup>220</sup> "Lithuania and Russia exchange diplomatic notes over detained fishing vessel," *Delfi*, September 23, 2014, <a href="http://en.delfi.lt/lithuania/foreign-affairs/lithuania-and-russia-exchange-diplomatic-notes-over-detained-fishing-vessel.d?id=65920560#ixzz3EJpBt0sS">http://en.delfi.lt/lithuania/foreign-affairs/lithuania-and-russia-exchange-diplomatic-notes-over-detained-fishing-vessel.d?id=65920560#ixzz3EJpBt0sS</a>.

Steven Chase, "Russian military jets flew within 100 kilometres of Canadian mainland," *The Globe and Mail*,

<sup>&</sup>lt;sup>221</sup> Steven Chase, "Russian military jets flew within 100 kilometres of Canadian mainland," *The Globe and Mail*, September 19, 2014,

**Summary:** American F-22 jets are dispatched to intercept six Russian military aircraft including MiG-31 fighters flying within 55 nautical miles of the Alaskan coastline. Officials in Washington believe the two incidents – Russian aircraft coming with 74 kilometers of Canada's coastline (above) and less than 102 kilometers of Alaska – are linked to Mr. Poroshenko's trips to Canada and the U.S.<sup>222</sup>

209. Date: September 14, 2014 **Type:** Military Exercise **Involving:** NATO Location: Lviv, Ukraine

> **Summary**: Troops from 15 countries, including the U.S., begin the military exercise Rapid Trident along the Ukrainian-Polish border. The drill, planned prior to the crisis in Ukraine, proceeds as fighting between government forces and pro-Russian rebels continues in eastern Ukraine. <sup>223</sup>

210. **Date:** September 11, 2014 **Type:** Air Incident: Intercept **Involving:** Russia and Canada

Location: Baltic Sea

Summary: Canadian CF-18 fighter jets armed with Sidewinder missiles intercepts a Russian An-

26 flying over the Baltic Sea. 224

### 211. Provocative Incident

**Date:** September 2014 **Type:** Sea Incident

**Involving:** Russia and Canada

**Location:** Black Sea

Summary: A Russian surveillance aircraft and two Russian fighter jets "buzz" Canadian warship

HMCS Toronto in the Black Sea coming within 200 meters of the ship. 225

212. Date: Early September 2014 **Type:** Military Exercise **Involving:** Russia

**Location:** Northern Atlantic

Summary: Two Russian Tu-95 Bear bombers practice cruise missile attacks. 226

<sup>222</sup> Steven Chase, "Russian military jets flew within 100 kilometres of Canadian mainland," *The Globe and Mail*, September 19, 2014.

http://www.theglobeandmail.com/news/politics/russian-military-jets-flew-within-100-kilometres-of-canadian-mainlandsource-says/article20706528/.

223 "US and Nato troops begin Ukraine military exercise," *BBC News*, September 15, 2014,

http://www.bbc.com/news/world-europe-29204505.

Matthew Fisher, "Matthew Fisher: Canadian fighter jets intercept Russian military aircraft in Baltics," National Post, September 29, 2014, http://news.nationalpost.com/2014/09/29/matthew-fisher-canadian-fighter-jets-intercept-russian-

military-aircraft-in-baltics/.

225 "Aboard HMCS Toronto for 'Operation Reassurance' on the Black Sea." CTV News, September 21, 2014, http://www.ctvnews.ca/world/aboard-hmcs-toronto-for-operation-reassurance-on-the-black-sea-1.2017821#ixzz3E2YOdNIQ.

<sup>226</sup> Bill Gertz, "Russian Strategic Bombers Near Canada Practice Cruise Missile Strikes on US," The Washington Free Beacon, September 8, 2014, http://freebeacon.com/national-security/russian-strategic-bombers-near-canada-practice-cruisemissile-strikes-on-us/.

213. Date: Week of August 25, 2014

**Type:** Air Incidents (3)

**Involving:** Russia and Finland **Location:** Gulf of Finland

**Summary:** A Russia AN-72 transport plane crosses the Finnish border after two similar incidents

earlier in the week.<sup>227</sup>

214. **Date:** August 28, 2014

**Type:** Air Incident: Intercept **Involving:** Russia and NATO

Location: Baltic Sea

Summary: NATO MiG-29 jets intercept a Russian advance warning aircraft and two Su-27 fighter

jets over the Baltic Sea near Latvia.<sup>228</sup>

215. **Date:** August 8, 2014 **Type:** Sea Incident

**Involving:** Russia and Latvia

Location: Baltic Sea

Summary: Russian corvette Stoiky and tugboat Victor Konetsky spotted 12 nautical miles from

Latvia's maritime borders. <sup>229</sup>

### 216. Provocative Incident

**Date:** August 7, 2014 **Type:** Sea Incident

**Involving:** Russia and the U.S.

Location: Barents Sea

**Summary:** Russian news agencies report that the Russian Northern Fleet's anti-submarine force detected a foreign submarine in the country's boundary waters. Russia sent an anti-submarine attack group and an Il-38 anti-submarine aircraft to the area to track the sub presumed to be a U.S.

Navy Virginia-class vessel.<sup>230</sup>

217. **Date:** August 3, 2014 **Type:** Sea Incidents (2)

**Involving:** Russia and Latvia

Location: Baltic Sea

**Summary:** Russian corvette *Stereguschy* is spotted 5.7 nautical miles from Latvia's maritime borders and an unnamed Kilo-class submarine is spotted 1.7 nautical miles from Latvia's maritime

<sup>227</sup> Kati Pohjanpalo and Kasper Viita, "Finland's Fighter Jets on Alert as Russia Violates Airspace," *Bloomberg Business*, August 29, 2014, <a href="http://www.bloomberg.com/news/articles/2014-08-28/finland-puts-fighter-planes-on-alert-as-russia-violates-airspace">http://www.bloomberg.com/news/articles/2014-08-28/finland-puts-fighter-planes-on-alert-as-russia-violates-airspace</a>.

violates-airspace.

228 "NATO air patrol intercepts more Russian planes," *LSM.LV*, August 28, 2014, <a href="http://www.lsm.lv/en/article/politics/bap-intercepts-russias-military-aircraft-over-baltic-skies.a96219/">http://www.lsm.lv/en/article/politics/bap-intercepts-russias-military-aircraft-over-baltic-skies.a96219/</a>.

229 "More Russia warships spotted near Baltic waters," *The Baltic Times*, August 8, 2014,

<sup>&</sup>quot;More Russia warships spotted near Baltic waters," *The Baltic Times*, August 8, 2014, http://www.baltictimes.com/news/articles/35333/#.VFKLSIfd7GM.

<sup>&</sup>lt;sup>230</sup> "Russia detects, 'expels' presumed US submarine – Russian news agencies," *Reuters*, August 9, 2014, http://in.reuters.com/article/2014/08/09/ukraine-crisis-russia-submarine-idINL6N0QF0J420140809.

borders. 231

218. Date: August 2, 2014 and early September 2014

Type: Sea Incident: Intercepts (2) Involving: Russia and Finland

Location: Baltic Sea

**Summary:** Finnish Environmental Institute reports Russian military ships intercepted one of the institute's research vessels in international waters twice recently. On August 2, a Russian warship ordered the Aranda to change course through radio contact. A month later, a Russian helicopter and a military vessel approached it. The institute said the Aranda did not change its course or speed in either case. <sup>232</sup>

219. Date: August 1, 2014

Type: Air Incident: Intercept Involving: Russia and NATO

Location: Baltic Sea

Summary: Polish MiG-29 fighter jets intercept Russian fighter jets flying over neutral waters over

the Baltic Sea near Estonia. 233

### 220. Provocative Incident (1)

**Date:** July 29-August 7, 2014 **Type:** Air Incident (16)

**Involving:** Russia and the U.S.

Location: Alaskan air defense identification zone, U.S.

**Summary:** U.S. defense officials report that Russian Tu-95 Bear bombers have conducted 16 incursions into northwestern U.S. air defense identification zones within 10 days. U.S. fighter jets

are sent to intercept on several occasions.<sup>234</sup>

221. **Date:** July 22, 2014 **Type:** Sea Incident

**Involving:** Russia and Latvia

Location: Baltic Sea

**Summary:** Russian naval ship *Syzran* spotted about 6.5 nautical miles from Latvia's maritime

borders. <sup>235</sup>

# 222. Provocative Incident

**Date:** July 18, 2014

**Type:** Air Incident: Intercept

<sup>231</sup> "More Russia warships spotted near Baltic waters," *The Baltic Times*, August 8, 2014, http://www.baltictimes.com/news/articles/35333/#.VFKLSIfd7GM.

http://www.rferl.org/content/russia-finland-intercept-research-vessel/26633181.html. 233 "NATO fighter jets escort Russian aircraft from Lithuania," *DELFI*, August 1, 2014,

http://en.delfi.lt/lithuania/defence/nato-fighter-jets-escort-russian-aircraft-from-lithuania.d?id=65454778#ixzz3E3WJztwZ.

<sup>234</sup> As exact dates for each incursion/intercept were not given, we attempted to evenly distribute the incidents within the 10 days, allocating 5 incidents to July and 11 incidents to August. Bill Gertz, "Russian Strategic Bombers Conduct More Than 16 Incursions of U.S. Air Defense Zones," *The Washington Free Beacon*, August 7, 2014, <a href="http://freebeacon.com/national-security/russian-strategic-bombers-conduct-more-than-16-incursions-of-u-s-air-defense-zones/">http://freebeacon.com/national-security/russian-strategic-bombers-conduct-more-than-16-incursions-of-u-s-air-defense-zones/</a>.

<sup>235</sup> "More Russia warships spotted near Baltic waters," *The Baltic Times*, August 8, 2014, http://www.baltictimes.com/news/articles/35333/#.VFKLSIfd7GM.

<sup>&</sup>lt;sup>232</sup> "Finland Says Russia warships intercept research vessel," *Radio Free Europe*, October 12, 2014

**Involving:** Russia and the U.S.

**Location:** Sweden

**Summary:** Russian military tracks the A U.S. Air Force RC-135 Rivet Joint (spy plane) – flying in international airspace conducting an electronic eavesdropping mission on the Russian military – using land-based radar. "At least one fighter jet" is sent by the Russians to intercept the spy aircraft causing the spy plane to quickly divert into Swedish airspace without permission from the Swedish military. <sup>236</sup>

## 223. High-Risk Incident

**Date:** July 17, 2014 **Type:** Air Incident

**Involving:** Russia and Ukraine **Location:** Hrabove, Ukraine

**Summary:** A commercial flight with almost 300 onboard is shot down in eastern Ukraine. The Dutch Safety Board later concluded the plane was shot down by a Russian-made Buk missile, but did not report on who had launched the missile.<sup>237</sup>

#### 224. Provocative Incident

**Date:** July 16, 2014

Type: Air Incident: Intercept Involving: Russia and Sweden

Location: Baltic Sea

**Summary:** A Russian Su-27 Flanker intercepts a Swedish electronic intelligence aircraft flying as close as 10.7 meters to the spy plane. Swedish officials say that while the spy planes are almost always intercepted by Russian armed fighters, the behavior of the Russian jets have become increasingly aggressive.<sup>238</sup>

225. **Date:** June 21 and 24, 2014 **Type:** Sea Incidents (2) **Involving:** Russia and Latvia

Location: Baltic Sea

**Summary:** Russian naval ships *Soobrazitelny* and *Boikiy* are spotted just off Latvia's maritime

borders on two occasions.<sup>239</sup>

226. Date: June 20, 2014

**Type:** Test Launch and Military Exercise

**Involving:** Russia **Location:** Russia

Summary: Russia test launches six AS-15 missiles from a Bear bomber during military

<sup>236</sup> Barbara Starr, "U.S. official: Spy plane flees Russian jet, radar; ends up over Sweden," *CNN U.S.*, August 4, 2014, <a href="http://www.cnn.com/2014/08/02/us/us-spy-plane/">http://www.cnn.com/2014/08/02/us/us-spy-plane/</a>.

<sup>&</sup>lt;sup>237</sup> Tom Cohen, "Malaysian plane shot down in Ukraine: What happened?" *CNN*, July 19, 2014, http://www.cnn.com/2014/07/18/world/europe/ukraine-malaysia-plane-questions/; Thomas Escritt and Toby Sterling, "Russian-made missile shot down MH17 - Dutch report," *Reuters*, October 13, 2015 <a href="http://uk.reuters.com/article/uk-ukraine-crisis-mh-idUKKCN0S71C020151013">http://uk.reuters.com/article/uk-ukraine-crisis-mh-idUKKCN0S71C020151013</a>.

<sup>238</sup> David Cenciotti, "Russian Su-27 Flanker performs dangerous intercept putting itself within 10 meters of Swedish

David Cenciotti, "Russian Su-27 Flanker performs dangerous intercept putting itself within 10 meters of Swedish plane," *Free Republic*, October 2, 2014, <a href="http://www.freerepublic.com/focus/news/3210582/posts">http://www.freerepublic.com/focus/news/3210582/posts</a>.

<sup>&</sup>lt;sup>239</sup> "More Russia warships spotted near Baltic waters," *The Baltic Times*, August 8, 2014, http://www.baltictimes.com/news/articles/35333/#.VFKLSIfd7GM.

exercises.240

227. **Date:** June 18, 2014

**Type:** Air Incident: Intercept

**Involving:** Russia and the U.K/NATO

Location: Baltic Sea

**Summary:** U.K. Royal Air Force Typhoons are launched after detection of four separate groups of Russian aircraft – including a Tu-22 bomber, 4 Su-27s fighters, a Beriev A50 early warning aircraft and an Antonov An-26 transport aircraft – in international airspace near the Baltic States. The

Russian aircraft are monitored and "escorted on their way." 241

228. **Date:** June 12, 2014 **Type:** Military Exercise **Involving:** Russia

Location: Kaliningrad, Russia

Summary: Russia begins military exercises in response to NATO drills in parts of Eastern Europe,

according to the Russian Defence Ministry. 242

229. **Date:** June 9-20, 2014 **Type:** Military Exercise

**Involving:** Demark, Poland, Norway, Canada, the U.K., and the U.S.

Location: Estonia, Latvia, Lithuania

Summary: The U.S. leads troops from Demark, Poland, Norway, Canada and the U.K. in the

military exercise Saber Strike 2014.<sup>243</sup>

## 230. Provocative Incident (1)

Date: June 12, 2014

**Type:** Air Incident: Intercept (4) **Involving:** Russia and NATO

Location: Baltic Sea

Summary: NATO patrol aircraft intercept Russian aircraft a record four times in one day. Sixteen

Russian aircraft were spotted in the area.<sup>244</sup>

#### 231. Provocative Incident

**Date:** June 9, 2014 **Type:** Air Incident

**Involving:** Russia and the U.S.

Location: Aleutian Islands and Off the Californian coast, U.S.

<sup>&</sup>lt;sup>240</sup> Bill Gertz, "Russian Strategic Bombers Near Canada Practice Cruise Missile Strikes on US," *The Washington Free Beacon*, September 8, 2014, <a href="http://freebeacon.com/national-security/russian-strategic-bombers-near-canada-practice-cruise-missile-strikes-on-us/">http://freebeacon.com/national-security/russian-strategic-bombers-near-canada-practice-cruise-missile-strikes-on-us/</a>

missile-strikes-on-us/.

241 "Royal Air Force Typhoons Intercept Russian Aircraft," *Royal Air Force*, June 18, 2014, http://www.raf.mod.uk/news/archive/baltic-air-policing-18062014.

<sup>242 &</sup>quot;Russia holds military exercises in Baltic in response to NATO," *Reuters*, June 12, 2014, http://uk.reuters.com/article/uk-russia-military-exercises-idUKKBN0FN10020140612

http://uk.reuters.com/article/uk-russia-military-exercises-idUKKBN0EN10020140612.

243 LETA, "15 Russian military aircraft are spotted near Latvia's border," *Baltic News Network*, June 12, 2014, http://abcnews.go.com/International/wireStory/russian-rockets-fuel-tensions-balkans-46862888.

<sup>&</sup>lt;sup>244</sup> "Russia holds military exercises in Baltic in response to NATO," *Reuters*, June 12, 2014, http://uk.reuters.com/article/uk-russia-military-exercises-idUKKBN0EN10020140612.

**Summary:** Two Russian Bear bombers fly within 50 miles of the California coast, the closest strategic bomber flights to a U.S. coast since the Cold War.<sup>245</sup>

232. Date: June 2014

Type: Air Incident: Intercept (2) Involving: Russia and Canada

Location: Artic Sea

Summary: Canadian fighters intercept Russian bombers flying over the artic on two occasions. 246

#### 233. Provocative Incident

Date: June 2014

**Type:** Military Exercise

**Involving:** Russia and Denmark **Location:** Bornholm, Denmark

**Summary:** A Danish Defence Intelligence Service assessment reveals that Russia carried out a simulated attack on a Danish island in June when politicians and journalists were gathered for an annual political meeting.<sup>247</sup>

234. Date: May 18, 2014

**Type:** Air Incident: Intercept **Involving:** Russia and the U.K.

Location: Baltic Sea

Summary: Royal Air Force Typhoon fighters intercept a Russian naval helicopter close to Latvian

airspace. 248

235. Date: May 8, 2014

**Type:** Military Exercise and Test Fire (3)

**Involving:** Russia

Location: Plesetsk launch facility, Russia; Pacific Ocean, Northern Russia

**Summary:** Russia conducts nuclear attack response exercises, involving land- and sea-based missile launches. As part of the exercise, Russia test fired a Topol ICBM and long-range ballistic

missiles from two submarines.<sup>249</sup>

#### 236. Provocative Incident

**Date:** April 23, 2014

**Type:** Air Incident: Intercept **Involving:** Russia and the U.S.

Location: Okhotsk Sea

<sup>245</sup> Bill Gertz, "Russian Strategic Bombers Near Canada Practice Cruise Missile Strikes on US," *The Washington Free Beacon*, September 8, 2014, <a href="http://freebeacon.com/national-security/russian-strategic-bombers-near-canada-practice-cruise-missile-strikes-on-us/">http://freebeacon.com/national-security/russian-strategic-bombers-near-canada-practice-cruise-missile-strikes-on-us/</a>.

http://www.nti.org/gsn/article/putin-supervises-strategic-nuclear-drill/.

<sup>&</sup>lt;sup>246</sup> Bill Gertz, "Russian Strategic Bombers Near Canada Practice Cruise Missile Strikes on US," *The Washington Free Beacon*, September 8, 2014, <a href="http://freebeacon.com/national-security/russian-strategic-bombers-near-canada-practice-cruise-missile-strikes-on-us/">http://freebeacon.com/national-security/russian-strategic-bombers-near-canada-practice-cruise-missile-strikes-on-us/</a>

missile-strikes-on-us/.

247 "Russia simulated an attack on Denmark," *The Local*, October 31, 2014, <a href="http://www.thelocal.dk/20141031/russia-simulated-a-military-attack-on-denmark">http://www.thelocal.dk/20141031/russia-simulated-a-military-attack-on-denmark</a>.

248 Ben Farmer, "RAF Typhoons sent to intercept Russian helicopter over Baltic," *The Telegraph*, May 18, 2014,

<sup>&</sup>lt;sup>248</sup> Ben Farmer, "RAF Typhoons sent to intercept Russian helicopter over Baltic," *The Telegraph*, May 18, 2014, <a href="http://www.telegraph.co.uk/news/10839095/RAF-Typhoons-sent-to-intercept-Russian-helicopter-over-Baltic.html">http://www.telegraph.co.uk/news/10839095/RAF-Typhoons-sent-to-intercept-Russian-helicopter-over-Baltic.html</a>.

<sup>249</sup> "Putin Supervises Strategic Nuclear Drill," *NTI: Global Security Newswire*, May 8, 2014,

**Summary:** A U.S. Air Force RC-135U aircraft flying on a routine mission over the Sea of Okhotsk and is intercepted by a Russian Su-27 Flanker aircraft. The Russian jet flew within 100 feet of the nose of a U.S. Air Force reconnaissance plane. The Russian aircraft turned and "showed its belly" to the U.S. crew so they could see it was armed with missiles, a U.S. military official said. On April 28, a Russian Defense Ministry statement said Russian Defense Minister Sergey Shoigu and U.S. Defense Secretary Chuck Hagel had discussed both incidents during a phone call that day. Shoigu "offered to instruct the commanders in chief of the armed forces of both countries to discuss possible additional measures to address the interests of both countries to prevent future misperceptions of actions." <sup>250</sup>

237. **Date:** April 23, 2014

**Type:** Sea Incident: Intercept

**Involving:** Russia and the Netherlands

Location: North Sea

**Summary:** Britain's HMS *Dragon* intercepts the Russian ship *Vice Admiral Kulakov* in a

"standard" event. 251

238. Date: April 23, 2014

**Type:** Air Incident: Intercept

**Involving:** Russia and the Netherlands

**Location:** North Sea

**Summary:** Two Russian military aircraft enter Dutch airspace prompting two Dutch F-16s to be dispatched to escort the Russian planes out of national airspace. A Dutch official called this a fairly

routine action with these types of incidents happening about 4 or 5 times a year.<sup>252</sup>

239. **Date:** April 23, 2014

**Type:** Air Incident: Intercept **Involving:** Russia and the U.K.

Location: North Sea

**Summary:** Royal Air Force Typhoon fighter jets are sent to investigate two Russian military aircraft approaching U.K. airspace. The aircraft turn away shortly after the RAF fighter jets are

dispatched.<sup>253</sup>

240. **Date:** April 12, 2014 **Type:** Sea Incident

**Involving:** Russia and the U.S.

Location: Black Sea

**Summary:** An unarmed Russian Su-24 attack aircraft makes 12 passes of the USS *Donald Cook*, a

<sup>250</sup> Jim Sciutto and Barbara Starr, "U.S. official: 'Dangerous' Russian jet fly-by was 'straight out of a movie'," *CNN World*, June 4, 2014, <a href="http://www.cnn.com/2014/06/03/world/russia-us-jet-fly-by/index.html?iref=allsearch.">http://www.cnn.com/2014/06/03/world/russia-us-jet-fly-by/index.html?iref=allsearch.</a>
<sup>251</sup> Lindsay Isaac and Greg Botelho, "Dutch fighter jets intercept 2 Russian bombers in their airspace," *CNN World*, April

<sup>&</sup>lt;sup>251</sup> Lindsay Isaac and Greg Botelho, "Dutch fighter jets intercept 2 Russian bombers in their airspace," *CNN World*, April 23, 2014, <a href="http://www.cnn.com/2014/04/23/world/europe/russian-bombers-intercepted/">http://www.cnn.com/2014/04/23/world/europe/russian-bombers-intercepted/</a>. <sup>252</sup> Lindsay Isaac and Greg Botelho, "Dutch fighter jets intercept 2 Russian bombers in their airspace," *CNN World*, April

Lindsay Isaac and Greg Botelho, "Dutch fighter jets intercept 2 Russian bombers in their airspace," *CNN World*, April 23, 2014, http://www.cnn.com/2014/04/23/world/europe/russian-bombers-intercepted/.

<sup>&</sup>lt;sup>253</sup> "RAF fighter jets scrambled to investigate Russian planes," *BBC*, April 24, 2014, <a href="http://www.bbc.com/news/uk-27130125">http://www.bbc.com/news/uk-27130125</a>.

U.S. warship patrolling in the western Black Sea. 254

241. **Date:** April 10, 2014

Type: Sea Incident: Intercept Involving: Russia and Lithuania

Location: Baltic Sea

**Summary:** Lithuanian Navy's Lindau-class mine hunter and an air force Mil MI-8 helicopter intercept two Russian Navy vessels that had entered Lithuania's Baltic maritime economic zone. <sup>255</sup>

242. **Date**: March 14, 2014

**Type:** Air Incident: Intercept **Involving:** Russia and the U.S.

**Location:** Crimea

**Summary:** Russia reports interception of a U.S. surveillance drone flying about 4,000 meters

above Crimea.<sup>256</sup>

<sup>&</sup>lt;sup>254</sup> Jim Garamone, "Russian Aircraft Flies Near U.S. Navy Ship in Black Sea," *U.S. Department of Defense*, April 14, 2014, http://www.defense.gov/news/newsarticle.aspx?id=122052

http://www.defense.gov/news/newsarticle.aspx?id=122052.

Bruce Jones, "Russian warships in Baltic incident with Lithuania," *The Local*, April 14, 2014, http://www.janes.com/article/36715/russian-warships-in-baltic-incident-with-lithuania.

Agence France Presse, "Russia Says It Intercepted A US Drone Over Crimea," *Business Insider*, March 14, 2014, <a href="http://www.businessinsider.com/russia-intercepted-us-drone-over-crimea-2014-3#ixzz3HjY82DDD">http://www.businessinsider.com/russia-intercepted-us-drone-over-crimea-2014-3#ixzz3HjY82DDD</a>.

### East Asia and the U.S.

Global Zero analyzed 231 incidents in East Asia where North Korea continues to develop their nuclear weapons program while engaging in provocative military threats amidst U.S. threats and U.S.-South Korea joint military exercises. Further south, China is building its military to exert influence on the region and defend disputed territory in the East and South China Seas. Russia has also been flexing its muscle in East Asia through military exercises and circumnavigations of U.S. military bases in Guam.



**Figure 4. Map of Military Incidents in East Asia** Each incident is color coded by type: red indicates cross-border incidents; pink indicates missile drill; yellow indicates an air incident; orange indicates an air intercept; blue indicates a sea intercept; brown indicates a military exercise; green indicates a test (launch or flight); and grey indicates defense news. Balloon markers indicate routine incidents while diamonds indicate provocative incidents and stars indicate high-risk incidents.

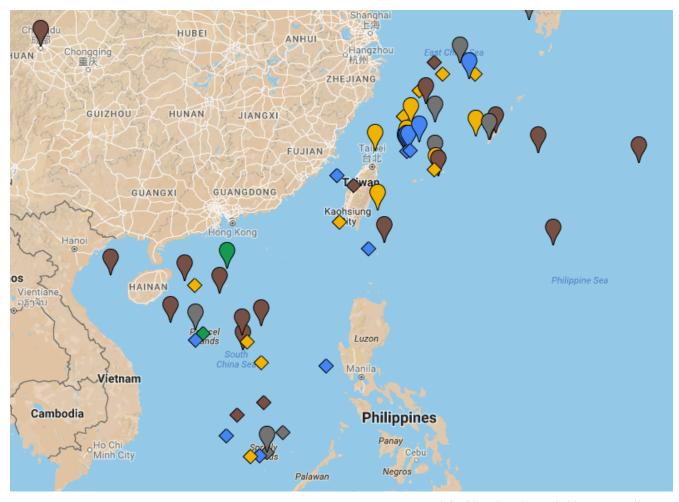
There were 114 incidents involving North and/or South Korea of which five involved cross-border activities (artillery firing or propaganda broadcasts) and ten involved missiles drills by North Korea in response to U.S.-South Korea military exercises. Tensions were so high in mid-August 2015 annual joint exercises were briefly suspended after North Korean leader Kim Jong Un put his troops in a "quasi-state of war." Days later an agreement between the North and South was reached and tensions eased.



Figure 5. A closer look at incidents in the Korean Peninsula. Incident locations are approximations.

Recently, the Korean Peninsula has been heating up. In April 2017 alone, six provocative incidents occurred, including the announcement of the redeployment of the U.S. Carl Vinson Strike Group to the Western Pacific, indications of preparations for a nuclear test by North Korea, heightened rhetoric from the North Korean regime and the U.S. with each side warning pre-emptive strikes are on the table, and a North Korean military parade showcasing new missiles and capabilities. The U.S. and South Korea also continued conducting joint military exercises and North Korea tested two missiles, though both failed shortly after launch.

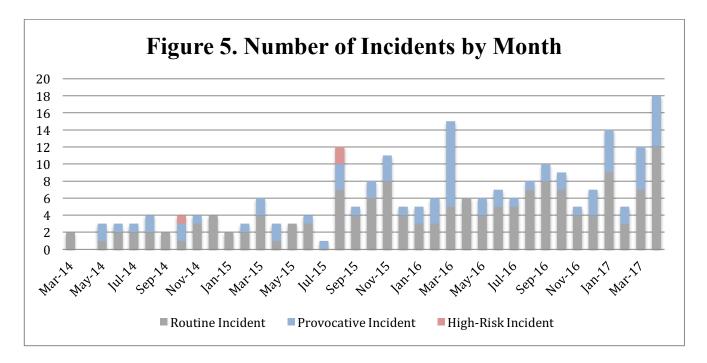
Despite international warnings and condemnations of North Korea's nuclear program, the country continues to push forward. Over the 38-month period, North Korea conducted at least 48 test launches, including tests of submarine-launched ballistic missiles and tests of engines experts suspect are part of the regime's development of an intercontinental ballistic missile that could reach targets in the U.S. Nine missiles were test-fired from February-April 2017. North Korea also conducted its fourth and fifth nuclear tests in 2016 – one in January and another in September, indicating its commitment to developing a credible nuclear deterrent capable of striking the U.S.



**Figure 6.** A Closer Look at Incidents in the South and East China Seas Each incident is color coded by type: yellow indicates an air incident; orange indicates an air intercept; blue indicates a sea intercept; brown indicates a military exercise; green indicates a test (launch or flight); and grey indicates defense news. Balloon markers indicate routine incidents while diamonds indicate provocative incidents and stars indicate high-risk incidents.

Ninety-nine of the 231 incidents in the region involved Chinese activities many of which pertain to two territorial disputes: The Spratly Islands and the Senkaku/Diaoyu Islands. The Spratly Islands are hotly contested islands in the South China Sea claimed by China, Vietnam, Malaysia and the Philippines. There are also disputes over the territorial waters surrounding the islands. China has been building artificial islands in the area and conducting military exercises in the South China Sea. The U.S. has sent bombers near the area and warships through the contested waters amidst China's objections. The Senkaku/Diaoyu Islands are islands claimed by both China and Japan in the East China Sea. Japan reported a record high number of intercepts over a six-month period: from April to September 2015, Japan intercepted Chinese aircraft on 231 occasions. With two major territorial disputes and tense relations with major players in the region, the flexing of military might provides numerous opportunities for unintended escalation.

<sup>&</sup>lt;sup>257</sup> "Chinese military planes fly near Okinawa Island during drill," *The Japan Times*, November 28, 2015, <a href="http://www.japantimes.co.jp/news/2015/11/28/national/chinese-military-planes-fly-near-okinawa-island-during-drill/#.VmdwmmSDFHw">http://www.japantimes.co.jp/news/2015/11/28/national/chinese-military-planes-fly-near-okinawa-island-during-drill/#.VmdwmmSDFHw</a>.



In East Asia, we have identified 3 high-risk incidents (those that have a high potential to lead to a direct military conflict) since March 2014: (1) the Cross-border artillery fire between North and South Korea in August 2015 mentioned above; (2) injuries to two South Korean soldiers after triggering a landmine reportedly planted by North Korea in the South-controlled Demilitarized Zone on August 4, 2015; and (3) the killing of the captain of a Chinese fishing vessel by the South Korean Coast Guard while it was attempting to impound the vessel for allegedly fishing in South Korean waters.

The region was also the scene of 73 provocative incidents, which are more aggressive in nature than routine incidents. In addition to those discussed above, there were provocative incidents include eight encounters between U.S. or Japanese aircraft and Chinese military aircraft deemed "unsafe" by officials, five instances of U.S. military presence near Taiwan or in the South China Sea near disputed territory drawing condemnation from China, four Chinese live-fire drills in areas of disputed territory, two North Korean nuclear tests, two cases of warning shots fired by South Korea to discourage North Korea from crossing the Demilitarized Zone, Chinese deployment of anti-ship cruise missiles on a disputed island in the South China Sea, and the detainment of the captain of a Chinese fishing boat by Japan for reportedly fishing in Japanese waters. Eleven of the past twelve months have seen at least one provocative incident, each contributing to tense relations in the region and increasing the likelihood of escalation.

More specifics of all incidents are below with high-risk and provocative incidents indicated.

Date: April 29, 2017
 Type: Test Launch
 Involving: North Korea

Location: Pukchang airfield, North Korea

Summary: A North Korean ballistic missile test fails.<sup>258</sup>

<sup>258</sup> Matt Stiles, "North Korea's latest missile test fails, U.S. says," *Los Angeles Time*, April 28, 2017, http://www.latimes.com/world/la-fg-north-korea-missile-20170429-story.html.

