

10/17/64 WPS

China Bomb Rated With Hiroshima's

Some of Fallout Could Reach U.S. By Next Tuesday

By Howard Simons
Staff Reporter

Red China's atomic blast in the early hours of Friday morning was instantaneously recorded by American detection devices and appears to have been a close copy of the bomb dropped on Hiroshima in 1945.

This is the best assessment of experts here. It would mean that the Chinese Communists detonated a 10 to 20 kiloton plutonium device from an above-ground test tower. The Hiroshima bomb was a plutonium device with a yield of 20 kilotons or the equivalent power of 20,000 tons of TNT.

The Chinese blast has produced an unknown amount of fallout, some of which is expected to reach the West Coast of the United States around Tuesday.

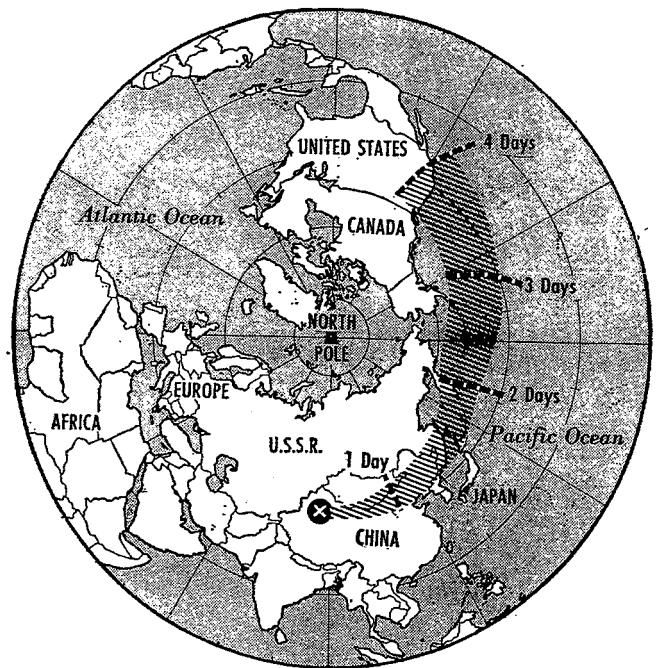
Radioactive debris from the blast is also expected to contain radioactive iodine, which President Johnson announced only Thursday had disappeared from the air as a consequence of the treaty banning atmospheric atomic

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tests. Red China did not sign the treaty.

It will be by analyzing radioactive debris from the Chinese blast that U.S. officials will definitely know the kind and size of atomic device that Chinese scientists put together. This information could be available to officials anytime from 12 to 36 hours after the blast, depending upon whether high-flying aircraft were sent across Red China to sample the debris or whether debris analysts wait until the material wafts across China to the open sea.

There is no doubt here that Red China set off a nuclear



The Washington Post

The map indicates the rate at which fallout from Red China's nuclear blast yesterday will travel around the Northern Hemisphere before reaching America.

blast, notwithstanding reports from earthquake recording stations that a large size natural earthquake coincidentally shook the earth at approximately the same time as the nuclear blast.

Positive detection of yesterday's detonation was made by the extensive U. S. network of varied recording devices set up solely for the purpose of detecting foreign atomic tests. In the case of yesterday's blast, which was an atmospheric test apparently in a desert region of western China's Sinkiang Province near Outer Mongolia, the first clue would have been an electromagnetic or radio signal generated by the blast.

In addition to picking up the characteristic radio signal from the explosion, which can be detected 3000 miles away from even a small atomic blast, further detection is possible by monitoring the tell-tale waves of sight and sound generated by an atmospheric atomic test. These include listening, pressure-sensing, and earthquake devices, as well as sensitive instruments to spot visible light and fluorescent reactions in the sky caused by an atomic explosion.

From the limited information available to experts yesterday most agreed that the Chinese set off an atomic de-

