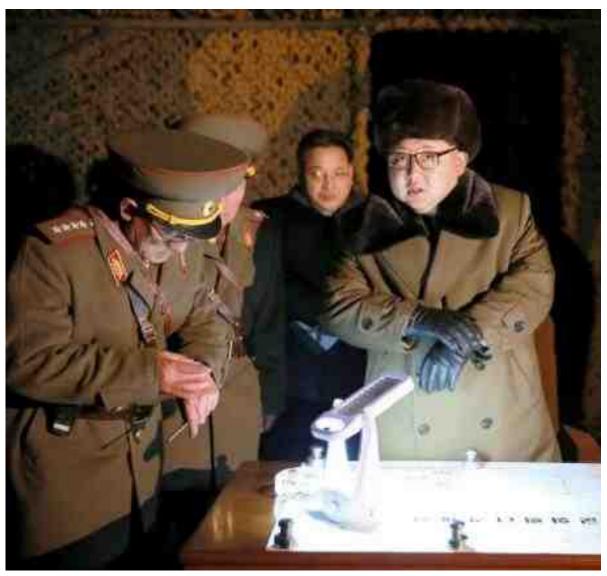
Mon Mar 14, 2016 6:13pm EDT Related: WORLD. AEROSPACE & DEFENSE

# North Korea leader says country will soon conduct nuclear warhead test: KCNA

**SEOUL** 



North Korean leader Kim Jong Un talks with officials at the ballistic rocket launch drill of the Strategic Force of the Korean People's Army (KPA) at an unknown location, in this undated photo released by North Korea's Korean Central News Agency (KCNA) in Pyongyang on March...

REUTERS/KCNA

North Korean leader Kim Jong Un said his country would soon conduct a nuclear warhead explosion test and a test launch of ballistic missiles capable of carrying nuclear warheads, the official KCNA news agency reported on Tuesday.

Kim made the comments as he supervised a successful simulated test of atmospheric re-entry of a ballistic missile,

(Reporting by Jack Kim and Ju-min Park)

## Kim Jong Un poses beside possible nuclear warhead mock-up

5:43 AM Thursday Mar 10, 2016



A South Korean soldier walks by a TV screen showing North Korean leader Kim Jong Un with alleged nuclear warhead. Photo / AP

North Korea has caused a new stir by publicising a purported mock-up of a key part of a nuclear warhead, with leader Kim Jong Un saying his country has developed miniaturized atomic bombs that can be placed on missiles.

The North's Rodong Sinmun newspaper carried photos on its front page showing Kim and nuclear scientists standing beside what outside analysts say appears to be a model warhead part - a small, silverish globe with a ballistic missile or a model ballistic missile in the background.

The newspaper said Kim met his nuclear scientists for a briefing on the status of their work and declared he was greatly pleased that warheads had been standardized and miniaturized for use on ballistic missiles.

Information from secretive, authoritarian North Korea is often impossible to confirm and the country's state media have a history of photo manipulations. But it was the first time the North has publicly displayed its purported nuclear designs, though it remains unclear whether the country has functioning warheads of that size or is simply trying to develop one.

South Korea's Defense Ministry quickly disputed the North's claim that it possesses miniaturized warheads. It called the photos and miniaturization claim an "intolerable direct challenge" to the international community.

The photos come amid heightened tensions after the United Nations imposed harsh sanctions on North Korea for its nuclear test and long-range rocket launch earlier this year. North Korea warned Monday of pre-emptive nuclear strikes after the United States and South Korea began their biggest-ever war games, which are to continue until the end of April.

North Korea has previously said it has nuclear warheads small enough to put on long-range missiles capable of striking the US mainland, but experts have questioned those claims.

The round object shown in the photos appears to be a model of a warhead trigger device which would contain uranium or plutonium, according to nuclear expert Whang Joo-ho of Kyung Hee University in South Korea. He said it was obviously a model because Kim and others would not stand near an actual device because of concerns about radioactivity.