### 2. Provocative Incident

**Date:** April 28, 2017 **Type:** Defense News **Involving:** U.S.

**Location:** Sea of Japan

**Summary**: The U.S. Carl Vinson Strike Group reaches the Sea of Japan. <sup>259</sup>

3. **Date:** April 23, 2017 **Type:** Military Exercise **Involving:** Japan and the U.S. **Location:** Philippine Sea

Summary: The U.S. Carl Vinson Strike Group and Japan Maritime Self-Defense Force begin at-

sea bilateral exercises designed to improve maritime response and defense capabilities.<sup>260</sup>

4. **Date:** April 20, 2017 **Type:** Defense News **Involving:** China Location: China

> Summary: According to a U.S. official, China's bombers are placed on high alert in what is thought to be a temporary measure aimed at the growing tensions on the Korean Peninsula. The

Chinese Ministry of National Defense said the claim was "not true." <sup>261</sup>

5. **Date:** April 20, 2017 **Type:** Defense News

> **Involving:** South Korea and the U.S. Location: East of the Korean Peninsula

**Summary**: The U.S. dispatches a nuclear sniffer aircraft.<sup>262</sup>

6. **Date:** April 17-29, 2017 **Type:** Military Exercise

> **Involving:** South Korea and the U.S. Location: Kunsan Air Base, South Korea

Summary: Over 1,500 troops from the U.S. and South Korea participate in annual military

exercise Max Thunder 17 designed to improve interoperability. <sup>263</sup>

### 7. **Date:** April 16, 2017

<sup>&</sup>lt;sup>259</sup> Max Greenwood, "Navy strike group arrives in Sea of Japan," *The Hill*, April 29, 2017, http://thehill.com/policy/defense/331236-strike-group-arrives-in-sea-of-japan.

<sup>&</sup>lt;sup>260</sup> Commander, Carrier Strike Group 1 Public Affairs, "CSG-1 and JMSDF ships refine maritime skills while transiting Western Pacific," U.S. 7<sup>th</sup> Fleet Press Release, April 22, 2017,

http://www.c7f.navy.mil/Media/News/Display/Article/1160312/csg-1-and-imsdf-ships-refine-maritime-skills-while-

transiting-western-pacific/.

261 Ryan Browne and Elise Labott, "US official: With eye on North Korea, China puts bombers on 'high alert,'" CNN, April 20, 2017, <a href="http://www.cnn.com/2017/04/20/politics/us-north-korea-china/index.html">http://www.cnn.com/2017/04/20/politics/us-north-korea-china/index.html</a>.

262 "U.S. sends nuclear sniffer plane to Korea: source," *Yonhap News Agency*, April 20, 2017,

http://english.yonhapnews.co.kr/northkorea/2017/04/20/47/0401000000AEN20170420011900315F.html.

<sup>&</sup>lt;sup>263</sup> "Massive air exercise Max Thunder 17 gets underway on Korean Peninsula," *Air Force Times*, April 17, 2017, https://www.airforcetimes.com/articles/air-force-max-

thunder?utm\_source=Sailthru&utm\_medium=email&utm\_campaign=EBB%204.18.2017&utm\_term=Editorial%20-%20Military%20-%20Early%20Bird%20Brief.

Type: Test Launch Involving: North Korea

Location: Sinpo, North Korea

Summary: A North Korean ballistic missile explodes within seconds of launch.<sup>264</sup>

### 8. Provocative Incident

**Date:** April 15, 2017 **Type:** Defense News **Involving:** North Korea

Location: Pyongyang, North Korea

**Summary**: North Korea displays new missiles during a military parade on the anniversary of its founder Kim Il Sung. The parade included canisters for intercontinental ballistic missiles, submarine-launched ballistic missiles, fins on missiles that could maneuver a missile to hit a target, and the new Korean People's Army special operation forces. <sup>265</sup>

#### 9. Provocative Incident

**Date:** April 13, 2017 **Type:** Test Preparation **Involving:** North Korea

Location: Punggye-ri nuclear test site, North Korea

Summary: Commercial satellite images show activity around North Korea's Punggye-ri nuclear

test site, indicating the country could test a nuclear device at any time. <sup>266</sup>

### 10. Provocative Incident

**Date:** April 13, 2017 **Type:** Defense News **Involving:** U.S.

Location: 300 miles off North Korean coast

**Summary**: U.S. intelligence officials say the U.S. is prepared to launch a preemptive strike against North Korea if officials are convinced they are about to test a nuclear weapon. Two U.S. destroyers capable of shooting Tomahawk cruise missiles are positioned in the region – one 300 miles from the North Korean nuclear test site. <sup>267</sup>

### 11. **Date:** April 12, 2017

<sup>&</sup>lt;sup>264</sup> Choe Sang-hun, David E. Sanger, and William J. Broad, "North Korean Missile Launch Fails, and a Show of Strength Fizzles," *The New York Times*, April 15, 2017, <a href="https://www.nytimes.com/2017/04/15/world/asia/north-korea-missiles-pyongyang-kim-jong-un.html">https://www.nytimes.com/2017/04/15/world/asia/north-korea-missiles-pyongyang-kim-jong-un.html</a>.

<sup>265</sup> Anna Fifield, "Here are the missiles North Korea just showed off, one be one," April 15, 2017,

Anna Fifield, "Here are the missiles North Korea just showed off, one be one," April 15, 2017, <a href="https://www.washingtonpost.com/news/worldviews/wp/2017/04/15/here-are-the-missiles-north-korea-just-showed-off-one-by-">https://www.washingtonpost.com/news/worldviews/wp/2017/04/15/here-are-the-missiles-north-korea-just-showed-off-one-by-</a>

one/?utm\_campaign=buffer&utm\_content=buffer1e9ec&utm\_medium=social&utm\_source=twitter.com&utm\_term=.0704 4083133a. "N.K. sers up special operation forces amid military tensions," *Yonhap News Agency*, April 17, 2017, http://english.yonhapnews.co.kr/northkorea/2017/04/17/0401000000AEN20170417005300315.html?utm\_source=Sailthru&utm\_medium=email&utm\_campaign=EBB%204.18.2018&utm\_term=Editorial%20-%20Early%20Bird%20Brief.

266 Justin McCurry and Julian Borger, "North Korea preparing for nuclear test, satellite images suggest," *The Guardian*,

<sup>&</sup>lt;sup>266</sup> Justin McCurry and Julian Borger, "North Korea preparing for nuclear test, satellite images suggest," *The Guardian*, April 13, 2017, <a href="https://www.theguardian.com/world/2017/apr/13/north-korea-preparing-for-nuclear-test-satellite-images-suggest">https://www.theguardian.com/world/2017/apr/13/north-korea-preparing-for-nuclear-test-satellite-images-suggest</a>

<sup>&</sup>lt;sup>267</sup> William M. Arkin, Cynthia McFadden, and Kenzi Abou-Sabe, "U.S. May Launch Strike if North Korea Reaches for Nuclear Trigger," *NBC News*, April 13, 2017, <a href="http://www.nbcnews.com/news/world/u-s-may-launch-strike-if-north-korea-reaches-nuclear-n746366">http://www.nbcnews.com/news/world/u-s-may-launch-strike-if-north-korea-reaches-nuclear-n746366</a>.

**Type:** Air Incident

**Involving:** Japan and Russia **Location:** Sea of Japan

Summary: Japan intercepts three Russian Tu-95 Bear bombers and an IL-20 spy plane flying near

Japan. The bombers came as close as 36 miles from Japan, but remained in international

airspace.<sup>268</sup>

#### 12. Provocative Incident

**Date:** April 11, 2017 **Type:** Defense News

**Involving:** North Korea and the U.S.

**Location:** Pyongyang and Washington, D.C.

Summary: North Korea and the U.S. trade threats as tensions rise in Korean Peninsula. North Korea warned of "the toughest counteraction" against any further U.S. provocations. The warning comes after U.S. President Donald Trump said the U.S. was "sending an armada" toward the Korean Peninsula and hinted the U.S. would take unilateral action if necessary to "solve the problem" of North Korea. 269

### 13. Provocative Incident

**Date:** April 8, 2017 **Type:** Defense News **Involving:** U.S.

Location: Western Pacific Ocean

Summary: Adm. Harry Harris, commander of U.S. Pacific Command, announces the redeployment of the Carl Vinson Strike Group, including the aircraft carrier USS Carl Vinson, from planned port visits in Australia to the Western Pacific. The move was seen as a signal to North Korea and U.S. allies Japan and South Korea. 270 After persistent reports the Vinson was nearing Korea, a picture released by the Navy showed the carrier group operating south of Singapore, participating in scheduled exercises with Australia. <sup>271</sup>

14. Date: April 5, 2017 **Type:** Test Launch **Involving:** North Korea Location: Sinpo, North Korea

> Summary: North Korea completes a test of a ballistic missile, likely a KN-15 intermediate-range nuclear-capable missile the North first launched in February. The test came a day before Chinese

<sup>268</sup> Lucas Tomlinson, "Russian nuclear-capable bombers fly near Japan, US officials say," Fox News, April 12, 2017,

group-to-the-

region?utm source=Sailthru&utm medium=email&utm campaign=EBB%2004.10.2017&utm term=Editorial%20-%20Early%20Bird%20Brief.

http://www.foxnews.com/world/2017/04/12/russian-nuclear-capable-bombers-fly-near-japan-us-officials-say.html. <sup>269</sup> Justin McCurry and Tom Phillips, "North Korea 'ready for war' after US redeploys navy strike team," *The Guardian*, April 11, 2017, https://www.theguardian.com/world/2017/apr/11/north-korea-ready-for-war-us-navy-redeploys. David B. Larter, "Korea crisis deepens as the US dispatches the Carl Vinson strike group to the region," The Navy Times, April 9, 2017, https://www.navytimes.com/articles/korea-crisis-deepens-as-the-us-dispatches-the-carl-vinson-strike-

<sup>&</sup>lt;sup>271</sup> Christopher P. Cavas, "Nothing to see here: US carrier still thousands of miles from Korea," *Defense News*, April 17, 2017, http://www.defensenews.com/articles/us-carrier-still-thousands-of-miles-fromkorea?utm source=Sailthru&utm medium=email&utm campaign=EBB%204.18.2018&utm term=Editorial%20-%20Early%20Bird%20Brief.

President Xi Jinping met with U.S. President Trump. 272

15. **Date:** Early April 2017 **Type:** Defense News

**Involving:** Japan and the U.S.

Location: Kadena Air Base, Okinawa, Japan

Summary: The U.S. deploys an observation aircraft in Okinawa to detect possible nuclear

weapons test by North Korea. 273

16. **Date:** April 3, 2017 **Type:** Military Exercise

**Involving:** Japan, South Korea, and the U.S.

Location: off the southern coast of South Korea, near Japan

Summary: Japan, South Korea, and the U.S. conduct a joint naval exercise designed to counter

missile threats from North Korean submarines.<sup>274</sup>

### 17. Provocative Incident

Date: March 24, 2017

**Type:** Test

**Involving:** North Korea

Location: Tongchang-ri, North Korea

Summary: North Korea conducts a test of a rocket engine believed to be part of its intercontinental

ballistic missile development program.<sup>275</sup>

### 18. Provocative Incident

**Date:** March 22, 2017 **Type:** Military Exercise

**Involving:** South Korea and the U.S.

Location: Jikdo, South Korea

**Summary**: A U.S. B-1B bomber trains with South Korean fighter jets in case of an emergency on the Korean Peninsula. The nuclear-powered submarine USS *Columbus* and aircraft carrier USS *Carl Vinson* also participate in the training. North Korea issue a statement saying military exercises in the region are aimed at making preemptive strikes against North Korea.<sup>276</sup>

19. **Date:** March 22, 2017 **Type:** Test Launch **Involving:** North Korea

Location: Wonsan Air Base, North Korea

<sup>272</sup> Choe Sang-hun, "North Korea Fires Ballistic Missile a Day Before U.S.-China Summit," *The New York Times*, April 4, 2017, <a href="https://www.nytimes.com/2017/04/04/world/asia/north-korea-ballistic-missile-test-xi-trump.html?">https://www.nytimes.com/2017/04/04/world/asia/north-korea-ballistic-missile-test-xi-trump.html?</a> r=0.

<sup>&</sup>lt;sup>273</sup> "Americans deploy nuclear sniffer plane to Okinawa," *Nikkei Asian Review*, April 12, 2017, http://asia.nikkei.com/Spotlight/Pyongyang-provocation/Americans-deploy-nuclear-sniffer-plane-to-Okinawa.

<sup>&</sup>lt;sup>274</sup> PTI, "South Korea, Japan, US hold drill against North Korea submarines missile threats," *Hindustan Times*, April 3, 2017, <a href="http://www.hindustantimes.com/world-news/south-korea-japan-us-hold-drill-against-north-korea-submarines-missile-threats/story-mO5IzHbeqyV1cmmVOMw9CO.html">http://www.hindustantimes.com/world-news/south-korea-japan-us-hold-drill-against-north-korea-submarines-missile-threats/story-mO5IzHbeqyV1cmmVOMw9CO.html</a>.

<sup>275</sup> Idrees Ali and Phil Stewart, "North Korea tests rocket engine: U.S. officials," *Reuters*, March 27, 2017,

<sup>&</sup>lt;sup>275</sup> Idrees Ali and Phil Stewart, "North Korea tests rocket engine: U.S. officials," *Reuters*, March 27, 2017, http://www.reuters.com/article/us-northkorea-missiles-usa-idUSKBN16Y2PY.

<sup>&</sup>lt;sup>276</sup> "B-1B bomber holds attack drill in Korea," *The Korea Herald*, March 22, 2017, http://www.koreaherald.com/view.php?ud=20170322000808.

Summary: A North Korean missile test fails, exploding within seconds of launch.<sup>277</sup>

20. **Date:** March 20, 2017 **Type:** Defense News

**Involving:** China and Taiwan **Location:** Taipei, Taiwan

**Summary**: Taiwan's defense minister claims China has aimed advanced medium-range ballistic missiles, including the DF-16, at Taiwan. The ministry has previously accused China of having

1,500 missiles pointed at the island. 278

21. **Date:** March 20, 2017 **Type:** Military Exercise **Involving:** China

Location: Yellow and Bohai Seas

Summary: China conducts a naval training exercise near North Korea, involving the Liaoning

aircraft carrier.<sup>279</sup>

#### 22. Provocative Incident

Date: March 19, 2017

Type: Test

Involving: North Korea

Location: Tongchang-ri, North Korea

**Summary**: North Korea conducts a ground jet test of a newly developed high-thrust missile engine, demonstrating progress toward developing an intercontinental ballistic missile. <sup>280</sup>

#### 23. Provocative Incident

Date: March 17, 2017 Type: Defense News Involving: Taiwan Location: Taiwan

Summary: Taiwan's Minister of National Defense confirms for the first time that Taiwan is

capable of launching missile that can hit mainland China.<sup>281</sup>

24. **Date:** March 15, 2017 **Type:** Military Exercise

**Involving:** North Korea and the U.S.

Location: South Korea

Anna Fifield, "North Korean missile explodes seconds after launch," *The Washington Post*, March 22, 2017, <a href="https://www.washingtonpost.com/world/north-korean-missile-explodes-seconds-after-launch/2017/03/22/6e55d36e-0ebc-11e7-b2bb-417e331877d9">https://www.washingtonpost.com/world/north-korean-missile-explodes-seconds-after-launch/2017/03/22/6e55d36e-0ebc-11e7-b2bb-417e331877d9</a> story.html?tid=pm pop&utm term=.0c5b7089846b.

<sup>&</sup>lt;sup>278</sup> AFP, "China aims advanced DF-16 missiles at Taiwan: Taipei's defence minister," *The Economic Times*, March 20, 2017, <a href="http://economictimes.indiatimes.com/news/defence/china-aims-advanced-df-16-missiles-at-taiwan-taipeis-defence-minister/articleshow/57733751.cms">http://economictimes.indiatimes.com/news/defence/china-aims-advanced-df-16-missiles-at-taiwan-taipeis-defence-minister/articleshow/57733751.cms</a>.

<sup>&</sup>lt;sup>279</sup> Elizabeth Shim, "Report: China carried out naval drill near North Korea," *UPI*, April 5, 2017, <a href="http://www.upi.com/Top\_News/World-News/2017/04/05/Report-China-carried-out-naval-drill-near-North-Korea/2591491404348/?spt=su&or=btn\_tw.">http://www.upi.com/Top\_News/World-News/2017/04/05/Report-China-carried-out-naval-drill-near-North-Korea/2591491404348/?spt=su&or=btn\_tw.</a>

Choe Sang-hun, "North Korea Revs the Engine of Its New High-Thrust Missile," *The New York Times*, March 18, 2017,

<sup>&</sup>lt;sup>280</sup> Choe Sang-hun, "North Korea Revs the Engine of Its New High-Thrust Missile," *The New York Times*, March 18, 2017, https://www.nytimes.com/2017/03/18/world/asia/north-korea-test-missile-engine.html?smid=tw-nytimes&smtyp=cur.

Ashley Bunch, "Taiwan says their missiles can reach mainland China," *Defense News*, March 17, 2017, <a href="http://www.defensenews.com/articles/taiwan-says-their-missiles-can-reach-mainland-china">http://www.defensenews.com/articles/taiwan-says-their-missiles-can-reach-mainland-china</a>.

Summary: A U.S. B-1B bomber deploys from Anderson Air Force Base, Guam to the Korean Peninsula. North Korea claims the U.S. was conducting "atomic bombing exercises that rehearsed pre-emptive strikes against [North Korean] major military facilities."<sup>282</sup>

25. Date: March 14-15, 2017 **Type:** Military Exercises

**Involving:** Japan, South Korea and the U.S.

Location: East Asia

Summary: Japan, South Korea and the U.S. conduct a joint exercise to detect and track potential North Korean missile launches. A North Korean official accused the drill as the exercise as intending to launch a preemptive strike, escalating confrontation. <sup>283</sup>

### 26. Provocative Incident

**Date:** March 7, 2017 **Type:** Defense News

**Involving:** South Korea and the U.S. Location: Seongiu, South Korea

Summary: The U.S. begins to deploy the Terminal High Altitude Area Defense system in South Korea after North Korea tests multiple missiles. China has opposed the system, which will take a couple months to become fully operational, fearing it will open the door to more systems meant to counter a growing Chinese military. 284

27. Date: March 6, 2017 **Type:** Defense News **Involving:** China

Location: North Island, Parcels, South China Sea

Summary: Images show Chinese construction in the disputed South China Sea. Experts believe

China is clearing land for possible military installations. <sup>285</sup>

#### 28. Provocative Incident

**Date:** March 6, 2017 **Type:** Missile Drill **Involving:** North Korea

Location: Tongchang-ri, Pyongan province, North Korea

Summary: North Korea fires four extended-range SCUD ballistic missiles. Three missiles landed inside Japan's exclusive economic zone. A fifth missile failed to launch. Experts believe the launch is a reaction to joint military exercise by South Korea and the U.S., which the North believes are

<sup>282</sup> Elizabeth Shim, "North Korea accuses United States of deploying supersonic bomber," *UPI*, March 16, 2017, http://www.upi.com/Top News/World-News/2017/03/16/North-Korea-accuses-United-States-of-deploying-supersonicbomber/8281489673846/?utm source=Sailthru&utm medium=email&utm campaign=EBB%203.17.17&utm term=Editor ial%20-%20Early%20Bird%20Brief.

<sup>&</sup>lt;sup>283</sup> "S. Korea, U.S., Japan begin missile warning exercise," *Yonhap News Agency*, March 14, 2017,

http://english.yonhapnews.co.kr/northkorea/2017/03/14/04010000000AEN20170314003251315.html.

Reference of the state of the Tests," https://www.nytimes.com/2017/03/06/world/asia/north-korea-thaad-missile-defense-us-china.html.

<sup>&</sup>lt;sup>285</sup> Greg Torode, "China begins new work on disputed South China Sea island," *Reuters*, March 15, 2017, http://www.reuters.com/article/us-southchinasea-china-paracels-idUSKBN16L2SS.

preparations for launching an attack.<sup>286</sup> North Korea said the firing was training for a strike on U.S. military bases in Japan.<sup>287</sup>

29. Date: March 1- April 30, 2017

**Type:** Military Exercise

**Involving:** South Korea and the U.S.

Location: South Korea

**Summary**: South Korea and the U.S. conduct annual large-scale joint military exercises, testing their defense readiness against the threat from North Korea. In response to the exercise commencement, North Korean leader Kim Jong-Un inspected a major military unit's headquarters and issued guidance on increasing combat readiness. <sup>288</sup>

### 30. Provocative Incident

**Date:** February 23, 2017 **Type:** Defense News **Involving:** China

Location: Spratly Islands, South China Sea

**Summary**: U.S. officials announce China is nearly finished building almost 24 structures on artificial islands in the South China Sea. The buildings appear designed to host long-range surface-to-air missiles.<sup>289</sup>

31. **Date:** February 12, 2017

Type: Test Launch Involving: North Korea

Location: Banghyeon, North Korea

**Summary**: North Korea conducts a successful test of a ballistic missile. A U.S. Strategic Command statement identified the missile as a medium or intermediate-range system. <sup>290</sup>

#### 32. Provocative Incident

**Date:** February 8, 2017 **Type:** Air Incident: Intercept **Involving:** China and the U.S. **Location:** South China Sea

Summary: A Navy P-3C aircraft intercepts a Chinese KJ-200 propeller airborne early warning and

control aircraft. U.S. officials deemed the encounter "unsafe" but didn't provide details.

Paula Hancocks and Ben Westcott, "North Korea fires four ballistic missiles into Sea of Japan," *CNN*, March 7, 2017, <a href="http://www.cnn.com/2017/03/05/asia/north-korea-projectile/index.html?sr=fbCNN030617north-korea-projectiles1245AMVODtopLink&linkId=35143560">http://www.cnn.com/2017/03/05/asia/north-korea-projectile/index.html?sr=fbCNN030617north-korea-projectiles1245AMVODtopLink&linkId=35143560</a>.
 Jesse Johnson, "North Korea says missile launches were training for striking U.S. bases in Japan," *The Japan Times*,

<sup>287</sup> Jesse Johnson, "North Korea says missile launches were training for striking U.S. bases in Japan," *The Japan Times*, March 7, 2017, <a href="http://www.japantimes.co.jp/news/2017/03/07/national/north-korea-says-missile-launches-part-training-striking-u-s-bases-japan/#.WOSEHsm1tao.">http://www.japantimes.co.jp/news/2017/03/07/national/north-korea-says-missile-launches-part-training-striking-u-s-bases-japan/#.WOSEHsm1tao.</a>

striking-u-s-bases-japan/#.WQSEHsm1tao.

288 "South Korea, U.S. begin large-scale annual drills amid North Korea tension," *Reuters*, March 1, 2017, <a href="http://www.reuters.com/article/us-southkorea-usa-drills-">http://www.reuters.com/article/us-southkorea-usa-drills-</a>

idUSKBN1683HQ?utm\_source=Sailthru&utm\_medium=email&utm\_campaign=EBB%2003.01.2017&utm\_term=Editorial %20-%20Early%20Bird%20Brief.

<sup>289</sup> Idrees Ali, "Exclusive: China finishing South China Sea buildings that could house missiles – U.S. officials," *Reuters*, February 23, 2017, <a href="http://www.reuters.com/article/us-china-usa-southchinasea-exclusive-idUSKBN161029">http://www.reuters.com/article/us-china-usa-southchinasea-exclusive-idUSKBN161029</a>.

<sup>290</sup> Choe Sang-hun, "North Korea Fires Ballistic Missile, Challenging Trump," *The New York Times*, February 11, 2017, https://www.nytimes.com/2017/02/11/world/asia/north-korea-missile-test-trump.html? r=0. Anonymous sources say the two planes came within 1,000 feet of each other.<sup>291</sup>

#### 33. Provocative Incident

**Date:** February 6, 2017 **Type:** Sea Incident

**Involving:** China and Japan **Location:** East China Sea

**Summary**: Three Chinese Coast Guard ships enter waters near disputed islands in the East China Sea. The Japanese Coast Guard said the Chinese vessels spent two hours in Japanese territorial waters, while the Chinese Defense Ministry said the three ships operated within China's territorial sea <sup>292</sup>

34. **Date:** February 4, 2017

Type: Test

**Involving:** Japan and the U.S.

Location: off the coast of Kauai, Hawaii, USA

**Summary**: Japan and the U.S. conduct a successful test of the Aegis Missile Defense System, shooting down a medium-range ballistic missile with an interceptor launched from a guided-missile destroyer.<sup>293</sup>

35. Date: January 24, 2017

Type: Air Incident: Intercept

**Involving:** Japan, Russia and the U.S.

Location: Japan

**Summary:** Japanese fighter jets intercept two Russian Tu-95 Bear bombers circling Japan's major islands as NORAD increases its threat posture from 5 to 4. The Russian bombers did not leave

international airspace.<sup>294</sup>

#### **36. Provocative Incident**

**Date:** January 24, 2017 **Type:** Defense News **Involving:** China

Location: Heilongjiang Province, China

Summary: China deploys the Dongfeng-41 road-mobile intercontinental ballistic missiles in

Heilongijang, a province bordering the Russian Far East.<sup>295</sup>

37. **Date:** January 24, 2017

Type: Air Incident: Intercept

<sup>291</sup> Rebecca Kheel, "US, Chinese aircraft have 'unsafe' encounter," *The Hill*, February 10, 2017, http://thehill.com/policy/defense/318905-us-chinese-aircraft-have-unsafe-encounter.

<sup>&</sup>lt;sup>292</sup> Brad Lendon, "Chinese ships sail near disputed Japanese islands," *CNN*, February 7, 2017, http://www.cnn.com/2017/02/06/asia/china-japan-disputed-islands-intrusion/.

Brad Lendon, "US, Japan conduct successful missile interception test," *CNN*, February 6, 2017, http://www.cnn.com/2017/02/05/politics/us-japan-aegis-missile-defense-test/.

<sup>&</sup>lt;sup>294</sup> Lucas Tomlinson, "NORAD Responds After Russian Bombers Zoom Around Japan," *Military.com*, January 25, 2017, <a href="http://www.military.com/daily-news/2017/01/25/norad-responds-russian-bombers-zoom-japan.html?utm-source=Sailthru&utm-medium=email&utm-campaign=DFN%20EBB%201.26.17&utm-term=Editorial%20-%20Early%20Bird%20Brief.

<sup>&</sup>lt;sup>295</sup> "China deploys intercontinental missiles near Russian border – media," *Tass*, January 24, 2017, http://tass.com/world/926888.

**Involving:** Japan and Russia **Location:** Sea of Japan

Summary: Japanese fighter jets intercept three Russian Tu-95 strategic bombers approaching

Japan's mainland over the Sea of Japan. 296

### 38. Provocative Incident

Date: January 22, 2017 Type: Defense News Involving: North Korea

Location: Yongbyon, North Korea

Summary: Satellite pictures show emissions from the cooling tower of North Korea's plutonium

reactor indicting the reactor has been restarted.<sup>297</sup>

39. **Date:** January 20-22, 2017 **Type:** Military Exercise

**Involving:** Japan, South Korea and the U.S.

Location: Sea of Japan

**Summary:** Japan, South Korea and the U.S. conduct a joint exercise to detect and track potential North Korean missile launches. A North Korean official accused the drill as the exercise as

intending to launch a preemptive strike, escalating confrontation.<sup>298</sup>

40. **Date:** January 19, 2017 **Type:** Defense News **Involving:** North Korea

Location: Chamjin missile factory, North Korea

**Summary:** U.S. intelligence satellites detected signs of activity and North Korea's Chamjin missile factory, signaling possible preparations for a ballistic missile test. South Korean media quote two unnamed South Korea officials who claim two missiles have been placed on mobile launchers at the missile factory site. <sup>299</sup> North Korean officials have made repeated threats to carry out a test launch of an intercontinental ballistic missile capable of hitting the U.S. <sup>300</sup>

41. **Date:** January 15 – February 3, 2017

**Type:** Military Exercise

**Involving:** South Korea and the U.S. **Location:** Pyeongchang, South Korea

Summary: South Korea and U.S. conduct military exercises, involving over 300 marines.<sup>301</sup>

<sup>296</sup> "Japan Says It Intercepted Three Russian Warplanes Near Its Borders," *Radio Free Europe*, January 25, 2017, <a href="http://www.rferl.org/a/japan-intercepted-three-russian-warplanes-near-borders/28256057.html">http://www.rferl.org/a/japan-intercepted-three-russian-warplanes-near-borders/28256057.html</a>.

"N. Korea berates recent three-way missile drills as pre-emptive strike-driven," *Yonhap News Agency*, February 6, 2017, http://english.yonhapnews.co.kr/northkorea/2017/02/06/90/0401000000AEN20170206013000315F.html.

<sup>299</sup> James Griffiths and Paula Hancocks, "North Korea readies long-range missiles on mobile launchers, Yonhap says," *CNN*, January 20, 2017, http://www.cnn.com/2017/01/19/asia/north-korea-missiles/index.html.

Elizabeth Shim, "China voices concern about North Korea statements on ICBM test," *UPI*, January 9, 2017, <a href="http://www.upi.com/Top">http://www.upi.com/Top</a> News/World-News/2017/01/09/China-voices-concern-about-North-Korea-statements-on-ICBM-test/5141484016262/

<sup>&</sup>lt;sup>297</sup> Sohee Kim, "North Korea Restarts Yongbyon Plutonium Reactor, Institute Says," *Bloomberg Technology*, January 27, 2017, <a href="https://www.bloomberg.com/news/articles/2017-01-28/north-korea-restarts-yongbyon-plutonium-reactor-institute-says?bcomANews=true">https://www.bloomberg.com/news/articles/2017-01-28/north-korea-restarts-yongbyon-plutonium-reactor-institute-says?bcomANews=true</a>.

Kim Daewoung, "South Korean, U.S. Marines tussle in snow in what North brands 'madcap' drill," *Reuters*, January 27, 2016, <a href="http://www.reuters.com/article/us-southkorea-usa-military-training-idUSKBN15B0BN">http://www.reuters.com/article/us-southkorea-usa-military-training-idUSKBN15B0BN</a>.

### 42. Provocative Incident

**Date:** January 14-15, 2017 **Type:** Military Exercise **Involving:** Taiwan

Location: Taichung, Taiwan

Summary: Taiwan conducts military exercises, simulating an attack on the island by China. 302

### 43. Provocative Incident

Date: January 11, 2017 Type: Sea Incident Involving: China Location: Taiwan

**Summary:** Taiwanese military jets and a ship monitor China's aircraft carrier as it moves through

the Taiwan Strait. 303

44. **Date:** January 9, 2017

Type: Air Incident: Intercept Involving: China and Japan Location: Sea of Japan

Summary: Japanese aircraft intercept eight Chinese military airplanes – six bombers, one

intelligence gathering plane and one early warning aircraft.<sup>304</sup>

45. **Date:** January 5, 2017

Type: Defense News Involving: South Korea

Location: Seoul, South Korea

**Summary:** South Korea announces they will form a special military brigade aiming to remove

North Korea's wartime command in the event of war. 305

### 46. Provocative Incident (1)

Date: January 2, 2017

Type: Military Exercise and Sea Incident

**Involving:** China

Location: South China Sea

**Summary:** China's aircraft carrier, J-15 fighter jets and ship-borne helicopters conduct take-off and landing drills in the South China Sea. <sup>306</sup> The aircraft carrier passed 90 nautical miles south of

<sup>302</sup> "Taiwan Begins Massive Drills Simulating Chinese Attack," *Sputnik*, January 17, 2017, <a href="https://sputniknews.com/military/201701171049697608-taiwan-massive-drills-china-attack/">https://sputniknews.com/military/201701171049697608-taiwan-massive-drills-china-attack/</a>.

