Natural disasters kill 16 in China in January

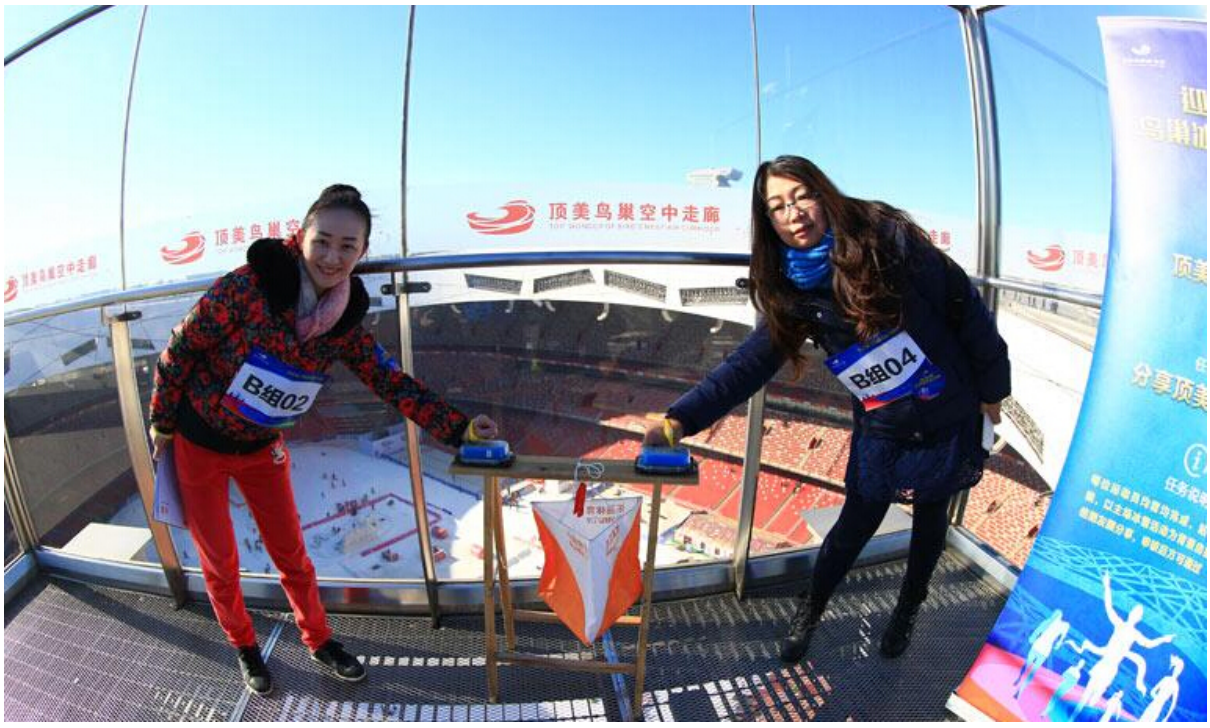
Natural disasters have caused the deaths of 16 people in January in China, according to the Ministry of Civil Affairs and the National Commission for Disaster Reduction.

Over 5,200 people were displaced by natural disasters last month, the two authorities said in a statement Monday.

In addition, over 35,000 houses were damaged and about 400 hectares of crops were destroyed, according to the statistics.

The statement said natural disasters in January have caused 541 million yuan (78.5 million U.S. dollars) in direct economic losses.

Rooftop aisle surrounding Bird's Nest opens to public



Participants of a running race pose for photos in the newly renovated walkways on the roof of the National Stadium, also known as the Bird's Nest, in Beijing on Saturday, February 11, 2017. [Photo: people.cn]

A walkway extending 1,000-meter-long on top of National Stadium, known as the

Bird’s Nest, opened to the public for the first time following an amateur winter sports program hosted on Feb. 11.

Nearly 100 contenders joining in skiing and Kirnu competitions in the stadium as the first group of visitors to the rooftop causeway were treated to a bird’s eye view 60 meters above the ground.