Karl Dewey, a senior analyst for IHS Jane's, a defense and aerospace publishing company, said the sphere could be a simple implosion weapon, possibly with hydrogen isotopes added to make it more efficient.

"It is unlikely that the object in the photo is a thermonuclear bomb (also referred to as a hydrogen bomb)," he said in a statement. "Thermonuclear weapons are multistage devices and in modern weapons the need to place two separate stages together would result in a more oblong-like structure."

Also shown in the photos is a KN-08 ballistic missile or its model, which reportedly has an estimated range of 10,000km, according to South Korean analysts. The KN-08, which North Korea showed off in 2012, is said to be capable of being launched from a road-mobile vehicle, which would make it difficult to monitor via satellite. The South Korean Defense Ministry said it believes the missile hasn't been proven functional.

North Korea says it tested its first H-bomb on Jan. 6, followed last month by the launch of a rocket that put a satellite into orbit but which violated U.N. resolutions because it employs dualuse technology that could also be applied to long-range ballistic missiles.

North Korea's development of smaller nuclear weapons and long-range missiles has long been a matter of concern and could shake up the security balance in Asia.

# North Korea 'has miniature nuclear warhead', says Kim Jong-un

#### From the section

Asia



### Image copyright

### Image captior

North Korea claims it now possesses the technology to mount nuclear warheads on ballistic missiles

Kim Jong-un has claimed North Korean scientists have developed miniaturised nuclear warheads, small enough to fit on its ballistic missiles.

State media has made this claim before but this is the first time its leader has been quoted saying it directly.

But experts have long cast doubt on such assertions from the North.

The state has stepped up its bellicose rhetoric in the wake of tough UN sanctions imposed after its nuclear and rocket tests earlier this year.

In recent days it has also threatened to launch an "indiscriminate" nuclear strike on the US and South Korea, as they began their largest ever round of annual military exercises.

The drills, known as Foal Eagle and Key Resolve, routinely generate tension.



lmage copyright

### Image caption

North Korean news agency KCNA released this picture on 4 March of Kim Jong-un at what it said was the testing of a multiple launch rocket system

### Claims questioned

The claim from Mr Kim was made as he inspected a nuclear facility on Wednesday. "The nuclear warheads have been standardized to be fit for ballistic missiles by miniaturising them," state media agency KCNA quoted him as saying.

"This can be called true nuclear deterrent," he added.

He also inspected nuclear warheads designed for thermo-nuclear reaction, the type used in a hydrogen bomb, KCNA said.

If the claim is true and North Korea can put nuclear warheads onto the tips of its ballistic weapons, it would represent a clear threat to the North's neighbours and the US.

In October 2014, the commander of US forces in South Korea, Gen Curtis Scaparrotti, told reporters that he believed the North had the capability to miniaturise a nuclear device.



Image copyright AFP/Getty Images

Image captior

Marines from South Korea (foreground) and the US (background) have been taking part in joint military drills

In May 2015, the North Korea's National Defence Commission said the country had succeeded in miniaturising nuclear weapons.

But the validity of the nuclear boasts have been widely questioned. Experts also still doubt the North's claim that the nuclear test it conducted in January was of a hydrogen bomb.

That test, which came after the launch of a satellite into space, led to the UN imposing some of its toughest ever sanctions on North Korea.

South Korea has also announced its own measures against the North, which includes blacklisting individuals and entities it believes are linked to the weapons programme.

The US and South Korea are currently discussing the possible deployment of a US missile defence system to the peninsula, a move strongly opposed by North Korea, Russia and China.

# North Korea 'expands plutonium production', says US

1 hour ago

North Korea could soon have enough plutonium for nuclear weapons after restarting one of its reactors, US intelligence chief James Clapper says.

He also said Pyongyang had taken steps towards making an intercontinental ballistic missile system.

It comes days after the North launched a long-range rocket, which critics say is a test of banned missile technology.

