

## DPRK provocations and US-ROK Military Exercises

By Victor Cha, Na Young Lee, and Andy Lim

August 18, 2016

### Summary of Findings

Reports common in the media and in North Korean propaganda statements suggest that the annual U.S.–South Korean military exercises have a provocative effect on Pyongyang’s behavior. To critically test this proposition, Beyond Parallel gathered and compared data on the relationship between the United States–Republic of Korea (ROK) military exercises and North Korean provocations. Findings from the original qualitative study of U.S.–ROK spring military exercises over the last twelve years (2005–2016) were published on Beyond Parallel in July 2016. This study was recently expanded to include the fall exercises and their effect on North Korean provocations. The findings of this study are summarized below.

#### **1. Null Effect (Confirmed for Fall Exercises)**

**U.S.–ROK military exercises do not impact diplomatic relations between the U.S. and the DPRK.** When extending the original analysis of the study of spring (Foal Eagle) exercises to include the fall (Ulchi-Freedom Guardian) exercises, the pattern still holds for U.S.–DPRK relations. The process of the Six Party Talks (SPT) in 2005, 2007, and 2008 carried on despite the fall exercises taking place in the middle of it. And the years 2006, 2009, 2010, 2012, and 2014 show that negative relations prior to the fall exercises were reinforced with post-exercise provocations although the reinforcement effect is not as demonstrable as with spring exercises.

#### **2. Split Personality (Confirmed for Fall Exercises)**

**The DPRK can compartmentalize its reactions to U.S.–ROK military exercises.** In 2008, the process of the SPT was insulated from Pyongyang’s hostilities towards the Lee Myung-bak government. In the “pre” and “post” exercise periods the status of relationship remained positive until disagreements over the verification issue stifled the talks and SPT finally fell apart in December.

In 2011, U.S.–DPRK relations remained relatively positive with multiple high-level meetings to discuss possible resumption of the denuclearization dialogue until Kim Jong-il’s death (reported December 17). However, ROK–DPRK relations were tainted with disputes over exclusive rights of Mt. Kumgang tour enterprise between North Korea and Hyundai, U.S.–ROK commemorative joint exercises for the shelling of Yeonpyeong island, and President Lee’s decision to not send an official delegation to Kim Jong-il’s funeral.

#### **3. All Politics are Local (Original Findings Not Impacted)**

**Domestic ROK politics plays a role in shaping DPRK responses, irrespective of U.S.–ROK joint military exercises.** Extending the analysis of spring exercises to include fall exercises does not impact the study’s third finding since the ROK ruling party has not changed since 2008. A notable point is that Pyongyang has shown much more willingness to come to talks with Seoul over a range of issues (Kaesong, leaflets, and loudspeaker broadcasts) other than the nuclear issue, unlike the past when they would insist on bilateral talks with the U.S.

#### **4. Length Matters (Original Findings Not Impacted)**

**The duration of the U.S.–ROK military exercise matters.** Since the length of fall exercises have not fluctuated much in the past 12 years and are generally much shorter than the spring exercises (11.6 days average), the correlation between the length of exercises and “during-exercise” provocations cannot be confirmed or weakened by extending the analysis.

## Coding and Methodology

The status of the U.S.-DPRK relationship prior to the spring Foal Eagle exercises was measured by comparing the number of *negative* and *positive* exchanges between the U.S. and DPRK from the start of each year leading up to the beginning of military exercises. For the years relevant to this research (2005-2016), the military exercises usually ran from early March to mid-April (Foal Eagle).

For the status of the relationship post-military exercises, we used the same measurement but looked at the time period from the beginning of the exercises to 2-3 months after the end of the exercise. There were a few exceptions when a significant event at the end of the previous year set the mood for the relationship which persisted onto the following year such as the shelling of Yeonpyeong Island (Nov. 2010), we marked the event and factored that into the assessment.

For Ulchi-Freedom Guardian exercises, the status of the U.S.-DPRK relationship was determined by looking at the number of number of *negative* and *positive* exchanges for 2-3 months prior to the exercise period. These exercises usually ran from mid-to-late August with slight variations. A few exceptions were made when a potential status-shifting event happened in between the Foal Eagle and Ulchi-Freedom Guardian exercise periods. These included the Sept. 15, 2005 Banco Delta Asia sanctions imposed on North Korea, the heart attack of Kim Jong-il in August 2008, and the August 25, 2015 inter-Korean agreement to resolve the issue of landmines and loudspeaker broadcasts across the DMZ. These were coded as not having enough of an impact overall to shift the status of the relationship for two reasons. First for the 2005 and 2008 cases, even though these events delayed the development of denuclearization talks, they did not keep Pyongyang from coming to the negotiation table. We believe the positive-positive coding during this time suits the purpose of this research since it is designed to analyze the “status of relationship” not “level of denuclearization.” Second, when considering the 2015 case of ROK-DPRK relations, the Aug 25 agreement instantaneously improved the relationship but the effect was short-lived and inter-Korean relations quickly relapsed back into a negative state.