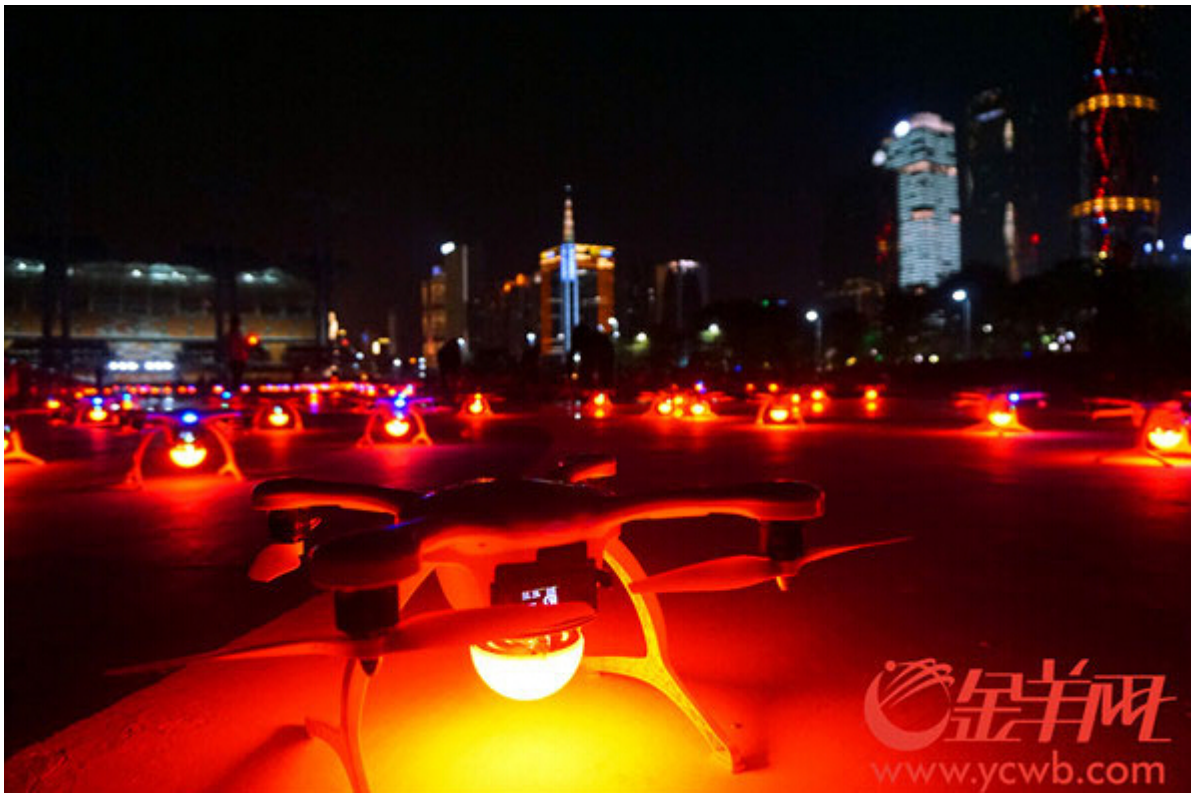
According to Beijing Youth Daily, the new walkway was built on the 230-meter-long original corridor, where the route now is connected with 600-meter and 100-meter causeways on the top and medium parts of the stadium.

According to staff working in the stadium, two observation towers soaring 69 meters into the air have been opened to visitors.

Platforms at the north, south and west wings are established for visitors to take breaks, and a deck on an east to west axis surrounded with 2-meter-high glass screens is designed to protect visitors from falling while presenting them with scenery through the transparent wall.

The walkway costs 80 yuan (US$11.62) per visit.