Ed Adamczyk, "Taiwan scrambles jets as Chinese aircraft carrier sails through Taiwan Strait," *UPI*, January 11, 2017, <a href="http://www.upi.com/Top-News/World-News/2017/01/11/Taiwan-scrambles-jets-as-Chinese-aircraft-carrier-sails-through-Taiwan-Strait/4861484145119/">http://www.upi.com/Top-News/World-News/2017/01/11/Taiwan-scrambles-jets-as-Chinese-aircraft-carrier-sails-through-Taiwan-Strait/4861484145119/</a>.

<sup>304 &</sup>quot;Chinese military planes flying to Sea of Japan prompt scramble," *The Asahi Shimbun*, "January 10, 2017, <a href="http://www.asahi.com/ajw/articles/AJ201701100021.html">http://www.asahi.com/ajw/articles/AJ201701100021.html</a>.

305 Kim Tong-Hyung, "S. Korea to form brigade to remove North's leadership in war," *Chicago Tribune*, January 5, 2017,

Kim Tong-Hyung, "S. Korea to form brigade to remove North's leadership in war," *Chicago Tribune*, January 5, 2017, http://www.chicagotribune.com/news/nationworld/sns-bc-as--koreas-tension-20170105-story.html.

<sup>&</sup>lt;sup>306</sup> "China aircraft carrier conducts drill in S. China Sea," *Xinhua* as cited by the Ministry of National Defense, The People's Republic of China, January 3, 2017, <a href="http://eng.mod.gov.cn/DefenseNews/2017-01/03/content">http://eng.mod.gov.cn/DefenseNews/2017-01/03/content</a> 4769017.htm.

the Taiwan days earlier after the Taiwanese President spoke by phone to U.S. President Donald Trump. Chinese officials called the exercise "routine." 307

47. **Date:** January 2017 **Type:** Test Launch **Involving:** China

Location: Taiyuan Space Center, China

**Summary:** China tests a DF-5C long-range missile with 10 inert warheads. <sup>308</sup>

#### 48. Provocative Incident

**Date:** December 26, 2016 **Type:** Sea Incident

**Involving:** China

Location: South China Sea

**Summary:** A Chinese aircraft carrier accompanied by five vessels enters the South China Sea after passing close to Taiwan. The incident occurs a few weeks after U.S. President-elect Donald Trump's phone call with the president of Taiwan, but there were no indications of a connection between the events.<sup>309</sup>

49. **Date:** Mid-December 2016 **Type:** Military Exercise **Involving:** China

**Location:** Yellow Sea

Summary: China conducts fighter launch recovery and combat exercises involving its first aircraft

carrier group.<sup>310</sup>

# **50. Provocative Incident**

Date: December 15, 2016

Type: Sea Incident

**Involving:** China and the U.S.

Location: 50 nautical miles northwest of Subic Bay, Philippines

**Summary:** China seizes a U.S. underwater drone conducting "routine operations in accordance with international law." The drone was deployed by a U.S. navy ship in international waters in the

disputed South China Sea. China later returned the unmanned underwater vehicle.<sup>311</sup>

# 51. Provocative Incident (1)

Date: December 10, 2016

Type: Military Exercise and Air Incident: Intercept

<sup>&</sup>lt;sup>307</sup> Wei Qi, "Reunification is inevitable, Beijing warns Taiwan," *CNBC*, December 28, 2016, http://www.cnbc.com/2016/12/28/reunification-is-inevitable-beijing-warns-taiwan.html.

<sup>&</sup>lt;sup>308</sup> Bill Gertz, "China Tests Missile With 10 Warheads," *The Washington Free Beacon*, January 31, 2017, http://freebeacon.com/national-security/china-tests-missile-10-warheads/.

Reuters, "Chinese warships enter South China Sea near Taiwan in show of force," *The Guardian*, December 26, 2016, http://www.reuters.com/article/us-china-taiwan-idUSKBN13Z05Z.

<sup>310</sup> Associated Press, "Chinese military: Aircraft carrier carries out fighter drills on open seas," *Fox News*, December 24, 2016, <a href="http://www.foxnews.com/world/2016/12/24/chinese-military-aircraft-carrier-carries-out-fighter-drills-on-open-seas.html">http://www.foxnews.com/world/2016/12/24/chinese-military-aircraft-carrier-carries-out-fighter-drills-on-open-seas.html</a>

The Two Way, December 16, 2016, <a href="http://www.npr.org/sections/thetwo-way/2016/12/16/505850933/china-seizes-unmanned-u-s-underwater-vehicle-in-international-waters">http://www.npr.org/sections/thetwo-way/2016/12/16/505850933/china-seizes-unmanned-u-s-underwater-vehicle-in-international-waters</a>.

**Involving:** China and Japan **Location:** Taiwan; Miyako Strait

**Summary:** Chinese military aircraft conducts long-range exercises, flying over waterways near Taiwan. The aircraft also flew over the Miyako Strait prompting Japan to send two fighter jets to intercept the Chinese jets. A Chinese spokesman objected to the intercept calling it a dangerous and unprofessional response to "routine" drills.<sup>312</sup>

52. Date: Early December 2016

Type: Test Launch Involving: North Korea Location: Undisclosed

Summary: North Korea tests a submarine-launched ballistic missile. 313

53. Date: Early December 2016

Type: Test Flight
Involving: China
Location: Undisclosed

Summary: China reportedly conducts a flight test of a Dong Neng-3 missile capable of knocking

out U.S. satellites.<sup>314</sup>

54. **Date:** November 26, 2016 **Type:** Air Incident: Intercept **Involving:** China and Taiwan

Location: Taiwan

Summary: Eight Japanese F-15 fighter jets intercept two Chinese Xian H-6 bombers and two

escort planes fly around the island of Taiwan. 315

55. **Date:** November 25, 2016 **Type:** Air Incident: Intercept **Involving:** China and Japan **Location:** Miyako Strait

Summary: Japanese fighter jets intercept two Chinese Su-30 fighters, two H-6 bombers and two

signal intelligence aircraft flying near Okinawa.<sup>316</sup>

56. **Date:** November 24-25, 2016 **Type:** Military Exercise

**Involving:** China

Location: western Pacific Ocean

<sup>312</sup> J.R. Wu and Michael Martine, "Taiwan says China air force conducts long-range drills," *Reuters*, December 11, 2016, http://www.reuters.com/article/us-china-taiwan-idUSKBN13Z05Z.

<sup>&</sup>lt;sup>313</sup> Elizabeth Shim, "Report: North Korea tested a sub-launched missile in December," *UPI*, December 15, 2016, <a href="http://www.upi.com/Top\_News/World-News/2016/12/15/Report-North-Korea-tested-a-sub-launched-missile-in-December/7371481812389/">http://www.upi.com/Top\_News/World-News/2016/12/15/Report-North-Korea-tested-a-sub-launched-missile-in-December/7371481812389/</a>.

<sup>314</sup> Bill Gertz, "2016 Was a Big Year for China's Military: Carriers, Missile and More," *The National Interest*, December 29, 2016, <a href="http://nationalinterest.org/blog/the-buzz/2016-was-big-year-chinas-military-carriers-missiles-more-18891">http://nationalinterest.org/blog/the-buzz/2016-was-big-year-chinas-military-carriers-missiles-more-18891</a>.

315 Lucas Tomlinson and Jennifer Griffin, "China flew nuclear-capable bombers around Taiwan before Trump call with Taiwanese president," *Fox News*, December 5, 2016, <a href="http://www.foxnews.com/world/2016/12/05/china-flew-nuclear-capable-bombers-over-taiwan-before-trump-call-with-taiwanese-president.html">http://www.foxnews.com/world/2016/12/05/china-flew-nuclear-capable-bombers-over-taiwan-before-trump-call-with-taiwanese-president.html</a>.

<sup>&</sup>lt;sup>316</sup> "Japan scrambles jets as Chinese warplanes fly near Okinawa," *RT*, November 27, 2016, https://www.rt.com/news/368344-china-air-force-drill/.

Summary: The Chinese air force conducts annual drills close to Japan and Taiwan.<sup>317</sup>

57. **Date:** November 4, 2016 **Type:** Defense News

**Involving:** South Korea and the U.S.

Location: South Korea

**Summary:** The commander of U.S. Forces Korea announces a U.S. Terminal High Altitude Area Defense (THAAD) anti-missile system will be deployed in South Korea in 8-10 months. <sup>318</sup> China has warned against placing a U.S. anti-missile system in South Korea, stating it will consider

countermeasures.319

#### 58. Provocative Incident

Date: November 2016 Type: Sea Incident Involving: U.S. Location: Guam

Summary: A U.S. Navy submarine carrying nuclear-tipped ballistic missiles makes a port visit to

Guam – the first time since the late 1980s. 320

59. **Date:** October 31 - November 11, 2016

**Type:** Military Exercise **Involving:** Japan and the U.S.

Location: Okinawa, Japan; Tinian; Guam

**Summary:** The U.S. and Japan conduct Exercise Keen Sword 2017 – the largest joint, bilateral field training exercise between the two countries – designed to increase combat readiness and

interoperability.<sup>321</sup>

60. **Date:** October 31 – November 3, 2016

**Type:** Military Exercise

**Involving:** U.S.

Location: South Korea

**Summary:** The U.S. conducts annual evacuation drills in South Korea practicing the transportation

of civilians to a U.S. military base in Japan for the first time since 2009.<sup>322</sup>

61. **Date:** October 27, 2016 **Type:** Military Exercise **Involving:** China

<sup>&</sup>lt;sup>317</sup> "Japan scrambles jets as Chinese warplanes fly near Okinawa," *RT*, November 27, 2016, https://www.rt.com/news/368344-china-air-force-drill/.

<sup>318 &</sup>quot;U.S. to deploy THAAD anti-missile battery in South Korea in 8-10 months: commander," *Reuters*, November 4, 2016, http://www.reuters.com/article/us-southkorea-usa-thaad-idUSKBN12Z028.

<sup>&</sup>quot;China again warns against U.S. anti-missile system in South Korea," *Reuters*, September 29, 2016, http://uk.reuters.com/article/uk-southkorea-usa-china-idUKKCN11Z12M.

<sup>&</sup>lt;sup>320</sup> Barbara Starr and Brad Lendon, "US sends message to adversaries with nuclear sub visit, drills," *CNN*, November 1, 2016, <a href="http://www.cnn.com/2016/10/31/politics/guam-nuclear-missile-submarine-visit/">http://www.cnn.com/2016/10/31/politics/guam-nuclear-missile-submarine-visit/</a>. <sup>321</sup> "Keen Sword 2017," *U.S. Forces, Japan*, October 31, 2016, <a href="http://www.usfj.mil/Media/Press-Releases/Article-">http://www.usfj.mil/Media/Press-Releases/Article-</a>

<sup>&</sup>lt;sup>321</sup> "Keen Sword 2017," *U.S. Forces, Japan*, October 31, 2016, <a href="http://www.usfj.mil/Media/Press-Releases/Article-View/Article/991856/keen-sword-2017/">http://www.usfj.mil/Media/Press-Releases/Article-View/Article/991856/keen-sword-2017/</a>.

Elizabeth Shim, "U.S. Forces Korea conducts evacuation drill for American civilians," *UPI*, November 7, 2016, <a href="http://www.upi.com/Top\_News/World-News/2016/11/07/US-Forces-Korea-conducts-evacuation-drill-for-American-civilians/9581478546022/">http://www.upi.com/Top\_News/World-News/2016/11/07/US-Forces-Korea-conducts-evacuation-drill-for-American-civilians/9581478546022/</a>.

Location: south of Hainan island, northwest of Parcel Islands, South China Sea

**Summary:** Days after a U.S. warship sails near disputed islands in the South China Sea, China conducts one-day military drills in the region.<sup>323</sup>

#### **62. Provocative Incident**

**Date:** October 21, 2016 **Type:** Sea Incident **Involving:** U.S.

Location: Parcel Islands, South China Sea

Summary: A U.S. warship sails near disputed islands in the South China Sea to exercise its right

to sail in international waters.<sup>324</sup>

63. **Date:** October 21, 2016 **Type:** Military Exercise

**Involving:** Japan, South Korea, the U.K. and the U.S.

Location: Misawa Air Base, Japan

Summary: The British Royal Air Force and the Japan Air Self-Defense Force commence their

first-ever joint military drills with fighter pilots from South Korea and the U.S.<sup>325</sup>

64. Date: October 19, 2016

Type: Test Launch Involving: North Korea

Location: Sohae Satellite Launch Station, northwest North Korea

Summary: North Korea unsuccessfully tests a Musudan intermediate-range ballistic missile. 326

65. Date: October 14, 2016

Type: Test Launch Involving: North Korea

**Location:** Sohae Satellite Launch Station, northwest North Korea

Summary: North Korea unsuccessfully tests an apparent Musudan intermediate-range ballistic

missile.327

66. **Date:** October 10-15, 2016

**Type:** Military Exercise

**Involving:** South Korea and the U.S. **Location:** waters around South Korea

**Summary:** South Korea and the U.S. naval forces conduct joint exercises in waters on both sides of the Korean Peninsula to demonstrate preparedness for possible North Kore provocations. <sup>328</sup>

<sup>324</sup> Morgan Chalfant, "U.S. Nacy Destroyer Sails Near Disputed Islands in South China Sea," *The Washington Free Beacon*, October 21, 2016, <a href="http://freebeacon.com/national-security/american-navy-destroyer-sails-near-disputed-islands-south-china-sea/">http://freebeacon.com/national-security/american-navy-destroyer-sails-near-disputed-islands-south-china-sea/</a>.

Gabriel Dominguez, "Another North Korean IRBM launch fails," *HIS Jane's 360*, October 21, 2016, <a href="http://www.janes.com/article/64814/another-north-korean-irbm-launch-fails">http://www.janes.com/article/64814/another-north-korean-irbm-launch-fails</a>.

<sup>&</sup>lt;sup>323</sup> Jesse Johnson, "China set to conduct military drills in South China Sea less than a week after U.S. patrol," *The Japan Times*, October 26, 2016, <a href="http://www.japantimes.co.jp/news/2016/10/26/asia-pacific/china-set-conduct-military-drills-south-china-sea-less-week-u-s-patrol/#.WJRD5RDgRQ2">http://www.japantimes.co.jp/news/2016/10/26/asia-pacific/china-set-conduct-military-drills-south-china-sea-less-week-u-s-patrol/#.WJRD5RDgRQ2</a>.

south-china-sea/.

325 Justin McCurry, "UK sends Typhoons to Japan for joint drills to strengthen security ties," *The Guardian*, October 14, 2016, <a href="https://www.theguardian.com/world/2016/oct/14/uk-sends-raf-typhoons-to-japan-joint-drills-china">https://www.theguardian.com/world/2016/oct/14/uk-sends-raf-typhoons-to-japan-joint-drills-china</a>.

Gabriel Dominguez, "Another North Korean IRBM launch fails," *HIS Jane's 360*, October 21, 2016, <a href="http://www.janes.com/article/64814/another-north-korean-irbm-launch-fails">http://www.janes.com/article/64814/another-north-korean-irbm-launch-fails</a>.

### 67. Provocative Incident

Date: October 10, 2016
Type: Defense News
Involving: South Korea
Location: Seoul, South Korea

Summary: South Korea's defence ministry says its military would pre-emptively strike North

Korea if a nuclear attack by the North was imminent. 329

68. **Date:** September 25, 2016 **Type:** Air Incident: Intercept **Involving:** China and Japan

Location: Okinawa

**Summary:** Japan's Air Self-Defense Force intercepts anywhere from 8 to 40 Chinese fighters and bombers as they pass through a politically sensitive international entryway into the Western Pacific. The passage goes between Miyako Island and Okinawa's main island. China claims the group was conducting reconnaissance and early warning exercises.<sup>330</sup>

69. Date: September 20, 2016

Type: Test

**Involving:** North Korea

Location: Sohae Space Center, North Korea

Summary: North Korea successfully tests a new rocket engine, which could possibly be used as

the first stage of an intercontinental ballistic missile.<sup>331</sup>

70. **Date:** September 16, 2016 **Type:** Defense News **Involving:** North Korea

Location: Pyongyang, North Korea

Summary: North Korea says it will "sweep Guam, the base of provocations, from the surface of

the earth" should U.S. bombers conduct flyovers of the Korean Peninsula. 332

### 71. Provocative Incident

Date: September 13, 2016

Type: Air Incident

**Involving:** South Korea and the U.S.

<sup>328</sup> Elizabeth Shim, "U.S., South Korea naval forces conduct joint drill 'Invincible Spirit 2016," *UPI*, October 10, 2016, <a href="http://www.upi.com/Top\_News/World-News/2016/10/10/US-South-Korea-naval-forces-conduct-joint-drill-Invincible-Spirit-2016/8371476106153/">http://www.upi.com/Top\_News/World-News/2016/10/10/US-South-Korea-naval-forces-conduct-joint-drill-Invincible-Spirit-2016/8371476106153/</a>.

<sup>329</sup> IANS, "South Korea may strike North Korea if nuclear attack imminent," *The Economic Times*, October 10, 2016, http://economictimes.indiatimes.com/news/defence/south-korea-may-strike-north-korea-if-nuclear-attack-imminent/articleshow/54778644.cms.

<sup>&</sup>lt;sup>330</sup> Jesse Johnson, "Japan scrambles jets as China warplanes fly through Okinawa strait," *The Japan Times*, September 26, 2016, <a href="http://www.japantimes.co.jp/news/2016/09/26/national/politics-diplomacy/fighter-scrambled-near-okinawa-china-air-force-planes-pass-mivako-strait/#.WIo22ZLgRO1.

air-force-planes-pass-miyako-strait/#.WIo22ZLgRQ1.

331 Ankit Panda, "North Korea Tests Missile Engine, Possibly Intended for an ICBM," *The Diplomat*, September 20, 2016, http://thediplomat.com/2016/09/north-korea-tests-missile-engine-possibly-intended-for-an-icbm/.

<sup>&</sup>lt;sup>332</sup> Peter Jeffrey, "Clinton, Trump, and a Nuclear North Korea: The Two-Minute Version," *Bloomberg*, September 22, 2016, <a href="https://www.bloomberg.com/news/articles/2016-09-23/clinton-trump-and-a-nuclear-north-korea-the-two-minute-version">https://www.bloomberg.com/news/articles/2016-09-23/clinton-trump-and-a-nuclear-north-korea-the-two-minute-version</a>.

Location: South Korea

Summary: Two U.S. bombers conduct a flyover of South Korea in response to North Korea's

nuclear test.<sup>333</sup>

72. **Date:** September 12-20, 2016 **Type:** Military Exercise **Involving:** China and Russia **Location:** South China Sea

Summary: China and Russia conduct joint naval exercises, highlighting marine corps units. 334

#### 73. Provocative Incident

**Date:** September 9, 2016 **Type:** Nuclear Test **Involving:** North Korea

Location: Yongbyon nuclear site, North Korea

**Summary:** North Korea conducts its fifth nuclear test. In a statement, North Korea claims it was a successful test of a "nuclear warhead that has been standardized to be able to be mounted on

strategic ballistic rockets."335

74. **Date:** September 5, 2016 **Type:** Test Launch (3) **Involving:** North Korea

**Location:** South of Pyongyang

**Summary:** North Korea successfully tests three missiles each covering a distance of approximately

1,000 kilometers.<sup>336</sup>

75. **Date:** September 1, 2016

Type: Defense News Involving: North Korea Location: North Korea

**Summary:** A researcher from North Korea Intellectuals Solidarity claims the country has been developing a new submarine. Subsequent reporting points to satellite imagery that strongly

suggests a naval construction program is underway, possibly a new submarine.<sup>338</sup>

76. **Date:** August 24, 2016 **Type:** Test Launch **Involving:** North Korea

Location: near Sinpo, North Korea

<sup>333</sup> James Pearson and Ju-min Park, "U.S. bombers fly over South Korea in show of force after nuclear test," *Reuters*, September 13, 2016, <a href="http://www.reuters.com/article/us-northkorea-nuclear-idUSKCN11J059">http://www.reuters.com/article/us-northkorea-nuclear-idUSKCN11J059</a>.

http://www.aljazeera.com/news/2016/09/north-korea-fires-ballistic-missiles-160905041455485.html.

Brad Lendon and Katie Hunt, "China, Russia begin joint exercises in South China Sea," CNN, September 12, 2016, http://www.cnn.com/2016/09/12/asia/china-russia-south-china-sea-exercises/.

<sup>335 &</sup>quot;North Korea claims success in fifth nuclear test," *BBC News*, September 9, 2016, <a href="http://www.bbc.com/news/world-asia-37314927">http://www.bbc.com/news/world-asia-37314927</a>.

asia-37314927.

336 "North Korea fires three ballistic missiles," *Al Jazeera*, September 5, 2016,

Franz-Stefan Gady, "Is North Korea Building a New Ballistic Missile Submarine," *The Diplomat*, September 1, 2016, <a href="http://thediplomat.com/2016/09/is-north-korea-building-a-new-ballistic-missile-submarine/">http://thediplomat.com/2016/09/is-north-korea-building-a-new-ballistic-missile-submarine/</a>.

<sup>&</sup>quot;Is North Korea Building a New Submarine," 38 North, September 30, 2016, http://38north.org/2016/09/sinpo093016/.

Summary: North Korea tests a submarine-launched ballistic missile off its eastern coast. The missile flew around 300 miles from the coast before splashing down in the Sea of Japan.<sup>339</sup>

77. **Date:** August 22 – September 2, 2016

**Type:** Military Exercise

**Involving:** South Korea and the U.S.

**Location:** South Korea

Summary: U.S. and South Korean forces conduct the annual Ulchi-Freedom Guardian joint exercises. The exercises involve practice launching a preemptive strike on a North Korean nuclear or missile base during a crisis. 340

78. **Date:** August 22, 2016 **Type:** Military Exercise **Involving:** China

**Location:** Gulf of Tonkin

**Summary:** Chinese coast guard ships conduct live-fire exercises. <sup>341</sup>

79. **Date:** August 19-26, 2016 **Type:** Military Exercise **Involving:** South Korea **Location:** South Korea

**Summary:** The South Korean Air Force conducts large-scale combat exercises, reportedly

including an exercise to preemptively strike North Korean missile threats. 342

80. Date: Mid-August 2016 **Type:** Military Exercise **Involving:** China **Location:** Sea of Japan

**Summary:** Chinese naval vessels conduct a "maritime confrontation drill" simulating a standoff.<sup>343</sup>

81. Date: August 18, 2016 **Type:** Military Exercise **Involving:** South Korea

**Location:** South Korea near the Demilitarized Zone

Summary: The South Korean army conducts its largest live-fire artillery drills, involving

approximately 300 artillery systems. 344

<sup>339</sup> Ankit Panda, "North Korea Tests Submarine-Launched Ballistic Missile as US-South Korea Exercises Begin," *The* Diplomat, August 24, 2016, http://thediplomat.com/2016/08/north-korea-tests-submarine-launched-ballistic-missile-as-us-

south-korea-exercises-begin/.

340 Park Byong-su, "South Korea and US begin Ulchi-Freedom Guardian joint exercises," *The Hankyoreh*, August 23, 2016, http://english.hani.co.kr/arti/english\_edition/e\_national/758034.html.

<sup>&</sup>lt;sup>341</sup> Simon Denyer, "China slams U.S.-South Korea military drills even as it stages naval war games of its own," *The* Washington Post, August 22, 2016, https://www.washingtonpost.com/news/worldviews/wp/2016/08/22/east-asia-wargames-a-tour-of-the-hotspots-as-temperatures-rise-between-china-and-the-u-s/?utm\_term=.6df1b8bd8052.

342 Park Byong-su, "South Korea and US begin Ulchi-Freedom Guardian joint exercises," *The Hankyoreh*, August 23,

<sup>2016,</sup> http://english.hani.co.kr/arti/english\_edition/e\_national/758034.html.

Ankit Panda, "Chinese Navy Holds 'Confrontation Drill' in Sea of Japan," *The Diplomat*, August 23, 2016, http://thediplomat.com/2016/08/chinese-navy-holds-confrontation-drill-in-sea-of-japan/.

Ankit Panda, "South Korea Holds Largest-Ever Live-Fire Artillery Drills," *The Diplomat*, August 19, 2016, http://thediplomat.com/2016/08/south-korea-holds-largest-ever-live-fire-artillery-drills/.

82. **Date:** August 16, 2016 **Type:** Sea Incident

**Involving:** China and Japan **Location:** East China Sea

Summary: Japan releases video of hundreds of Chinese vessels sailing close to the disputed

Senkaku/Diaoyu Islands. 345

## 83. Provocative Incident

Date: August 2, 2016 Type: Missile Drill Involving: North Korea

Location: near Hwangju, North Korea

Summary: U.S. Strategic Command detects launches of two North Korean intermediate-range

ballistic missiles.<sup>346</sup>

84. **Date:** July 18, 2016 **Type:** Test Launch (3) **Involving:** North Korea

Location: off the east coast of North Korea

Summary: North Korea test fires three ballistic missiles it simulated preemptive strikes against

South Korean ports and airfields. 347

85. **Date:** July 9, 2016 **Type:** Test Launch **Involving:** North Korea

Location: off the east coast of North Korea

**Summary:** North Korea unsuccessfully tests a submarine-launched ballistic missile. The test fails

in the early stages of the launch. 348

# **86. Provocative Incident**

**Date:** July 8, 2016 **Type:** Defense News

**Involving:** South Korea and the U.S.

Location: Seoul, South Korea

**Summary:** South Korea and the U.S. announce they will deploy the Terminal High Altitude Area Defense anti-missile system in South Korea to counter the North Korea threat. China formally

lodges complaints over the decision.<sup>349</sup>

<sup>345</sup> "Japanese Coast Guard video claims to show hundreds of Chinese ships near disputed Senkaku Islands," *RT*, August 17, 2016, <a href="https://www.rt.com/news/356244-chinese-ships-senkaku-video/">https://www.rt.com/news/356244-chinese-ships-senkaku-video/</a>.

<sup>347</sup> Jack Kim, "North Korea says missile test simulated attack on South's airfields," *Reuters*, July 20, 2016, <a href="http://www.reuters.com/article/us-northkorea-missiles-idUSKCN0ZZ2WO">http://www.reuters.com/article/us-northkorea-missiles-idUSKCN0ZZ2WO</a>.

<sup>348</sup> Reuters, "North Korea Test Fires Submarine-Launched Ballistic Missile: South Korea," *NDTV*, July 9, 2016,

Reuters, "North Korea Test Fires Submarine-Launched Ballistic Missile: South Korea," *NDTV*, July 9, 2016, http://www.ndtv.com/world-news/north-korea-test-fires-submarine-launched-missile-1429553.

<sup>349</sup> Jack Kim, "South Korea, U.S. to deploy THAAD missile defense, drawing China rebuke," July 8, 2016, http://www.reuters.com/article/us-southkorea-usa-thaad-idUSKCN0ZO084.

Amanda Macias, "'Mr. Kim has missile lust, and he's not giving up': A timeline of North Korea's brazen missile tests so far in 2016," *Business Insider*, October 29, 2016, <a href="http://www.businessinsider.com/timeline-of-north-korea-tests-2016-10/#july-18-the-rogue-regime-fires-three-more-ballistic-missiles-14">http://www.businessinsider.com/timeline-of-north-korea-tests-2016-10/#july-18-the-rogue-regime-fires-three-more-ballistic-missiles-14</a>.

87. **Date:** July 8, 2016

Type: Military Exercise

**Involving:** China

**Location:** South China Sea

Summary: China's Navy conducts a combat drill near Hainan Island and Xisha Island. 350

88. **Date:** June 22, 2016 **Type:** Test Launch (2) **Involving:** North Korea

Location: Wonsan, North Korea

**Summary:** North Korea test launches an intermediate-range missile hours after a similar test failed. The partially successful test took the missile more than halfway toward the southwest coast of Japan's main island, reaching a reported altitude of 1,000 km. <sup>351</sup>

89. **Date:** June 20-28, 2016 **Type:** Military Exercise

**Involving:** Japan, South Korea, and the U.S.

Location: off the coast of the Pacific Missile Range Facility, Kauai, Hawaii

Summary: Japan, South Korea and the U.S. hold biennial exercise Pacific Dragon, a trilateral

ballistic missile defense tracking event. 352

# 90. Provocative Incident

Date: June 9, 2016 Type: Sea Incident

**Involving:** China and Japan **Location:** East China Sea

Summary: A Chinese frigate enters contiguous waters near the disputed Daioyu/Senkaku Islands

sparking protest from Japan.<sup>353</sup>

91. **Date:** June 9, 2016 **Type:** Military Exercise

**Involving:** Japan, India and the U.S.

**Location:** Philippine Sea

**Summary:** Japan, India and the U.S. kick off the annual Malabar exercise. 354

92. **Date:** June 8, 2016 **Type:** Sea Incident

50 ((01)

Ju-min Park and Tim Kelly, "North Korea missile reaches new heights, 'intensifying' threat to Japan," *Reuters*, June 22 2016, http://www.reuters.com/article/us-northkorea-missile-idUSKCN0Z72YF.

<sup>&</sup>lt;sup>350</sup> "Chinese navy conducts combat drill in South China Sea," *Xinhua* as cited by the Ministry of National Defense, The People's Republic of China, July 9, 2016, <a href="http://eng.mod.gov.cn/DefenseNews/2016-07/09/content\_4691291.htm">http://eng.mod.gov.cn/DefenseNews/2016-07/09/content\_4691291.htm</a>.

Ju-min Park and Tim Kelly, "North Korea missile reaches new heights, 'intensifying' threat to Japan," *Reuters*, June 22,

<sup>&</sup>lt;sup>352</sup> "Pacific Dragon Exercise Concludes," U.S. Navy, June 28, 2016,

http://www.navy.mil/submit/display.asp?story\_id=95419.

353 Ayako Mie, "First Chinese warship to skirt Senkakus triggers protest from Tokyo," *The Japan Times*, June 9, 2016, http://www.japantimes.co.jp/news/2016/06/09/national/chinese-frigate-sails-near-senkakus-russian-military-vessels/#.WIkB pLgRQ0.

<sup>&</sup>lt;sup>354</sup> Prashanth Parameswaran, "US, Japan, and India Kick off 2016 Malabar Exercise," *The Diplomat*, June 12, 2016, http://thediplomat.com/2016/06/us-japan-and-india-kick-off-malabar-2016/.

**Involving:** Russia and Japan **Location:** East China Sea

Summary: Japan detects Russian vessels near the disputed Senkaku/Daioyu Islands. 355

# 93. Provocative Incident

Date: June 7, 2016

Type: Air Incident: Intercept Involving: China and the U.S. Location: East China Sea

Summary: Two Chinese fighter jets intercepts a U.S. spy plane over the East China Sea. The U.S.

Pacific Command deemed the intercept "unsafe. 356

94. **Date:** May 31, 2016 **Type:** Test Launch **Involving:** North Korea

Location: east coast, North Korea

Summary: North Korea unsuccessfully tests a Musudan missile, according to South Korea.<sup>357</sup>

95. **Date:** May 26, 2016 **Type:** Defense News **Involving:** China

Location: Pacific Ocean

Summary: The Chinese military prepares to send nuclear-armed submarines into the Pacific

Ocean for the first time. No specifics on the exact timing are given. 358

96. **Date:** May 25-26, 2016 **Type:** Military Exercise **Involving:** China

Location: South China Sea

Summary: The South Sea Fleet of the Chinese Navy conducts warship-helicopter coordination and

anti-submarine operation drills.<sup>359</sup>

### 97. Provocative Incident

Date: May 22, 2016 Type: Air Incident

**Involving:** Russia and the U.S.

**Location:** Sea of Japan

<sup>355</sup> Yoku Wakatsuki and James Griffiths, "Japan: Chinese ship sailing close to disputed islands 'heightens tensions'," *CNN*, June 9, 2016, http://www.cnn.com/2016/06/08/asia/japan-china-diaoyu-senkaku/.

<sup>&</sup>lt;sup>356</sup> Jeremy Page and Gordon Lubold, "Chinese Jets Intercept U.S Spy Plane Over East China Sea," *The Wall Street Journal*," June 8, 2016, <a href="https://www.wsj.com/articles/chinese-jets-intercept-u-s-spy-plane-over-east-china-sea-1465360954">https://www.wsj.com/articles/chinese-jets-intercept-u-s-spy-plane-over-east-china-sea-1465360954</a>.