- **Positive exchanges** were defined as interactions between the two actors that improved relations. This could range from rhetoric, such as expressing a willingness to negotiate or announcing a moratorium on its nuclear weapons program, to physical actions such as meetings that end with positive results (SPT or breakthrough agreements, such as the February 13 joint statement).
- **Negative exchanges** are interactions that worsen relations. This can also range from hostile rhetoric to actual provocations (cutting off North-South military hotline, short/long range missile launches, etc).

Color coding for types of positive and negative actions

Types of action	Degree	
	Major	Minor
Positive	Major	Minor
Negative	Major	Minor

## Glossary of acronyms and abbreviations

ATACMS	Army Tactical Missile System
ASW	Anti-Submarine Warfare
BDA	Banco Delta Asia
BIS	Bureau of Industry and Security (U.S.)
DDoS	Distributed Denial-of-Service
DMZ	Demilitarized Zone
DOD	Department of Defense (U.S.)
DOE	Department of Energy (U.S.)
DOS	Department of State (U.S.)
DPRK	Democratic People’s Republic of Korea
FE	Foal Eagle
FROG	Free Rocket over Ground
GPS	Global Positioning System
HASC	House Armed Services Committee (U.S.)
HFAC	House Foreign Affairs Committee (U.S.)
IAEA	International Atomic Energy Agency
JCS	Joint Chiefs of Staff
KCNA	Korean Central News Agency
KEDO	Korean Peninsula Energy Development Organization
KIC	Kaesong Industry
KOMID	Korea Mining Development Trading Corporation
KPA	Korean People’s Army
KR	Key Resolve
MLRS	Multiple Launch Rocket System
MND	Ministry of National Defense (ROK)
MOFA	Ministry of Foreign Affairs
MOU	Ministry of Unification (ROK)
NDC	National Defense Commission
NLL	Northern Limit line
PSI	Proliferation Security Initiative
ROK	Republic of Korea
SOTU	State of the Union
SPT	Six-Party Talks
SRBM	Short-Range Ballistic Missile
THAAD	Terminal High Altitude Area Defense
TWEA	Trading with the Enemy Act of 1917
UNSC	United Nations Security Council
UNSCR	United Nations Security Council Resolution
USAID	United States Agency for International Development
USFK	United States Forces Korea
USG	Ulchi-Freedom Guardian
WMD	Weapon of mass destruction

## Detailed Findings from 2005-2016

2005 U.S.-DPRK Relations		
Type of Action		
Negative	Date	Positive
DPRK called on the U.S. to drop hostile policy	Jan 1	
NYT revealed classified U.S. intelligence that DPRK had exported processed uranium to Libya	Feb 2	
DPRK announced it has nuclear weapons and will suspend participation in SPT	Feb 10	
DPRK announced an end to its missile-testing moratorium	March 2	
Sec State Condoleezza Rice said the U.S. supports the SPT framework and rejects a separate deal with DPRK	March 15	
	March 19-25	RSOI/Foal Eagle
DPRK wants the SPT to be a regional disarmament talks and calls for U.S. apology for Sec State Rice's "outpost of tyranny" remarks. Both rejected	April 1	
DPRK shut down its Yongbyon's reactor in order to remove spent fuel rods for reprocessing	April 17	
U.S. said it will refer the DPRK nuclear issue to the UNSC if DPRK refuses to return to the SPT	April 18	
President Bush called Kim Jong-il a "tyrant" and a "dangerous person" during a press conference	April 28	
1 Anti-Ship Cruise Missile (KN-01) into the East Sea	May 1	
U.S. Treasury Dept. announced freezing assets of 3 DPRK entities	June 29	
	July 9	Kim Gye Gwan announced the return to SPT
	July 26 - Aug 7	4th round of SPT (1st phase) in Beijing (include U.S.-DPRK bilateral talks within SPT)
<b>Ulchi-Focus Lense</b>	Aug 22 - Sep 2	
	Sep 13 - Sep 18	4th round of SPT (2nd phase) in Beijing
U.S. Treasury Dept. announced freezing of \$25 million DPRK funds in Banco Delta Asia	Sep. 15	
	Sep. 19	Sep. 19 Joint Statement (reached from the 4th round of SPT)
	Nov. 9-11	5th round of SPT (1st phase)
DPRK announced the construction of larger graphite-moderated reactors	Dec. 19	