Last September Pyongyang said its main nuclear facility at Yongbyon had resumed normal operations.

The reactor there has been the source of plutonium for its nuclear weapons programme. The North carried out its fourth nuclear test in January.

#### North Korea's nuclear tests

### How advanced is North Korea's nuclear programme?

"We assess that North Korea has followed through on its announcement by expanding its Yongbyon enrichment facility and restarting the plutonium production reactor," Mr Clapper wrote in his annual assessment of threats facing the US. "We further assess that North Korea has been operating the reactor long enough so that it could begin to recover plutonium from the reactor's spent fuel within a matter of weeks to months."



Image copyright
Science Photo Library
Image caption

The Yongbyon nuclear facility is North Korea's main nuclear site



### Image copyright

Image caption

North Korean TV broadcast the recent launch of the rocket

Mr Clapper also told the Senate Armed Services Committee that Pyongyang was committed to developing a long-range, nuclear-armed missile "capable of posing a direct threat to the United States".

He said it had publicly displayed a mobile intercontinental ballistic missile system and had taken "initial steps toward fielding this system, although the system has not been flight-tested".



### mage caption

### Sunday's rocket launch was watched by North Korean leader Kim Jong-un

Experts have said that, when fully operational, the Yongbyon reactor could make one nuclear bomb's worth of plutonium per year. About **4kg of plutonium is needed** in order to make a bomb that would explode with a force of 20 kilotons. Pyongyang has pledged several times to stop operations at Yongbyon and even destroyed the cooling tower in 2008 as part of a disarmament-for-aid deal. However, in March 2013, following a row with the US and after new UN sanctions over a third nuclear test, it vowed to restart all facilities at Yongbyon. Six-nation talks involving South Korea, the US, China, Japan and Russia aimed at ending the North's nuclear programme have been stalled since 2009. Pyongyang says it has made a device small enough to fit a nuclear warhead on to a missile, which it could launch at its enemies. However, US officials have cast doubt on the claim.

### Yongbyon nuclear complex

North Korea's main nuclear facility, believed to have manufactured material for previous nuclear tests

Reactor shut down in July 2007 as part of a disarmament-for-aid deal International inspectors banned in April 2009 when North Korea pulled out of disarmament talks

A uranium enrichment facility was revealed in 2010. An American nuclear scientist said centrifuges appeared to be primarily for civilian nuclear power, but could be converted to produce highly enriched uranium bomb fuel In 2013, North Korea said it would restart the nuclear reactor, the same year it conducted a nuclear test. It is believed to have shut it down for a period in 2014

Experts believe that reactor could make one bomb's worth of plutonium per year

Nuclear test based on uranium device would be harder to monitor than plutonium

### North Korea announces hydrogen bomb test

- 8 minutes ago
- From the section Asia



Image copyright GeoEye

Image caption Punggye-ri has previously been used to conduct underground nuclear tests. The North Korean authorities say they have successfully tested a hydrogen bomb amid reports of a tremor near the main nuclear test site.

State media announced the test after monitors detected a 5.1 magnitude quake close to the Punggye-ri site.

The North is thought to have conducted three previous underground nuclear tests there since 2006.

A hydrogen bomb uses fusion to create a blast far more powerful than that of a more basic atomic bomb.

### North Korea says tested hydrogen nuclear device

**SEOUL** 



North Korean leader Kim Jong Un gives a New Year's address for 2016 in Pyongyang, in this undated photo released by Kyodo January 1, 2016. Reuters/Kyodo/Files

North Korea said it had successfully conducted a test of a miniaturized hydrogen nuclear device on Wednesday morning.

The announcement on North Korean state TV followed detection of a 5.1 magnitude earthquake near its known nuclear test site earlier on Wednesday.

The nuclear test is the fourth by the isolated country, which is under U.S. and UN sanctions for its nuclear and missile programs.

### North Korea's nuclear tests

15 September 2015

From the section



North Korea's nuclear programme has been a source of great concern for the international community for more than 20 years.

