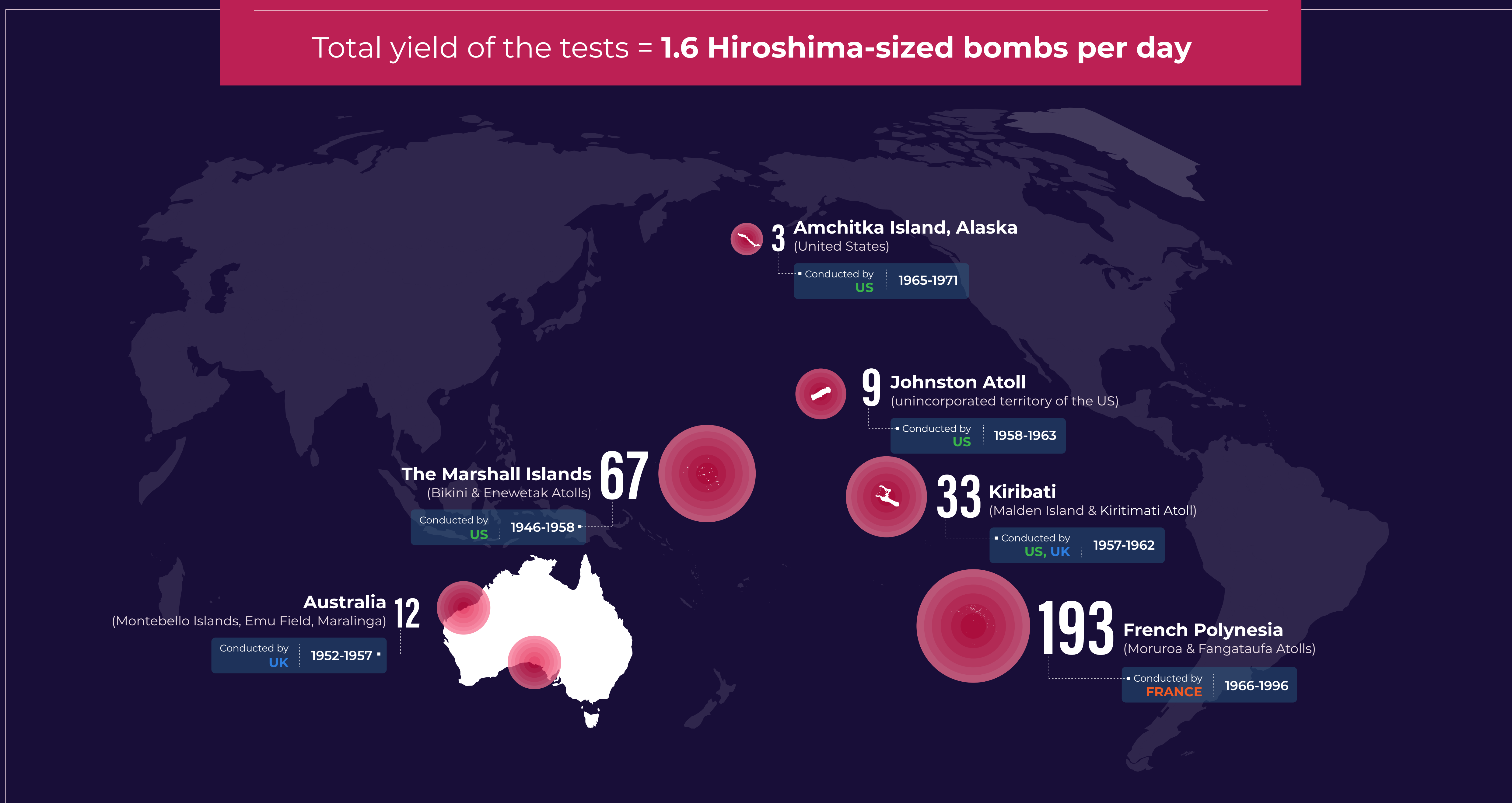


# NUCLEAR TESTS IN THE PACIFIC

1946-1996

Total nuclear tests in the Pacific Islands: **317**

Total yield of the tests = **1.6 Hiroshima-sized bombs per day**



193 French Polynesia (Moruroa & Fangataufa Atolls)	67 The Marshall Islands (Bikini & Enewetak Atolls)	33 Kiribati (Malden Island & Kiritimati Atoll)	9 Johnston Atoll (unincorporated territory of the US)	12 Australia (Montebello Islands, Emu Field, Maralinga)	3 Amchitka Island, Alaska (United States)
<ul style="list-style-type: none"> <li>193 tests by France</li> <li><b>Moruroa Atoll</b> 179 tests (including 42 atmospheric tests &amp; 137 underground tests)</li> <li><b>Fangataufa Atoll</b> 14 tests (including 4 atmospheric &amp; 10 underground nuclear tests)</li> <li><b>24 September 1966</b> Rigel Test: First atmospheric tests at Fangataufa</li> </ul>	<ul style="list-style-type: none"> <li>67 tests by the United States</li> <li><b>23 tests:</b> at Bikini Atoll</li> <li><b>44 tests:</b> at Enewetak Atoll</li> <li><b>1 July 1946</b> Shot Able: First test at Bikini Atoll, part of Operation Crossroads</li> <li><b>1951</b> Operation Greenhouse: series of tests at Enewetak Atoll</li> <li><b>1952</b> Operation Ivy: first series of thermonuclear tests at Enewetak Atoll</li> <li><b>1 November 1952</b> Operation Shot Mike: first successful thermonuclear test by the United States</li> <li><b>1 March 1954</b> Castle Bravo test: largest known nuclear detonation.</li> </ul> <p><b>Castle Bravo Test:</b> The Castle Bravo test had a yield of 15 megatons, making it 1,000 times more powerful than the atomic bomb dropped on Hiroshima.</p> <p>Radioactive material from the test is estimated to have spread over an area of approximately 11,000 square kilometers. Radioactive material on the Bikini Atoll produces 184 millirems of radiation a year.</p> <p>Concerns have been raised of radioactive material leakage from the Runit Dome on Enewetak Atoll into the surrounding ocean and groundwater.</p>	<ul style="list-style-type: none"> <li>9 tests by the United Kingdom</li> <li><b>24 tests by the United States</b></li> <li><b>15 May 1951</b> Short Granite: First thermonuclear test attempted by the UK (Malden Island)</li> <li><b>8 November 1957</b> Purple Granite: First successful thermonuclear test by the UK (Kiritimati Atoll)</li> <li><b>1962</b> Operation Dominic: 24 nuclear detonations conducted by the US (Kiritimati Atoll)</li> </ul> <p><b>Operation Grapple:</b> Operation Grapple was an important part of the British mission to develop a hydrogen bomb. It included four series of tests at Malden Island and Kiritimati Atoll (British colonies until 1979) in the Gilbert and Ellice Islands in the Pacific Ocean (modern Kiribati).