## 2006 US-DPRK Relations

### Type of Action

Negative	Date	Positive
DPRK declared that "we cannot sit down and discuss abandonment of our nuclear deterrent, designed to protect our system, with a counterpart that seeks to isolate and stifle us to death."	January	
State Department announced that it has "substantial evidence" of DPRK counterfeiting of U.S. currency	March 1	
Ri Gun, DRPK deputy head of SPT met with U.S. officials in NYC to talk about BDA financial sanctions, but no progress	March 7	
DPRK fired 2 Short range Ballistic Missiles	March 7	<b>RSOI/Foal Eagle</b>
	March 24	
The U.S. froze the assets of a Swiss firm that have business dealings with a DPRK entity named as a WMD proliferator by the U.S.	March 30	
	March 31	
Christopher Hill refused DPRK's offer of separate bilateral talks on the sidelines of the NEACD in Tokyo	April 9-11	
New OFAC regulations made it illegal for US citizens to own/lease/operate/insure any vessel flagged by DPRK	May	
DPRK invited Hill for a bilateral meeting in Pyongyang, invitation rejected by the White House.	Late May	
DPRK fired seven missiles into the East Sea, including a Taepodong 2, which failed 40 seconds into flight. The other six were short and medium range Nodong and Scuds	July 4	
UNSCR 1695 passed unanimously	July 15	<b>Ulchi-Focus Lense</b>
	Aug 21 – Sep 1	
DPRK conducted 1st nuclear test	Oct 9	
UNSC adopts R1718	Oct 14	
	Nov 28 – Dec 1	U.S. ,China, DPRK, ROK envoys met to discuss resuming SPT
5th round of SPT (2nd phase) ended without result (due to U.S. sanction on BDA issue)	Dec 18-22	

## 2007 US-DPRK Relations

Type of Action		
Negative	Date	Positive
	Mid- Jan	Christopher Hill met with Kim Gye-gwan in Berlin to talk about financial sanctions and the SPT
The U.S. BIS released a list of luxury items prohibited for export and re-export to the DPRK	Jan 26	
	Feb 8-13	5th round of SPT (3rd phase) in Beijing
	Feb 13	Feb. 13 Joint Agreement - DPRK agreed to shut down its nuclear facilities at Yongbyon and U.S. agreed to remove DPRK as a state-sponsor of terrorism and from TWEA
	March 5-6	Christopher Hill met with Kim Gye-gwan again to talk about normalization of relations and removing DPRK as a state-sponsor of terrorism
	March 19-22	6th round of SPT – Reached an understanding to transfer back the US\$25 million in funds frozen in BDA
<b>RSOI/Foal Eagle</b>	March 25-31	
DPRK fired a SRBM off the east coast. Potentially a KN-01	May 25	
DPRK fired 2 SRBMs off the west coast. Potentially KN-01s	June 7	
	June 17	DPRK announced that it will allow IAEA inspectors to enter DPRK
		6th round of SPT (resumption of the 1st phase halted in March) in Beijing
	June 19	US\$25 million in funds from BDA returned to DPRK
	July 21-22	Christopher Hill visited Pyongyang (1st visit by a U.S. ambassador since October 2002) and met with DPRK foreign minister Pak Ui-chan and nuclear envoy Kim Gye-gwan
	June 26-29	IAEA inspectors visited Yongbyon and the under-construction facility in Taechon.
DPRK fired 3 SRBMs off the east coast and into the East Sea (KN-02)	June 27	
	July 16	IAEA confirmed the shutdown of Yongbyon facilities
	July 18-20	The 6th round of SPT concludes with a joint communique
<b>Ulchi-Focus Lense</b>	Aug 20 - 31	
Israeli air-strike on Syrian facility discovered a nearly completed nuclear reactor modeled on DPRK Yongbyon reactor	Sep 6	
	Sep 11-14	U.S. Russia, China experts visited DPRK to examine Yongbyon facilities
	Sep 27 - Oct 3	6th round of SPT (2nd phase) in Beijing
	Oct 3	Oct. 3 Joint Statement to implement Feb 13 agreement
	Nov 5	U.S. experts arrived in North Korea to begin disablement of Yongbyon facilities