The state is now believed to have conducted three underground nuclear tests. Its latest test was in February 2013 and involved what it claimed was a "miniaturised" nuclear device, though experts say it is impossible to confirm if this is true.

The announcement that it is restarting its main nuclear facility Yongbyon will add to fears it is planning further tests.

In a statement carried on state media, it said that its plutonium and highly enriched uranium facilities there had been "rearranged" and restarted.

### 'Cat and mouse'

Previous tests were in 2006 and 2009, and all of them appear to have originated at a test site called Punggye-ri, also known as P'unggye-yok, in a remote area in the east of the country, near the town of Kilju.

Multiple rounds of international negotiations amid a strict sanctions regime - a process, which has been described as a game of cat and mouse - appear to have done little to curb North Korea's nuclear ambitions.



Image copyright
Getty Images

#### mage caption

There have been many rounds of negotiations aimed at curbing the country's nuclear ambitions

North Korea's previous tests followed rocket launches and on 14 September Pyongyang warned that it was planning to launch what it called "satellites" aboard long-range rockets, to mark the ruling party's anniversary next month.

The North put its first satellite into space with a long-range rocket in late 2012, in what the UN said was a banned test of ballistic missile technology, imposing

sanctions.

The US is concerned that such long-range rockets could threaten its mainland with atomic bombs.

### 9 October 2006

Years of posturing and wrangles over the delivery of American aid culminated in October 2006 with an **announcement by Pyongyang** that it had carried out an underground nuclear explosion.

North Korea's first nuclear test exploded a device based on plutonium, rather than enriched uranium.

The test was conducted at P'unggye-yok, and US intelligence officials later announced that analysis of radioactive debris in air samples collected a few days after the test confirmed that the blast had taken place.

But they estimated that it had not been a powerful one, measuring less than one kiloton, raising questions about the sophistication and effectiveness of the weapon. This is less than a tenth of the size of the bomb dropped on Hiroshima in 1945.

In response to the test the UN approved military and economic



News that nuclear production has restarted at Yongbyon has caused alarm in South Korea

After years of on-off talks, in February 2007 Pyongyang agreed to shut down its main nuclear reactor at Yongbyon in return for aid and diplomatic concessions. But negotiations stalled as North Korea accused its negotiating partners - the US, South Korea, Japan, China and Russia - of failing to meet agreed obligations.

### 25 May 2009

Barely a month after North Korea walked out of international talks on its nuclear programme, it carried out its second underground nuclear test, which was said to be more powerful than the first.

Russia's defence ministry estimated a blast of up to 20 kilotons, a similar size to the American bombs that completely destroyed Hiroshima and Nagasaki in 1945.

Although the North gave no details of the test location, South Korean officials said a seismic tremor was detected in its neighbour's north-east around the town of Kilju - close to P'unggye-yok.

The US Geological Survey said a 4.7-magnitude quake was detected, 10km (six miles) underground.

Geological agencies in both South Korea and the US said the tremor indicated a nuclear explosion.

After the test, an official communique stated that it was "part of measures to enhance the Republic's self-defensive nuclear deterrent in all directions".

The underground test followed hard on the heels of the test of a long-range missile that threatened Asia and could have reached the US.

The UN issued **a resolution condemning the nuclear test** and tightened sanctions. And after the US imposed tough sanctions in August 2009, Kim Jong-il said he was willing to resume nuclear talks.



### North Korea's rocket launches

Dec 2012: North Korea launches three-stage rocket, says it successfully put a satellite into orbit; US defence officials confirm object in orbit

Apr 2012: Three-stage rocket explodes just after take-off, falls into sea

Apr 2009: Three-stage rocket launched; North Korea says it was a success,

US says it failed and fell into the sea

Jul 2006: North Korea test-fires a long-range Taepodong-2 missile; US said

it failed shortly after take-off

### North Korea's missile programme

### November 2010: Tour of Yongbyon

In November 2010 a US atomic scientist was given a tour of North Korea's uranium enrichment plant at Yongbyon about 100km (60 miles) north of the capital. Siegfried Hecker was shown an experimental light-water nuclear reactor that was still under construction, and perhaps more significantly a new facility that contained "more than 1,000 centrifuges" that the North Koreans said was processing lowenriched uranium to fuel the new reactor.