</p> <p>Operation Grapple ended in September 1958, with the 'United States-United Kingdom' Mutual Defense Agreement, a treaty between the US and the UK on nuclear weapons testing.</p>	<ul style="list-style-type: none"> <li>9 tests by the United States</li> <li>Including atmospheric tests and extremely high-altitude nuclear explosions in outer space</li> <li><b>1958</b> 2 "Hardtack I" nuclear tests firings: "Hardtack Teak" (August 1, 1958) &amp; "Orange" (August 12, 1958)</li> <li><b>1962</b> Operation Dominic: 7 nuclear tests</li> </ul>	<ul style="list-style-type: none"> <li>12 tests by the United Kingdom</li> <li><b>3 tests</b> in Montebello Islands, <b>2 tests</b> in Emu Field, <b>7 tests</b> in Maralinga</li> <li><b>3 October 1952</b> Operation Hurricane: first British nuclear weapon test on the Montebello Islands off the Western Australian coast</li> <li><b>15-27 October 1953</b> Operation Totem: British atmospheric nuclear tests which took place at Emu Field in South Australia</li> <li><b>27 September 1956</b> Operation Buffalo (4 tests): First Britain test at Maralinga</li> <li><b>14 September - 9 October 1957</b> Operation Antler (3 tests) in Maralinga</li> </ul> <p>200+ minor trials of radioactive and toxic materials aimed at testing the performance of weapons components and investigating safety issues.</p> <p>Plutonium contamination at Maralinga was caused by these minor trials.</p>	<ul style="list-style-type: none"> <li>3 tests by the United States</li> <li><b>1965</b> First test, Long Shot</li> <li><b>1969</b> Second test, Milrow</li> <li><b>1971</b> Third test, Cannikin</li> </ul> <p>The Cannikin test had a yield of under five megatons, the largest underground test ever conducted by the US.</p>

## Countries responsible for nuclear testing in the Pacific



### Data Sources:

<https://icanw.org.au/wp-content/uploads/Pacific-Report-2017.pdf>;  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4165831/>;  
<https://thebulletin.org/2021/11/the-untold-story-of-the-worlds-biggest-nuclear-bomb/>;  
<https://www.cbsnews.com/news/enewetak-atoll-dome-un-antonio-guterres-concerns-marshall-islands-structure-leaking-radioactive-material-pacific/>