1,000 drones perform spectacular formations in Guangzhou



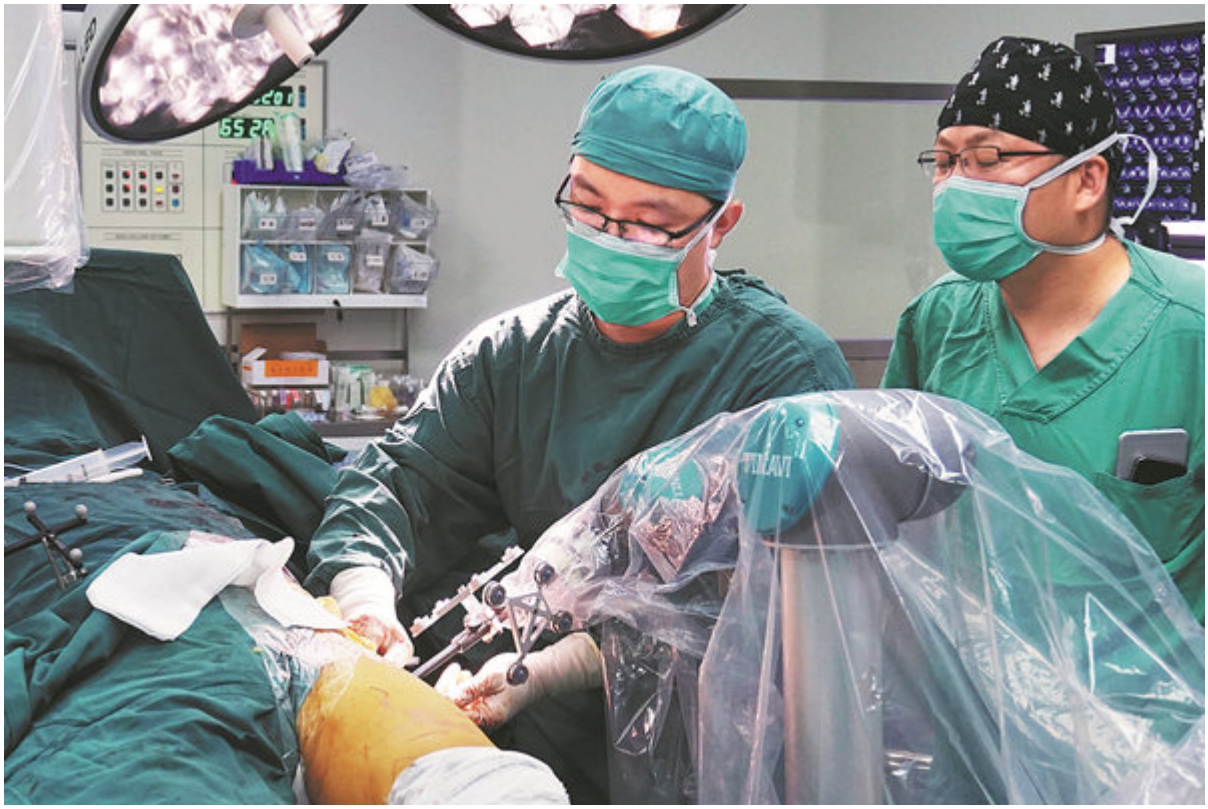
Drones get ready to take off for a performance in Guangzhou, capital city of south China's Guangdong Province, on Saturday, Feb. 11, 2017. [Photo: ycwb.com]

A record number of 1,000 Chinese drones performed stunning formations in Guangzhou of south China's Guangdong Province on Saturday night to celebrate the Lantern Festival, the last day of the Chinese New Year holiday.

According to local news portal ycwb.com, the drones formed six different formations during a 15-minute performance against the night sky near Guangzhou's landmark Canton Tower. The performance was held concurrently with a concert.

All the drones were made by Chinese producer EHang and controlled by only one computer.

China's medical robots take on foreign rivals



A doctor uses Phecda, a surgical robot developed by Tinavi, to do orthopedic surgery in Beijing Jishuitan Hospital in 2016. [Provided to China DAily]

Surgeon Tian Wei came across one of the most challenging orthopedic surgeries in his 30-year career in 2015. A 43-year-old patient had complained of progressive numbness in the limbs on his right side for 14 months, caused by a deformity in his upper cervical vertebrae.

The patient was in dire need of surgery to implant a screw to help support his neck bone, but the operation was risky. Any minor mistake could lead to paralysis or a life-threatening hemorrhage. Many hospitals were unwilling to treat him.