## 2008 US-DPRK Relations

### Type of Action

Negative	Date	Positive
	Jan 26	President Bush announced that the DPRK will be removed as a state sponsor of terror and from the TWEA list
	February 26	The New York Philharmonic Orchestra performed in Pyongyang
<b>Key Resolve/Foal Eagle</b>	March 2-7	
	March 13-14	Christopher Hill and Kim Gye-gwan held talks in Geneva about DPRK nuclear program
DPRK fired 3 Anti-Ship Cruise Missiles off the west coast and into the West Sea	March 28	
	April 8	Christopher Hill and Kim Gye-gwan held talks in Singapore
	April 9	Nuclear envoys of the DPRK, US, ROK, China and Japan met separately in Beijing
	April 22	U.S. Department of State Sung Kim met Kim Gye-gwan in Pyongyang to discuss denuclearization
U.S. intelligence officials showed U.S. lawmakers evidence of DPRK-Syria nuclear technology transfer	April 22 - 23	
	April 24	DPRK agreed that documents on nuclear activity at Yongbyon will be given to the U.S.
	May 1	HFAC passed legislation to allow the DOE to fund the DPRK denuclearization process
	May 8	DPRK provide U.S. delegation in Pyongyang with 18,000 pages of documents detailing two DPRK nuclear facilities
DPRK fired 3 Anti-Ship Cruise Missiles into the West Sea	May 30	
	June 26	DPRK submitted its nuclear declaration to the SPT In exchange the U.S. agreed to lift TWEA sanctions and remove DPRK from its state sponsor of terror list
	June 27	DPRK demolished Yongbyon cooling tower
	July 12	SPT participants issued a statement outlining the verification process of DPRK nuclear program
President Bush did not carry out the removal of DPRK from state sponsor of terrorism list saying it's a "minimum, rather than a deadline"	Aug 11	
	Aug 18-22	<b>Ulchi-Focus Lense</b>
	Aug 22	Sung Kim met with DPRK officials in New York regarding verification protocol
	Oct 1-3	Assistant Secretary Christopher Hill visited Pyongyang to discuss verification
DPRK fired 2 Anti-Ship Cruise Missiles into the Yellow Sea	Oct 7	
	Oct 11	U.S. announced preliminary agreement on verification protocol with DPRK
	Oct 11	President Bush removed DPRK from the list of states sponsoring terrorism
	Oct 13	DPRK resumed disabling its key nuclear facilities
DPRK issued statement denying the 'sampling' process of verification	Nov 13	
SPT ended in stalemate due to disagreements on verification protocol	Dec 8-11	
U.S. announced discontinuation of heavy fuel assistance to DPRK	Dec 12	
DPRK announced slowing down the speed of disablement by half	Dec 13	

## 2009 US-DPRK Relations

### Type of Action

Negative	Date	Positive
DPRK MOFA announced that it will remain a nuclear weapons state as long as it perceives a threat from the U.S.	Jan 17	
President Obama authorized sanctions on three DPRK entities (KOMID, Sino-Ki and Moksong Trading Company)	Jan 21	
DPRK announced its intentions to launch an experimental communications satellite	Feb 24	
	March 9	<b>Key Resolve/Foal Eagle</b>
U.S. journalists Laura Ling and Euna Lee detained in DPRK	March 17	
DPRK ejected U.S. food donor teams that were there as part of an agreement to provide 500,000 tons of food	March 17	
	March 20	
DPRK warned that if the U.S. pushed for UN sanctions in response to a missile test, it will quit the SPT and restart its nuclear weapons program	March 24	
DPRK accused the U.S. RC-135 surveillance aircraft of spying on its satellite launch site and threatened to shoot it down	April 1	
DPRK launched Kwangmyongsong-2 (Taepodong 2). The missile travelled for about 1,900 miles and flew over Japan.	April 5	
UN Security Council adjusted sanctions under UNSCR 1718	April 13	
DPRK kicked a U.S. nuclear monitoring team and an IAEA team out of the country	April 15	
DPRK threatened to conduct another nuclear test/ballistic missile test unless the UN apologized for its resolution	April 29	
DPRK rejected bilateral talks with the U.S. and vowed to continue strengthening its nuclear deterrence	May 8	
DPRK conducted its 2nd nuclear test.	May 25	
DPRK fired 3 SRBMs from Musudan-ri missile base	May 26	
DPRK fired 2 SRBMs	May 27	
DPRK fired a SRBM (surface-to-air missile)	May 29	
DPRK announced that Laura Ling and Euna Lee will be sentenced to 12 years of "reform through labor"	June 8	
UNSC passed UNSCR 1874	June 12	
DPRK fired 4 SRBMs from the east coast	July 2	
DPRK fired 2 medium range ballistic missiles (Nodongs) and 5 short range missiles	July 4	
US imposed sanctions on DPRK company Hyokshin	July 30	
	Aug 4	Former President Clinton visited North Korea to secure the release of two U.S. journalists
<b>Ulchi Freedom Guardian</b>	Aug 17-28	
DPRK fired 5 SRBMs (KN-02) into the East Sea	Oct 12	
	Oct 20	DPRK issued an invitation to ambassador Bosworth to visit Pyongyang
DPRK patrol boats entered NLL and exchanged	Nov 10	



