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H-bomb blast remembered

Mike: The very first H-bomb test

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Fifty years ago on Friday, one of the more significant events in the era of mushroom clouds, megaton yields and mutually assured destruction took place.

It was the detonation of the world's first hydrogen bomb, set off at a United States test site in the Pacific Ocean.

The blast, timed at 1915 GMT, produced a light brighter than a 1,000 suns and a heat wave felt 50 kilometres away.

Although successive international treaties have sought to reduce the nuclear stockpile, there are still enough hydrogen bombs in the world to destroy humanity many times over.

Arms race

It was just after dawn on 1 November, 1952, that US Government scientists in the Marshall Islands pressed the button which would usher in a new age of human history.

The 10.4-megaton blast on the far away Enewetak Atoll was hundreds of times more powerful than the A-bomb explosion at Hiroshima.

Unlike that device which tapped energy

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by splitting atomic nuclei, the Enewetak weapon forced together nuclei of hydrogen to unleash an even greater destructive force.

Internationally, the test restored at a stroke the US lead in the race for weapons of mass destruction.

Edward Teller: Knew the Soviets were working on their own device

No choice

The US had taken the lead during World War Two with its first successful atom bomb test, but in 1949 the Soviet Union caught up, detonating its first A-bomb.

Edward Teller, the scientist often labelled "the father of the H-bomb", recalled the political imperative he felt to keep the USA ahead:

"Stalin had explicitly said, in response to Hiroshima, 'we are going to have the atomic bomb, and we are going to have more'. I then believed that the possibility of the hydrogen bomb was already there on the Soviet side, and not to work on it would be dangerous."

The first H-bomb, nicknamed "Mike", was a singularly impractical device.

Too costly

It weighed around 70 tonnes and was as big as a house - but it worked.

The US lead in the arms race was short-lived, however. Less than a year later, the Soviet Union too had a working hydrogen bomb.

Each side went on testing and building bigger and more sophisticated H-bombs over the next few decades, as did other global powers - France, China and the UK.

But according to military historian David Holloway, the race would in the end help bring about the demise of the Soviet empire.

Fallout cost

"You can, I think, go back and look at the early nuclear decisions made by Stalin after Hiroshima - although it was not discussed at

all in the Soviet leadership, it was an absolutely automatic decision," he told the BBC.

"But it was a very fateful one because it committed the Soviet Union to an arms race with a country which was economically far superior to it."

Many of the subsequent American H-bomb tests were also performed in the South Pacific.

They left a number of islands uninhabitable, and local people counting the impact of vast radiation doses on their health.

Atomic nations

As recently as 1995, France was still testing its bombs in the Pacific, to international and local protest.

Despite substantial compensation payments to some countries used as test-beds for the H-bomb age, the health effects of the hundred-plus thermonuclear detonations in the Pacific are still an issue in several nations.

This is the local legacy of Mike and its followers.

Its global legacy is the vast arsenals still maintained by the nuclear club.

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