

# Excitement the region can do without

Foundations have been laid for an arms race in East Asia, setting pulses racing, but it is a dangerous game

A flare-up in tensions between the United States and the Democratic People's Republic of Korea (DPRK) is leading to an arms race in East Asia.

US President Donald Trump warned the DPRK that it would face "fire and fury" if it threatened the country, prompting the East Asian nation to say it was considering the launch of four missiles toward the US territory of Guam.



Cai Hong

On Aug 21, soldiers from the US and the Republic of Korea (ROK) started their annual military exercises codenamed Ulchi Freedom Guardian. The DPRK views the drills, which are largely computer-simulated war games held every summer, as a rehearsal for invasion and typically responds furiously with weapons tests. Pyongyang's state media has said the US could face "merciless revenge" for ignoring warnings not to go ahead with this year's 10-day exercises.

The DPRK conducted two nuclear tests last year, and analysts predict that Pyongyang is preparing for another one, based on the activity around the country's nuclear test facility.

According to the James Martin Center for Nonproliferation Studies in California, the DPRK has so far carried out 12 tests in 2017, indicating a significant increase in activity from 2016. In July, the DPRK's Vice-Foreign Minister Han Song-ryol said his country would be testing missiles more regularly.

After decades of weapons testing, most Western experts accept that the DPRK is close to placing a nuclear warhead on an intercontinental ballistic missile that can reach the continental US.

At a United Nations disarmament forum in Geneva, Switzerland, on Aug 22, Ju Yong-chol, a senior DPRK diplomat, justified his country's missile and nuclear tests as a form of deterrence. "The DPRK will never place its self-defensive nuclear deterrence on the negotiating table or step back an inch from the path it took to bolster the national nuclear force," said Ju.

When Japanese and US foreign and defense heads met in Washington on Aug 17, Japan unveiled its plan for accelerating the deployment of a land-based Aegis Ashore missile defense system as one of its new measures to deal with the DPRK's military provocations.

The defense ministry has decided to include a request in the fiscal 2018 government budget for the Aegis Ashore system. Japan also uses a sea-based Aegis system.

*The Asahi Shimbun* newspaper

reported that the Japanese defense ministry has also decided to develop an anti-stealth radar system that can locate ballistic missiles with stealth capabilities. Work on the next-generation warning and control radar system will begin next fiscal year with an expected budget request for 19.6 billion yen (\$179 million). The ministry plans to complete the radar system by fiscal 2023.

Japan is likely to increase its defense spending at a faster pace in its next five-year plan from April 2019 than the annual 0.8 percent average rise in its current mid-term plan, according to the *Nikkei Shimbun*.

The ROK is also beefing up its military muscle. After the DPRK's second test of an intercontinental ballistic missile on July 28, ROK President Moon Jae-in ordered a speedy deployment of the controversial US Terminal High Altitude Area Defense (THAAD) system, reversing his earlier decision to postpone it for environmental reviews.

The US Department of Defense said it was "actively" considering revising bilateral ballistic missile guidelines with the ROK to allow Seoul to build more powerful missiles.

Moon told Trump in a telephone conversation on Aug 7 that the ROK wants to build a nuclear-powered submarine.

The ROK, still technically at war with its northern neighbor after

the 1950-53 Korean War ended in a truce and not a peace treaty, has deployed the US-built Patriot missile defense system, as well as the THAAD system. Besides the two THAAD launchers currently deployed in South Korea, there are four more in storage, pending an environmental review by Seoul.

China will increase its defense budget by about 7 percent this year, the country's slowest rise in at least a decade. Defense spending accounts for only about 1.3 percent of China's GDP.

But Fu Ying, spokesperson for China's 12th National People's Congress, said in Beijing in March that the country will continue to build its military capacity to safeguard its national sovereignty and security.

On July 30, a huge military parade took place in North China's Inner Mongolia autonomous region to celebrate the 90th anniversary of the People's Liberation Army (PLA). Attended by President Xi Jinping, the event showcased the newest weapons at the country's disposal.