---

fire with ROK naval vessels		
	Dec 8-10	U.S. delegation (head: Amb. Bosworth) visited Pyongyang to hold first senior-level meeting, and delivered President Obama's letter to Kim Jong-il

---

## 2010 US-DPRK Relations

### Type of Action

Negative	Date	Positive
White House spokesman Robert Gibbs rejected DPRK's call for talks on a peace treaty to end the Korean War before talks on denuclearization	Jan 11	
<i>Rodong Sinmun</i> called for the withdrawal of U.S. troops from the Korean Peninsula	Jan 14	
DPRK reaffirmed that it will not return to the SPT until sanctions were lifted	Jan 18	
DPRK declared two no-sail zones near the NLL	Jan 26	
KCNA reported that a U.S. citizen has been detained for illegally entering the country	Jan 27	
DPRK fired dozen of artillery shells into the waters near the NLL	Jan 28	
DPRK fired dozens of artillery shells into the waters near the NLL	Jan 29	
DPRK declared 5 additional no-sail zones near NLL	Jan 31	
	Feb 3	President Obama said the DPRK will remain off the list of state sponsors of terrorism
	Feb 5	DPRK said U.S. missionary Robert Park will be released
<b>Key Resolve/Foal Eagle</b>	March 8-18	
General Sharp said U.S. troops responsible for eliminating DPRK's WMDs are involved in KR/FE	March 11	
KCNA announced that U.S. citizen Aijalon Mahli Gomes will be put on trial	March 22	
DPRK sank the ROK corvette <i>Cheonan</i>	March 26	
President Obama reaffirmed the U.S. extended nuclear deterrence to the ROK. KCNA threatened "unprecedented nuclear strikes"	March 26	
DPRK demanded end to DMZ tours and threatened "unpredictable incidents"	March 29	
U.S. SecDef Robert Gates said that the U.S. will leave all options on the table when dealing with the DPRK, including the use of nuclear weapons	April 6	
U.S. DOD announced that the U.S. and ROK Navy will conduct ASW drills	May 24	
President Obama announced that the U.S. will extend its sanctions regime against the DPRK by one more year	June 16	
U.S. imposed new sanctions against DPRK for its involvement in the sinking of South Korean vessel <i>Cheonan</i>	July 21	
DPRK fired artillery rounds near NLL	Aug 9	
	Aug 16-26	<b>Ulchi Freedom Guardian</b>
	Aug 25-27	Former President Carter visited Pyongyang to release Aijalon Mahli Gomes (detained US citizen)
President Obama signed an executive order to increase financial restrictions against DPRK	Aug 30	
DPRK revealed construction of uranium enrichment facility to a team of U.S. experts (including Dr. Siegfried Hecker) visiting Pyongyang	Nov 12	
DPRK fired artillery rounds at Yeonpyeong island of South Korea (2 killed, 20 wounded including 3 civilians)	Nov. 23	

## 2011 US-DPRK Relations

### Type of Action

Negative	Date	Positive
U.S. SecDef Robert Gates called on DPRK to impose a moratorium on its missile and nuclear weapons program in order to restart the SPT	Jan 11	
Chairman of the JCS Admiral Mike Mullen called the DPRK nuclear and missile technology a serious threat	Jan 12	
USFK Commander Gen. Walter Sharp warned of DPRK's long-range missiles	Jan 17	
President Obama called on DPRK to abandon nuclear weapons in his SOTU	Jan 25	
	Feb 28	<b>Key Resolve/Foal Eagle</b>
DPRK jammed GPS signals during U.S.-ROK military exercises	March 4	
DPRK conducted DDoS attacks against ROK government websites and USFK network	March 2-14	
	March 19-Apr 3	12 DPRK economic officials' 16-day tour of the U.S. and its industries
DPRK announced that it will indict U.S. citizen Eddie Yong Su Jun for "unauthorized religious activities"	April 14	
President Obama issued Executive Order 13570	April 18	
US announced including Dongbang bank (DPRK bank) to be included in the sanction	April 19	
U.S. reinforced trade sanctions on DPRK	April 30	
	April 30	
U.S. and ROK air forces launched the joint military exercise Max Thunder	May 23-27	
	May 25	U.S. special envoy for North Korean human rights issues Robert King and USAID deputy assistant administrator Jon Brause visited Pyongyang and met with Kim Gye-gwan
U.S. Navy stopped a DPRK ship suspected of carrying weapons to Myanmar, but was denied permission to board	May 26	
	May 28	DPRK released U.S. citizen Eddie Yong Su Jun
DPRK fired a KN-06 SRBM from the west coast	June 8	
	July 28-29	Amb. Bosworth and Kim Gye Gwan met in New York to discuss resuming multilateral talks on DPRK nuclear program
<b>Ulchi Freedom Guardian</b>	Aug 16-26	
	Aug 25	Kim Jong-il met with Russian President (Medvedev) and expressed willingness to return to the talks
IAEA General Conference adopted resolution regarding DPRK nuclear program	Sep 23	
	Oct 24-25	U.S.-DPRK held round of talks in Geneva to resume the SPT
DPRK reported the death of Kim Jong-il	Dec 17	DPRK reported the death of Kim Jong-il