He said the facility seemed designed primarily for civilian nuclear power but that it could easily be converted to further process uranium to weapons grade.

The Stanford University scientist described the plant as modern and clean - unlike all the other Yongbyon facilities he had seen - and said he was "stunned" at its sophistication.

There are a number of other sites associated with North Korea's nuclear programme around the country. At Taechon, for example, work on a graphite heavy water plant was started, but suspended several years ago.

### 12 February 2013

In the early hours of 12 February 2013, unusual seismic activity was detected around the Punggye-ri underground nuclear test site. This was followed with confirmation by the state news agency that North Korea had successfully tested a device.

"It was confirmed that the nuclear test that was carried out at a high level in a safe and perfect manner using a miniaturised and lighter nuclear device with greater explosive force than previously did not pose any negative impact on the surrounding ecological environment," KCNA said.

The reference to "miniaturised" is likely to alarm observers, with fears that Pyongyang's ultimate aim is to produce a device small enough to fit on a long-range missile.

In recent weeks speculation has been rife that such a test might involve a uranium device, which could **have significant implications for North Korea's nuclear capabilities.** 

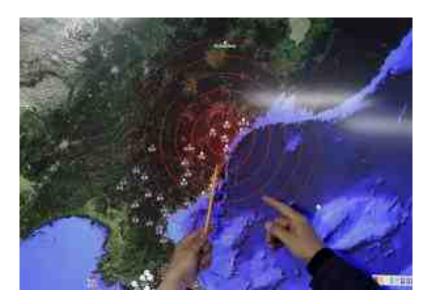
However, a well-contained underground test may provide little evidence of this, analysts say.

World | Wed Jan 6, 2016 2:07pm EST

Related: World, United Nations, North Korea

### First H-bomb test a success, North Korea says, but U.S. agencies cast doubt

SEOUL/WASHINGTON | By Ju-min Park and Mark Hosenball



North Korea said it successfully tested a miniaturized hydrogen nuclear bomb on Wednesday, but atomic weapons experts and U.S. government agencies cast doubt on the isolated nation's ability to make such an advance in its arsenal.

The test, the fourth time that North Korea has exploded a nuclear device, unnerved South Korea and Japan and drew world criticism, including from China and Russia, Pyongyang's two main allies.

U.N. Secretary-General Ban Ki-moon condemned North Korea's action, calling it "profoundly destabilizing for regional security," while U.S. House Speaker Paul Ryan said it "looks like a provocation".

North Korea has been under U.N. Security Council sanctions since it first tested an atomic device in 2006 and could face additional measures. The Security Council was holding an emergency meeting to weigh what steps it could take.

The explosion caused an earthquake that was measured by the United States Geological Survey. The nuclear test was ordered by leader Kim Jong Un and successfully conducted at 10 a.m. local time (0130 GMT), North Korea's official KCNA news agency said.

"Let the world look up to the strong, self-reliant nuclear-armed state," Kim wrote in what North Korean state TV displayed as a handwritten note.

U.S. government experts do not believe the device was a hydrogen bomb, U.S. government sources said. It likely will take several days to determine more precisely what kind of nuclear device Pyongyang set off as a variety of sensors, including "sniffer planes," collect evidence.

South Korean intelligence officials and several analysts also questioned whether Wednesday's explosion was a test of a full-fledged hydrogen device, pointing to the fact that it was roughly as powerful as North Korea's last atomic test in 2013.

Stocks across the world fell for a fifth consecutive day as the North Korea tension added to a growing list of geopolitical worries and China fueled fears about its economy by allowing the yuan to weaken further.