But Tian, who also is president of Beijing Jishuitan Hospital, decided to do the surgery – with a little help from another "surgeon".

The operation was completed in an hour with help from Phecda, a surgery robot with a 3-D high-definition visual system that can "see" the internal orthopedic structure and a "hand" that can guide medical tools to the proper location within 0.8 millimeters.

Developed by Beijing Tinavi Medical Technology Co with the help of Jishuitan Hospital, Phecda is part of the broad effort by Chinese companies to outcompete foreign rivals just as the country's use of medical robots is set to take off, thanks in part to an aging population.

Medical robots are highlighted in the country's Made in China 2025 strategy, which was designed to promote high-end manufacturing.

"That was the world's first robot-assisted surgery on upper cervical vertebrae," Tian said, describing the 2015 clinical trial. "Phecda is more precise than foreign products and its cost is lower."

Phecda, which is the third-generation surgery robot developed by Tinavi, is ready to be commercialized this year after obtaining approval from the China Food and Drug Administration in July.

Chinese medical robot-makers like Tinavi are working hard to outshine foreign companies in both price and quality as they benefit from ample demand, strong policy support and manufacturing prowess, company executives and experts said.

By 2050, more than 400 million Chinese will be over 60 years old, accounting for more than 30 percent of the population, up from about 11 percent now, official data show.

"The growing number of senior citizens will offer a sizable quantity of clinical cases, and enterprises can leverage a huge database to accelerate research and development," said Zhang Songgen, chairman of Tinavi.

In April, China unveiled its plan to sell more than 30 billion yuan ($4.4 billion) worth of domestic service robots by 2020. Medical robots are an important part of the ambitious goal, Zhang said.

Efforts focus on smog ‘routes’

Governments in cities along three pollution “highways” have been told to coordinate their efforts to cut emissions and help prevent the kind of smog that again blanketed the Beijing-Tianjin-Hebei region on Sunday and is expected to persist for five days.

The Ministry of Environmental Protection has identified 20 cities that are required to beef up pollution controls and work to unify emergency response standards.

The cities lie on three routes — western, central and eastern — on which airborne pollutants travel north due to geological and meteorological conditions, according to Xue Wenbo, director of airborne simulation for the Chinese Academy of Environmental Planning.

There are eight such cities in Hebei province, five in Shandong province and five in Henan province, as well as Beijing and Tianjin.

Researchers have said that tackling emissions in cities along the routes will cut the severity of air pollution in neighboring areas and ultimately help Beijing meet its ambitious target this year. The goal is to reduce the daily concentration of PM2.5 — fine particulate matter that is particularly hazardous — to 60 micrograms per cubic meter, down from 73 in 2016.

The ministry has installed more monitoring stations to facilitate scientific, targeted solutions to the problem posed by the smog highways in the Beijing-Tianjin-Hebei region.

Pollutants discharged from chimneys taller than 45 meters along the routes can reach the capital within hours, according to Chen Jining, the minister of environmental protection.

To address that problem, in 2016, the ministry sent inspection teams to 1,239 factories with 45-meter-high chimneys in the 20 cities to oversee measures to cut the rate of excessive pollutants. As a result, the rate fell from 31 percent to 3.79 percent over the 12 months, Chen said.

In addition, the ministry also limited or halted industrial production and processing of iron and steel and ordered cities to coordinate their smog responses.

“We’ve found that some cities do not make a timely emergency response or do less than is required, to avoid affecting industrial production,” said Liu Bingjiang, head of air quality management for the ministry.

Cities should engage in joint controls instead of waiting for others to act, he said, adding that government officials’ performance will be assessed by the ministry.

The smog across the Beijing-Tianjin-Hebei region is expected to reach a peak

on Tuesday and Wednesday in terms of severity and coverage, according to the China National Environmental Monitoring Center.

Twenty-three cities are forecast to experience severe air pollution on Wednesday, including Beijing, Tianjin, Shijiazhuang and Baoding in Hebei province, Jinan and Dezhou in Shandong province, and Zhengzhou in Henan province.