<sup>&</sup>lt;sup>357</sup> Ju-min Park, "Attempted North Korea missile launch fails: South Korea," *Reuters*, May 31, 2016, <a href="http://www.reuters.com/article/us-northkorea-missile-fail-idUSKCN0YM015">http://www.reuters.com/article/us-northkorea-missile-fail-idUSKCN0YM015</a>.

<sup>358</sup> Julian Borger, "China to send nuclear-armed submarines into Pacific amid tensions with U.S." *The Guardian*, May 26,

Julian Borger, "China to send nuclear-armed submarines into Pacific amid tensions with U.S." *The Guardian*, May 26, 2016, <a href="https://www.theguardian.com/world/2016/may/26/china-send-nuclear-armed-submarines-into-pacific-us.">https://www.theguardian.com/world/2016/may/26/china-send-nuclear-armed-submarines-into-pacific-us.</a>

<sup>359 &</sup>quot;Chinese warships conduct anti-submarine drill in South China Sea," *China Military Online* as cited by the Ministry of National Defense, The People's Republic of China, May 27, 2016, <a href="http://eng.mod.gov.cn/DefenseNews/2016-05/27/content-4666211.htm">http://eng.mod.gov.cn/DefenseNews/2016-05/27/content-4666211.htm</a>.

**Summary:** A U.S. reconnaissance plane flies near passenger planes creating "a real threat of collision for passenger aircraft" according to Russian officials. <sup>360</sup>

#### 98. Provocative Incident

**Date:** May 17, 2016

Type: Air Incident: Intercept Involving: China and the U.S. Location: South China Sea

**Summary:** Two Chinese fighters intercept a U.S. reconnaissance aircraft over the South China Sea. The Pentagon claims the U.S. pilot was forced to descend to 200 feet to avoid collision. The Chinese foreign ministry denied the allegation.<sup>361</sup>

99. **Date:** May 5, 2016

Type: Military Exercise

**Involving:** China

Location: Xisha waters, South China Sea

Summary: The Chinese Nanhai fleet carries our exercises aimed at improving "means of sea area

management and control."362

100. **Date:** April 28, 2016 **Type:** Test Launch (2) **Involving:** North Korea

Location: near Wonsan, North Korea

Summary: Test launches of two North Korean intermediate-range ballistic missiles fail. 363

101. **Date:** April 23, 2016 **Type:** Test Launch **Involving:** North Korea

**Location:** off the east coast of North Korea

Summary: North Korea conducts a test of a submarine-launched ballistic missile.<sup>364</sup>

102. **Date:** April 22, 2016 **Type:** Test Launch **Involving:** China

Location: Wuzhai, China

Summary: The U.S. Pentagon reports China successfully tests a hypersonic DF-2F missile.<sup>365</sup>

<sup>360</sup> "US spy plane created 'real threat' to KLM & Swiss flights over Sea of Japan – Moscow," *RT*, May 25, 2016, https://www.rt.com/news/344322-us-spy-jet-threat/.

<sup>363</sup> Ju-min Park and David Brunnstrom, "North Korea test-fires two missiles, both fail: U.S.," *Reuters*, April 28, 2016, <a href="http://www.reuters.com/article/us-northkorea-missile-idUSKCN0XP0R2">http://www.reuters.com/article/us-northkorea-missile-idUSKCN0XP0R2</a>.

Reuters "North Korea Says Submarine Ballistic Missile Test 'Great Success'," *NDTV*, April 24, 2016,

http://www.ndtv.com/world-news/north-korea-says-submarine-ballistic-missile-test-great-success-1398785.

<sup>361 &</sup>quot;Chinese jets intercept US spy plane over South China Sea, Pentagon says," *BBC News*, May 19, 2016, http://www.bbc.com/news/world-asia-36328464.

<sup>&</sup>lt;sup>362</sup> "Chinese naval fleet conducts training exercise in Xisha," *China Military Online* as cited by the Ministry of National Defense, The People's Republic of China, May 6, 2016, <a href="http://eng.mod.gov.cn/DefenseNews/2016-05/06/content">http://eng.mod.gov.cn/DefenseNews/2016-05/06/content</a> 4654113.htm.

<sup>&</sup>lt;sup>365</sup> Mark Piggot, "China successfully tests 7,000mph Df-2F hypersonic missile says Pentagon source," *International Business Times*, "April 267, 2016, <a href="http://www.ibtimes.co.uk/china-successfully-tests-7000-mph-df-2f-hypersonic-missile-says-pentagon-source-1557121">http://www.ibtimes.co.uk/china-successfully-tests-7000-mph-df-2f-hypersonic-missile-says-pentagon-source-1557121</a>.

103. **Date:** April 15, 2016 **Type:** Test Launch **Involving:** North Korea

Location: East Coast of North Korea

Summary: The first test of North Korea's new Musudan intermediate-range missile fails when the

missile blows up shortly after launch, damaging the mobile launcher. 366

104. **Date:** April 12, 2016 **Type:** Test Launch **Involving:** China

Location: South China Sea

**Summary:** China test fires a DF-41 intercontinental ballistic missile reportedly carrying two warheads. The missile was aimed toward the South China Sea, unlike previous tests in which missiles were pointed toward the west. Chinese officials claim the missile was tested near the Sea, but the warheads did not land in the Sea.<sup>367</sup>

105. **Date:** March 29, 2016 **Type:** Defense News **Involving:** China **Location:** Beijing

**Summary:** The DF-41, described as the world's longest-range missile and China's most powerful intercontinental ballistic missile, will enter into service as early as this year. The missile has an operational range of up to 14.500 km.<sup>368</sup>

106. **Date:** March 26, 2016 **Type:** Test Launch **Involving:** North Korea

Location: Wonsan, East Coast of North Korea

Summary: North Korea test fires a short-range missile near the coastal town of Wonsan. The

missile flew for about 200 km before making contact with the ground.<sup>369</sup>

107. **Date:** March 26, 2016 **Type:** Defense News **Involving:** North Korea **Location:** Pyongyang

Summary: North Korea releases a propaganda video depicting a nuclear strike on Washington,

D.C. alongside a warning to the U.S. not to provoke the North. 370

<sup>366</sup> Bill Gertz, "North Korean Missile Exploded, Damaged Launcher in Failed Test," *The Washington Free Beacon*, April 20, 2016, <a href="http://freebeacon.com/national-security/north-korean-missile-exploded-failed/">http://freebeacon.com/national-security/north-korean-missile-exploded-failed/</a>.

<sup>&</sup>lt;sup>367</sup> Kyle Mizokami, "China Test Fires Nuclear-Capable Missile into the South China Sea," *Popular Mechanics*, April 22, 2016, <a href="http://www.popularmechanics.com/military/weapons/a20501/china-tests-fires-nuclear-capable-missile-into-the-south-china-sea/">http://www.popularmechanics.com/military/weapons/a20501/china-tests-fires-nuclear-capable-missile-into-the-south-china-sea/</a>.

south-china-sea/.

368 Minnie Chan, "China's top new long-range missile 'may be deployed this year', putting US in striking distance," *South China Morning Post*, March 29, 2016, <a href="http://www.scmp.com/news/china/diplomacy-defence/article/1931652/chinas-top-new-long-range-missile-may-be-deployed-year">http://www.scmp.com/news/china/diplomacy-defence/article/1931652/chinas-top-new-long-range-missile-may-be-deployed-year</a>.

<sup>&</sup>lt;sup>369</sup> James Pearson, "North Korea fires short-range missile along its coast," *Reuters*, March 29, 2016, <a href="http://www.reuters.com/article/us-northkorea-nuclear-missile-idUSKCN0WV0YH">http://www.reuters.com/article/us-northkorea-nuclear-missile-idUSKCN0WV0YH</a>.

108. Date: March 24, 2016

**Type:** Test

**Involving:** North Korea **Location:** North Korea

Summary: North Korea successfully tests a solid-fuel engine that boosts the power of ballistic

rockets.<sup>371</sup>

# 109. Provocative Incident

Date: March 21, 2016 Type: Test Launch Involving: China

Location: Woody Island, Parcels, South China Sea

**Summary:** Pentagon officials confirm China recently test-fired a YJ-62 anti-ship cruise missile. China has reportedly deployed anti-ship cruise missiles on a disputed island in the South China

Sea. 372

#### 110. Provocative Incident

**Date:** March 21, 2016 **Type:** Projectile Fire **Involving:** North Korea

Location: South of Hamhung, East Coast, North Korea

Summary: North Korea fires five short-range unidentified projectiles off its east coast into the

sea.<sup>373</sup>

#### 111. Provocative Incident

Date: March 18, 2016 Type: Missile Drill Involving: North Korea Location: North Korea

**Summary:** North Korea fires five short-range ballistic missiles into the sea as a response to UN

and U.S. sanctions.<sup>374</sup>

#### 112. Provocative Incident

**Date:** March 10, 2016 **Type:** Missile Drill **Involving:** North Korea

Location: off the coast of Wonsan, North Korea

strike.html?mtrref=undefined& r=3.

371 Jack Kim, "North Korea claims rocket engine success; South on high alert," *Reuters*, March 24, 2016, http://www.reuters.com/article/us-northkorea-nuclear-idUSKCN0WP320.

ambitions," *Reuters*, March 21, 2016, <a href="http://uk.reuters.com/article/us-northkorea-nuclear-idUKKCN0WN0H2">http://uk.reuters.com/article/us-northkorea-nuclear-idUKKCN0WN0H2</a>.

<sup>&</sup>lt;sup>370</sup> Choe Sang-Hun, "North Korean Propaganda Video Depicts Nuclear Strike on Washington, *The New York Times*, March 26, 2016, <a href="http://www.nytimes.com/2016/03/27/world/asia/north-korea-propaganda-video-nuclear-strike.html?mtrref=undefined&r=3.">http://www.nytimes.com/2016/03/27/world/asia/north-korea-propaganda-video-nuclear-strike.html?mtrref=undefined&r=3.</a>

http://www.reuters.com/article/us-northkorea-nuclear-idUSKCN0WP320.

372 Bill Gertz, "Pentagon Concerned by Chinese Anti-Ship Missile Firing," *The Washington Free Beacon*, March 30, 2016, http://freebeacon.com/national-security/pentagon-concerned-chinese-anti-ship-missile-firing/.

373 Ju-min Park and James Pearson, "North Korea fires short-range projectiles into sea amid tension over nuclear

<sup>373</sup> Ju-min Park and James Pearson, "North Korea fires short-range projectiles into sea amid tension over nuclear ambitions," *Reuters*, March 21, 2016, <a href="http://uk.reuters.com/article/us-northkorea-nuclear-idUKKCN0WN0H2">http://uk.reuters.com/article/us-northkorea-nuclear-idUKKCN0WN0H2</a>.

374 Ju-min Park and James Pearson, "North Korea fires short-range projectiles into sea amid tension over nuclear

**Summary**: North Korea fires two short-range ballistic missiles into the sea. <sup>375</sup>

113. **Date:** March 10, 2016 **Type:** Military Exercises

> **Involving:** U.S. and South Korea Location: Cheorwon, South Korea

Summary: A U.S. artillery brigade launches rockets close to the border town of Cheorwon, South Korea as part of a test of the M270A1 multiple-launch rocket system. The live-fire drills are separate from the annual joint U.S.-South Korean military exercise, which started earlier in the

week 376

### 114. Provocative Incident

**Date:** March 9, 2016 **Type:** Defense News **Involving:** North Korea **Location:** Pyongyang

Summary: Supreme leader of North Korea Kim Jong Un announces his country has miniaturized nuclear warheads to be fit on ballistic missiles. South Korea officials expressed doubts over the validity of the announcement.<sup>377</sup>

#### 115. Provocative Incident

**Date:** March 7, 2016 **Type:** Defense News **Involving:** North Korea **Location:** Pyongyang

Summary: North Korea threatens the U.S. and South Korea with a "pre-emptive nuclear strike of

justice" in reaction to the start of U.S.-South Korean military drills.<sup>378</sup>

#### 116. Provocative Incident

**Date:** March 7, 2016 **Type:** Military Exercise

**Involving:** South Korea and the U.S.

Location: South Korea

**Summary:** The U.S. and South Korea begin large-scale annual joint military exercises to test defenses against North Korea. The drills involve 17,000 U.S. troops and over 300,000 South

Koreans 375

#### 117. Provocative Incident

<sup>375</sup> Jack Kim and Ju-min Park, "North Korea fires missiles, to 'liquidate' South Korea assets," *Reuters*, March 10, 2016, http://www.reuters.com/article/northkorea-missiles-idUSKCN0WB2SN.

<sup>&</sup>lt;sup>376</sup> James Pearson, "U.S. serves up Korean rocket salad in war drill response to North's threats," *Reuters*, March 10, 2016, http://www.reuters.com/article/us-southkorea-usa-northkorea-drills-idUSKCN0WB16H.

Jack Kim, "North Korea's Kim says country has miniaturized nuclear warheads," Reuters, March 9, 2016,

http://www.reuters.com/article/us-northkorea-nuclear-kim-idUSKCN0WA2QM.

378 Foster Klug, "North Korea again threatens nuke strikes on US, South Korea," *Associated Press*, March 7, 2016, http://bigstory.ap.org/article/ab7f41931a9c4e4ebd455dc1923a5c6c/north-korea-again-threatens-nuke-strikes-us-south-

Anna Fifield, "In drills, U.S., South Korea practice striking North's nuclear plants, leaders," *The Washington Post,* March 7, 2016, https://www.washingtonpost.com/world/in-drills-us-south-korea-practice-striking-norths-nuclearplants/2016/03/06/46e6019d-5f04-4277-9b41-e02fc1c2e801\_story.html.

**Date:** March 4, 2016 **Type:** Defense News **Involving:** North Korea **Location:** Pyongyang

**Summary:** North Korean leader Kim Jong Un orders the military to prepare nuclear weapons for a

pre-emptive attack at any time following the imposition of new U.N. sanctions. 380

### 118. Provocative Incident

**Date:** March 3, 2016 **Type:** Sea Incident

**Involving:** China and the U.S. **Location:** South China Sea

**Summary:** A U.S. Navy carrier, two destroyers, two cruisers and the command ship Blue Ridge sail into disputed waters in the South China Sea as a show of force in response to U.S. claims that

China is militarizing the region to guard its territorial claims.<sup>381</sup>

### 119. Provocative Incident

**Date:** February 17, 2016 **Type:** Air Incident

**Involving:** U.S. and South Korea **Location:** Osan Air Base, South Korea

**Summary:** Four U.S. F-22 Raptor fighters, accompanied by U.S. F-16 fighters and South Korean F-15K Slam Eagle Fighters, perform a flyover of Osan Air Base following North Korea space

rocket test the week prior.<sup>382</sup>

#### 120. Provocative Incident

**Date:** February 17, 2016 **Type:** Defense News **Involving:** China

Location: Woody Island, Parcel Islands, South China Sea

**Summary:** According to U.S. and Taiwan officials, China deploys surface-to-air missiles on a disputed island in the South China Sea. Chinese state media denied it was militarizing the island,

saying defenses have been in place for years.<sup>383</sup>

121. **Date:** February 16, 2016 **Type:** Defense News **Involving:** China **Location:** Beijing

2.0

Kyle Mizokami, "U.S. Flies Stealth Fighters Over South Korea to Flex Its Muscles," *Popular Mechanics*, February 17, 2016, <a href="http://www.popularmechanics.com/military/weapons/news/a19481/f-22-flyover-south-korea-north-korea/">http://www.popularmechanics.com/military/weapons/news/a19481/f-22-flyover-south-korea-north-korea/</a>.

<sup>&</sup>lt;sup>380</sup> Eric Limer, "North Korea's Kim Jong Un Orders Nukes Prepared for 'Pre-Emptive Attack'," *Popular Mechanics*, March 4, 2016, <a href="http://www.popularmechanics.com/military/a19765/kim-jong-un-north-korea-brace-pre-emptive-nuke-strikes/">http://www.popularmechanics.com/military/a19765/kim-jong-un-north-korea-brace-pre-emptive-nuke-strikes/</a>.

strikes/.

381 David Larter, "The U.S. just sent a carrier strike group to confront China," *Navy Times*, March 4, 2016,

http://www.navytimes.com/story/military/2016/03/03/stennis-strike-group-deployed-to-south-china-sea/81270736/.

382 Kyle Mizokami, "U.S. Flies Stealth Fighters Over South Korea to Flex Its Muscles," *Popular Mechanics*, February 17,

<sup>&</sup>lt;sup>383</sup> Katie Hunt, Jim Sciutto and Tim Hume, "China said to deploy missiles on South China Sea island," *CNN*, February 17, 2016, <a href="http://www.cnn.com/2016/02/16/asia/china-missiles-south-china-sea/">http://www.cnn.com/2016/02/16/asia/china-missiles-south-china-sea/</a>.

Summary: According to a report from the Union of Concerned Scientists, China may be considering putting its nuclear forces on high alert. 384

122. Date: February 14, 2016 **Type:** Defense News **Involving:** North Korea

**Location:** Pyongyang, North Korea

**Summary:** North Korea creates the "KN-08 Brigade" military unit according to South Korea's Yonhap news agency. The unit can deploy a road-mobile intercontinental ballistic missile bringing

North Korea closer to fielding such weapons. 385

123. **Date:** February 13, 2016 **Type:** Defense News

**Involving:** U.S. and South Korea

Location: South Korea

Summary: The U.S. temporarily deploys an additional Patriot missile battery in South Korea after

North Korea's nuclear test and rocket launch. 386

# 124. Provocative Incident

**Date:** February 7, 2016 Type: Rocket Launch **Involving:** North Korea

Location: Tongchang-ri, North Korea

Summary: North Korea launches a rocket to put a satellite into orbit defying warnings of tougher sanctions from the U.S. Experts believe the test is part of a program to develop intercontinental ballistic missile technologies.<sup>387</sup>

125. **Date:** January 31, 2016

**Type:** Air Incident: Intercept

Involving: China, Japan, South Korea

**Location:** Korea Air Defense Identification Zone and Japan's Air Defense Identification Zone Summary: Japanese Self-Defense Force fighter jets intercept two Chinese combat planes that had entered first, the Korea Air Defense Identification Zone, then Japan's Air Defense Identification Zone 388

126. **Date:** January 20, 2016 **Type:** Air Incident

<sup>384</sup> Ankit Panda, "Is China Considering a High-Risk Change to Its Nuclear Deterrence Posture?" *The Diplomat*, February 16, 2016, http://thediplomat.com/2016/02/is-china-considering-a-high-risk-change-to-its-nuclear-deterrence-posture/.

<sup>385</sup> Sneha Shankar, "North Korea Develops New Unit To Deploy KN-08 International Ballistic Missile: Report," International Business Times, February 14, 2016, http://www.ibtimes.com/north-korea-develops-new-unit-deploy-kn-08intercontinental-ballistic-missile-report-2306711.

<sup>&</sup>lt;sup>386</sup> Associated Press, "US deploys more Patriot missiles in South Korea following North's nuclear test," *The Guardian*, February 13, 2016, http://www.theguardian.com/world/2016/feb/13/us-deploys-more-patriot-missiles-in-south-korea-

following-norths-nuclear-test.

387 Choe Sang-Hun, "North Korea Launches Rocket Seen as Cover for a Missile Test," *The New York Times*, February 6, 2016, http://www.nytimes.com/2016/02/07/world/asia/north-korea-moves-up-rocket-launching-plan.html.

<sup>&</sup>lt;sup>388</sup> Elizabeth Shim, "Chinese military aircraft trespass into Japan, Korea airspace," *UPI*, February 2, 2016, http://www.upi.com/Top\_News/World-News/2016/02/02/Chinese-military-aircraft-trespass-into-Japan-Koreaairspace/6781454430627/.

**Involving:** U.S. and Japan

Location: Yokota Air Base, Tokyo, Japan

Summary: Eight U.S. F-22 stealth fighters fly to Tokyo as part of a scheduled deployment.<sup>389</sup>

# 127. Provocative Incident

**Date:** January 10, 2016 **Type:** Air Incident

**Involving:** U.S. and South Korea **Location:** Osan Air Base, South Korea

Summary: The U.S. flies a nuclear-capable B-52 bomber over South Korea to demonstrate U.S.

commitment to its East Asian allies after North Korea's fourth nuclear test. 390

### 128. Provocative Incident

Date: January 6, 2016 Type: Nuclear Test Involving: North Korea Location: Yongbyon

**Summary:** North Korea conducts its fourth nuclear test. The state-run Korea Central New Agency announced that the country had successfully tested a small hydrogen bomb, a claim questioned by U.S. nuclear weapons experts.<sup>391</sup>

129. **Date:** January 2, 2016 **Type:** Defense News **Involving:** China

Location: South China Sea

Summary: China announces one of their aircraft had landed for the first time on an airstrip in the

disputed chain of islets in the South China Sea. 392

130. Date: December 23, 2015

Type: Sea Incident

**Involving:** China and Japan **Location:** East China Sea

**Summary:** Japan's coast guard reports that an armed Chinese coast guard vessel sailed near disputed islands in the East China Sea. It is the first time an armed ship had been spotted in the area. <sup>393</sup>

131. Date: December 21, 2015

Type: Test Launch

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http://www.popularmechanics.com/military/weapons/news/a18848/north-korea-h-bomb-of-justice/.

392 Dan Southerland, "China's Aircraft Landings in the South China Sea Worry Its Neighbors," *Radio Free Asia*, January 8, 2016, http://www.rfa.org/english/commentaries/east-asia-beat/asia-beat-01082016201802.html.

<sup>&</sup>lt;sup>389</sup> Elizabeth Shim, "U.S. deploys F-22 Raptor stealth fighters to base in Japan," *UPI*, January 21, 2016, http://www.upi.com/Top\_News/World-News/2016/01/21/US-deploys-F-22-Raptor-stealth-fighters-to-base-in-Japan/2181453402285/.

<sup>&</sup>lt;sup>390</sup> Choe Sang-Hun, "In Show of Alliance, American Forces Fly B-52 Bomber Over South Korea," *The New York Times*, January 10, 2016, <a href="http://www.nytimes.com/2016/01/11/world/asia/south-korea-us-flies-b-52-bomber.html?r=0">http://www.nytimes.com/2016/01/11/world/asia/south-korea-us-flies-b-52-bomber.html?r=0</a>. <sup>391</sup> yle Mizokami, "North Korea Claims That It Tested the 'H-Bomb of Justice'," *Popular Mechanics*, January 6, 2016,

<sup>&</sup>lt;sup>393</sup> Nathaniel Taplin, Kiyoshi Takenaka, Lisa Twaronite, and Ben Blanchard, "Japan says armed Chinese coastguard ship seen near disputed islands," *Reuters*, December 23, 2015, <a href="http://www.reuters.com/article/us-china-japan-islands-idUSKBN0U606H20151223">http://www.reuters.com/article/us-china-japan-islands-idUSKBN0U606H20151223</a>.

**Involving:** North Korea

Location: Sinpo, North Korea

**Summary**: North Korea ejection test for a submarine-launched ballistic missile fails.<sup>394</sup>

132. **Date:** December 10, 2015 **Type:** Defense News **Involving:** North Korea

Location: Phyongchon Revolutionary Site, North Korea

**Summary:** North Korean leader Kim Jong Un announces that North Korea has developed a hydrogen bomb, stating that North Korea was "ready to detonate self-reliant A-bomb and H-bomb to reliably defend its sovereignty and the dignity of the nation." Experts are skeptical.<sup>395</sup>

### 133. Provocative Incident

**Date:** December 8, 2015 **Type:** Sea Incident

Involving: China and South Korea

Location: North Korea-South Korea Maritime Border

Summary: South Korea's navy fires warning shots at a Chinese patrol vessel that had crossed the

disputed maritime border between North and South Korea.<sup>396</sup>

134. Date: December 5, 2015

Type: Test Launch Involving: China

Location: Wuzhai missile test center, Shanxi Province, China

Summary: China test launces a new rail-mobile version of its intercontinental ballistic missile, the

DF-41 397

135. **Date:** December 2, 2015 **Type:** Test Preparation **Involving:** North Korea

Location: Punggye-ri nuclear test site

Summary: According to 38 North, recent commercial satellite images indicate North Korea is

creating a new tunnel for nuclear testing. 398

136. Date: November 30, 2015

**Type:** Sea Incident

**Involving:** China and Japan **Location:** East China Sea

<sup>394</sup> Sneha Shankar, "North Korea Test-Fired Another Submarine-Launched Ballistic Missile In December: Report," *International Business Times*, January 6, 2016, <a href="http://www.ibtimes.com/north-korea-test-fired-another-submarine-launched-ballistic-missile-december-report-2251062">http://www.ibtimes.com/north-korea-test-fired-another-submarine-launched-ballistic-missile-december-report-2251062</a>.

<sup>&</sup>lt;sup>395</sup> Kyle Mizokami, "North Korea Claims to Have a Highly Destructive Hydrogen Bomb," *Popular Mechanics*, December 10, 2015, <a href="http://www.popularmechanics.com/military/weapons/news/a18505/north-korea-claims-to-have-h-bomb/">http://www.popularmechanics.com/military/weapons/news/a18505/north-korea-claims-to-have-h-bomb/</a>.

<sup>396</sup> AFP, "South Korean navy fires warning shots at Chinese patrol boat," *The Japan Times*, December 8, 2015, <a href="http://www.japantimes.co.jp/news/2015/12/08/asia-pacific/south-korean-navy-fires-warning-shots-chinese-patrol-">http://www.japantimes.co.jp/news/2015/12/08/asia-pacific/south-korean-navy-fires-warning-shots-chinese-patrol-</a>

boat/#.Vwf5zD8wi9Z.

397 Franz-Stefan Gady, "China Tests New Rail-Mobile Missile Capable of Hitting all of US," *The Diplomat*, January 5, 2016, http://thediplomat.com/2016/01/china-tests-new-rail-mobile-missile-capable-of-hitting-all-of-us/.

<sup>&</sup>lt;sup>398</sup> "New Nuclear Test Tunnel Under Construction at North Korea's Punggye-ri Nuclear Test Site," *38 North*, December 2, 2015, <a href="http://38north.org/2015/12/punggye120215/">http://38north.org/2015/12/punggye120215/</a>.

**Summary:** Three Chinese Coast Guard ships enter Japanese territorial waters close to the disputed islands in the East China Sea. It is the 32<sup>nd</sup> intrusion by Chinese ships so far this year.<sup>399</sup>

137. Date: November 28, 2015

Type: Test Launch Involving: North Korea Location: North Korea

Summary: A test launch of a North Korean submarine-launched ballistic missile fails, according

to a report from South Korea's Yonhap news agency. 400

138. **Date:** November 27, 2015 **Type:** Air Incident: Intercept **Involving:** China and Japan **Location:** Near Okinawa, Japan

Summary: Tokyo F-15 fighter jets intercept Chinese military aircraft, including bombers,

conducting maneuvers close to Okinawa. 401

#### 139. Provocative Incident

**Date:** November 27, 2015 **Type:** Military Exercise **Involving:** China

Location: East China Sea

**Summary:** Eight Chinese bombers and three electronic intelligence aircraft conduct exercises over the East China Sea in order to affirm the East China Air Defence Identification Zone, declared

in December 2013.<sup>402</sup>

140. **Date:** November 26, 2015 **Type:** Defense News

**Involving:** Japan

Location: East China Sea

**Summary:** According a report from *The Japan Times*, Japan will likely deploy 500 ground troops

and advanced surface-to-air and anti-ship missiles in Okinawa, a short distance from the

Senkaku/Diaoyu Islands. 403

141. Date: November 25, 2015

Type: Air Incident

201

<sup>&</sup>lt;sup>399</sup> "Japan may deploy troops, missiles near disputed islands" *Deutsche Welle*, December 1, 2015, <a href="http://www.dw.com/en/japan-may-deploy-troops-missiles-near-disputed-islands/a-18886571">http://www.dw.com/en/japan-may-deploy-troops-missiles-near-disputed-islands/a-18886571</a>.

<sup>&</sup>lt;sup>400</sup> Jack Kim and Ju-min Park, "North Korea tested submarine-launched missile, but launch failed: report," *Reuters*, November 28, 2015, <a href="http://www.reuters.com/article/us-northkorea-missile-idUSKBN0TH09M20151128#MMx36lcr6obsHC6y.97">http://www.reuters.com/article/us-northkorea-missile-idUSKBN0TH09M20151128#MMx36lcr6obsHC6y.97</a>.

<sup>401 &</sup>quot;Chinese military planes fly near Okinawa Island during drill," *The Japan Times*, November 28, 2015, http://www.japantimes.co.jp/news/2015/11/28/national/chinese-military-planes-fly-near-okinawa-island-during-drill/#.VmdwmmSDFHw.

<sup>&</sup>lt;sup>402</sup> Richard D. Fisher Jr., "Chinese bomber exercise affirms air-defence identification zone, penetrates Second Island Chain," *IHS Jane's 360*, November 30, 2015,

http://www.janes.com/article/56327/chinese-bomber-exercise-affirms-air-defence-identification-zone-penetrates-second-island-chain.

<sup>&</sup>lt;sup>403</sup> "Japan may deploy troops, missiles near disputed islands" *Deutsche Welle*, December 1, 2015, http://www.dw.com/en/japan-may-deploy-troops-missiles-near-disputed-islands/a-18886571.

**Involving:** Russia and the U.S.

**Location:** Guam

Summary: Two Russian bombers circumvent Guam without violating U.S. airspace. 404

# 142. Provocative Incident

Date: November 23, 2015 **Type:** Military Exercise **Involving:** South Korea Location: Yellow Sea

**Summary:** South Korea's military conducts major live-fire drills around the islands in the Yellow

Sea despite threats of retaliation from North Korea. 405

143. Date: November 23, 2015

**Type:** Test Launch **Involving:** China

Location: Shanxi Province, China

Summary: China completes a sixth flight test of the DF-ZF hypersonic glide vehicle, which is

capable of penetrating U.S. interceptor missiles. 406

144. Date: November 11, 2015

**Type:** Sea Incident

**Involving:** China and Japan **Location:** East China Sea

**Summary:** A Chinese Dongdiao-class intelligence-gathering ship is spotted near the Senkaku/Diaoyu Islands in the East China Sea. The ship did not enter Japanese territorial waters, but repeatedly sailed from east to west and vice versa just outside, according to the Japanese

Defense Ministry. 407

#### 145. Provocative Incident

**Date:** November 8-9, 2015 **Type:** Air Incident: Intercept **Involving:** China and the U.S. Location: South China Sea

**Summary:** Two U.S. B-52 bombers fly near China's man-made islands in the South China Sea. The Chinese military warned the bombers to "get away from our islands." The U.S. Pentagon account reported that the bombers were on a routine mission in international airspace and never ventured "within 15 nautical miles of any feature." 408

146. **Date:** November 1, 2015

<sup>&</sup>lt;sup>404</sup> Bill Gertz, "Russian Bombers Again Circle Guam," *The Washington Free Beacon*, December 4, 2015, http://freebeacon.com/national-security/russian-bombers-again-circle-guam/.

<sup>&</sup>lt;sup>405</sup> Jack Moore, "South Korea Stages Drill Near Disputed Border, Despite Threats from the North," Newsweek, November 23, 2015, http://www.newsweek.com/south-korea-conducts-major-live-fire-drill-near-disputed-sea-border-north-397160. <sup>406</sup> Franz-Stefan Gady, "China Test New Hypersonic Weapon," *The Diplomat*, November 26, 2015,

http://thediplomat.com/2015/11/china-tests-new-hypersonic-weapon/.

407 "Chinese naval eavesdropping ship spotted near Senkakus," *The Japan Times*, November 13, 2015, http://www.japantimes.co.jp/news/2015/11/13/national/chinese-naval-eavesdropping-ship-spotted-nearsenkakus/#.VmTITb8hlS5

<sup>408</sup> Kristina Wong, "U.S. flies B-52 bombers near disputed islands claimed by China," *The Hill*, November 12, 2015, http://thehill.com/policy/defense/259958-us-flies-b-52-bombers-near-islands-claimed-by-china.