No countries were given advance warning of a nuclear test, South Korea's intelligence service said, according to lawmakers briefed by intelligence officials.

In previous such tests, Pyongyang had notified China, Russia and the United States beforehand, they said.

#### U.S. PRESIDENTIAL CANDIDATES

While a fourth nuclear test had long been expected, the claim that it was a hydrogen device, much more powerful than anatomic bomb, came as a surprise, as did the timing.

It made North Korea a topic on the U.S. presidential campaign with the first state nominating contests weeks away. The vote is in November.

Democratic front-runner Hillary Clinton condemned the test as a "provocative and dangerous act" that the United States should meet with sanctions and strengthened missile defenses.

"North Korea must have no doubt that we will take whatever steps are necessary to defend ourselves and our treaty allies, South Korea and Japan," she said in a statement.

Republican candidate Donald Trump said the onus was on China to solve what he called the North Korean "problem", and if it did not, the United States "should make trade very difficult for China."

North Korea has long coveted diplomatic recognition from Washington, but sees its nuclear deterrent as crucial to ensuring the survival of its third-generation dictatorship.

While the Kim government boasts of its military might to project strength globally, it also plays up the need to defend itself from external threats as a way to maintain control domestically.

The North's state news agency said Pyongyang would act as a responsible nuclear state and vowed not to use its nuclear weapons unless its sovereignty was infringed.

Michael Madden, an expert on North Korea's secretive leadership, said, "With Iran being off the table, the North Koreans have placed themselves at the top of the foreign policy agenda as far as nation-states who present a threat to the U.S."

#### **DOUBTS RAISED**

The device had a yield of about 6 kilo tonnes, according to the office of a South Korean lawmaker on the parliamentary intelligence committee - roughly the same size as the North's

last test, which was equivalent to 6-7 kilo tonnes of TNT.

"Given the scale, it is hard to believe this is a real hydrogen bomb," said Yang Uk, a senior research fellow at the Korea Defence and Security Forum.

Joe Cirincione, a nuclear expert who is president of Ploughshares Fund, a global security organization, said North Korea may have mixed a hydrogen isotope in a normal atomic fission bomb.

"Because it is, in fact, hydrogen, they could claim it is a hydrogen bomb," he said. "But it is not a true fusion bomb capable of the massive multi-megaton yields these bombs produce".

The USGS reported a 5.1 magnitude quake that South Korea said was 49 km (30 miles) from the Punggye-ri site where the North has conducted nuclear tests in the past.

The test may mark an advance of North Korea's nuclear technology. The claim of miniaturizing, which would allow the device to be adapted as a weapon and placed on a missile, would pose a new threat to the United States and its regional allies, Japan and South Korea.

The North's previous miniaturization claims have not been independently verified. Many experts also doubt whether the North possesses missile technology capable of reliably delivering a warhead to the continental United States.

South Korea said it would take all possible measures, including possible U. N. sanctions, to ensure Pyongyang paid the price.

"The government must now work closely with the international community to ensure that North Korea pays the commensurate price for the latest nuclear test," President Park Geun-hye said in astatement. "We must respond decisively through measures such as strong international sanctions."

Conventional atomic bombs split atoms from heavier elements such as uranium or plutonium. They occur in one stage. The process is called fission. Hydrogen bombs have a second stage after fission. This fusion stage releases much more energy.

(Additional reporting by Meeyoung Cho, Ju-min Park, <u>James Pearson</u>, Se; Young Lee, Christine Kim, Jee Heun Kahng, Jack Kim in Seoul,; Louis Charbonneau at the United Nations, Ayesha Rascoe and in; Washington, Megha Rajagopalan in Beijing and Takashi Umekawa in; Tokyo; Writing by <u>Tony Munroe</u> and <u>Alistair Bell</u>; Editing by <u>Raju</u> Gopalakrishnan, Mike Collett-White and Howard Goller)