## 2012 US-DPRK Relations

### Type of Action

Negative	Date	Positive
	Jan 11	DPRK remained open to suspending its uranium enrichment activities for U.S. food aid
U.S. and ROK navies held joint anti-submarine exercises	Feb 20-24	
<b>Key Resolve/Foal Eagle</b>	Feb 23-24	3rd round of U.S.-DRPK exploratory dialogue between Glyn Davies and Kim Gye-gwan
	Feb 27 Feb 29	
	Feb 29	Leap Day agreement – a moratorium on nuclear tests, long-range missile launches, and uranium enrichment activity at Yongbyon, and allow IAEA inspectors to return to Yongbyon. The DPRK will receive 240,000 metric tons of nutritional assistance in return.
	March 6	DOS Robert King and USAID Jon Brause in Beijing to finalize arrangement for U.S. government food shipment to the DPRK
	March 16	
DPRK announced plans to launch an earth observation satellite called the Kwangmyongsong-3, a three-stage liquid-fueled rocket designated Unha-3	Mar 16	DPRK invited IAEA inspectors to return
The acting assistant secretary of defense for Asian and Pacific Affairs Peter Lavoy told the HASC that the U.S. has suspended food aid to the DPRK	March 28	
DPRK fired two KN-01 SRBMs on the west coast	March 29	
DPRK launched the Kwangmyongsong-3. It failed 81 seconds into launch.	April 13	
US announce decision to halt further food aid to DPRK	April 13	
DPRK revealed six new road-mobile missiles, KN-08 during a military parade for the 100th anniversary of Kim Il-sung's birth. Kim Jong-un elected chairman of the NDC at 5th session of the SPA	April 15	
DPRK withdrew its offer for IAEA inspections at Yongbyon	April 16	
	April 30	
President Obama said the U.S. will not accept DPRK's strategy of provocations for concessions	May 1	
DPRK revised its constitution to state that it is a "nuclear-armed state."	May 30	
U.S. deployed ATACMS and MLRS to USFK	June 16	
US announced decision to extend sanctions against DPRK (E.O. 13466) for another year	June 18	
Obama administration extended another year of DPRK sanctions	June 19	
	Aug 13-30	<b>Ulchi Freedom Guardian</b>
IAEA General Conference adopted resolution regarding DPRK nuclear program	Sep 21	
DPRK announced the plan to launch a satellite (announce the ICAO, IMO, ITU)	Dec 1	
DPRK launched a long-range rocket Unha-3, achieved orbit	Dec 12	

## 2013 US-DPRK Relations

### Type of Action

Negative	Date	Positive
DPRK launched the Kwangmyongson-3 Unit 2 (Unha-3) successfully.	Dec 12	
U.S. House of Representatives passed a resolution condemning the DPRK 2012 missile launch	Jan 2	
UNSC passed UNSCR 2087	Jan 22	
U.S. and ROK conducted a joint naval exercise in the East Sea	Feb 4-7	
DPRK conducted 3rd nuclear test	Feb 12	
President Obama criticized the nuclear test and vowed a firm response in SOTU	Feb 12	
U.S. and ROK conducted a joint naval exercise in the east coast	Feb 14-16	
U.S. Senate adopted a bill condemning DPRK nuclear test	Feb 25	
	March 1	<b>Key Resolve/Foal Eagle</b>
UNSC passed UNSCR 2094	March 7	
DPRK fired 2 SRBMs, KN-02	March 15	
DPRK staged a military exercise near Wonsan	March 25	
U.S. sent B-2 stealth bombers to participate in FE	March 28	
KCNA reported that Kim Jong-un had ordered strategic rockets to be on standby to strike the U.S. and the ROK	March 29	
DPRK announced its intention to restart reactor at Yongbyon	April 2	
The DOD announced the deployment of THAAD system to Guam to respond to the DPRK threat	April 3	
DPRK moved its Musadan missiles to the East Coast.	April 4	
DPRK warned foreign diplomatic missions in Pyongyang to move out for their safety	April 5	
SecState John Kerry warned DPRK against testing its Musudan missiles.	April 12	
	April 30	
DPRK fired 3 SRBMs into East Sea	May 18	
DPRK fired 1 SRBM into the East Sea	May 19	
DPRK fired 2 SRBMs into the East Sea	May 20	
US claimed denuclearization efforts should take place before US-DPRK dialogue can take place	June 17	
US designated additional sanctions to be placed against DPRK according to executive order 13382	June 27	
US state department said there are no plans to send envoys to DPRK	July 28	
	Aug 19-30	<b>Ulchi Freedom Guardian</b>
Operation of the second nuclear reactor in Yongbyon began	Aug 29	
IAEA General Conference adopted resolution against DPRK nuclear program	Sep 20	
	Dec 17	DPRK released Merrill Newman (US citizen) after 42 days of detainment