**Type:** Test Flight **Involving:** China

**Location:** Korla Missile Test Complex, China

Summary: China conducts a missile defense interceptor flight test. 409

147. **Date:** October 2015 **Type:** Defense News **Involving:** Japan

Location: Okinawa, Japan and East China Sea

Summary: Japan reports that it intercepted Chinese aircraft 231 times between April and

September 2015. 410

148. **Date:** October 30, 2015 **Type:** Test Launch **Involving:** China

Location: Korla Missile Test Complex, Western China

Summary: China conducts a flight test of the Dong Neng-3 anti-satellite missile capable of

knocking out U.S. satellites.411

### 149. Provocative Incident

**Date:** October 27, 2015 **Type:** Sea Incident

**Involving:** China and the U.S.

Location: Spratly Islands, South China Sea

**Summary:** Chinese vessels shadow a U.S. destroyer during a five-hour patrol through contested waters in the South China Sea. China officially condemned the presence of a U.S. warship in the

area.412

150. **Date:** October 27, 2015

**Type:** Air Incident: Intercept and Military Exercise

**Involving:** Russia and the U.S.

**Location:** Sea of Japan

**Summary:** Four U.S. fighter jets are scrambled by the USS *Ronald Reagan* aircraft carrier to intercept two Russian Tu-145 long-range anti-submarine warfare planes in the Sea of Japan, where

the U.S. was carrying out exercises in coordination with South Korean ships. 413

#### 151. Provocative Incident

**Date:** October 25, 2015 **Type:** Sea Incident

<sup>409</sup> Bill Gertz, "China Tests Anti-Satellite Missile," *The Washington Free Beacon*, November 9, 2015, <a href="http://freebeacon.com/national-security/china-tests-anti-satellite-missile/">http://freebeacon.com/national-security/china-tests-anti-satellite-missile/</a>.

<sup>410 &</sup>quot;Chinese military planes fly near Okinawa Island during drill," *The Japan Times*, November 28, 2015, http://www.japantimes.co.jp/news/2015/11/28/national/chinese-military-planes-fly-near-okinawa-island-during-drill/#.VmdwmmSDFHw.

<sup>411</sup> Bill Gertz, "China Tests Anti-Satellite Missile," *The Washington Free Beacon*, November 9, 2015, <a href="http://freebeacon.com/national-security/china-tests-anti-satellite-missile/">http://freebeacon.com/national-security/china-tests-anti-satellite-missile/</a>.

412 David Larter, "Destroyer's patrol in South China Sea shadowed by China's navy," *Navy Times*, October 29, 2015,

http://www.navytimes.com/story/military/2015/10/27/china-navy-shaddows-lassen-spratly-islands-patrol/74680390/.

<sup>413 &</sup>quot;US fighter jets intercept Russian bombers over Sea of Japan," *The Guardian*, October 29, 2015, http://www.theguardian.com/us-news/2015/oct/30/us-fighter-jets-intercept-russian-bombers-over-sea-of-japan.

**Involving:** North Korea and South Korea

Location: Northern Limit Line

Summary: South Korea's navy fires several warning shots at a North Korean patrol boat that had

crossed the disputed maritime border, causing it to retreat. 414

152. **Date:** October 24, 2015 **Type:** Sea Incident

**Involving:** China and the U.S.

**Location:** Pacific Ocean off the coast of Japan

**Summary:** According to a U.S. defense official, a submerged Chinese Kilo-class fast attack

submarine closely tracked the USS *Ronald Reagan* for at least half a day. 415

153. Date: October 20, 2015 **Type:** Test Preparation **Involving:** North Korea Location: North Korea

**Summary:** South Korea's intelligence agency reports that North Korea has prepared for a fourth

nuclear bomb test, although detonation does not appear to be imminent. 416

154. Date: September 15, 2015 **Type:** Defense News **Involving:** North Korea

Location: Yongbyon nuclear site, North Korea

**Summary:** North Korea reports that it is improving its nuclear arsenal in "quality and quantity,"

stating that all nuclear facilities in Yongbyon are in "normal operation." 417

# 155. Provocative Incident

Date: September 15, 2015 **Type:** Air Incident: Intercept **Involving:** China and the U.S.

Location: Yellow Sea

Summary: A Chinese J-11 jet intercepts a U.S. RC-135 electronic intelligence-gathering jet,

coming within 50 feet of the U.S. plane. 418

AM Nukes Roundup&utm medium=email&utm term=0 547ee518ec-408953a57d-

391776953&mc cid=408953a57d&mc eid=7249794093.

<sup>&</sup>lt;sup>414</sup> "South Korea fires warning shots at North patrol boat near border," *Reuters*, October 25, 2015, http://www.reuters.com/article/us-northkorea-southkorea-shootingidUSKCN0SJ03L20151025#LFTkeVCRTdKoGKlG.97.

<sup>415</sup> CNN Wire "Chinese submarine tracked aircraft carrier USS Ronald Reagan off Japan Last Month," WTKR.com, November 5, 2015, http://wtkr.com/2015/11/05/chinese-submarine-tracked-aircraft-uss-ronald-reagan-carrier-

Alastair Gale, "North Korea May Have Taken Steps for New Nuclear Bomb Test," *The Wall Street Journal*, October 20, 2015, http://www.wsj.com/articles/north-korea-may-have-taken-steps-for-new-nuclear-bomb-test-1445341415.

<sup>417</sup> Chow Sang-Hun, "North Korea Says It Is Bolstering Its Nuclear Arsenal," *The New York Times*, September 15, 2015, http://www.nytimes.com/2015/09/16/world/asia/north-korea-says-it-is-bolstering-its-nucleararsenal.html? r=1&utm source=AM+Nukes+Roundup&utm campaign=408953a57d-

<sup>&</sup>lt;sup>418</sup> Bill Gertz, "Chinese Jet in Second Near-Collision with U.S. Plane," *The Washington Free Beacon*, September 22, 2015, http://freebeacon.com/national-security/chinese-jet-in-second-near-collision-with-u-s-spy-plane/.

156. **Date:** September 7, 2015 **Type:** Defense News **Involving:** North Korea

Location: Yongbyon nuclear site; Various Locations, North Korea

**Summary:** International Atomic Energy Agency chief Amano reports satellite imagery indicates

that North Korea is expanding its atomic program. 419

157. **Date:** September 3, 2015 **Type:** Defense News **Involving:** China **Location:** Beijing

**Summary:** China holds a parade to commemorate the 70th anniversary of the victory over Japan. The parade showcased a variety of ballistic missiles for the first time, including the DF-5B ICBM,

DF-15B short-range ballistic missile and the DF-26 intermediate-range ballistic missile. 420

158. Date: September 2/3, 2015

Type: Sea Incident

**Involving:** China and the U.S.

Location: Bering Sea

**Summary:** Five Chinese warships legally cross into U.S. waters without prior notification. <sup>421</sup>

159. **Date:** August 24-28 2015 **Type:** Military Exercise **Involving:** China and Russia **Location:** Sea of Japan

Summary: Russian and Chinese vessels participate in the first joint amphibious assault drill. 422

160. Date: August 22-24, 2015

Type: Air Incident
Involving: North Korea

**Location:** Demilitarized Zone

**Summary:** South Korean Armed Forces Joint Chiefs of Staff report that a North Korean surveillance drone crosses the Demilitarized Zone flying over a South Korean military outpost several times. Media outlets offer conflicting reports on whether or not the drone was identified or not <sup>423</sup>

161. **Date:** August 21-28, 2015 **Type:** Military Exercise **Involving:** Russia and China

Involving: Russia and China

Wendell Minnick, "China's Parade Puts US Navy on Notice," *Defense News*, September 3, 2015, <a href="http://www.defensenews.com/story/defense/naval/2015/09/03/chinas-parade-puts-us-navy-notice/71632918/">http://www.defensenews.com/story/defense/naval/2015/09/03/chinas-parade-puts-us-navy-notice/71632918/</a>.

<sup>422</sup> Franz-Stefan Gady, "Russia and China Kick Off Naval Exercise in Sea of Japan," *The Diplomat*, August 24, 2015, http://thediplomat.com/2015/08/russia-and-china-kick-off-naval-exercise-in-sea-of-japan/.

<sup>419 &</sup>quot;IAEA reports more nuclear facilities in North Korea," *Deutsche Welle*, September 7, 2015, http://www.dw.com/en/iaea-reports-more-nuclear-facilities-in-north-korea/a-18697946.

<sup>&</sup>lt;sup>421</sup> Sam LaGrone, "Chinese Warships Made 'Innocent Passage' Through U.S. Territorial Waters off Alaska, *USNI News*, September 3, 2015, <a href="http://news.usni.org/2015/09/03/chinese-warships-made-innocent-passage-through-u-s-territorial-waters-off-alaska">http://news.usni.org/2015/09/03/chinese-warships-made-innocent-passage-through-u-s-territorial-waters-off-alaska</a>.

<sup>422</sup> Franz-Stefan Gady, "Russia and China Kick Off Naval Exercise in Sea of Japan," *The Diplomat*, August 24, 2015,

<sup>&</sup>lt;sup>423</sup> Franz-Stefan Gady, "North Korea Flew a Spy Drone Across the DMZ," *The Diplomat*, September 4, 2015, <a href="http://thediplomat.com/2015/09/north-korea-flew-a-spy-drone-across-the-dmz/">http://thediplomat.com/2015/09/north-korea-flew-a-spy-drone-across-the-dmz/</a>.

Location: Sea of Japan

Summary: Russia and China hold joint naval and air defense exercises code named Joint Sea-

2015.424

# 162. High-Risk Incident

**Date:** August 20, 2015 **Type:** Cross-border Incident

**Involving:** North Korea and South Korea

**Location:** Demilitarized Zone

**Summary:** South Korea fires dozens of shells into North Korea in retaliation for reported cross-border firing from the North and an apparent North Korean rocket landing in South Korea. North

Korea's leader orders front-line military units to go to a "semi-war state." 425

#### 163. Provocative Incident

**Date:** August 17-28, 2015 **Type:** Military Exercise

**Involving:** South Korea and the U.S. **Location:** Pocheon, South Korea

**Summary:** The U.S. and South Korea hold annual joint military exercises, which North Korea has long condemned as a rehearsal for war. Before the exercises commenced, North Korea warned of "all-out military action," unless Seoul cancelled the plans and stopped the cross-border loudspeaker propaganda broadcasts. <sup>426</sup> The exercises are temporarily suspended after increasing tensions result artillery fire (see incident #9 above). <sup>427</sup> On October 28, the U.S. and South Korea hold a joint, live-fire military drill near the border town of Pocheon. This is the largest drill yet and comes just days after South and North Korea reach an agreement to ease recent tensions on the peninsula. <sup>428</sup>

#### 164. Provocative Incident

Date: August 13, 2015 Type: Cross-border Incident Involving: North Korea

Location: Demilitarized Zone

**Summary:** A few days after South Korean resumes propaganda broadcasts, North Korea begins its own loudspeaker cross-border propaganda broadcasts, marking the resumption of propaganda warfare after the two Koreas stopped the practice in 2004. 429

http://www.cbsnews.com/news/us-halts-military-exercise-south-korea-rising-tensions-north-korea/.

Worth and South Korea reach agreement in crisis talks," *Aljazeera*, August 25, 2015,

http://www.aljazeera.com/news/2015/08/north-south-korea-reach-agreement-crisis-talks-150824164713340.html.

<sup>&</sup>lt;sup>424</sup> Jared M. Feldschreiber, "Russia, China begin joint military exercises in Sea of Japan," *UPI*, August 21, 2015, <a href="http://www.upi.com/Top\_News/World-News/2015/08/21/Russia-China-begin-joint-military-exercises-in-Sea-of-Japan/5171440183755/">http://www.upi.com/Top\_News/World-News/2015/08/21/Russia-China-begin-joint-military-exercises-in-Sea-of-Japan/5171440183755/</a>.

<sup>425</sup> Choe Sang-hun, "North Korea and South Korea Trade Fire Across Border, Seoul Says," *The New York Times*, August

<sup>&</sup>lt;sup>425</sup> Choe Sang-hun, "North Korea and South Korea Trade Fire Across Border, Seoul Says," *The New York Times*, August 20, 2015, <a href="http://www.nytimes.com/2015/08/21/world/asia/north-korea-and-south-korea-exchange-rocket-and-artillery-fire.html">http://www.nytimes.com/2015/08/21/world/asia/north-korea-and-south-korea-exchange-rocket-and-artillery-fire.html</a>.

<sup>&</sup>lt;sup>426</sup> Doug Stanglin, "N. Korea threatens Seoul with war over military exercises with U.S.," *USA Today*, August 15, 2015, http://www.usatoday.com/story/news/world/2015/08/15/n-korea-threatens-seoul-war-over-military-exercises-us/31774703/. Kim Ju-sung, "North Korea threatens war with South after artillery fire," *CBS News*, August 21, 2015,

<sup>&</sup>lt;sup>429</sup> Hyung-Jin Kim, "Seoul: N. Korea resumes loudspeaker broadcasts amid tension," *Associated Press*, August 17, 2015, <a href="http://bigstory.ap.org/article/75b0d4e167194436b4d357863faa2863/seoul-n-korea-resumes-loudspeaker-broadcasts-amid-tension">http://bigstory.ap.org/article/75b0d4e167194436b4d357863faa2863/seoul-n-korea-resumes-loudspeaker-broadcasts-amid-tension.</a>

165. **Date:** August 12, 2015 **Type:** Military Exercise

**Involving:** China

Location: Chengdu and Nanjing Military Regions, China

Summary: China begins live-fire drills in mainland China, involving more than 140,000 troops. 430

#### 166. Provocative Incident

**Date:** August 11, 2015 **Type:** Military Exercise **Involving:** China

Location: South China Sea

Summary: China conducts live-fire naval warfare exercises in the South China Sea amid tensions

over Chinese militarization of their artificial islands. 431

167. **Date:** August 6, 2015 **Type:** Test Flight **Involving:** China

Location: Unreported; most likely Wuzhai Missile and Space Test Centre, China

**Summary:** China conducts a flight test of the latest DF-41 road-mobile, long-range missile. U.S. intelligence says the missile lofted two independently targeted simulated nuclear warheads. 432

# 168. High-Risk Incident

**Date:** August 4, 2015

**Type:** Cross-border Incident

Involving: North Korea and South Korea

Location: Demilitarized Zone

**Summary:** According to the South Korean Defense Ministry, two South Korean soldiers are injured after triggering a landmine, which was planted in the South Korean half of the Demilitarized Zone by North Korean soldiers who sneaked across the guarded border. A week later, South Korea resumes loudspeaker propaganda broadcasts across the border. 433

169. Date: Early August 2015

**Type:** Test and Test Preparation

**Involving:** North Korea

**Location:** Sohae Satellite Launching Station, North Korea

**Summary:** New analysis of satellite images shows that North Korea carried out at least one rocket engine test in early August. The images also show construction at the Sohae Satellite Launching Station, suggesting preparations for a new launch, possibly in October to commemorate the 70<sup>th</sup>

<sup>430</sup> Ting Shi, "China stages live fire military drills," *The Sydney Morning Herald,* August 12, 2015, <a href="http://www.smh.com.au/world/china-stages-live-fire-military-drills-20150812-gixbe6.html">http://www.smh.com.au/world/china-stages-live-fire-military-drills-20150812-gixbe6.html</a>.

431 Bill Gertz, "China Conducts Live-Fire Drills in Disputed Sea," *The Washington Free Beacon*," August 12, 2015, <a href="http://freebeacon.com/national-security/china-conducts-live-fire-drills-in-disputed-sea/">http://freebeacon.com/national-security/china-conducts-live-fire-drills-in-disputed-sea/</a>.

Bill Gertz, "China Tests New Long-Range Missile with Two Guided Warheads," *The Washington Free Beacon*, August

<sup>432</sup> Bill Gertz, "China Tests New Long-Range Missile with Two Guided Warheads," *The Washington Free Beacon*, August 18, 2015, <a href="http://freebeacon.com/national-security/china-tests-new-long-range-missile-with-two-guided-warheads/">http://freebeacon.com/national-security/china-tests-new-long-range-missile-with-two-guided-warheads/</a>.

<sup>433</sup> Choe Sang-Hun, "South Korea Accuses the North After Land Mines Maim Two Soldiers in DMZ," *The New York Times*, August 10, 2015, <a href="http://www.nytimes.com/2015/08/11/world/asia/north-korea-placed-mines-that-maimed-2-south-korean-soldiers-at-dmz-seoul-says.html?">http://www.nytimes.com/2015/08/11/world/asia/north-korea-placed-mines-that-maimed-2-south-korean-soldiers-at-dmz-seoul-says.html?</a> r=0.

anniversary of the founding of the Workers' Party. 434

### 170. Provocative Incident

**Date:** July 28, 2015 **Type:** Military Exercise **Involving:** China

Location: South China Sea

Summary: The Chinese Navy conducts a live-firing drill in the South China Sea, involving over

100 naval vessels, dozens of aircraft, and missile launch battalions. 435

#### 171. Provocative Incident

**Date:** June 16, 2015 **Type:** Defense News **Involving:** China

Location: Spratly Islands, South China Sea

**Summary:** China announces that the creation of islands will soon be completed. The artificial islands are a major point of contention between the U.S. and China. Malaysia, Vietnam, and the

Philippines also claim islands in the area. 436

172. **Date:** June 14, 2015 **Type:** Test Launch **Involving:** North Korea

**Location:** Eastern Coast of North Korea

**Summary:** North Korean officials announce that Kim Jong Un oversaw a test-firing of three KN-01 short-range anti-ship missiles off the eastern coast. Footage reportedly showing the test is released in September. 437

173. **Date:** June 7, 2015 **Type:** Test Launch **Involving:** China

Location: Wuzhai Missile and Space Test Centre, China

Summary: China successfully tests a supersonic nuclear delivery vehicle, dubbed Wu-14 by the

U.S., for the fourth time. 438

174. **Date:** June 3, 2015 **Type:** Test Launch

<sup>&</sup>lt;sup>434</sup> Julian Ryall, "North Korea 'tests engines ahead of possible rocket launch," *The Telegraph*, August 20, 2015, <a href="http://www.telegraph.co.uk/news/worldnews/asia/northkorea/11813516/North-Korea-tests-engines-ahead-of-possible-rocket-launch.html">http://www.telegraph.co.uk/news/worldnews/asia/northkorea/11813516/North-Korea-tests-engines-ahead-of-possible-rocket-launch.html</a>.

rocket-launch.html.

435 "Chinese navy conducts live firing drill in South China Sea," *Xinhua News*, July 28, 2015, http://news.xinhuanet.com/english/2015-07/28/c 134456370.htm.

<sup>&</sup>lt;sup>436</sup> "Foreign Ministry Spokesperson Lu Kand's Remarks on Issues Relating to China's Construction Activities on the Nansha Islands and Reefs," Ministry of Foreign Affairs of the People's Republic of China, June 16, 2015, http://www.fmprc.gov.cn/mfa\_eng/xwfw\_665399/s2510\_665401/2535\_665405/t1273370.shtml.

http://www.fmprc.gov.cn/mfa\_eng/xwfw\_665399/s2510\_665401/2535\_665405/t1273370.shtml.

437 Jess McHugh, "Kim Jong Un Watches North Korea Missile Test: Amid Seoul Tensions, Pyongyang State News Agency Release New Video Footage," *International Business Times*, September 1, 2015, <a href="http://www.ibtimes.com/kim-jong-un-watches-north-korea-missile-test-amid-seoul-tensions-pyongyang-state-news-2077794">http://www.ibtimes.com/kim-jong-un-watches-north-korea-missile-test-amid-seoul-tensions-pyongyang-state-news-2077794</a>.

<sup>&</sup>lt;sup>438</sup> PTI, "China confirms test of supersonic nuclear delivery vehicle," *The Economic Times*, June 13, 2015, <a href="http://economictimes.indiatimes.com/news/defence/china-confirms-test-of-supersonic-nuclear-delivery-vehicle/articleshow/47659199.cms">http://economictimes.indiatimes.com/news/defence/china-confirms-test-of-supersonic-nuclear-delivery-vehicle/articleshow/47659199.cms</a>.

**Involving:** South Korea

Location: Southern region of South Korea

Summary: South Korean officials announce the successful test-launch of two domestically built

ballistic missiles with a reported range of more than 300 miles. 439

175. **Date:** May 16, 2015 **Type:** Defense News **Involving:** China **Location:** China

Summary: An annual Pentagon report discloses that China has added multiple independently-

targetable re-entry vehicle (MIRV)-equipped ICBMs to its nuclear arsenal.<sup>440</sup>

176. **Date:** May 8, 2015 **Type:** Test Launch **Involving:** North Korea

Location: Eastern Coast of North Korea

**Summary:** North Korea announces that it successfully test-fired a ballistic missile from a submarine. South Korean officials report North Korea also fired three anti-ship cruise missiles in the sea. 441 The validity of North Korea's claimed submarine-fired missile test has come under

question.442

177. **Date:** May 6, 2015 **Type:** Defense News **Involving:** Japan

Location: East China Sea

**Summary:** The Japanese media reports that the Japanese Defense Ministry plans to deploy up to 600 military personnel and surface-to-ship missiles on the southwestern islands in the East China

Sea to counter a reported increase in maritime activity from Chinese naval vessels.<sup>443</sup>

#### 178. Provocative Incident

Date: April 7, 2015 Type: Missile Drill Involving: North Korea

**Location:** Western Coast of North Korea

Summary: North Korea fires two short-range missiles off the west coast two days before the

arrival of U.S. defense secretary arrived in Japan. 444

<sup>439</sup> Associated Press, "South Korea test-fires missiles capable of striking all of North Korea," *The Guardian,* June 3, 2015, <a href="http://www.theguardian.com/world/2015/jun/03/south-korea-test-fires-missiles-capable-of-striking-all-of-north-korea">http://www.theguardian.com/world/2015/jun/03/south-korea-test-fires-missiles-capable-of-striking-all-of-north-korea</a>.

officials-say.

443 "Japan Planning Military Deployment to its Southernmost Islands," *Sputnik International*, May 6, 2015, http://sputniknews.com/asia/20150506/1021761879.html.

<sup>&</sup>lt;sup>440</sup> David E. Sanger and William J. Broad, "China Making Some Missiles More Powerful," *The New York Times*, May 16, 2015, http://www.nytimes.com/2015/05/17/world/asia/china-making-some-missiles-more-powerful.html? r=0.

AP, "North Korea Claims Successful Test-Fire of Ballistic Missile," NBC News, May 9, 2015, http://www.nbcnews.com/news/world/north-korea-claims-successful-test-fire-ballistic-missile-n356421.

Anthony Capaccio and Sam Kim, "North Korea Didn't Launch Submarine Missile, U.S. Officials Say," *Bloomberg*, May 12, 2015, <a href="http://www.bloomberg.com/news/articles/2015-05-12/north-korea-didn-t-launch-submarine-missile-u-s-officials-say">http://www.bloomberg.com/news/articles/2015-05-12/north-korea-didn-t-launch-submarine-missile-u-s-officials-say</a>.

<sup>&</sup>lt;sup>444</sup> David Brunnstrom, "North Korea fires missiles into sea as U.S. defence chief visits region," *Reuters*, April 9, 2015, <a href="http://www.reuters.com/article/2015/04/09/us-northkorea-missiles-idUSKBN0N008D20150409">http://www.reuters.com/article/2015/04/09/us-northkorea-missiles-idUSKBN0N008D20150409</a>.

### 179. Provocative Incident

**Date:** April 3, 2015 **Type:** Missile Drill **Involving:** North Korea

Location: Western Coast of North Korea

**Summary:** North Korea fires four short-range missiles off the west coast. 445

180. **Date:** April 2, 2015 **Type:** Test Launch **Involving:** North Korea

Location: North Wonsan, North Korea

**Summary**: North Korea tests a short-range missile. 446

181. **Date:** March 20, 2015

Type: Air Incident: Intercepts (2) Involving: Japan and Russia Location: Japanese coast

Summary: Japanese F-15J fighter jets intercept a Russian Tu-95 bomber off the coast of Japan in

two separate incidents. 447

#### 182. Provocative Incident

Date: March 13, 2015 Type: Missile Drill Involving: North Korea

Location: Eastern Coast of North Korea

**Summary:** North Korea fires seven missiles off its east coast. 448

183. **Date:** March 11, 2015 **Type:** Defense News

**Involving:** Russia and U.S.

**Location:** Vietnam

Summary: The U.S. asks Vietnam to stop letting Russian nuclear-capable bombers refuel at a

former U.S. base 449

184. **Date:** March 8, 2015 **Type:** Defense News

**Involving:** China and Japan

<sup>445</sup> David Brunnstrom, "North Korea fires missiles into sea as U.S. defence chief visits region," *Reuters*, April 9, 2015, http://www.reuters.com/article/2015/04/09/us-northkorea-missiles-idUSKBN0N008D20150409.

<sup>446</sup> Elizabeth Shim, "North Korea test-fires four short-range missile into the Yellow Sea," *UPI*, April 3, 2015, <a href="http://www.upi.com/Top\_News/World-News/2015/04/03/North-Korea-test-fires-four-short-range-missiles-into-Yellow-Sea/9051428068946/">http://www.upi.com/Top\_News/World-News/2015/04/03/North-Korea-test-fires-four-short-range-missiles-into-Yellow-Sea/9051428068946/</a>; "The CNS North Korea Missile Test Database," *CNS* North Korea Missile Test Database, April 24, 2017, <a href="http://www.nti.org/analysis/articles/cns-north-korea-missile-test-database/">http://www.nti.org/analysis/articles/cns-north-korea-missile-test-database/</a>

<sup>447</sup> Christopher Harress, "Russian Tu-95 Bomber Intercepted By Japanese Air Force Jets," *International Business Times*, March 23, 2015, <a href="http://www.ibtimes.com/russian-tu-95-bomber-intercepted-japanese-air-force-jets-1855868">http://www.ibtimes.com/russian-tu-95-bomber-intercepted-japanese-air-force-jets-1855868</a>.

<sup>&</sup>lt;sup>448</sup> Agense France-Presse, "North Korea fires four short-range missiles into sea," *The Times of India*, April 3, 2015, <a href="http://timesofindia.indiatimes.com/world/rest-of-world/North-Korea-fires-four-short-range-missiles-into-sea/articleshow/46795897.cms">http://timesofindia.indiatimes.com/world/rest-of-world/North-Korea-fires-four-short-range-missiles-into-sea/articleshow/46795897.cms</a>.

<sup>&</sup>lt;sup>449</sup> David Brunnstrom, "Exclusive: U.S. asks Vietnam to stop helping Russian bomber flights," *Reuters*, March 11, 2015, http://www.reuters.com/article/2015/03/11/us-usa-vietnam-russia-exclusive-idUSKBN0M71NA20150311.

**Location:** East China Sea

Summary: A New York Times piece reports that Japanese F-15 fighter jets intercept foreign

aircraft at least once a day, mostly from China. 450

# 185. Provocative Incident

**Date:** Early March 2015 **Type:** Missile Drill

**Involving:** North Korea, South Korea and the U.S.

Location: Eastern Coast of North Korea

**Summary:** North Korea fires two short-range missiles off its east coast in a show of displeasure

with U.S.-South Korea annual joint military drills. 451

186. **Date:** February 13, 2015 **Type:** Military Exercise

**Involving:** South Korea and the U.S. **Location:** Seoul, South Korea

Summary: The U.S. and South Korea finish annual joint exercises designed to shape deterrence

strategies as a counter to military threats from North Korea. 452

#### 187. Provocative Incident

**Date:** February 8, 2015 **Type:** Missile Drill **Involving:** North Korea

Location: Eastern Coast of North Korea

Summary: North Korea fires five short-range missiles from its eastern coast into the sea about 125

miles northeast. 453

188. **Date:** February 7, 2015 **Type:** Test Launch **Involving:** North Korea

**Involving:** North Korea **Location:** North Korea

**Summary:** North Korean officials report a successful test of a new anti-ship cruise missile, an "ultra-precision" rocket that a South Korean expert said looked similar to the Russian KH-35

missile.454

189. **Date:** January 23, 2015 **Type:** Launcher Test **Involving:** North Korea

<sup>450</sup> Martin Fackler, "In a Test of Wills, Japanese Fighter Pilots Confront Chinese," *The New York Times*, March 8, 2015, <a href="http://www.nytimes.com/2015/03/09/world/in-a-test-of-wills-japanese-fighter-pilots-confront-chinese.html?\_r=1">http://www.nytimes.com/2015/03/09/world/in-a-test-of-wills-japanese-fighter-pilots-confront-chinese.html?\_r=1</a>.

<sup>451</sup> Agense France-Presse, "North Korea fires four short-range missiles into sea," *The Times of India*, April 3, 2015, <a href="http://timesofindia.indiatimes.com/world/rest-of-world/North-Korea-fires-four-short-range-missiles-into-sea/articleshow/46795897.cms">http://timesofindia.indiatimes.com/world/rest-of-world/North-Korea-fires-four-short-range-missiles-into-sea/articleshow/46795897.cms</a>.

453 Choe Sang-hun, "North Korea Tests Five Missiles," *The New York Times*, February 8, 2015, http://www.nytimes.com/2015/02/09/world/asia/north-korea-launches-5-short-range-missiles.html? r=0.

sea/articleshow/46795897.cms.

452 Oh Seok-min, "S. Korea, U.S. conduct deterrence drill against N. Korea," *Yonhap News Agency*, February 13, 2015, http://english.yonhapnews.co.kr/national/2015/02/13/0301000000AEN20150213006100315.html.

<sup>454 &</sup>quot;North Korea Test-Fires 'Capable' New Anti-Ship Cruise Missile," *NBC News*, February 7, 2015, <a href="http://www.nbcnews.com/news/world/north-korea-test-fires-capable-new-anti-ship-cruise-missile-n302031">http://www.nbcnews.com/news/world/north-korea-test-fires-capable-new-anti-ship-cruise-missile-n302031</a>.

Location: Sinpo South Shipyard, North Korea

Summary: South Korean officials report that North Korea has conducted a test of a missile

ejection launcher used to help fire missiles from submarines. 455

190. **Date:** January 9, 2015 **Type:** Test Launch **Involving:** China **Location:** China

**Summary:** China successfully tests a supersonic nuclear delivery vehicle, dubbed Wu-14 by the

U.S.<sup>456</sup>

191. **Date:** December 13, 2014

Type: Test Launch Involving: China

Location: Wuzhai Missile and Space Test Centre, China

Summary: China successfully tests its ICBM DF-41 involving multiple, independently targetable

reentry vehicles. 457

192. Date: December 13, 2014

Type: Air Incident Involving: Russia Location: Guam

Summary: Two Russian Tu-95 bombers conduct a circumnavigation of Guam. No U.S. jets are

dispatched.<sup>458</sup>

193. **Date:** December 6, 2014

Type: Air Incident: Intercept Involving: China and Japan Location: East China Sea

**Summary:** Japanese Self Defense Force planes scramble to intercept a Chinese Y9 intelligence-gathering plane, two Y9 early warning planes and 2 H6 bombers flying over the East China Sea returning from naval and air combat exercises in the Western Pacific. A Japanese defense official

said the Chinese aircraft did not violate Japanese airspace. 459

194. **Date:** December 2, 2014 **Type:** Test Launch **Involving:** China

Location: Wuzhai Missile and Space Test Centre, China

455 "N. Korea conducts submarine missile ejection test: sources," *Yonhap News Agency*, February 20, 2015, http://english.yonhapnews.co.kr/national/2015/02/20/47/0301000000AEN20150220001900315F.html.

<sup>456</sup> Franz-Stefan Gady, "China Test New Hypersonic Weapon," *The Diplomat*, November 26, 2015, http://thediplomat.com/2015/11/china-tests-new-hypersonic-weapon/.

41-missile-report-says.

458 Bill Gertz, "Russian Nuclear Bombers Again Buzz Guam," *The Washington Free Beacon*, December 19, 2014, http://freebeacon.com/national-security/russian-nuclear-bombers-again-buzz-guam/.

<sup>&</sup>lt;sup>457</sup> Minnie Chan, "Chinese military conducts full test of long-range missile 'which can hit any part of US'," *South China Morning Post*, December 20, 2014, <a href="http://www.scmp.com/news/china/article/1666525/pla-conducts-full-test-long-range-df-41-missile-report-says">http://www.scmp.com/news/china/article/1666525/pla-conducts-full-test-long-range-df-41-missile-report-says</a>.