The PLA has fielded its "carrier killer" — the DF-21D anti-ship medium-range ballistic missile — and, at the July 30 parade, unveiled the new DF-31AG intercontinental ballistic missile that has a maximum range of over 10,000 kilometers.

Confronting the DPRK, the Trump administration has also pushed the envelope on the issue of Taiwan. The White House approved

in June a \$1.42 billion arms deal with Taiwan.

Saying it would hurt Chinese sovereignty, Chinese Foreign Ministry spokesman Lu Kang has called on the US to stop the sale.

The US is mulling a greater military presence in Asia Pacific.

In May the Pentagon endorsed a plan, known as the Asia-Pacific Stability Initiative, to invest \$7.5 billion to strengthen the US' presence in the region over the next five years. The proposal, if adopted, would cost an extra \$1.5 billion for the region annually from 2018 to 2022.

According to US Senator John McCain, the initiative "could enhance US military power through targeted funding to realign our force posture in the region, improve operationally relevant infrastructure, fund additional exercises, pre-position equipment and build capacity with our allies and partners".

McCain first proposed it earlier this year as a long-term initiative to provide a counterweight to China's growing capabilities. Now the plan has gained increasing support among US lawmakers amid the intensifying concerns over the DPRK and its nuclear program.

The region is playing a dangerous game with military buildup, setting many pulses racing.

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## New 'four inventions' a source of pride

China's success in implementing breakthrough technologies is central to the economy's innovation-driven development

By XU GONGCHENG

President Xi Jinping has been reiterating the importance of innovation in economic development, and recent media reports have highlighted the "four new great inventions" of modern China — high-speed railway, Alipay, shared bicycles and online shopping. The four new inventions are technological breakthroughs that will help China move toward overall prosperity and make innovation a driver of economic development.

Some may argue that the technologies the "four new great inventions" are based on did not originate in China. That is true, but it is China that used the technologies to come up with the new inventions. This shows that research is impor-

tant. But it is equally important to successfully implement it.

Each of the four new inventions involves a series of new technologies. High-speed rail involves new material technology, motor technology, bogie processing technology as well as network control technology. From its engine to its cover to its rails, high-speed rail integrates many high technologies. And since high-speed railway is an exemplary combination of technological innovation and industrial capacity, it would not have been possible without China's mature manufacturing industry.

Besides, this invention plays a rather important role in China's modern development.

China is not only developing a high-speed railway network within the country; it is also building high-

speed railways overseas to improve infrastructure in other countries and regions involved in the Belt and Road Initiative — the drive to boost connectivity along the historical Silk Road routes.

Alipay, the other new invention, has to a large extent solved the trust problem of online trade with modern technologies, by introducing real-name registration, digital certificates and dynamic passwords based on smartphones. More importantly, it has been constantly adopting new technologies, such as 3D fingerprint detection.

By popularizing mobile payment, Alipay is freeing people of the burden of carrying cash. Many foreign tourists who visit China marvel at the convenience of Alipay: All that people need to have is a smartphone, which enables them to pay

for almost everything.

The business of shared bicycles is also based on a mobile network, third-party payment and big data technologies, and it has revolutionized the concept of traffic and optimized the usage of roads in cities. Before shared bikes were introduced, urban residents had almost given up on bicycles. But shared bikes have made people realize the benefits of eco-friendly commuting.

Bike sharing has also helped ease traffic jams in cities, by prompting more people to use bicycles, instead of cars, for short-distance travel.

Online shopping also combines technologies such as the Internet, online financing and advanced logistics. It has turned the world into a village in the truest sense of

the term: People can now buy anything from anywhere in the world. Moreover, it has helped develop logistical technology to meet the needs of transporting large quantities of goods across long distances at short notice.

True, online shopping poses a challenge to brick-and-mortar stores, but it has also prompted them to improve their services and cut their costs.

In other words, the "four new great inventions" have combined modern technologies and helped the Chinese economy to move toward innovation-driven development. Therefore, every Chinese should feel proud of them.

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