

Treaty May Discourage Development of 'Gigaton' Weapon

Editor's note: Russia and the United States, on the brink of war over Cuba missile bases less than a year ago, recently signed a treaty designed to steer mankind away from possible nuclear destruction. Now it is before the U.S. Senate for ratification. In the following dispatch, a veteran UPI reporter who covered the first Bikini bomb tests describes the nuclear race which led to the treaty and what it has meant to space-age weaponry.

By JOSEPH L. MYLER
Washington—UPI—History's first nuclear weapon was exploded in the summer of 1945. Its power frightened even those who made it. Some called it the "ultimate weapon."

It weighed five tons. But it was equal in violence to nearly 20,000 tons (20 kilotons) of TNT.

The first combat use of a nuclear weapon was the bombing of Hiroshima on Aug. 6, 1945. The second was the bombing of Nagasaki on Aug. 9, 1945. To date there have been no others.

But in the 18 years after the first experimental blast in the New Mexican desert there have been approximately 450 nuclear test explosions.

Greater Energy Potential
The first nuclear bomb represented a 4,000-fold jump in power over TNT weapons. Now there exists in the Soviet arsenal a weapon with an energy potential 5,000 times greater than the early A-bomb's.

Like the bombs of 1945, the Soviet weapon can be carried only by a heavy modern bomber, although missiles or spacecraft capable of delivering it may be in the cards.

The Soviet bomb is equivalent in energy to 100 million tons (100 megatons) of TNT. This one weapon could do to greater New York what those little ones of 1945 did to Hiroshima. Its toll would be reckoned not in thousands but in millions of lives.

The 25-megatonner is the biggest bomb in the U. S. arsenal. This country, scientists say, could have developed a 100-megaton bomb any time it wanted to in the past 10 years. But the 25 megatonner is considered the biggest with any real military worth.

Russians Explode More
Since 1945 both sides have exploded more than 400 nuclear test weapons equal in power more than 511 million tons (511 megatons) of TNT. This works out at 25,550 times the power of the Hiroshima bomb.

Of the 511 megaton total, the Russians exploded 357.7 megatons and the United States and Britain together, 153.3 megatons.

If nuclear experimentation should continue indefinitely, according to the experts, the variety of weapons might also be expanded indefinitely, resulting at one extreme to the "gigaton" weapon.

This would be a bomb equal to 1,000 megatons of TNT. It probably would weigh 100 to 200 tons. It could hardly be delivered by anything but a submarine or surface ship. A few of them exploded off the West Coast could doom half of the United States.

At the other end of the scale might be the tiny H-bomb capable of killing with radiation at short range without destroying property or contaminating the atmosphere. This, the little "clean" H-bomb, is otherwise known as the neutron bomb.

Test Ban Proposed
Now the three nuclear powers have proposed a limited test ban treaty. It would not necessarily halt the arms race, but it might slow development of horrible new weapons and curb contamination of the world's atmosphere with dangerous debris.

It would prohibit tests in the atmosphere, under water, and in space. It would permit only those deep or shallow underground tests which did not pollute the air outside the testing nation.

The United States apparently has a fine head start on all other nations in testing underground. So far 71 of its tests have been underground. The British have tested two

Warplanes Geared
Missiles are the big thing these days. But this country has 500 or more B52 and 1,000 or more B47 bombers capable of carrying its big city-killing bombs. Practically every U.S. warplane is geared to deliver nuclear weapons of one kind or another.

A recently published list shows that the United States has 34 different kinds of missiles — aside from its warplanes—designed to deliver nuclear blows. Of the 34 types, 24 are said to be ready to fire with the other 10 still in the development stage.

Less is known about Soviet capabilities. But the Russians have their Badger, Bear, and Bison warplanes, plus a long list of ballistic missiles. Of a dozen Soviet missiles capable of delivering nuclear warheads at various distances, 10 are said to be ready for combat and two are still under development.

Both countries have striven constantly to improve weapon efficiency—to get "more bang per pound" of warhead. There is some belief that Russia may be somewhat ahead in this respect, at least in the bigger bombs.

Both sides also have been trying to cut down the size of the costly and radioactively "dirty" fission triggers of their H-bombs.

If another trigger can be made, it will be possible to replace high-priced and inefficient tactical weapons, now

all fission, with cheap and efficient fusion weapons. In this category would be the so-called neutron bomb. Work on the all-fusion bomb can be done with underground testing. The Moscow treaty would not stop it.

Bodies of Two Portlanders Found
Portland—UPI—The bodies of two persons were recovered from the Columbia and Willamette rivers Sunday.

The body of Charles W. Moss Jr., 12, Portland, was found in the Columbia river. The boy drowned when he fell into the river from the Harbor Moorage at 98th and Marine dr. last Wednesday afternoon.

The body of a man was taken from the Willamette river near the Broadway bridge here. The Multnomah county coroner's office identified him as John Lee Lockett, about 50, Portland.

The coroner's office said he was in the river about a week to 10 days.

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