<sup>&</sup>lt;sup>459</sup> Kalyan Kumar, "Chinese Military Bomber Aircraft Fly Menacingly Near Japan Islands; Analysts Say Guam Base Can Be Under Threat," *International Business Times*, December 10, 2014, <a href="http://au.ibtimes.com/chinese-military-bomber-aircraft-fly-menacingly-near-japan-islands-analysts-say-guam-base-can-be">http://au.ibtimes.com/chinese-military-bomber-aircraft-fly-menacingly-near-japan-islands-analysts-say-guam-base-can-be</a>.

**Summary:** China successfully tests a supersonic nuclear delivery vehicle, dubbed Wu-14 by the  $U.S.^{460}$ 

195. Date: November 12, 2014

**Type:** Air Incident

**Involving:** Russia and the U.S.

**Location:** Guam

**Summary:** Russian bombers circumvent Guam without violating U.S. airspace. 461

196. **Date:** November 10, 2014 **Type:** Military Exercise **Involving:** Russia

Location: South China Sea

**Summary:** A Lowy Institute military fellow reports that the Russian guided missile cruiser *Moskva* is conducting unilateral live-fire drills in the South China Sea. The U.S. Naval Institute described the appearance of the ship in Southeast Asia as "a rare show of surface presence in the region."

# 197. Provocative Incident

**Date:** November 10, 2014 **Type:** Cross-border Incident

**Involving:** North Korea and South Korea

Location: Demilitarized Zone

**Summary:** South Korea fired warning shots as about 10 North Korean soldiers approached the Military Demarcation Line around 9:40 am. The North Koreans did not return fire and retreated. 463

198. **Date:** November 3, 2014 **Type:** Defense News **Involving:** North Korea **Location:** North Korea

**Summary:** North Korea launches a domestically built submarine designed to fire ballistic missiles. The sub is thought to be based on the Golf II-class Soviet submarine that could carry sub-launched ballistic missiles more than 880 miles. Meanwhile, U.S. and South Korean intelligence have warned that NK is close to perfecting miniaturization of nuclear warheads. A military analyst stated that while we should not ignore the threat a North Korean submarine capability poses, we should also not exaggerate it.<sup>464</sup>

<sup>&</sup>lt;sup>460</sup> Franz-Stefan Gady, "China Test New Hypersonic Weapon," *The Diplomat*, November 26, 2015, http://thediplomat.com/2015/11/china-tests-new-hypersonic-weapon/.

<sup>&</sup>lt;sup>461</sup> Bill Gertz, "Russian Bombers Again Circle Guam," *The Washington Free Beacon*, December 4, 2015, http://freebeacon.com/national-security/russian-bombers-again-circle-guam/.

<sup>462</sup> James Brown, "Putin flexes muscle ahead of G20," *Lowy Interpreter*, November 10, 2014, <a href="http://www.lowyinterpreter.org/post/2014/11/10/Putin-flexes-muscle-ahead-of-g20.aspv2COLL.CC=1523515065.8rCOLL.CC=1354146416.8r">http://www.lowyinterpreter.org/post/2014/11/10/Putin-flexes-muscle-ahead-of-g20.aspv2COLL.CC=1523515065.8rCOLL.CC=1354146416.8r</a>

G20.aspx?COLLCC=1522515965&COLLCC=1254146416&.

463 K.J. Kwon and Jethro Mullen, "South Korea fires warning shots at North Korean patrol near border," CNN World, November 10, 2014, http://www.cnn.com/2014/11/10/world/asia/koreas-tensions/.

<sup>&</sup>lt;sup>464</sup> Julian Ryall, "North Korea launches Soviet-era style ballistic missile submarine," *The Telegraph*, November 3, 2014, <a href="http://www.telegraph.co.uk/news/worldnews/asia/northkorea/11204667/North-Korea-launches-Soviet-era-style-ballistic-missile-submarine.html">http://www.telegraph.co.uk/news/worldnews/asia/northkorea/11204667/North-Korea-launches-Soviet-era-style-ballistic-missile-submarine.html</a>.

199. Date: Late October 2014 **Type:** Launcher Test **Involving:** North Korea Location: North Korea

> **Summary:** A news report says North Korea tested an ejection launcher that helps fire missiles from submarines. U.S. intelligence agencies observed the test and, in September, 38North reported that commercial satellite imagery showed a new test stand to research and develop submarinebased ballistic missiles. 465

200. Date: October 30, 2014 **Type:** Sea Incident

> **Involving:** China and Japan Location: East China Sea

Summary: Around 10 a.m., three Chinese coast guard ships enter waters around the disputed Senkaku/Diaoyu islands in the East China Sea. The ships did not respond immediately when asked to leave the area by a Japanese Coast Guard patrol ship. 466

#### 201. Provocative Incident

Date: October 27, 2014 Type: Sea Incident

**Involving:** China and Japan

**Location:** Near Ogasawara Islands, Japan

Summary: A Chinese fishing boat captain is arrested by the Japan Coast Guard on suspicion of poaching coral in Japan's exclusive economic zone. It is the fourth arrest in the month of October. 467

202. Date: October 18, 2014 Type: Sea Incident

> **Involving:** China and Japan **Location:** East China Sea

**Summary:** China sent three coast guard vessels to patrol disputed waters in the East China Sea a day after the Japanese prime minister sent an offering to the Yasukuni Shrine, a controversial shrine to Japan's war dead. 468

# 203. High-Risk Incident

**Date:** October 10, 2014 **Type:** Sea Incident

**Involving:** China and South Korea

Location: Off the coast of Wangdeung-do, South Korea

**Summary:** The South Korean Coast Guard fires shots while trying to impound a Chinese vessel

466 "3 Chinese ships enter waters near Senkakus," *The Japan News*, October 30, 2014, http://the-japannews.com/news/article/0001681427.

<sup>&</sup>lt;sup>465</sup> "N. Korea conducts ejection launcher test for submarine missile: report," Yonhap News Agency, November 21, 2014, http://english.yonhapnews.co.kr/full/2014/11/22/39/1200000000AEN20141122000300315F.html.

Agence France-Presse, "Japan arrests Chinese fishing boat skipper over coral-poaching," The Japan Times, October 27, 2014, http://www.japantimes.co.jp/news/2014/10/27/national/japan-arrests-chinese-fishing-boat-skipper-over-coralpoaching/#.VFLf14fd7dc.

468 "Chinese coastguard vessels patrol disputed waters," *Reuters*, October 18, 2014

http://www.reuters.com/article/2014/10/19/us-china-japan-idUSKCN0I801720141019.

they said was illegally fishing in South Korean waters. The captain of the vessel was killed. 469

#### 204. Provocative Incident

**Date:** October 10, 2014 **Type:** Cross-border Incident

**Involving:** North Korea and South Korea

Location: Paju, South Korea

**Summary:** North Korean military fires anti-aircraft machine guns at propaganda balloons released in the border city of Paju, South Korea (balloons containing leaflets, U.S. dollars, DVDs and books showcasing South Korean life). Some shells fall in South Korea, prompting the South Korean military to give a pre-warning before firing 40 bullets in the air toward North Korea. 470

205. Date: September 25, 2014

Type: Test Launch Involving: China

Location: Wuzhai Missile and Space Test Centre, China

Summary: China successfully tests the Dongfeng missile, which can carry a nuclear warhead

10,000 km putting all of Europe and parts of the U.S. within range.<sup>471</sup>

206. Date: September 6, 2014

Type: Test Launch Involving: North Korea

Location: Suckon region, North Korea

**Summary**: North Korea tests three short-range projectiles. 472

207. Date: August 25, 2014

Type: Air Incident: Intercept Involving: China and Taiwan Location: Off the coast of Taiwan

**Summary:** Two Chinese military surveillance aircraft enter Taiwan's airspace twice. Taiwanese fighter jets are sent to tail the two aircraft. Chinese defense officials state the military carried out

"routine flight activities in relevant airspace with no unusual occurrences." 473

## 208. Provocative Incident

**Date:** August 19, 2014 **Type:** Air Incident

**Involving:** China and the U.S.

Location: Off the coast of Hainan Island

<sup>469</sup> Choe Sang-Hun, "Fisherman From China Dies in Clash Off S. Korea," *The New York Times*, October 10, 2014, <a href="http://www.nytimes.com/2014/10/11/world/asia/chinese-fishing-captain-killed-in-clash-with-south-korean-coast-guard.html">http://www.nytimes.com/2014/10/11/world/asia/chinese-fishing-captain-killed-in-clash-with-south-korean-coast-guard.html</a>.

guard.html.

470 Joohee Cho, "Koreas Trade Gunfire as Kim Jong-un Mystery Deepens," *ABC News*, October 10, 2014, http://abcnews.go.com/International/koreas-trade-gunfire-kim-jong-mystery-deepens/story?id=26097426.

<sup>4/2</sup> Choe Sang-hun, "North Korea Reported to Test Short-Range Missiles," *The New York Times*, September 6, 2014, https://www.nytimes.com/2014/09/06/world/asia/north-korea-reported-to-test-short-range-missiles.html.

<sup>&</sup>lt;sup>471</sup> Mark Piggott, "China Launches Test Missile Capable of Carrying Nuclear Warheads to Europe and US," *International Business Times*, October 5, 2014, <a href="http://www.ibtimes.co.uk/china-launches-test-missile-capable-carrying-nuclear-warheads-europe-us-1468574">http://www.ibtimes.co.uk/china-launches-test-missile-capable-carrying-nuclear-warheads-europe-us-1468574</a>.

The New York Times, September 6, 2014,

<sup>&</sup>lt;sup>473</sup> Adela Lin, "Taiwan Fighters Chase China Jets a Week After U.S. Incident," *Bloomberg News*, August 27, 2014, http://www.bloomberg.com/news/2014-08-26/taiwan-says-chinese-military-aircraft-entered-island-s-airspace.html.

**Summary:** A Chinese J-11 fighter jet flashes past a Navy Poseidon P-8 patrol aircraft, performing a "barrel roll" at close range and bringing its wingtip within 20 feet of the U.S. plane. The incident occurs in international airspace about 135 miles east of China's Hainan Island. Pentagon officials protest publicly and release photos of the near miss, which they cite as evidence of rash and irresponsible behavior on the part of the Chinese pilot. They claim the same Chinese military unit had conducted three other risky intercepts of U.S. aircraft in March, April and May this year. 474

### 209. Provocative Incident

**Date:** August 14, 2014 **Type:** Missile Drill **Involving:** North Korea

Location: Wonsan, North Korea

Summary: North Korea fires three short-range missiles before Pope Francis' visit to Seoul, South

Korea. 475

210. **Date:** August 6, 2014

Type: Air Incident: Intercept Involving: China and Japan Location: East China Sea

**Summary:** China's Ministry of Defense claims Japanese F-15 fighter jets shadowed Chinese patrolling aircraft over the East China Sea. Japan's defense ministry said it had no information on

the incident.<sup>476</sup>

211. **Date:** July 26, 2014 **Type:** Test Launch

**Involving:** North Korea

Location: Hwanghae province, North Korea

**Summary**: North Korea tests a short-range ballistic missile. 477

#### 212. Provocative Incident

**Date:** July 12, 2014 **Type:** Test Launch **Involving:** North Korea

Location: Kaesong, North Korea

Summary: North Korea tests two short-range ballistic missiles just 20 kilometers from the border

with South Korea.<sup>478</sup>

213. **Date:** July 9, 2014 **Type:** Test Launch

<sup>&</sup>lt;sup>474</sup> Adela Lin, "Taiwan Fighters Chase China Jets a Week After U.S. Incident," *Bloomberg News*, August 27, 2014, <a href="http://www.bloomberg.com/news/2014-08-26/taiwan-says-chinese-military-aircraft-entered-island-s-airspace.html">http://www.bloomberg.com/news/2014-08-26/taiwan-says-chinese-military-aircraft-entered-island-s-airspace.html</a>
<sup>475</sup> "North Korea test-fires mid-range missiles," *BBC News*, March 26, 2014, <a href="http://www.bbc.com/news/world-asia-26743197">http://www.bbc.com/news/world-asia-26743197</a>

<sup>476 &</sup>quot;China says Japan fighter jets shadowed its planes over disputed waters," *Reuters*, August 7, 2014, <a href="http://www.reuters.com/article/2014/08/07/us-china-japan-idUSKBN0G70B220140807">http://www.reuters.com/article/2014/08/07/us-china-japan-idUSKBN0G70B220140807</a>.

477 Scott Neuman "North Korea Barara III To a Clarific Transfer of the Control of the C

http://www.npr.org/sections/thetwo-way/2014/07/26/335581206/north-korea-reportedly-tests-short-range-ballistic-missile. The San Diego Union-Tribune, July 12, 2014, http://www.sandiegouniontribune.com/sdut-media-north-korea-again-test-fires-missiles-2014jul12-story.html.

**Involving:** North Korea

**Location:** Southwest North Korea

Summary: North Korea tests two Scud-type missiles. 479

214. **Date:** June 29, 2014 **Type:** Test Launch **Involving:** North Korea

Location: East coast of North Korea

Summary: North Korea tests two Scud-type missiles. 480

215. Date: June 26, 2014 **Type:** Test Launch **Involving:** North Korea

Location: East coast of North Korea

**Summary**: North Korea indicates they may have successfully tested three short-range precision

guided missiles.<sup>481</sup>

#### 216. Provocative Incident

**Date:** June 11, 2014

**Type:** Air Incident: Intercept **Involving:** China and Japan **Location:** East China Sea

**Summary:** Chinese Su-27 fighter jets fly "abnormally close" to a Japanese OP-3C surveillance plane and a YS-11EB electronic intelligence aircraft over the East China Sea. Chinese officials claim two Japanese F-15 planes followed a Chinese Tu-54 aircraft coming as close as 30 meters,

prompting China to send the Su-27 jets. Japanese officials deny this. 482

#### 217. Provocative Incidents (2)

Date: May 24, 2014

**Type:** Air Incidents (2) and Military Exercise

**Involving:** China, Russia and Japan

**Location:** East China Sea

Summary: Japanese Defense Minister Onodera reports that a Chinese Su-27 fighter and a Japanese navy OP-3C surveillance plane came as close as 50-meters apart and an hour later a Chinese Su-27 came within 30 meters of a Japanese air force YS-11EB. Both encounters were over international waters near where China and Japan have established overlapping air-defense zones in the East China Sea. China blamed Japan for operating near Russian-Chinese joint military exercises and claimed the Chinese aircraft was taking necessary control and identification

479 Choe Sang-hun, "North Korea Fires 2 More Ballistic Missiles," The New York Times, July 8, 2014, https://www.nytimes.com/2014/07/09/world/asia/north-korea-fires-2-more-ballistic-missiles.html.

http://www.foxnews.com/world/2014/06/27/n-korea-tests-new-precision-guided-missiles.html.

<sup>480</sup> Choe Sang-hun, "North Korea Fires 2 More Ballistic Missiles," *The New York Times*, July 8, 2014, https://www.nytimes.com/2014/07/09/world/asia/north-korea-fires-2-more-ballistic-missiles.html. 481 "N. Korea tests new precision guided missiles," *Fox News*, June 27, 2014,

Reuters, "Japan denies brush with Chinese planes, demands Beijing withdraws footage," South China Morning Post, June 13, 2014, http://www.scmp.com/news/asia/article/1531719/japan-denies-its-fighters-buzzed-chinese-plane.

measures.483

218. Date: March 26, 2014 **Type:** Test Launch **Involving:** North Korea

Location: Wonsan, North Korea

**Summary**: North Korea tests two medium-range ballistic missiles. It is the first launch of a Nodong missile in five years. 484

219. Date: March 3, 2014 **Type:** Test Launch **Involving:** North Korea

**Location:** East coast of North Korea

**Summary**: North Korea tests two short-range ballistic missiles. 485

<sup>&</sup>lt;sup>483</sup> Atsuko Fukase and Brian Spegele, "Japan, China Accuse Each Other of Provocation," *The Wall Street Journal*, May 25, 2014, <a href="http://online.wsj.com/articles/SB10001424052702304811904579583651509691882">http://online.wsj.com/articles/SB10001424052702304811904579583651509691882</a>.

484 "North Korea test-fires mid-range missiles," *BBC News*, March 26, 2014, <a href="http://www.bbc.com/news/world-asia-">http://www.bbc.com/news/world-asia-</a>

<sup>26743197.

485</sup> AP, "North Korea fires 2 more missiles amid US drills," *CNBC*, March 3, 2014, http://www.cnbc.com/2014/03/03/north-korea-fires-2-more-missiles-amid-us-drills.html.

### India, Pakistan and China

Two countries with the fastest growing nuclear arsenals – India and Pakistan – have been in a contentious border conflict for almost seven decades. The coupling of the Kashmir border conflict with a nuclear arms race creates a dangerous hot spot for escalation and regional nuclear war. India is also facing a border clash with China along the Line of Actual Control as both countries vie for regional power. Global Zero has analyzed 121 military-related incidents in the region involving India, Pakistan and China over the past 3 years.

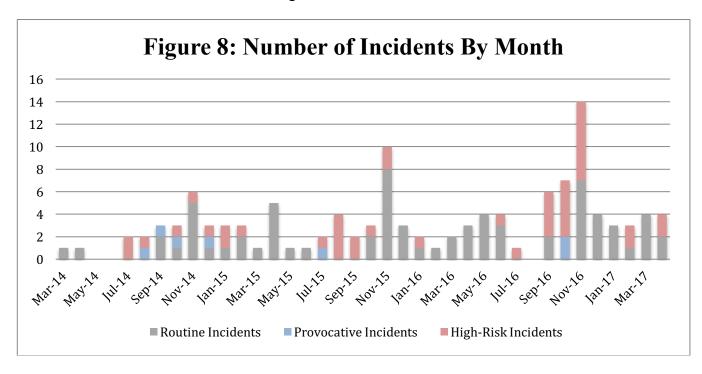


**Figure 7. Map of Military Incidents in South Asia** Each incident is color coded by type: red indicates border clashes; yellow indicates an air incident; orange indicates an air intercept; blue indicates a sea intercept; brown indicates a military exercise; green indicates a test (launch or flight); and grey indicates defense news. Balloon markers indicate routine incidents while diamonds indicate provocative incidents and stars indicate high-risk incidents.

The Line of Control between Pakistan and India in Kashmir is the most densely populated with military incidents. Of the 121 incidents listed, 47 are border clashes. Two of those occurred between India and China after a conflict broke out in the fall of 2014 near the Line of Actual Control while 34 occurred between India and Pakistan in the disputed region of Kashmir. These incidents kill soldiers and civilians with both sides blaming the other for instigating.

Active militant groups in Kashmir add another dimension to risk escalation: In November 2015, India exchanged fire with militants along the border on three separate occasions. In September 2016, a clash between India and militants killed 19 soldiers and sparked a 2-month period of increased cross-border firing from Pakistan and India. (India believes Pakistan arms and trains militant groups to fight against India, a claim Pakistan denies). Terrorist groups continue to work to obtain a nuclear weapon through theft or the black market a mission violent chaos makes easier.

Pakistan and India both continue to develop new nuclear-capable missiles, including indigenously built sea-based missiles in India and tactical nuclear weapons in Pakistan. Tests of such weapons make up 46 percent of the identified incidents in South Asia. Pakistan has conducted at least 16 such tests while India has conducted at least 38. These new weapons and capabilities shorten the fuse separating the two countries from limited nuclear exchange.



South Asia is a hot spot for military conflict. The territorial dispute has given way to a number of high-risk incidents in the region. We identified 42 high-risk incidents (those that have a high potential to lead to a direct military conflict) in South Asia since March 2014, including 29 clashes near the Line of Control between Pakistan and India resulting in casualties with spikes in frequency in October 2014, August-September 2015, and September-November 2016; ten instances of clashes between India and militants; and the detection of a Pakistan fishing vessel carrying explosives by the Indian Coast Guard in December 2014. The number of high-risk incidents is made more troubling by the consistent nature

of these cases. These incidents continuously spark up leaving the region vulnerable to escalation to a direct military conflict.

There were also seven provocative incidents identified in the region, consisting of Pakistan and Indian troops firing at each other with no casualties, three instances of Chinese troops and vessels crossing the Line of Actual Control into Indian territory in the fall of 2014, and the arrest of an unarmed Indian soldier by Pakistan after he mistakenly crossed the border.

More specifics of all incidents are below with high-risk and provocative incidents indicated.

### 1. High Risk Incident

**Date:** April 27, 2017 **Type:** Border Clash

**Involving:** India and Militants

Location: Chowkibals's Panzgam area, Kupwara district, Kashmir

**Summary**: Suspected militants attack an Indian army garrison in Kashmir, killing three soldiers. A civilian is later killed after the Indian army opens fire on protesters demanding the bodies of the

two militants killed. 486

Date: April 27, 2017
 Type: Test Launch
 Involving: India

Location: off the coast of Odisha, India

Summary: India successfully tests a nuclear-capable surface-to-surface intermediate range ballistic

missile.487

3. **Date:** April 21, 2017 **Type:** Test Launch **Involving:** India

Location: Integrated Test Range, Chandipur, Odisha, India

**Summary**: India completest the first test of the land-attack version of the BrahMos supersonic

cruise missile.488

# 4. High Risk Incident

**Date:** April 1, 2017 **Type:** Border Clash

**Involving:** India and Pakistan **Location:** Chirikot sector, Kashmir

<sup>&</sup>lt;sup>486</sup> Toufiq Rashid and Ashiq Hussein, "Kupwara army camp attack: Civilian killed as army opens fire on stone pelters," *Hindustan Times*, April 27, 2017, <a href="http://www.hindustantimes.com/india-news/militants-attack-army-camp-in-kashmir-s-kupwara-encounter-still-on/story-JNVixzSdXu75ZmL6jmeT5L.html">http://www.hindustantimes.com/india-news/militants-attack-army-camp-in-kashmir-s-kupwara-encounter-still-on/story-JNVixzSdXu75ZmL6jmeT5L.html</a>.

<sup>487</sup> "India successfully test fires nuclear capable Agni-III missile off Odisha coast," *The New Indian Express*, April 27,

<sup>&</sup>lt;sup>48</sup> "India successfully test fires nuclear capable Agni-III missile off Odisha coast," *The New Indian Express*, April 27, 2017, <a href="http://www.newindianexpress.com/nation/2017/apr/27/india-successfully-test-fires-nuclear-capable-agni-iii-missile-off-odisha-coast-1598412.html">http://www.newindianexpress.com/nation/2017/apr/27/india-successfully-test-fires-nuclear-capable-agni-iii-missile-off-odisha-coast-1598412.html</a>.

<sup>&</sup>lt;sup>488</sup> "Indian Navy successfully test fires the BrahMos Land Attack Supersonic Cruise Missile," *Tech2*, April 24, 2017, <a href="http://tech.firstpost.com/news-analysis/indian-navy-successfully-test-fires-the-brahmos-land-attack-supersonic-cruise-missile-373067.html">http://tech.firstpost.com/news-analysis/indian-navy-successfully-test-fires-the-brahmos-land-attack-supersonic-cruise-missile-373067.html</a>.

**Summary**: One civilian is killed after cross-border firing on the Line of Control in Kashmir. Pakistan accused Indian forces of an "unprovoked ceasefire violation."

5. **Date:** March 16, 2017 **Type:** Test Launch **Involving:** Pakistan

**Location:** Coast of Pakistan

**Summary**: Pakistan successfully tests a land-based anti-ship missile. 490

6. **Date:** March 12, 2017 **Type:** Defense News **Involving:** Pakistan **Location:** Undisclosed

**Summary**: Pakistan deploys a Chinese-made low-to-medium altitude Air Defence System in

response to India's developing air-defense system. 491

7. **Date:** March 11, 2017 **Type:** Test Launch **Involving:** India

Location: Integrated Test Range, Chandipur, Odisha, India

Summary: India successfully tests an extended-range BrahMos cruise missile. 492

8. **Date:** March 1, 2017

Type: Test Involving: India

Location: Integrated Test Range, Chandipur, Odisha, India

Summary: India successfully tests its indigenously-developed interceptor missile. 493

## 9. High Risk Incident

**Date:** February 14, 2017 **Type:** Border Clash

**Involving:** India and Pakistan

Location: Kashmir

**Summary**: At least three Pakistani soldiers are killed in a clash with Indian forces in Kashmir.

Pakistan accused Indian border guards of "unprovoked" firing. 494

<sup>489</sup> "Pakistan summons Indian envoy over cross-border shelling," *Xinhua*, April 3, 2017, http://news.xinhuanet.com/english/2017-04/03/c 136180625.htm.

<sup>490</sup> Usman Ansari, "Pakistan conducts anti-ship missile test," *Defense News*, March 16, 2017, http://www.defensenews.com/articles/pakistan-conducts-anti-ship-missile-test.

<sup>&</sup>lt;sup>491</sup>Akash Sinha, "Pakistan deploys Chinese air defence system: Where does India stand?" *The Economic Times*, March 15, 2017, <a href="http://economictimes.indiatimes.com/news/defence/pakistan-deploys-chinese-air-defence-system-where-does-india-stand/articleshow/57630076.cms">http://economictimes.indiatimes.com/news/defence/pakistan-deploys-chinese-air-defence-system-where-does-india-stand/articleshow/57630076.cms</a>.

<sup>492</sup> Rahul Singh, "India successfully test-fires BrahMos supersonic cruise missile," *Hindustan Times*, March 11, 2017,

<sup>&</sup>lt;sup>492</sup> Rahul Singh, "India successfully test-fires BrahMos supersonic cruise missile," *Hindustan Times*, March 11, 2017, http://www.hindustantimes.com/india-news/india-successfully-test-fires-brahmos-supersonic-cruise-missile/story-B3ERwFWxKpQAasgOxmho7I.html.

<sup>&</sup>lt;sup>493</sup> "India's indigenous supersonic interceptor missile successfully test-fired," *Hindustan Times*, March 1, 2017, <a href="http://www.hindustantimes.com/india-news/india-again-successfully-test-fires-indigenous-supersonic-interceptor-missile/story-koKVtYI5wUKCqP2dHtjDZM.html">http://www.hindustantimes.com/india-news/india-again-successfully-test-fires-indigenous-supersonic-interceptor-missile/story-koKVtYI5wUKCqP2dHtjDZM.html</a>.

10. **Date:** February 11, 2017

**Type:** Test **Involving:** India

Location: Bay of Bengal and Kalam Island

Summary: India successfully intercepts a target mimicking a hostile incoming ballistic missile. 495

### 11. High Risk Incident

Date: February 11, 2017 **Type:** Border Clash

**Involving:** India and Militants

Location: Frisal village, Kulgam district, Kashmir

Summary: Two Indian security force members and four suspected militants are killed during a tenhour gun fight that broke out when the security forces entered Frisal village in pursuit of the militants. One civilian was killed when local protesters confronted the security forces. 496

12. **Date:** January 24, 2017

**Type:** Test Flight **Involving:** Pakistan Location: Undisclosed

**Summary:** Pakistan successfully tests the surface-to-surface nuclear-capable missile 'Ababeel.' It is the first flight test of the missile which has a range of up to 2,200 kilometers and can carry multiple warheads. 497

13. **Date:** January 9, 2017 **Type:** Test Launch **Involving:** Pakistan

Location: undisclosed location, Indian Ocean

**Summary:** Pakistan tests the first submarine-launched cruise missile – the nuclear-capable Babur-

3 missile – with a range of 450 km. 498

14. **Date:** January 2, 2017 **Type:** Test Launch Involving: India

Location: Abdul Kalam Island, India

Summary: India successfully tests the long-range Agni-IV ballistic missile from a road-mobile

launcher 499

#### 15. **Date:** December 26, 2016

<sup>494</sup> "3 Pakistani soldiers die in Kashmir border clash," *The Peninsula*, February 14, 2017,

https://thepeninsulagatar.com/article/14/02/2017/3-Pakistani-soldiers-die-in-Kashmir-border-clash.

496 "Kashmir clashes: Eight dead as troops surround gunman," *BBC News*, February 12, 2017,

498 "Pakistan fires 'first submarine-launched nuclear-capable missile," Reuters, January 10, 2016,

http://www.reuters.com/article/us-pakistan-missiles-idUSKBN14T1EL.

<sup>&</sup>lt;sup>495</sup> Richard Tomkins, "India tests ballistic missile interceptor," *UPI*, February 13, 2017, <a href="http://www.upi.com/Defense-">http://www.upi.com/Defense-</a> News/2017/02/13/India-tests-ballistic-missile-interceptor/8971487015306/.

http://www.bbc.com/news/world-asia-india-38950506.

497 Express Web Desk, "Pakistan conducts first flight test of nuclear-capable 'Ababeel' missile," *The Indian Express*, January 24, 2017, http://indianexpress.com/article/world/pakistan-nuclear-missile-test-4489709/.

<sup>499</sup> T.S. Subramanian, "Agni-IV test a 'grand success'," *The Hindu*, January 2, 2017, http://www.thehindu.com/news/national/Agni-IV-test-a-%E2%80%98grand-success%E2%80%99/article16979214.ecc.

Type: Test Launch Involving: India

Location: Kalam Island

Summary: India successfully test fires the nuclear-capable Agni-V, the country's longest range

nuclear-capable intercontinental ballistic missile with a range of over 5,000 km. 500

16. **Date:** December 21, 2016

Type: Test Fire Involving: Pakistan

Location: North Arabian Sea

**Summary:** Pakistan successfully test fires a surface-to-surface anti-ship missile. <sup>501</sup>

17. **Date:** December 21, 2016

Type: Test Launch Involving: India

Location: Bay of Bengal

**Summary:** A test of India's nuclear-capable Nirbhay land-attack cruise missile fails. 502

18. **Date:** December 14, 2016

Type: Test Fire Involving: Pakistan Location: Undisclosed

**Summary:** Pakistan successfully tests the Babur cruise missile. <sup>503</sup>

### 19. High-Risk Incident (2)

**Date:** November 29, 2016 **Type:** Border Clash (2)

**Involving:** India and Militants

**Location:** Nagrota army camp, Jammu and Kashmir; Chamliyal area, Samba sector, India **Summary:** Militants dressed as policemen storm an Indian military camp killing seven soldiers. Three militants were killed in the 12 hour+ gun battle. Separately, three infiltrators were killed and six others injured in the Chamliyal area of Samba sector. 504

#### 20. High-Risk Incident

Date: November 23, 2016

<sup>&</sup>lt;sup>500</sup> Pallava Bagla "Agni 5, India's Longest Range Nuclear Capable Missile, Successfully Test Fired: 10 Points, *NDTV*, December 26, 2016, <a href="http://www.ndtv.com/india-news/india-to-test-its-longest-range-agni-5-missile-1641785?type=news&id=1641785&category=india-news">http://www.ndtv.com/india-news/india-to-test-its-longest-range-agni-5-missile-1641785?type=news&id=1641785&category=india-news</a>.

For PTI "Pakistan conducts live anti-ship missile test in Arabian Sea," *The Economic Times*, December 21, 2016, <a href="http://economictimes.indiatimes.com/news/defence/pakistan-conducts-live-anti-ship-missile-test-in-arabian-sea/articleshow/56104495.cms">http://economictimes.indiatimes.com/news/defence/pakistan-conducts-live-anti-ship-missile-test-in-arabian-sea/articleshow/56104495.cms</a>.

Rajat Panditl, "Nuclear-capable Nirbhay cruise missile's test fails for the fourth time," *The Times of India*, December 21, 2016, <a href="http://timesofindia.indiatimes.com/india/nuclear-capable-nirbhay-cruise-missiles-test-fails-for-the-fourth-time/articleshow/56105444.cms">http://timesofindia.indiatimes.com/india/nuclear-capable-nirbhay-cruise-missiles-test-fails-for-the-fourth-time/articleshow/56105444.cms</a>.

The Times of India, December 21, 2016, <a href="https://timesofindia.indiatimes.com/india/nuclear-capable-nirbhay-cruise-missiles-test-fails-for-the-fourth-time/articleshow/56105444.cms">https://timesofindia.indiatimes.com/india/nuclear-capable-nirbhay-cruise-missiles-test-fails-for-the-fourth-time/articleshow/56105444.cms</a>.