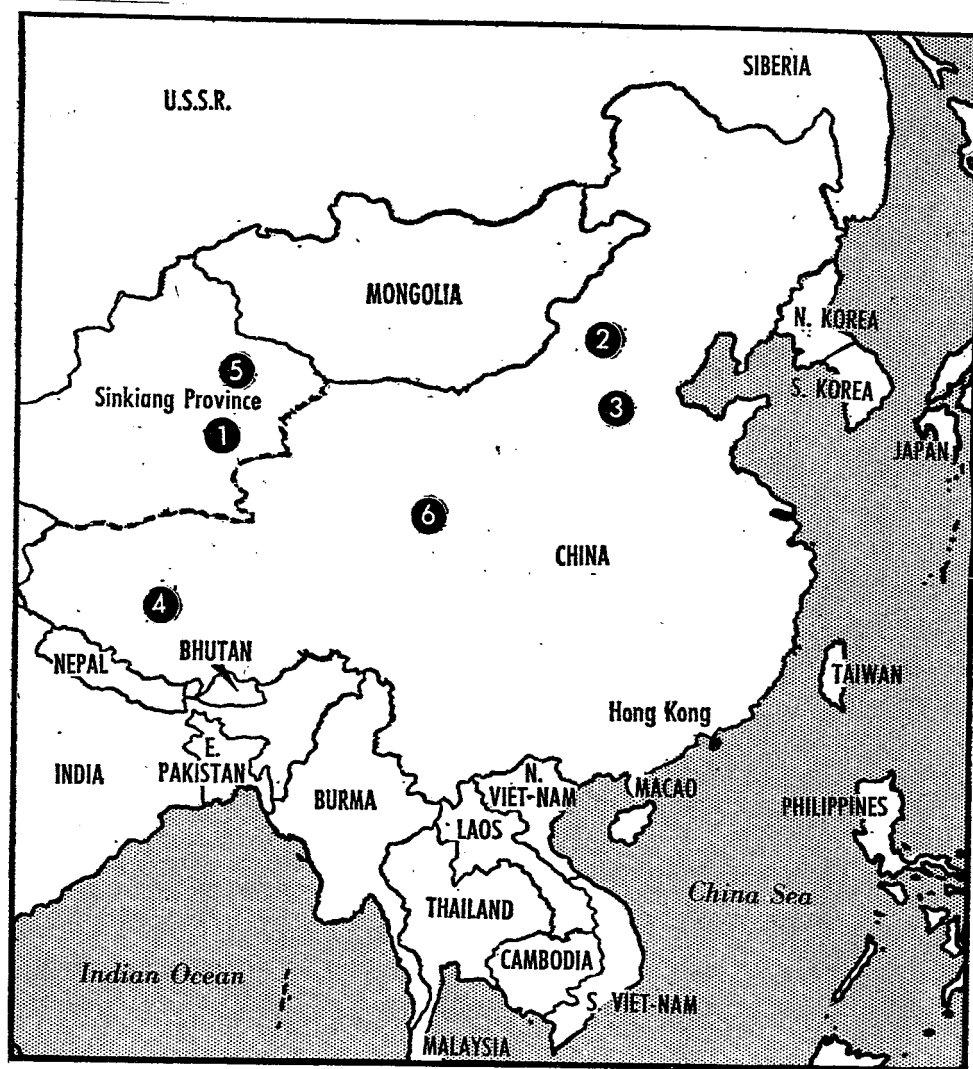
vice and not an atomic "bomb." Essentially, the difference between a "device" and an atomic "weapon," is that a device need not be packaged, nor its weight and size tailored for being carried to a battle site.

Devices are detonated to provide atomic scientists with information about their handiwork, that is, to tell them whether their physics was good. Many of the recent U.S. underground nuclear tests in Nevada have been tests of devices.

Many officials yesterday tended to discount an immediate military significance to the China blast. One reason is that it usually takes atomic weapons scientists three to five years to put a "device" into proper shape for weapons production. Another reason is that Red China is thought to have only a limited capability for making the stuff of atomic weapons.

It takes roughly 7000 grams of plutonium to fashion a Hiroshima-size device, and a nuclear reactor produces roughly a gram of plutonium per day per megawatt.