## 2014 US-DPRK Relations

### Type of Action

Negative	Date	Positive
DRPK fired 4 FROGs	Feb 21	<b>Key Resolve/Foal Eagle</b>
	Feb 24	
DPRK fired 4 Scud SRBMs from east coast	Feb 27	
DPRK fired 2 Scud SRBMs from east coast	March 3	
DPRK fired short range missiles	March 4	
DPRK refused to regularize family reunion	March 7	
DPRK fired 25 FROGs eastward	March 16	
DPRK fired 30 FROGs eastward	March 22	
DPRK fired 16 FROGs eastward	March 23	
DPRK fired 2 medium range ballistic missiles (Nodongs) into the East Sea	March 26	
DPRK threatened to carry out a "new form" of nuclear test	March 30	
DPRK fired 500 shells, 100 of which landed in the NLL. The ROK fired 300 shells back in response	March 31	
	April 18	
DPRK conducted live-fire naval drill near NLL and fired 50 shells from 2 coastal base	April 29	
ROK MND called DPRK a regime that "should disappear from the earth"	May 12	
DPRK fired an artillery shell toward a ROK patrol boat near Yeonpyeong Island	May 22	
DPRK claimed to have developed "tactical guided missiles" after it fired 3 SRBMs from Wonsan	June 26	
DPRK fired 2 Scud SRBMs from Wonsan into the East Sea	June 29	
DPRK fired 2 projectiles from Wonsan into the East Sea	July 2	
DPRK fired 2 Scud SRBMs from Hwanghae province into the East Sea	July 9	
DPRK fired 2 Scud SRBMs into the East Sea	July 13	
DPRK fired 100 shells from Goseong to north of NLL in the East Sea	July 14	
DPRK fired a Scud SRBM into the East Sea	July 26	
	Aug 18-29	<b>Ulchi Freedom Guardian</b>
DPRK and ROK patrol boats exchanged fire near NLL	Oct 7	
DPRK and ROK exchanged fire across the border regarding leaflets sent by ROK NGOs	Oct 10	
DPRK and ROK exchanged fire across the border regarding ROK broadcasting	Oct 19	
	Nov 8	DPRK released detained US citizens (Kenneth Bae, Matthew Todd Miller)
UN adopted resolution accusing DPRK leadership to have committed a 'crime against humanity'	Nov 18	
DPRK hacking attempt against Sony Pictures Inc.	Nov 24	
DPRK criticized US human rights violations regarding CIA's torture report	Dec 13	
DPRK denied cyberattack on Sony Pictures	Dec 20	