The Times of India, December 21, 2016, <a href="https://timesofindia.indiatimes.com/india/nuclear-capable-nirbhay-cruise-missiles-test-fails-for-the-fourth-time/articleshow/56105444.cms">https://timesofindia.indiatimes.com/india/nuclear-capable-nirbhay-cruise-missiles-test-fails-for-the-fourth-time/articleshow/56105444.cms</a>.

The Times of India, December 21, 2016, <a href="https://timesofindia.indiatimes.com/india/nuclear-capable-nirbhay-cruise-missiles-test-fails-for-the-fourth-time/articleshow/56105444.cms">https://timesofindia.indiatimes.com/india/nuclear-capable-nirbhay-cruise-missiles-test-fails-for-the-fourth-time/articleshow/56105444.cms</a>.

The Times of India, December 21, 2016, <a href="https://timesofindia.indiatimes.com/india/nuclear-capable-nirbhay-cruise-missiles-test-fails-for-the-fourth-time/articleshow/56105444.cms">https://timesofindia.indiatimes.com/india/nuclear-capable-nirbhay-cruise-missiles-test-fails-for-the-fourth-time/articleshow/56105444.cms</a>.

The Times of India, December 21, 2016, <a href="https://timesofindia.indiatimes.com/india/nuclear-capable-nirbhay-cruise-missiles-test-fails-for-the-

<sup>&</sup>lt;sup>503</sup> PTI, "Pakistan successfully test-fires cruise missile 'Babur' with range of 700kms," *Hindustan Times*, December 14, 2016, <a href="http://www.hindustantimes.com/world-news/pakistan-successfully-test-fires-cruise-missile-babur-with-range-of-700kms/story-50FloJFcJRhFCjd7XqRdwK.html">http://www.hindustantimes.com/world-news/pakistan-successfully-test-fires-cruise-missile-babur-with-range-of-700kms/story-50FloJFcJRhFCjd7XqRdwK.html</a>.

Ravi Krishnan Khajuria, "7 soldiers, including 2 officers, killed in militant attack on Nagrota army camp," *Hindustan Times*, November 30, 2016, <a href="http://www.hindustantimes.com/india-news/two-jawans-injured-as-militants-strike-nagrota-camp-in-j-k/story-QIWC1IjU12FGGj2Iw0x3ZP.html">http://www.hindustantimes.com/india-news/two-jawans-injured-as-militants-strike-nagrota-camp-in-j-k/story-QIWC1IjU12FGGj2Iw0x3ZP.html</a>.

Type: Border Clash

**Involving:** India and Pakistan

**Location:** Line of Control, Kashmir

**Summary:** India and Pakistan exchange fire along the Line-of-Control killing at least 7 Indian soldiers, three Pakistani soldiers, and at least 11 civilians according to Pakistani officials. Each side

blamed the other for starting the firing. 505

### 21. High-Risk Incident

Date: November 22, 2016 Type: Border Clash Involving: India

**Location:** Line of Control, Kashmir

**Summary:** India says three soldiers had been killed and promises to retaliate for the attack. Officials decline to say if they were killed by Pakistan, militants, or a combination. <sup>506</sup>

22. **Date:** November 22, 2016

Type: Test Launch Involving: India

Location: Abdul Kalam Island

**Summary:** India successfully tests the Agni-I surface-to-surface medium-range ballistic missile. <sup>507</sup>

23. **Date:** November 21, 2016

Type: Test Launch Involving: India

Location: Chandipur, India

**Summary:** India successfully tests two nuclear-capable Prithvi-II ballistic missiles. <sup>508</sup>

24. **Date:** November 17-21, 2016 **Type:** Military Exercise

**Involving:** China and Pakistan **Location:** Karachi, Pakistan

**Summary:** The navies of China and Pakistan engage in joint military exercise aimed at enhancing

security and stability in the China-Pakistan Economic Corridor. 509

25. **Date:** November 16-30, 2016 **Type:** Military Exercise

<sup>&</sup>lt;sup>505</sup> Ayaz Gul, "Pakistan: Cross-Border Indian Fire Kills 11 Civilians, 3 Troops," *VOA News*, November 23, 2016, <a href="http://www.voanews.com/a/pakistan-india-cross-border-fire-kills-civilians-kashmir/3608217.html">http://www.voanews.com/a/pakistan-india-cross-border-fire-kills-civilians-kashmir/3608217.html</a>.

<sup>&</sup>lt;sup>506</sup> Hari Kumar and Salman Masood, "Fighting Intensifies Between India and Pakistan on Kashmir Line of Control," *The New York Times*, November 23, 2016, <a href="https://www.nytimes.com/2016/11/23/world/asia/india-pakistan-kashmir-fighting.html?smid=pl-share&r=0">https://www.nytimes.com/2016/11/23/world/asia/india-pakistan-kashmir-fighting.html?smid=pl-share&r=0</a>.

Hemant Kumar Rout, "India test-fires nuclear capable Agni-I ballistic missile," *The New Indian Express*, November 22, 2016, <a href="http://www.newindianexpress.com/nation/2016/nov/22/india-test-fires-nuclear-capable-agni-i-ballistic-missile-1541390.html">http://www.newindianexpress.com/nation/2016/nov/22/india-test-fires-nuclear-capable-agni-i-ballistic-missile-1541390.html</a>.

Hemant Kumar Rout, "India successfully conducts twin trial of Prithvi-II missile," *The New Indian Express*, November 21, 2016, <a href="http://www.newindianexpress.com/nation/2016/nov/21/india-successfully-conducts-twin-trial-of-prithvi-ii-missile-1541015.html">http://www.newindianexpress.com/nation/2016/nov/21/india-successfully-conducts-twin-trial-of-prithvi-ii-missile-1541015.html</a>.

<sup>509</sup> ANI, "Pakistan-China begin fourth joint naval exercise aimed at CPEC security," *The Indian Express*, November 18, 2016, <a href="http://indianexpress.com/article/world/world-news/pakistan-china-begin-fourth-joint-naval-exercise-aimed-at-cpec-security-4381894/">http://indianexpress.com/article/world/world-news/pakistan-china-begin-fourth-joint-naval-exercise-aimed-at-cpec-security-4381894/</a>.

**Involving:** China and India Location: Pune, India

Summary: India and China conduct the sixth annual "Hand in Hand" joint military training

exercise focusing on transnational terrorism and counter-terrorism operations. 510

26. Date: November 16, 2016 **Type:** Military Exercise **Involving:** Pakistan **Location:** Punjab, Pakistan

**Summary:** Pakistan conducts Exercise Eaad ul Barq to "reflect the preparedness of [the] armed

forces to respond to any national security threat."511

27. **Date:** November 14, 2016 **Type:** Sea Incident: Intercept **Involving:** India and Pakistan

**Location:** South of the Pakistani coast

**Summary:** The Pakistan Navy claims it detected an Indian submarine in waters south of the Pakistani border. According to officials, the submarine made efforts to escape detection but was continuously tracked and pushed out of Pakistani waters. <sup>512</sup> India later rejected the claim. <sup>513</sup>

## 28. High-Risk Incident

Date: November 9, 2016 **Type:** Border Clash

**Involving:** India and Pakistan Location: Line of Control, Kashmir

**Summary:** India and Pakistan exchange fire along the Line-of-Control killing one India soldier.

Each side accuses the other of a ceasefire violation.<sup>514</sup>

#### 29. High-Risk Incident

Date: November 8, 2016 **Type:** Border Clash

**Involving:** India and Pakistan **Location:** Line of Control, Kashmir

**Summary:** India and Pakistan exchange fire along the Line-of-Control killing two Indian soldiers and at least four Pakistani civilians. Each side accuses the other of a ceasefire violation. Several

others were injured in the incident. 515

http://www.thehindu.com/news/national/India-denies-Pak.-claims-of-submarine-intrusion/article16668233.ece. Fire exchanged across India-Pakistan border in Kashmir," *Al Jazeera*, November 9, 2016,

http://www.aljazeera.com/news/2016/11/deadly-cross-border-firings-india-pakistan-border-161109155002126.html.

<sup>515</sup> "Fire exchanged across India-Pakistan border in Kashmir," *Al Jazeera*, November 9, 2016, http://www.aliazeera.com/news/2016/11/deadly-cross-border-firings-india-pakistan-border-161109155002126.html.

<sup>&</sup>lt;sup>510</sup> Sushant Kulkarni, "India, China begin joint military exercise," *The Indian Express*, November 16, 2016, http://indianexpress.com/article/india/india-news-india/india-china-begin-joint-military-exercise-4379466/.

<sup>&</sup>lt;sup>511</sup> PTI, "Pakistan conducts military exercise close to Indian border," *The Indian Express*, November 17, 2016, http://indianexpress.com/article/world/world-news/pakistan-military-conducts-military-exercise-close-to-indian-border-

<sup>4379118/.

512</sup> Baqir Sajjad Syed, "Navy says Indian sub's bid to intrude into its waters foiled," *Dawn*, November 19, 2016, http://www.dawn.com/news/1297315/navy-says-indian-subs-bid-to-intrude-into-its-waters-foiled.

<sup>513 &</sup>quot;India denies Pak. Claims of submarine intrusion," *The Hindu*, November 19, 2016,

30. **Date:** November 3-11, 2016 **Type:** Military Exercise

**Involving:** India **Location:** Arabian Sea

Summary: The Western Naval Command of the Indian Navy, the Indian Air Force, and the Indian

Coast Guard partake in 'Exercise Paschim Leher,' involving mobilization and operational

synchronization and testing combat readiness. 516

### 31. High-Risk Incident

**Date:** November 1, 2016 **Type:** Border Clash

**Involving:** India and Pakistan **Location:** Line of Control, Kashmir

**Summary:** India and Pakistan exchange fire along the Line-of-Control killing six civilians and wounding nine others according to Indian officials. Each side blamed the other for starting the

firing.<sup>517</sup>

## 32. High-Risk Incident

**Date:** October 31, 2016 **Type:** Border Clash

**Involving:** India and Pakistan **Location:** Line of Control, Kashmir

Summary: India and Pakistan exchange fire along the Line-of-Control killing one Indian soldier,

four civilians and wounding ten others. Each side blamed the other for starting the firing. 518

#### 33. High-Risk Incident

**Date:** October 28, 2016 **Type:** Border Clash

**Involving:** India and Pakistan **Location:** Line of Control, Kashmir

Summary: An Indian officer claims a civilian and a soldier have been killed by mortars and

automatic gunfire from Pakistani troops. Pakistan denies the claim. 519

## 34. High-Risk Incident

**Date:** October 22, 2016 **Type:** Border Clash

**Involving:** India and Pakistan

Location: Jammu

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<sup>&</sup>lt;sup>516</sup> IANS, "Indian Navy concludes major exercise in Arabian Sea," *Business Standard*, November 11, 2016, http://www.business-standard.com/article/news-ians/indian-navy-concludes-major-exercise-in-arabian-sea-116111101639 1.html.

<sup>517</sup> Aijaz Hussain, "India, Pakistan trade border fire in Kashmir, 6 killed," *The Jakarta Post*, November 1, 2016, <a href="http://www.thejakartapost.com/news/2016/11/01/india-pakistan-trade-border-fire-in-kashmir-6-killed.html">http://www.thejakartapost.com/news/2016/11/01/india-pakistan-trade-border-fire-in-kashmir-6-killed.html</a>. http://www.thejakartapost.com/news/2016/11/01/india-pakistan-trade-border-fire-in-kashmir-6-killed.html.

Associated Press, "India, Pakistan trade fire and blame along Kashmir border," *Fox News*, October 28, 2016, http://www.foxnews.com/world/2016/10/28/india-pakistan-trade-fire-and-blame-along-kashmir-border.html.

**Summary:** India says it killed seven Pakistani border guards in retaliation for "unprovoked firing" by Pakistan. The Pakistani army refuted the claim, saying there was "no loss" on their side of the border. <sup>520</sup>

#### 35. Provocative Incident

**Date:** October 5, 2016 **Type:** Border Clash

**Involving:** India and Pakistan **Location:** Line of Control, Kashmir

Summary: India and Pakistan exchange fire along the Line-of-Control. Pakistan accused India of

provoking the artillery fire. One hundred to 150 people were evacuated from the area. 521

## 36. High-Risk Incident

**Date:** October 3, 2016 **Type:** Border Clash

**Involving:** India and Pakistan **Location:** Line of Control, Kashmir

Summary: India and Pakistan exchange fire along the Line-of-Control killing one Indian

paramilitary solider. Each side blamed the other for starting the firing. 522

# 37. High-Risk Incident

**Date:** October 2, 2016 **Type:** Border Clash

**Involving:** India and Militants

**Location:** Kashmir

**Summary:** An Indian army camp is reportedly attacked. One soldier was killed. 523

#### 38. Provocative Incident

**Date:** October 1, 2016 **Type:** Border Clash

**Involving:** India and Pakistan

Location: Line of Control, Kashmir

**Summary:** India and Pakistan exchange fire along the Line-of-Control. Each side blamed the other

for starting the firing.<sup>524</sup>

#### 39. High-Risk Incident

**Date:** September 29, 2016 **Type:** Border Clash

<sup>520</sup> Ravi Krishnan Khajuria, "7 Pakistani Rangers killed in retaliatory firing along Jammu border: BSF," *Hindustan Times*, October 22, 2016, <a href="http://www.hindustantimes.com/india-news/bsf-says-it-killed-7-pakistani-rangers-a-militant-along-jammu-border/story-dt2WyZqryYDGYrJMYZ0CIJ.html">http://www.hindustantimes.com/india-news/bsf-says-it-killed-7-pakistani-rangers-a-militant-along-jammu-border/story-dt2WyZqryYDGYrJMYZ0CIJ.html</a>.

 $\frac{http://www.cnbc.com/2016/10/01/india-pakistan-tensions-gunfire-across-loc-kashmir-border-after-indias-strike-on-militants.html.}{}$ 

<sup>521 &</sup>quot;India-Pakistan armies exchange more fire in Kashmir," *AlJazeera*, October 5, 2016,

http://www.aljazeera.com/news/2016/10/india-pakistan-armies-exchange-fire-kashmir-161005172916992.html. 
Associated Press, "India, Pakistan troops exchange fire at border in Kashmir," *Fox News*, October 3, 2016,

http://www.foxnews.com/world/2016/10/03/india-pakistan-troops-exchange-fire-at-border-in-kashmir.html.

Associated Press, "India, Pakistan troops exchange fire at border in Kashmir," *Fox News*, October 3, 2016, http://www.foxnews.com/world/2016/10/03/india-pakistan-troops-exchange-fire-at-border-in-kashmir.html.

Reuters, "India, Pakistan exchange fire across Kashmir border," *CNBC*, October 1, 2016,

**Involving:** India and Pakistan **Location:** Line of Control, Kashmir

Summary: India and Pakistan exchange fire along the Line-of-Control killing two Pakistani

soldiers. Each side blamed the other for starting the firing. 525

### 40. High-Risk Incident

Date: September 30, 2016

**Type:** Border Clash

**Involving:** India and Militants **Location:** Line of Control, Kashmir

**Summary:** Indian troops cross into Pakistan-administered Kashmir and kill suspected militants in a "surgical strike," according to Indian officials. Pakistani officials say the operation never took

place. 526

41. **Date:** September 26 –October 10, 2016

**Type:** Military Exercise

**Involving:** Pakistan and Russia

**Location:** Pakistan

Summary: Russia and Pakistan conduct their first joint military exercises – Friendship 2016. 527

## 42. High-Risk Incident

Date: September 20, 2016

**Type:** Border Clash

**Involving:** India and Pakistan **Location:** Line of Control, Kashmir

Summary: India and Pakistan exchange fire along the Line-of-Control killing 18 soldiers. 528

43. Date: September 20, 2016

Type: Test Fire Involving: India

Location: coast of Odisha, India

Summary: India successfully tests a Barak-8 long-range surface-to-air nuclear-capable ballistic

missile, which was jointly developed with Israel. 529

### 44. High Risk Incident

Date: September 18, 2016

Type: Border Clash

**Involving:** India and Militants

525 "Nuclear-armed neighbors, both U.S. allies, exchange fire," CBS, September 29, 2016,

 $\underline{\underline{http://www.cbsnews.com/news/india-pakistan-trade-fire-kashmir-border-pakistani-troops-killed/}.$ 

<sup>&</sup>lt;sup>526</sup> Reuters, "India, Pakistan exchange fire across Kashmir border," *CNBC*, October 1, 2016, http://www.cnbc.com/2016/10/01/india-pakistan-tensions-gunfire-across-loc-kashmir-border-after-indias-strike-on-militants.html.

militants.html.

527 "Russia, Pakistan conduct first-ever joint military drills," *RT*, September 27, 2016, <a href="https://www.rt.com/news/360873-russia-pakistan-military-drills/">https://www.rt.com/news/360873-russia-pakistan-military-drills/</a>.

528 AFP, "Indian, Pakistani troops exchange fire in Kashmir," *New Strait Times*, September 20, 2016,

<sup>&</sup>lt;sup>528</sup> AFP, "Indian, Pakistani troops exchange fire in Kashmir," *New Strait Times*, September 20, 2016, http://www.nst.com.my/news/2016/09/174712/indian-pakistani-troops-exchange-fire-kashmir.

<sup>529</sup> IANS, "India successfully test-fires Barak-8 missile," *Business Standard*, September 20, 2016, <a href="http://www.business-standard.com/article/news-ians/india-successfully-test-fires-barak-8-missile-116092001021\_1.html">http://www.business-standard.com/article/news-ians/india-successfully-test-fires-barak-8-missile-116092001021\_1.html</a>.

Location: Uri, Kashmir

**Summary:** Militants storm an Indian Army base near the border with Pakistan, killing 19 soldiers. Lt. Gen. Ranbir Singh, India's director general of military operations, later expressed concerns to his counterpart in the Pakistani Army, claiming the militants were "foreign terrorists" carrying items with "Pakistani markings." A Pakistani official dismissed allegations of Pakistan's involvement. Four of the militants were also killed in the fighting. 530

### 45. High-Risk Incident

**Date:** July 9-20, 2016 **Type:** Border Clash

**Involving:** India and Pakistan **Location:** Line of Control. Kashmir

**Summary:** India security forces fire on protesters in Kashmir killing almost 45 people and injuring more than 2,000. Pakistan observes a "Black Day" in honor of those killed and accuses India of "atrocities, human rights violations and a killing spree of innocent people in Kashmir." Violence escalated in the region after a Hizbul Mujahideen militant was killed on July 8.531

46. **Date:** June 30-July 1, 2016 **Type:** Test Launch (3) **Involving:** India

Location: Chandipur, India

Summary: India successfully test fires three new surface-to-air missiles, which was developed

jointly with Israel.<sup>532</sup>

## 47. High-Risk Incident

**Date:** June 25, 2016 **Type:** Border Clash

**Involving:** India and Militants

Location: Pulwama, Jammu and Kashmir

**Summary:** Militants ambush a convoy in Pulwama district killing eight Indian policemen and injuring 20 others. Pakistan-based Lashkar-e-Taiba claimed responsibility for the convoy. Two

militants were also killed.<sup>533</sup>

48. **Date:** May 27, 2016 **Type:** Test Fire **Involving:** India

Location: Pokharan firing range

**Summary:** India successfully test fires the BrahMos land-attack supersonic cruise missile. 534

<sup>530</sup> Hari Kumar and Geeta Anand, "17 Indian Soldiers Killed by Militants in Kashmir," *The New York Times*, September 18, 2016, https://www.nytimes.com/2016/09/19/world/asia/17-indian-soldiers-killed-by-militants-in-kashmir.html? r=0.

<sup>531</sup> Arshad R. Zargar, "Dozens killed as tensions flare between nuclear neighbors," CBS News, July 20, 2016, http://www.cbsnews.com/news/kashmir-india-protests-killed-clashes-police-pakistan/.

Rahul Bedi, "India successfully tests MR-SAM system developed with Israel," IHS Jane's 360, July 1, 2016, https://thaimilitaryandasianregion.wordpress.com/2016/07/03/india-successfully-tests-mr-sam-system-developed-with-

israel/.
533 Ashiq Hussain, "8 CRPF men, 2 militants killed in Kashmir ambush, LeT claims responsibility," *Hindustan Times*, June 25, 2016, http://www.hindustantimes.com/india-news/5-crpf-jawans-killed-in-kashmir-highway-attack-two-militants-shotdown/story-auH1u95ETbvH9ajuWFXnyO.html.

<sup>534</sup> PTI, "BrahMos missile successfully test-fired, hits target," *The Indian Express*, May 27, 2016, http://indianexpress.com/article/india/india-news-india/brahmos-missile-test-indian-air-force-pokharan-2822200/ 49. Date: May 18, 2016 **Type:** Test Launch **Involving:** India

Location: Chandipur, India

**Summary:** India successfully test fires the nuclear-capable Prithvi-II missile. 535

50. Date: May 15, 2016 **Type:** Military Exercise **Involving:** China

Location: Indian Ocean

Summary: The Chinese Navy's South China Sea Fleet carries out an anti-piracy drill to enhance

emergency response capacity and capability. 536

51. Date: May 15, 2016 **Type:** Test Launch **Involving:** India

Location: Bay of Bengal

**Summary:** India successfully test fires the indigenously-developed supersonic interceptor missile. <sup>537</sup> Pakistan reacted to the test with "serious concerns." <sup>538</sup>

52. **Date:** April 21-22, 2016 **Type:** Military Exercise

**Involving:** India

Location: Rajasthan, India

**Summary**: Around 30,000 Indian troops take part in a military exercise aimed at honing

countering chemical, biological, radiological and nuclear warfare. 539

53. **Date:** April 19, 2016

Type: Test Involving: India

Location: Undisclosed

Summary: The Indian Navy announces the first submarine capable of firing nuclear ballistic

missiles – the INS Arihant – is undergoing sea trials. 540

<sup>535</sup> PTI, "India successfully test fires indigenously developed Prithvi-II missile," *The Indian Express*, May 18, 2016, http://indianexpress.com/article/india/india-news-india/india-successfully-test-fires-indigenously-developed-prithyi-iimissile-2806807/.

536 "Chinese naval taskforce conducts anti-piracy drill in Indian Ocean,", China Military Online as cited by the Ministry of National Defense, The People's Republic of China, May 16, 2016, http://eng.mod.gov.cn/DefenseNews/2016-

05/16/content 4659371.htm.

http://www.livemint.com/Politics/wko3yut33Q7wo2JEll9JlN/Indian-Army-holds-war-game-to-deal-with-tactical-nuclear-

<sup>&</sup>lt;sup>537</sup> PTI, "India successfully tests supersonic interceptor missile capable of destroying enemy missiles," *The Indian Express*, May 15, 2016, http://indianexpress.com/article/india/india-news-india/india-successfully-tests-supersonic-interceptormissile-capable-of-destroying-enemy-missiles-2801737/.

<sup>&</sup>lt;sup>538</sup> Ayaz Gul, "Pakistan Reacts Strongly to Latest Indian Missile Tests," VOA News, May 19, 2016, http://www.voanews.com/a/pakistan-reacts-strongly-latest-indian-missile-tests/3337590.html. <sup>539</sup> "Indian Army holds war game to deal with tactical nuclear attack," *LiveMint*, April 21, 2016,

<sup>&</sup>lt;sup>540</sup> "India tests 1st nuclear-propeeled ballistic missile submarine," RT, April 19, 2016, https://www.rt.com/news/340146arihant-nuclear-submarine-trial/.

54. **Date:** April 9, 2016 **Type:** Test Fire **Involving:** Pakistan **Location:** Arabian Sea

Summary: Pakistan conducts a successful test fire of an anti-ship missile. 541

55. **Date:** March 13, 2016 **Type:** Test Launch **Involving:** India

Location: Off the coast of Odisha

Summary: India successfully test-fires a domestically built nuclear-capable intermediate range

Agni-I ballistic missile, which covered 700 km. 542

56. **Date:** March 7, 2016 **Type:** Test Launch **Involving:** India

Location: Bay of Bengal

Summary: India completes a successful test launch of the K-4 nuclear-capable submarine

launched ballistic missile from a submerged pontoon. 543

57. **Date:** February 24, 2016 **Type:** Defense News **Involving:** India **Location:** New Delhi

**Summary:** India media reports that the country's first indigenous nuclear-powered submarine has

passed its sea-trials and "can now be commissioned at any time." 544

58. **Date:** January 19, 2016 **Type:** Test Launch **Involving:** Pakistan **Location:** Pakistan

**Summary:** Pakistan successfully test fires a dual-capable Ra'ad air-launched cruise missile. 545

# 59. High-Risk Incident

**Date:** January 2, 2016 **Type:** Border Clash

**Involving:** India and Militants

41

<sup>541</sup> "Pakistan successfully test-fires anti-ship 'Zarb' missile," *The Express Tribune*, April 9, 2016, <a href="https://tribune.com.pk/story/1081688/pakistan-successfully-test-fires-anti-ship-zarb-missile/">https://tribune.com.pk/story/1081688/pakistan-successfully-test-fires-anti-ship-zarb-missile/</a>.

http://www.newindianexpress.com/states/odisha/K-4-Missile-Test-A-Roaring-Success/2016/03/16/article3329130.ece. <sup>544</sup> Dave Majumdar, "Look out, China: India's Lethal Ballistic Missile Sub Is Ready to Go," *The National Interest*, February 24, 2016, http://nationalinterest.org/blog/look-out-china-indias-lethal-ballistic-missile-sub-ready-go-15312.

<sup>545</sup> Richard Tomkins, "Pakistan tests air-launched cruise missile," *UPI*, January 20, 2016,

 $\underline{\text{http://www.upi.com/Business\_News/Security-Industry/2016/01/20/Pakistan-tests-air-launched-cruise-missile/7081453325830/.}$ 

<sup>542</sup> PTI, "India test-fires nuclear-capable Agni-I ballistic missile," *The Economic Times*, March 14, 2016, http://economictimes.indiatimes.com/news/defence/india-test-fires-nuclear-capable-agni-i-ballistic-missile/articleshow/51390769.cms?utm\_source=contentofinterest&utm\_medium=text&utm\_campaign=cppst.

<sup>543</sup> Hemant Kumar Rout, "K-4 Missile Test A Roaring Success," *The New Indian Express*, March 16, 2016, http://www.newindianexpress.com/states/odisha/K-4-Missile-Test-A-Roaring-Success/2016/03/16/article332913

Location: Pathankot Air Force Base, India

**Summary:** At least four gunmen enter an Indian air force base and exchange fire with security forces. Two of the attackers were killed. India accuses Pakistan of arming and training insurgents fighting for Kashmir's independence. 546

60. Date: December 30, 2015

Type: Test Launch Involving: India Location: Arabian Sea

Summary: India successfully test-fires a Barak 8 surface-to-air missile, which has a range of

nearly 70 km, from the *INS Kolkata*. 547

61. Date: December 15, 2015

Type: Test Launch Involving: Pakistan

Location: Near the Arabian Sea

Summary: Pakistan successfully test-fires a dual-capable Shaheen 1A surface-to-surface ballistic

missile, which has a range of 900 km. 548

62. Date: December 11, 2015

Type: Test Launch Involving: Pakistan

Location: Near the Arabian Sea

**Summary:** Pakistan successfully test-fires a Shaheen III intermediate-range nuclear-capable

ballistic missile. The missile traveled 2,750 km. 549

63. **Date:** November 27, 2015

Type: Test Launch Involving: India

Location: Off the coast of Odisha

**Summary:** India successfully test-fires a domestically built nuclear-capable intermediate range

Agni-I ballistic missile. 550

64. **Date:** November 26, 2015

Type: Test Launch Involving: India

Location: Chandipur, Odisha, India

<sup>546</sup> "Gunmen attack Indian air base near Pakistan border," *CBS News*, January 1, 2016, http://www.cbsnews.com/news/gunmen-attack-indian-air-base-near-pakistan-border/.

https://www.rt.com/news/325592-pakistan-tests-nuclear-missile/.

<sup>&</sup>lt;sup>547</sup> PTI, "Indian Navy successfully test fires Barak long range missile from INS Kolkata," *The Indian Express*, December 30, 2015, <a href="http://indianexpress.com/article/india/india-news-india/navy-successfully-test-fires-barak-8-long-range-missile-from-ins-kolkata/">http://indianexpress.com/article/india/india-news-india/navy-successfully-test-fires-barak-8-long-range-missile-from-ins-kolkata/</a>.

<sup>&</sup>lt;sup>548</sup> Agence France-Presse, "Pakistan Test-Fires Second Missile in Three Days," *Defense News*, December 15, 2015, <a href="http://www.defensenews.com/story/defense/2015/12/15/pakistan-test-fires-second-missile-three-days/77391618/">http://www.defensenews.com/story/defense/2015/12/15/pakistan-test-fires-second-missile-three-days/77391618/</a>.
<sup>549</sup> "Pakistan test-fires its most advanced nuclear-capable ballistic missile," *RT*, December 11, 2015,

<sup>&</sup>lt;sup>550</sup> PTI, "India test-fires nuclear-capable Agni-I ballistic missile," *The Economic Times*, March 14, 2016, http://economictimes.indiatimes.com/news/defence/india-test-fires-nuclear-capable-agni-i-ballistic-missile/articleshow/51390769.cms?utm\_source=contentofinterest&utm\_medium=text&utm\_campaign=cppst.

**Summary:** India test-fires the Prithvi-II missile, an indigenously developed nuclear-capable missile <sup>551</sup>

65. **Date:** November 26, 2015

**Type:** Test Launch

Involving: India and Israel

Location: Haifa, Mediterranean Sea

**Summary:** The Barak 8 long-range surface-to-air missile, an Indian missile jointly designed and developed with Israel, completes a successful test flight, destroying an incoming fast-moving air

target. 552

### 66. High-Risk Incident

Date: November 25, 2015

Type: Border Clash

**Involving:** India and Militants

Location: Kashmir

Summary: A civilian and three militants are killed in the Kashmir region during a gun battle

between militants and the Indian Army near the Pakistan border. 553

67. Date: November 25, 2015

Type: Test launch Involving: India Location: India

Summary: The Arihant, India's first indigenously-developed nuclear attack submarine,

successfully test fires an unarmed missile. 554

#### 68. High-Risk Incident

Date: November 23, 2015

**Type:** Border Clash

**Involving:** India and Militants

Location: Kashmir

Summary: Four militants are killed in two gunfights with the Indian Army near the disputed

border with Pakistan. 555

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<sup>&</sup>lt;sup>551</sup> "India test-fires nuclear-capable Prithvi II missile," *Pakistan Today*, November 26, 2015, <a href="http://www.pakistantoday.com.pk/2015/11/26/national/india-test-fires-nuclear-capable-prithvi-ii-missile-3/">http://www.pakistantoday.com.pk/2015/11/26/national/india-test-fires-nuclear-capable-prithvi-ii-missile-3/</a>.

<sup>&</sup>lt;sup>552</sup> IANS, "India and Israel Have Just Test Fired A Missile That Can Destroy Aerial Attacks," *The India Times*, November 28, 2015, <a href="http://www.indiatimes.com/news/india/india-and-israel-have-just-test-fired-a-missile-that-can-destroy-aerial-attacks-247821.html">http://www.indiatimes.com/news/india/india-and-israel-have-just-test-fired-a-missile-that-can-destroy-aerial-attacks-247821.html</a>.

<sup>553</sup> Hari Kumar, "4 Killed in Gunfight Between Indian Army and Militants in Kashmir," *The New York Times*, November 25, 2015, <a href="http://www.nytimes.com/2015/11/26/world/asia/india-kashmir-army-militants.html">http://www.nytimes.com/2015/11/26/world/asia/india-kashmir-army-militants.html</a>? r=0.

IANS, "N-capable Arihant submarine successfully test-fires unarmed missile," *Business Standard*, November 26, 2015, <a href="http://www.business-standard.com/article/news-ians/n-capable-arihant-submarine-successfully-test-fires-unarmed-missile-special-to-ians-115112600705">http://www.business-standard.com/article/news-ians/n-capable-arihant-submarine-successfully-test-fires-unarmed-missile-special-to-ians-115112600705</a> 1.html.

\*\*The property of the prop

Hari Kumar, "4 Killed in Gunfight Between Indian Army and Militants in Kashmir," *The New York Times*, November 25, 2015, <a href="http://www.nytimes.com/2015/11/26/world/asia/india-kashmir-army-militants.html">http://www.nytimes.com/2015/11/26/world/asia/india-kashmir-army-militants.html</a>? r=0.

