

Putin, Trump playing with fire in talking about nukes

By John Warnock

SPECIAL TO THE ARIZONA DAILY STAR

Vladimir Putin and Donald Trump have been talking about a new nuclear arms race.

Has either one of them ever witnessed the detonation of a nuclear weapon?

Neither has. But then, neither has anyone else in the United States or Russia who came of age after 1963. That's the year those countries and Great Britain signed the Partial Test Ban Treaty and agreed to stop testing nuclear weapons in the air, the sea, or in space. Many more tests were conducted — many more than most people think — but all were underground.

Before 1963, during the 18 years when nuclear devices were being tested in the air by Russia and the U.S., did any of our presidents go to witness a detonation? No. None did.

Like the rest of us, they only saw pictures. That might have

seemed enough. In 1953, when President Dwight Eisenhower was shown film of Ivy Mike, the first-ever detonation of a hydrogen device, he “blanched,” according to someone in the room.

Eisenhower had seen terrible things during World War II, of course. The yield of Ivy Mike, the equivalent of 10 megatons of TNT, was twice the yield of all the bombs dropped by all sides in World War II.

The U.S. and Russia made the treaty in 1963 because they had recognized something special about nuclear weapons.

Yes, they produce heat many, many times greater than that on the surface of the sun. And, yes, even the smallest nuclear weapon produces a blast that is many, many times greater than that of the biggest conventional bomb. They also, it had been recognized, produce radioactive poisons that linger, some for minutes, some for months, some for centuries. These poisons are like carbon emissions. They don't stay in the

nation that produces them. They go around the world.

Some people would get cancer and die from these poisons. It was not possible to say who or when or where, but by 1963 it was known that some people would, somewhere. This was a statistical certainty.

Harold Agnew was probably unique as a witness to the detonation of nuclear weapons. In 1942, when he was 21 and a physics student at the University of Chicago, he helped Enrico Fermi produce in Pile-1 the first-ever controlled nuclear chain reaction. Three years later, on July 16, 1945, employed at this point in the Manhattan Project at Los Alamos, Agnew witnessed the first-ever detonation of an atomic bomb, in the Trinity test in New Mexico. On Aug. 6, 1945, he flew from Tinian Island in the Pacific to Japan in The Great Artiste, the observation plane that went with the Enola Gay, the B-29 that dropped the bomb on Hiroshima. The only films taken from the air of the immediate aftermath were taken by Agnew.

He continued in nuclear weapons development and testing and in 1952, witnessed the Ivy Mike test at Enewetok Atoll in the Pacific. Two years later, he witnessed the Castle Bravo test at Bikini, which would turn out to be the biggest nuclear bomb we would ever detonate.

It yielded 15 megatons, 50 percent more than Ivy Mike. That test created a cloud of immediately dangerous radioactive fallout that spread 100 miles downwind.

In 1970, Agnew became the third director of the Los Alamos National Laboratory, our principal nuclear weapons laboratory. In 1977, while still director, in a hearing before the Senate Foreign Relations Committee, he testified:

“I firmly believe that if every five years the world's major political leaders were required to witness the in-air detonation of a multimegaton warhead, progress on meaningful arms control measures would be speeded up appreciably.”

In 1984, according to an article in the Los Angeles Times, he add-

ed that every leader should be in his underwear for the experience “so he feels the heat and understands just what he's screwing around with. (O)nce you've seen one, it's rather sobering.”

If what Agnew recommended were done, we know now that the fallout would eventually kill some of us. We wouldn't be able say who or when or where. But some of us would die before our time. That much is certain.

Even so, might we choose — we and Russia, of course, but also the seven other Nuclear Weapons States there are now — to do what Agnew recommended? Might we decide that the deaths that would follow would be — even if we ourselves were one of those who died early — an acceptable price to pay?

You can sign me up as supporting this.

All the leaders of the Nuclear Weapons States would have to be present, of course. I agree that they should be in their underwear.

John Warnock is a Tucson native and a retired University of Arizona professor.



John Warnock