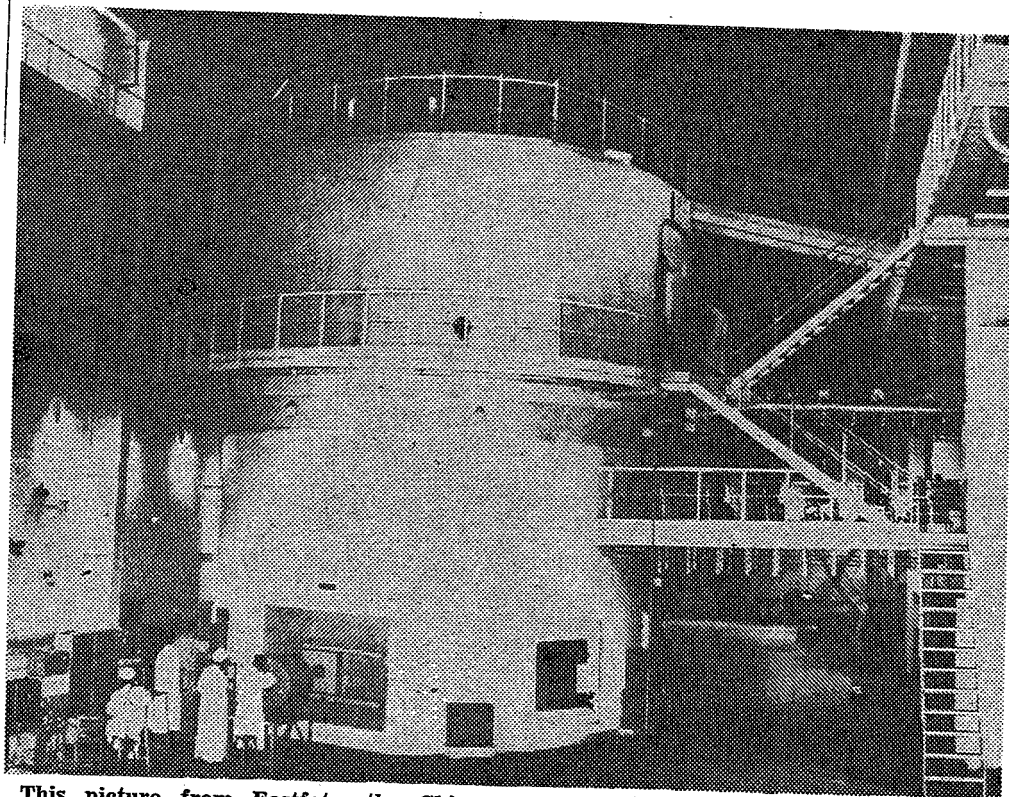
According to some estimates, Red China has only two reactors: a small 7000 kilowatt research reactor in Peking which was a Russian gift; and a homemade reactor rated at close to 50 megawatts which might be located at Paotow on the Yellow River in Inner Mongolia.



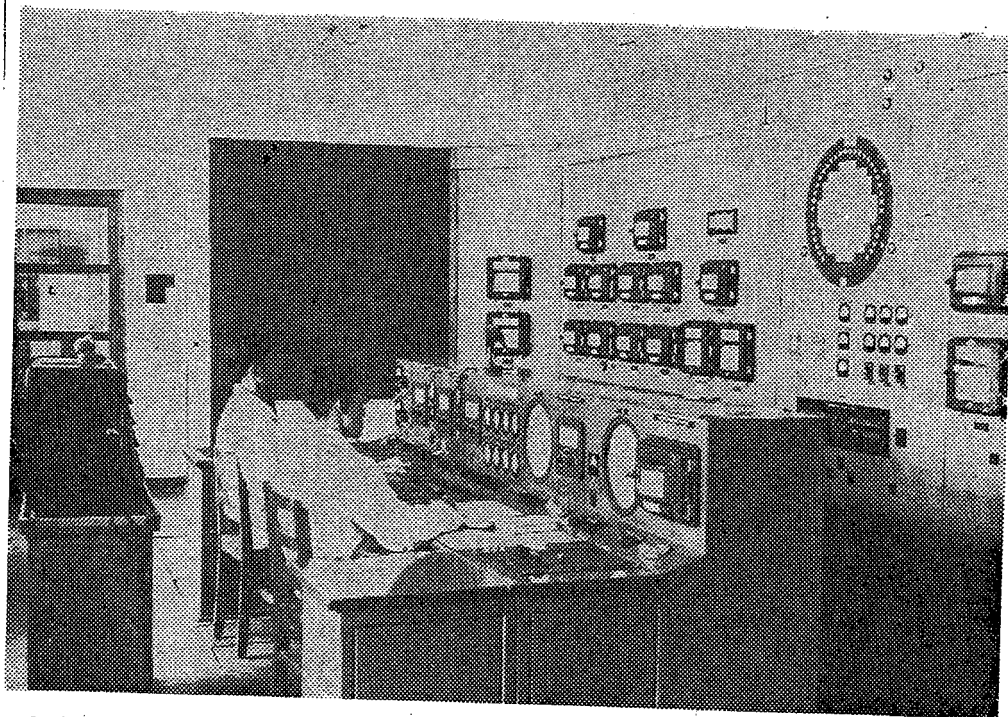
The Washington Post

This map locates the suspected bomb site (1) for yesterday's nuclear explosion in the western portion of Red China. The point is located in Sinkiang Province. Other locations marked are (2) and (3),

suspected atomic reactors; (4) uranium deposits in Tibet, (5) a uranium ore processing plant at Urumchi and (6) a suspected gaseous diffusion plant under construction at Lanchow.



This picture from Eastfoto, the China photo service, shows Red China's first experimental atomic reactor and cyclotron, built with Russian aid.



This Eastfoto picture shows the control board of Red China's first atomic reactor.