69. Date: November 22, 2015

Type: Test Launch Involving: India

Location: Abdul Kalam Island, India

**Summary:** India completes a successful test launch of the Advanced Air Defense missile, an indigenously developed supersonic interceptor missile that is part of India's Ballistic Missile

Defense initiative. 556

70. **Date:** November 14, 2015

Type: Test Launch Involving: Pakistan

Location: North Arabian Sea

Summary: Pakistan successfully test-fires an anti-ship guided missile. 557

71. **Date:** November 9, 2015

Type: Test Launch Involving: India

Location: Abdul Kalam Island, India

**Summary:** India completes a successful test-fire of the Agni-IV intermediate-range ballistic

missile.558

72. **Date:** November 3-12, 2015

Type: Military Exercise Involving: Pakistan

Location: North Arabian Sea

Summary: The Pakistan Navy conducts major domestic exercises in the North Arabian Sea to test

the Navy's ability to maintain regional peace, security and stability. 559

73. Date: October 31, 2015

Type: Test Launch Involving: India

**Location:** Arabian Sea

Summary: India completes a successful test-launch of the BrahMos supersonic cruise missile from

Ankit Panda, "India Tests Supersonic Advanced Air Defense Missile," *The Diplomat*, November 23, 2015, <a href="http://thediplomat.com/2015/11/india-tests-supersonic-advanced-air-defense-missile/">http://thediplomat.com/2015/11/india-tests-supersonic-advanced-air-defense-missile/</a>.

\*\*The Nation November 15, 2015, <a href="http://nation.com.pk/national/15-Nov-">http://nation.com.pk/national/15-Nov-</a>

<sup>&</sup>lt;sup>557</sup> "Pakistan test-fires anti-ship guided missile," *The Nation* November 15, 2015, <a href="http://nation.com.pk/national/15-Nov-2015/pakistan-test-fires-anti-ship-guided-missile">http://nation.com.pk/national/15-Nov-2015/pakistan-test-fires-anti-ship-guided-missile</a>.

<sup>558</sup>Y. Mallikarjun, "Agni-IV missile successfully test-fired," *The Hindu*, November 9, 2015,

<sup>558</sup>Y. Mallikarjun, "Agni-IV missile successfully test-fired," *The Hindu*, November 9, 2015, http://www.thehindu.com/news/cities/Hyderabad/agniiv-successfully-testfired/article7860816.ece.
559 Usman Ansari, "Pakistan Wraps Up Major Naval Exercise," *DefenseNews*, November 13, 2015,

http://www.defensenews.com/story/defense-news/2015/11/13/pakistan-wraps-up-major-naval-exercise/75700140/.

the newly-commissioned stealth destroyer INS Kochi. 560

## 74. High-Risk Incident

**Date:** October 26, 2015 **Type:** Border Clash

**Involving:** India and Pakistan

Location: Kashmir

Summary: Two Pakistani children are reportedly killed during fire exchange between Indian and

Pakistani military forces in Kashmir. 561

### 75. **Date:** October 16, 2015

Type: Test Launch Involving: India

Location: Chandipur, Odisha, India

**Summary:** India aborts a test involving a long-range cruise missile, Nirbhay, terminating the

missile mid-flight.<sup>562</sup>

## 76. High-Risk Incident

Date: September 15, 2015

Type: Border Clash

**Involving:** India and Pakistan

Location: Kashmir

Summary: A Pakistani solider is killed during fire exchange with Indian troops along the disputed

Kashmir and Jammu border. 563

#### 77. High-Risk Incident

**Date:** September 5, 2015 **Type:** Border Clash

**Involving:** India and Pakistan

Location: Kashmir

**Summary:** According to the Indian military, a soldier is wounded in a clash with the Pakistan

Rajat Pandit, "BrahMos missile tested successfully from latest stealth destroyer INS Kochi," *Times of India*, November

1, 2015, <a href="http://timesofindia.indiatimes.com/india/BrahMos-missile-tested-successfully-from-latest-stealth-destroyer-INS-Kochi/articleshow/49620328.cms">http://timesofindia.indiatimes.com/india/BrahMos-missile-tested-successfully-from-latest-stealth-destroyer-INS-Kochi/articleshow/49620328.cms</a>.

\*\*Two children die in new Kashmir cross-border clashes," \*\*Press TV\*\*, October 26, 2015,

http://www.presstv.ir/Detail/2015/10/26/435004/Pakistan-India-Kashmir-crossborder-shelling.

562 Franz-Stefan Gady, "Revealed: India's Deadly New Missile Fails Flight-Test," *The Diplomat*, October 20, 2015, http://thediplomat.com/2015/10/revealed-indias-deadly-new-missile-fails-flight-test/.

<sup>&</sup>lt;sup>563</sup> Fred Lambert, "Pakistani soldier killed in cross-border skirmish with Indian troops in Kashmir," *UPI*, September 16, 2015, <a href="http://www.upi.com/Top\_News/World-News/2015/09/15/Pakistani-soldier-killed-in-cross-border-skirmish-with-Indian-troops-in-Kashmir/7491442353535/">http://www.upi.com/Top\_News/World-News/2015/09/15/Pakistani-soldier-killed-in-cross-border-skirmish-with-Indian-troops-in-Kashmir/7491442353535/</a>.

military along the border region of Kashmir and Jammu. 564

## 78. High-Risk Incident

**Date:** August 28, 2015 **Type:** Border Clash

**Involving:** India and Pakistan

Location: Kashmir

**Summary:** At least 11 civilians are killed in clashes between Indian and Pakistani security forces on both sides of the border. Both countries accused the other of starting the confrontation. <sup>565</sup>

## 79. High-Risk Incident

**Date:** August 25, 2015 **Type:** Border Clash

**Involving:** India and Pakistan

**Location:** Kashmir

**Summary:** According to the Indian military, an Indian army officer is killed by a Pakistani

military sniper. 566

## 80. High-Risk Incident

**Date:** August 15-16, 2015

Type: Border Clash

**Involving:** India and Pakistan

Location: Kashmir

**Summary:** Cross-border clashes between Indian and Pakistani troops along the Line of Control

kill multiple civilians.<sup>567</sup>

## 81. High-Risk Incident

**Date:** August 4, 2015 **Type:** Border Clash

**Involving:** India and Pakistan

Location: Kashmir

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<sup>&</sup>lt;sup>564</sup> Fred Lambert, "India: Soldier wounded in clash with Pakistani military in Kashmir," *UPI*, September 6. 2015, <a href="http://www.upi.com/Top\_News/World-News/2015/09/06/India-Soldier-wounded-in-clash-with-Pakistani-military-in-Kashmir/7201441573947/">http://www.upi.com/Top\_News/World-News/2015/09/06/India-Soldier-wounded-in-clash-with-Pakistani-military-in-Kashmir/7201441573947/</a>.

Tim Craig, "Clashes erupt between India and Pakistan along disputed boarder," *The Washington Post*, August 28, 2015, <a href="https://www.washingtonpost.com/world/asia">https://www.washingtonpost.com/world/asia</a> pacific/clashes-erupt-between-india-and-pakistan-along-disputed-border/2015/08/28/52453d4a-4d6b-11e5-bfb9-9736d04fc8e4 story.html.

border/2015/08/28/52453d4a-4d6b-11e5-bfb9-9736d04fc8e4\_story.html.

566 "India military officer killed in exchange of fire with Pakistan on Kashmir LoC," *Xinhua*, August 25, 2015, http://news.xinhuanet.com/english/2015-08/25/c 134554685.htm.

<sup>&</sup>lt;sup>567</sup>Fred Lambert, "India and Pakistan exchange fire along border in Kashmir," *UPI*, August 16, 2015, <a href="http://www.upi.com/Top\_News/World-News/2015/08/16/India-and-Pakistan-exchange-fire-along-border-in-Kashmir/2051439754341/?spt=sec&or=tn.">http://www.upi.com/Top\_News/World-News/2015/08/16/India-and-Pakistan-exchange-fire-along-border-in-Kashmir/2051439754341/?spt=sec&or=tn.</a>

Summary: Cross-border firing in the Kashmir region kills two Pakistanis and one Indian. 568

#### 82. Provocative Incident

Date: July 20, 2015 Type: Border Clash

**Involving:** India and Pakistan

Location: Kashmir

**Summary:** Indian and Pakistani troops fire at each other across the disputed border in the Kashmir

region.<sup>569</sup>

### 83. High-Risk Incident

**Date:** July 15, 2015 Type: Border Clash

**Involving:** India and Pakistan

**Location:** Kashmir

**Summary:** India and Pakistan exchange fire along the Line of Control killing at least 5 civilians.

The Pakistani army also claims it shot down an Indian spy drone in Kashmir. 570

84. Date: June 16, 2015 **Type:** Defense News

**Involving:** India and Pakistan

**Location:** Pakistan

Summary: After Indian troops conduct a military operation in which media reports claim Indian soldiers crossed into Burma and killed more than 50 militants. Pakistan threatens swift retaliation should India try similar operations along its border with Pakistan. 571

85. Date: May 8, 2015 **Type:** Test Launch **Involving:** India

Location: Car Nicobar Islands, India

Summary: India completes a successful test launch of the BrahMos land-attack cruise missile, a

multi-mission missile with a range of 290 km. 572

<sup>569</sup> Indian, Pakistani forces exchange fire in Kashmir," *PressTV*, July 20, 2015, http://www.presstv.ir/Detail/2015/07/20/421077/India-Pakistan-Kashmir-Poonch-District.

http://articles.economictimes.indiatimes.com/2015-05-08/news/61947879 1 brahmos-missile-brahmos-aerospacebrahmos-block.

<sup>&</sup>lt;sup>568</sup>The Associated Press, "Pakistani, Indian troops trade fire in Kashmir, killing 3," *Aljazeera*, August 4, 2015, http://america.aliazeera.com/articles/2015/8/4/pakistani-indian-troops-trade-fire-in-kashmir.html.

<sup>570 &</sup>quot;Kashmir firing: Five civilians killed after drone downed," BBC News, July 16, 2015, http://www.bbc.com/news/world-

asia-india-33546468.

Tim Craig and Annie Gowen, "Indian military operation along Burma border opens new rift with Pakistan," *The* Guardian, June 16, 2015, http://www.theguardian.com/world/2015/jun/16/india-pakistan-burma-border-tension. <sup>572</sup> PTI, "BrahMos missile test-fired, meets all flight parameters," *The Economic Times*, May 8, 2015,

86. **Date:** April 16, 2015 **Type:** Test Launch **Involving:** India

Location: Chandipur, Odisha, India

Summary: India completes a successful test launch of the Agni-II ballistic missile, which has a

range of over 3,000 km.<sup>573</sup>

87. Date: April 15, 2015 **Type:** Defense News

**Involving:** Pakistan and Russia

**Location:** Moscow

**Summary:** Pakistan and Russia agree to hold joint military exercises in an effort to enhance defense cooperation. Other points of collaboration include increasing "military cooperation in

training and import of arms and equipment."574

88. **Date:** April 15, 2015 **Type:** Test Launch **Involving:** Pakistan

**Location:** Jhelum District, Pakistan

Summary: Pakistan completes a successful test launch of the Ghauri Missile System, which can

carry nuclear warheads up to 1.300 km. 575

89. Date: April 9, 2015 **Type:** Test Launch **Involving:** India

**Location:** Off the coast of Odisha, India

**Summary:** India completes a successful test launch of the Dhanush ballistic missile, which has a

strike range of 350 km, off a naval ship. 576

90. **Date:** April 2, 2015 **Type:** Defense News

**Involving:** Pakistan and China

Location: Islamabad

Summary: Pakistan defense officials share plans to buy eight submarines from China in efforts to

<sup>573</sup> "India test fires nuclear-capable ballistic missile, a day after Pakistan fires Ghauri missile," *Firstpost*, April 16, 2015, http://www.firstpost.com/india/india-test-fires-nuclear-capable-ballistic-missile-day-pakistan-fires-ghauri-missile-

http://thediplomat.com/2015/04/pakistan-tests-ballistic-missile/.

<sup>574 &</sup>quot;Defence union: Pakistan, Russia to conduct joint military drills," *The Express Tribune*, April 16, 2015, http://tribune.com.pk/story/870725/defence-union-pakistan-russia-to-conduct-joint-military-drills/. Franz-Stefan Gady, "Pakistan Tests Ballistic Missile," *The Diplomat*, April 18, 2015,

<sup>&</sup>lt;sup>576</sup> PTI "Nuclear-capable Dhanush missile successfully test-fired." The Economic Times, April 9, 2015, http://economictimes.indiatimes.com/news/defence/nuclear-capable-dhanush-missile-successfully-testfired/articleshow/46864757.cms.

modernize its submarine fleet.<sup>577</sup>

91. Date: March 9, 2015 Type: Test Launch Involving: Pakistan

Location: Near the Arabian Sea

Summary: Pakistan completes a successful test launch of the Shaheen-III surface-to-surface

ballistic missile, which has a range of 2,750 km. 578

92. **Date:** February 14, 2015

Type: Test Launch Involving: India

Location: Arabian Sea

Summary: India completes a successful test of the supersonic BrahMos cruise missile from the

INS Kolkata. 579

### 93. High-Risk Incident

**Date:** February 14, 2015 **Type:** Border Clash

**Involving:** India and Pakistan

Location: Kashmir

Summary: The Pakistani military reports that a civilian was killed when fire was exchanged

between Indian and Pakistani troops across the Line of Control (LOC). 580

94. Date: February 2, 2015

Type: Test Launch Involving: Pakistan

**Location:** Rawalpindi Test Range, Pakistan

**Summary:** Pakistan successfully tests the Ra'ad air-launched cruise missile capable of carrying

conventional and nuclear payloads. 581

<sup>577</sup> Usman Ansari, "Pakistan to Buy 8 Submarines From China," *Defense News*, April 3, 2015, <a href="http://www.defensenews.com/story/defense/naval/submarines/2015/04/03/pakistan-to-buy-8-submarines-from-china/25233481/">http://www.defensenews.com/story/defense/naval/submarines/2015/04/03/pakistan-to-buy-8-submarines-from-china/25233481/</a>.

<sup>&</sup>lt;sup>578</sup> Tim Craig, "Pakistan tests missile that could carry nuclear warhead to every part of India," *The Washington Post*, March 9, 2015, <a href="https://www.washingtonpost.com/world/asia\_pacific/pakistan-tests-missile-that-could-carry-nuclear-warhead-to-every-part-of-india/2015/03/09/920f4f42-c65c-11e4-bea5-b893e7ac3fb3\_story.html">https://www.washingtonpost.com/world/asia\_pacific/pakistan-tests-missile-that-could-carry-nuclear-warhead-to-every-part-of-india/2015/03/09/920f4f42-c65c-11e4-bea5-b893e7ac3fb3\_story.html</a>.

<sup>579</sup> "India successfully test-fires BrahMos supersonic cruise missile," *The Times of India*, February 14, 2014,

http://timesofindia.indiatimes.com/india/India-successfully-test-fires-BrahMos-supersonic-cruise-missile/articleshow/46243956.cms.

<sup>&</sup>lt;sup>580</sup> "Pakistani civilian killed in Kashmir shootout," *PressTV*, February 14, 2015, http://www.presstv.ir/Detail/2015/02/14/397562/Pakistani-killed-in-Kashmir-firing.

Franz-Stefan Gady, "Pakistan Tests New Air-Launched Cruise Missile," *The Diplomat,* February 5, 2015, <a href="http://thediplomat.com/2015/02/pakistan-tests-new-air-launched-cruise-missile/">http://thediplomat.com/2015/02/pakistan-tests-new-air-launched-cruise-missile/</a>.

95. Date: January 31, 2015

**Type:** Test Launch **Involving:** India

Location: Abdul Kalam Island, India

Summary: India completes a successful test of Agni-V, India's first ICBM, firing the missile from

a mobile launcher.<sup>582</sup>

# 96. High-Risk Incident

**Date:** January 5, 2015 **Type:** Border Clash

**Involving:** India and Pakistan

Location: Kashmir

**Summary:** Five people die in Jammu and Kashmir due to intensified clashes between India and Pakistan in the disputed areas. Pakistani officials claim four of the deaths were a result of unprovoked firing from Indian troops while India allege the individuals were planning an attack on Indian soil. <sup>583</sup>

## 97. High-Risk Incident

**Date:** January 3, 2015 **Type:** Border Clash

**Involving:** India and Pakistan

Location: Kashmir

**Summary:** Skirmishes break out in Kashmir between Indian and Pakistani troops. Four people

were killed and 12 were wounded. 584

#### 98. High-Risk Incident

Date: December 31, 2014

Type: Sea Incident

**Involving:** India and Pakistan

Location: Arabian Sea

**Summary:** A Pakistan fishing vessel allegedly carrying explosives came into confrontation with the Indian Coast Guard. The boat's occupants set the boat on fire killing four people from the

fishing vessel. 585

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<sup>&</sup>lt;sup>582</sup> Santanu Choudhury, "India Tests Nuclear-Capable Missile," *The Wall Street Journal*, January 31, 2015, <a href="http://www.wsj.com/articles/india-tests-nuclear-capable-missile-1422719598">http://www.wsj.com/articles/india-tests-nuclear-capable-missile-1422719598</a>.

Avaneesh Pandey, "India-Pakistan Border Clashes Kill 5 As Thousands Flee Intensified Violence," *International Business Times*, January 6, 2015, <a href="http://www.ibtimes.com/india-pakistan-border-clashes-kill-5-thousands-flee-intensified-violence-1774194">http://www.ibtimes.com/india-pakistan-border-clashes-kill-5-thousands-flee-intensified-violence-1774194</a>.

violence-1774194.

584 Peerzada Arshad Hamid, "India, Pakistan border flare-up kills 4 in Kashmir," *Xinhua News*, January 3, 2015, <a href="http://news.xinhuanet.com/english/2015-01/03/c">http://news.xinhuanet.com/english/2015-01/03/c</a> 127354946.htm.

<sup>&</sup>lt;sup>585</sup> Santanu Choudhury, "India Intercepts Suspicious Pakistani Boat Defense Ministry Says," *The Wall Street Journal*, January 2, 2015, <a href="http://www.wsj.com/articles/india-intercepts-suspicious-pakistani-boat-defense-ministry-says-1420198186">http://www.wsj.com/articles/india-intercepts-suspicious-pakistani-boat-defense-ministry-says-1420198186</a>.

#### 99. Provocative Incident

Date: December 16, 2014

Type: Border Clash

**Involving:** India and China

**Location:** Line of Actual Control (LAC)

**Summary:** The Chinese PLA enters Indian territory in support of Chinese civilians quarreling over disputed territory. Indian forces ask the Chinese forces to retreat to their territory pushing the

troops back after three hours.<sup>586</sup>

100. Date: December 2, 2014

Type: Test Launch Involving: India

Location: Abdul Kalam Island, India

Summary: India successfully test-fires the strategic Agni-IV missile for a range of 3,000 km, but

the missile has a full range of 4,000 km. 587

101. Date: November 25, 2014

**Type:** Defense News

**Involving:** India and Pakistan

Location: Kashmir

**Summary:** India's Defense Minister Manohar Parrikar writes that 13 civilians have been killed by Pakistan in ceasefire violations so far in 2014. That would make this year the bloodiest in the last four (there were no civilian casualties in 2011 and 2013, and there were 4 in 2012). The highest number of security personnel casualties due to ceasefire violations occurred last year with 12 soldiers killed. Five have been killed so far in 2014.<sup>588</sup>

#### 102. High-Risk Incident

Date: November 20, 2014

Type: Border Clash

**Involving:** India and Pakistan

Location: Kashmir

**Summary:** Pakistan accuses Indian forces of unprovoked attacks on the Pakistani side of the Line of Control resulting in the death of a Pakistani soldier. Pakistan summoned a senior Indian diplomat to express strong condemnation of the shooting and call on New Delhi to take serious

Deeptiman Tiwary, "Chinese army intrudes again in Ladakh, pushed back after 3-hour stand-off," *The Times of India*, December 18, 2014, <a href="http://timesofindia.indiatimes.com/india/Chinese-army-intrudes-again-in-Ladakh-pushed-back-after-3-hour-stand-off/articleshow/45554834.cms">http://timesofindia.indiatimes.com/india/Chinese-army-intrudes-again-in-Ladakh-pushed-back-after-3-hour-stand-off/articleshow/45554834.cms</a>.

587 T.S. Subramanian, "Agni-IV launch successful," *The Hindu*, December 2, 2014,

T.S. Subramanian, "Agni-IV launch successful," *The Hindu*, December 2, 2014, <a href="http://www.thehindu.com/news/national/agniiv-launch-successful/article6654494.ece">http://www.thehindu.com/news/national/agniiv-launch-successful/article6654494.ece</a>.

<sup>&</sup>lt;sup>588</sup> PTI, "13 civilians killed in ceasefire violations in 2014: Manohar Parrikar," *The Economic Times*, November 25, 2014, <a href="http://economictimes.indiatimes.com/news/politics-and-nation/13-civilians-killed-in-ceasefire-violations-in-2014-manohar-parrikar/articleshow/45275322.cms">http://economictimes.indiatimes.com/news/politics-and-nation/13-civilians-killed-in-ceasefire-violations-in-2014-manohar-parrikar/articleshow/45275322.cms</a>.

measures to prevent similar incidents. 589

103. Date: November 17, 2014

Type: Test Launch Involving: Pakistan

Location: Near the Arabian Sea

**Summary:** Pakistan conducts a successful test launch of the intermediate rage Shaheen 1A (Hatf IV) ballistic missile aimed at re-validating various design and technical parameters. The missile is capable of carrying nuclear and conventional warheads up to a range of 900 kilometers. <sup>590</sup>

104. Date: November 14, 2014

Type: Test Launch Involving: India

Location: Chandipur, Odisha, India

**Summary:** India successfully test-fires the indigenously developed Prithi-II surface-to-surface

missile according to defense sources.<sup>591</sup>

105. Date: November 13, 2014

Type: Test Launch Involving: Pakistan

Location: Near the Arabian Sea

**Summary:** Pakistan successfully test-fires the Shaheen-II missile with a target somewhere in the Arabian Sea. Pakistani military sources said the missile is capable of hitting targets 900 miles away and that the purpose of the test was to revalidate various technical parameters of the missile and ensure operation readiness. <sup>592</sup>

106. **Date:** November 2, 2014 **Type:** Defense News

**Involving:** India and China

Location: Sri Lanka

**Summary:** Sri Lanka allows China to dock another attack submarine at their port, despite Indian concerns. In late September, Sri Lanka allowed China to dock a nuclear submarine at a Lankan

<sup>589</sup> "Pakistan slams fresh Indian shelling in disputed Kashmir," *Press TV*, November 24, 2014, http://www.presstv.ir/detail/2014/11/21/386964/pakistan-slams-india-over-kashmir/.

http://www.presstv.ir/detail/2014/11/13/385851/pakistan-tests-nuclear-capable-missile/.

<sup>&</sup>lt;sup>590</sup> "Pakistan conducts successful test launch of Shaheen 1A Ballistic Missile," *Daily Times*, November 17, 2014, http://www.dailytimes.com.pk/national/17-Nov-2014/pakistan-conducts-successfull-test-launch-of-shaheen-1a-ballistic-missile

missile.

591 PTI, "India successfully test fires Prithvi-II missile," *India Today*, November 14, 2014, <a href="http://indiatoday.in/story/india-successfully-test-fires-prithvi-ii-missile/1/400762.html">http://indiatoday.in/story/india-successfully-test-fires-prithvi-ii-missile/1/400762.html</a>.

592 "Pakistan test-fires nuclear capable ballistic missile," *PressTV*, November 13, 2014,

port.<sup>593</sup>

### 107. High-Risk Incident

**Date:** October 2014 **Type:** Border Clash

**Involving:** India and Pakistan

Location: Kashmir

**Summary:** In the "worst spell of violence...in years," Indian and Pakistani military troops exchange gunfire and mortar shells in Kashmir on-and-off throughout the first couple of weeks in October killing 20 civilians and injuring many on both sides. Both India and Pakistan have blamed the other side for unprovoked firing along the Line of Control (LoC). Cease-fire violations continue with the Pakistani Army reporting the death of a 70-year old civilian from unprovoked Indian firing on October 28. <sup>594</sup>

#### 108. Provocative Incident

**Date:** October 22, 2014

Type: Sea Incident: Intercept Involving: India and China

Location: Line of Actual Control

**Summary:** Indo-Tibetan Border Police intercept Chinese boats in Pangong Lake at the Line of Actual Control (LAC). They also block People's Liberation Army (PLA) troops from crossing over

the LAC by road.<sup>595</sup>

109. Date: October 17, 2014

**Type:** Test Launch **Involving:** India

Location: Chandipur, Odisha, India

**Summary:** India successfully test launches the first indigenously developed long-range cruise missile, Nirbhay, which is nuclear-capable and has a strike range of over 1,000 kilometers. <sup>596</sup>

http://southasia.foreignpolicy.com/posts/2014/11/03/pak suicide bomber kills 55 people chinese army enters indian waters afghan first 1.

 <sup>&</sup>lt;sup>593</sup> Sachin Parashar, "Sri Lanka snubs India, opens port to Chinese submarine again," *The Times of India*, November 2, 2014, <a href="http://timesofindia.indiatimes.com/india/Sri-Lanka-snubs-India-opens-port-to-Chinese-submarine-again/articleshow/45008757.cms">http://timesofindia.indiatimes.com/india/Sri-Lanka-snubs-India-opens-port-to-Chinese-submarine-again/articleshow/45008757.cms</a>.
 <sup>594</sup> "Pakistanis hold anti-Indian demo in Kashmir," *Press TV*, October 16, 2014

http://www.presstv.ir/detail/2014/10/16/382406/pakistanis-antiindian-demo-in-kashmir/; "Fresh Indian firing across LoC kills 70-year-old," *The Express Tribune*, October 29, 2014, <a href="http://tribune.com.pk/story/782690/fresh-indian-firing-across-loc-kills-one/">http://tribune.com.pk/story/782690/fresh-indian-firing-across-loc-kills-one/</a>.

<sup>&</sup>lt;sup>595</sup> Courtney Schuster, Neeli Shah, Jameel Khan, David Sterman, "Pak Suicide Bomber Kills 55 People; Chinese Army Enters Indian Waters; Afghan First Lady Quoted as in Support of Burka Ban," *Foreign Policy: The South Asia Channel*, November 3, 2014,

<sup>&</sup>lt;sup>596</sup> "India test-fires indigenously developed sub-sonic cruise missile Nirbhay," *The Economic Times*, October 17, 2014, http://articles.economictimes.indiatimes.com/2014-10-17/news/55148421 1 cruise-missile-mission-objectives-nirbhay.

110. Date: September 26, 2014

Type: Test Launch Involving: Pakistan Location: Pakistan

Summary: Pakistan successfully test fires a Nasr missile. 597

## 111. Provocative Incident

**Date:** September 8-30, 2014

**Type:** Border Clash and Defense News

**Involving:** India and China

Location: Line of Actual Control

**Summary:** In June, Indian Prime Minister Narendra Modi ordered faster construction of roads and infrastructure along the LAC. After the Indian army built a small observation hut close to the LAC on September 8, Chinese soldiers started work on a road on territory claimed by India demanding the hut be destroyed. India refused and raised troop numbers in the area. Tensions continued to build as about 1,000 Chinese soldiers crossed the LAC in Ladakh, Kashmir prompting a face-off with an equal number of Indian troops and coinciding with Chinese President Xi Jinping's arrival in India in mid-September. Both countries completed simultaneous withdrawal of troops on September 30.<sup>598</sup>

Last year India reported over 400 Chinese incursions across the Himalayan border, up from about 140 in 2006. This year, India has claimed China has violated the ceasefire line 334 times. Incursions are usually temporary, harmless patrol exercises – there has not been a fatal confrontation in decades.

#### 112. High-Risk Incident

**Date:** August 23, 2014 **Type:** Border Clash

Involving: India and Pakistan

**Location:** Kashmir

**Summary:** Indian and Pakistani forces exchange fire along the LoC, killing four civilians – two Indian and two Pakistani. Indian Defense Minister Jaitley claimed Pakistan had violated the cease-fire agreement 54 times from the beginning of 2014 through July 16 and had violated the agreement 199 times last year. <sup>599</sup>

#### 113. Provocative Incident

Date: August 6, 2014

<sup>597</sup> "Full spectrum deterrence: Pakistan test-fires Nasr missile," *The Express Tribune*, September 27, 2014, http://tribune.com.pk/story/767860/full-spectrum-deterrence-pakistan-test-fires-nasr-missile/.

<sup>&</sup>lt;sup>598</sup> Sanjeev Miglani, "Insight – With canal and hut, India stands up to China on disputed frontier," *Reuters*, September 25, 2014, <a href="http://in.reuters.com/article/2014/09/24/india-china-modi-chumar-army-ladakh-idINKCN0HJ2FU20140924">http://in.reuters.com/article/2014/09/24/india-china-modi-chumar-army-ladakh-idINKCN0HJ2FU20140924</a>; Press Trust of India, "Border row: Ladakh standoff ends with withdrawal of Chinese, Indian troops," *The Indian Express*, September 30, 2014, <a href="http://indianexpress.com/article/india/india-others/border-row-ladakh-standoff-ends-with-withdrawal-of-chinese-indian-troops/">http://indianexpress.com/article/india/india-others/border-row-ladakh-standoff-ends-with-withdrawal-of-chinese-indian-troops/</a>.

Adi Narayan, "Four killed as India and Pakistan exchange fire on border," *The Sydney Morning Herald*, August 24, 2014, <a href="http://www.smh.com.au/world/four-killed-as-india-and-pakistan-exchange-fire-on-border-20140824-107q83.html">http://www.smh.com.au/world/four-killed-as-india-and-pakistan-exchange-fire-on-border-20140824-107q83.html</a>.

**Type:** Border Clash

**Involving:** India and Pakistan

**Location:** Kashmir

Summary: Pakistani forces arrest an unarmed Indian soldier after he accidentally crossed the

border. He is released two days later. 600

# 114. High-Risk Incident

**Date:** July 21, 2014 **Type:** Border Clash

**Involving:** India and Pakistan

**Location:** Kashmir

Summary: Pakistan and Indian troops on the boarder of the LoC exchange fire, killing at least one

man and wounding two women and a child. 601

### 115. High-Risk Incident

**Date:** July 16, 2014 **Type:** Border Clash

**Involving:** India and Pakistan

Location: Kashmir

**Summary:** Pakistan and India troops on the boarder of the LoC exchange fire, killing at least one

boarder guard and wounding seven more including four civilians. <sup>602</sup>

116. Date: April 26, 2014 **Type:** Test Launch **Involving:** India

Location: Chandipur, Odisha, India

**Summary:** India completes a test launch of the indigenously developed surface-to-air Akash

missile 603

117. **Date:** March 24, 2014 **Type:** Test Launch

**Involving:** India

Location: Bay of Bengal

**Summary:** India completes a secretive test of the K-4 SLBM, the country's "most advanced

submarine-launched ballistic missile to date," which has a range of 3,000 km. 604

600 Hari Kumar and Salman Masood, "Pakistan Detains Indian Soldier Who Accidentally Crossed Border," International New York Times, August 6, 2014,

 $http://www.ny\underline{times.com/2014/08/07/world/asia/pakistan-detains-indian-solider-who-accidentally-crossed-border.html.\\$ 601 "One Pakistani killed, three wounded during Indo-Pak border clash," *Dawn.com*, July 21, 2014, http://www.dawn.com/news/1120463.

602 "India, Pakistan border guards exchange fire on Kashmir border, 1 killed, 7 wounded," *Xinhua News*, July 16, 2014, http://news.xinhuanet.com/english/world/2014-07/16/c\_133489043.htm.

The Indian Express, April 26, 2014,

http://indianexpress.com/article/india/politics/akash-test-fired-successfully/.

Ankit Panda, "India Inches Closer to Credible Nuclear Triad With K-4 SLBM Test," *The Diplomat*, May 13, 2014, http://thediplomat.com/2014/05/india-inches-closer-to-credible-nuclear-triad-with-k-4-slbm-test/.