## 2015 US-DPRK Relations

### Type of Action

Negative	Date	Positive
President Obama issued an Executive Order (additional sanction against DPRK) for the cyberattack on Sony Pictures	Jan 2	
DPRK blamed the US for refusing to talk (Amb. Sung Kim rejected DPRK's invitation to visit Pyongyang)	Feb 1	
DPRK fired an Anti-Ship Cruise Missile	Feb 7	
DPRK fired 5 SRBMs into the East Sea	Feb 8	
	March 2	<b>Key Resolve/Foal Eagle</b>
DPRK fired 2 SRBMs into the East Sea	March 2	
DPRK called the attack against Amb. Lippert as 'rightful act of punishment'	March 5	
DPRK fired 7 surface-to-air missiles	March 13	
Dpt. of Treasury issued an advisory with an updated list of DPRK's involvement in money laundering and financing terrorism	March 16	
UN Human Rights Council adopted DPRK human rights resolution	March 27	
DPRK fired 4 SRBMs (KN-02)	April 2	
DPRK fired 4 SRBMs (KN-02)	April 3	
DPRK declared 'No-sail, No-fly' zone in the East Sea	April 6	
	April 24	
DPRK claimed to have successfully fired a Submarine-launched Ballistic Missile (SLBM)	May 9	
Senator Cory Gardner introduced a resolution recognizing DPRK as a 'serious threat to US national security'	May 19	
DPRK released a statement declaring their capability to miniaturize nuclear warhead	May 20	
State Department published a report on the likelihood of additional unidentified nuclear facilities in DPRK	June 5	
DPRK fired 3 Anti-Ship Cruise Missiles (KN-03)	June 14	
UN Office of the High Commissioner for Human Rights opened in Seoul	June 23	
Senator Robert Menedez, and Linsey Graham introduced new sanction bill on NK	July 9	
DPRK ambassador to China announced that NK will not participate in dialogue for nuclear dismantlement (right after US-Iran nuclear deal)	July 28	
3 landmines buried by North Korea, exploded South of DMZ (1 ROK soldier wounded)	Aug 4	
	Aug 17-28	<b>Ulchi Freedom Guardian</b>
DPRK and ROK exchanged fire across the border near Yeoncheon	Aug 20	
US added 10 DPRK entities (6 individuals, 4 companies) as subjected to special sanctions	Dec 8	

## 2016 US-DPRK Relations

### Type of Action

Negative	Date	Positive
DPRK conducted 4th nuclear test at the Punggye-ri site	Jan 6	
Director Clapper confirmed the restarting of DPRK plutonium reactor (close in 2007)	Feb 9	
DPRK launched a rocket into the orbit (Kwangmyongsong-4), first testing of inter-continental ballistic missile capabilities	Feb 7	
President Obama signed NK sanctions and policy enhancement (HR 757) into law	Feb 18	
DPRK fired 6 SRBMS into the East Sea	March 3	<div style="border: 1px solid black; padding: 5px; display: inline-block;">Key Resolve/Foal Eagle</div>
	March 7	
DPRK launched 2 SRBMs into the East Sea	March 10	
President Obama issued E.O. 13722 in response to DPRK's nuclear test (Jan 6), and missile launch (Feb 7)	March 16	
DPRK fired 2 medium range ballistic missiles (Nodong) within the Japanese ADIZ	March 18	
DPRK fired 5 SRBMs into the East Sea	March 21	
DPRK fired a short-range projectile into the East Sea	March 29	
DPRK fired 5 surface-to-air missiles (KN-06) into the East Sea	April 1	
DPRK launched an SLBM in the East Sea (failed)	April 6	
DPRK launched a medium-range ballistic missile (Musudan), (failed)	April 15	
DPRK launched SLBM (KN-11) in the East Sea (failed)	April 23	
DPRK launched a medium-range ballistic missile (Musudan), (failed)	April 28	
	April 30	
DPRK launched intermediate range ballistic missile (Musudan), (failed)	May 31	
Dept. of Treasury declared DPRK as 'primary money laundering concern'	June 1	
House Foreign Affairs Committee approved HR 5484 regarding NK's designation as state sponsor of terrorism	June 16	
DPRK fired 2 intermediate range ballistic missiles (Musudan)	June 22	
US announced a list of 11 individuals including Kim Jung Un as accused of human rights abuse	July 6	
US-ROK announced joint decision to deploy THAAD to the Korean peninsula	July 8	
DPRK fired an SLBM (KN-11) into the East Sea (failed)	July 9	
DPRK announced Pyongyang's decision to close all communication channel with the US	July 11	
DPRK fired a SLBM (KN-11) in the East Sea (failed)	July 19	
DPRK launched 2 medium range ballistic missiles (Nodong) one of which landed in Japan's EEZ	Aug 3	



## Results of Analysis

### Null Effect, Confirmed

Status of Relationship (Post-exercise)	Status of Relationship (Pre-exercise)	
	Positive	Negative
	Positive -	Negative +

Year	US-DPRK Relations			
	Spring Exercise		Fall Exercise	
	Pre-exercise status	Post-exercise status	Pre-exercise status	Post-exercise status
2005	N	N+	P	P+
2006	N	N+	N	N+
2007	P	P-	P	P+
2008	P	P-	P	P-
2009	N	N+	N	N-
2010	N	N+	N	N+
2011	N	N	P	P
2012	P	N	N	N+
2013	N	N+	N	N
2014	N	N+	N	N+
2015	N	N+	N	N
2016	N	N+	N	N+ (TBD)

### Citation

Victor Cha, Na Young Lee, and Andy Lim, “DPRK provocations and US-ROK Military Exercises 2005 to 2016,” CSIS Beyond Parallel, <http://beyondparallel.csis.org/dprk-provocations/>