

# This Is How America Nearly Nuked A Canal Through Central America

By [Robin Andrews](#), Senior Contributor.

[Follow Author](#)

Published Aug 23, 2018, 09:00am EDT, Updated Aug 23, 2018, 09:27am EDT



🕒 This article is more than 7 years old.

The Panama Canal is, inarguably, a remarkable feat of engineering. Most people know that it's an artificial construct connecting the Atlantic and Pacific Oceans, but it certainly wasn't a matter of simply digging it out of the earth in a matter of months.

The French, buoyed by their recent success at carving out Egypt's Suez Canal, were the first to give excavation and construction a go in 1881, about a century after the Spanish military outlined their plans to do just that – but it proved to be too difficult, and, succumbing to diseases they didn't fully understand, workers died at a breathtakingly high rate. The British, along with the now-defunct Republic of New Granada, thought about giving it a try too, but they never got started.

The US has already built a railway across the isthmus by 1855, but they were also keen on the idea of a canal. After the French plans were sold to the American government, its engineers achieved a feat no-one else could: a 82-kilometer (51-mile) aquatic highway was born in 1914, after 10 years of painstaking work. The region was revolutionized, and, until control was handed over to Panama in 1977, the US ruled the waters.

In the 1960s, the powers-that-be decided that Panama Canal wasn't enough. There was simply too much land still in the way, and it would be rather useful if, somewhere along Central America, a new route could be dug out. Fortunately, science had seemingly provided an answer to an impatient US government: why not simply use a series of colossal nuclear weapons to literally carve a hole through hundreds of kilometres of rock?

This was to be the Pan-Atomic Canal. Here's the story of why it never came to pass.



Nevada saw a huge range of nuclear warhead test detonations during the Cold War. Before atmospheric tests were banned, you could even see nuclear warheads being fired out of artillery cannons, like this one. [... More](#)  
NATIONAL NUCLEAR SECURITY ADMINISTRATIONS

The canal, which would provide both militaristic and trade support to the US and its allies, was a decidedly serious proposal. After all, American ingenuity had achieved an unparalleled engineering feat in the region half a century earlier, so why not double-down on what the nation was clearly quite good at?

So, in the early-to-mid-1960s, plans were drawn up to create a nuclear-forged sequel to the Panama Canal. The Interoceanic Sea-Level Canal Study, as it was technically referred to, was in fact a third generation scheme, with the first two cropping up, before being nixed, in 1939 and 1946 respectively. The former was designed to just increase capacity, whereas the latter was aimed to provide a back-up in case the original was attacked with nuclear weapons.

The cost, according to a series of 1964 Congressional hearings, would be anything between \$620 million, if nukes were used, to \$13 billion, if they weren't. The economics of the situation seemed promising, so in 1967-1968, the US Army Corps of Engineers sent 50 geologists to look for the best possible routes through Central America.

Paths through Nicaragua, Panama and Columbia were identified, with Mexico having been ruled out earlier on in the process. According to this rather thorough review on the history of the plots to expand the Panama Canal, the best of these would still require as much as 1.53 billion cubic meters (2 billion cubic yards) of material to be blasted out of the way. That's roughly equivalent to throwing

The project began to precipitate back in early 1957, when it was discussed at a symposium hosted by what was then known as the University of California Radiation Laboratory at Livermore. Back then, per Slate, there was a [large margin of error](#) on the specifics, with as little as 26 to as many as 764 bombs being proposed to complete the project. This sounds entirely maniacal to you and I, but back then, the idea was seen as such a good idea that, four months later, the AEC founded PP.

As time went on, it was agreed that the US would use multiple 2, 5 and 15-megaton nuclear weapons – the last of which is 1,000 times the powerful than the bomb dropped on Hiroshima, by the way – to progressively dig out the canal. So-called Buggy tests were carried out in Nevada, using multiple low-yield nuclear weapons, buried beneath the ground several hundred meters apart, to create a ditch. At the same time, larger nuke shots nearby were used to provide a scalable comparison.



The Sedan crater.  
NATIONAL NUCLEAR SECURITY ADMINISTRATION

The 1969 [white paper](#) on Route 25, one that would have pierced Colombia, makes for an insightful, utterly surreal read. It discusses the Atrato-Truando pathway, which was the best option thanks to its remote location; it notes how large river sections would need to be diverted as a result, which would require decades of additional construction work to maintain post-excavation.

At the end of the day, it was assumed that a mixture of conventional digging procedures, as well as a

By 1969, however, the atmosphere had changed somewhat. Several test shots designed to round off the canal digging studies were cancelled citing concerns over radiation release. A 1970 report, spearheaded by the respected Corps of Engineers brigadier general Charles Noble, advised against the plan, noting that it was not economically viable, and would endanger both the environment and various indigenous populations.

“Although we are confident that someday nuclear explosions will be used in a wide variety of massive, earth-moving projects, no current decision on U.S. canal policy should be made in the expectation that nuclear excavation technology will be available for canal construction,” the report concluded.

It wasn’t just the Pan-Atomic Canal that was losing steam: PP in general was losing support, both within and without the halls of power. Environmental and economic concerns abounded, and even the most “successful” tests – those that created wells into natural gas supplies, like the Rio Blanco series – couldn’t be reasonably justified.

As the curtain began to fall on PP, the Pan-Atomic Canal was put out of its misery. On June 30, 1975, PP was officially terminated. The following spring, after so many tests had already been carried out, the US and the Soviet Union signed the [Treaty on Underground Nuclear Explosives for Peaceful Purposes](#), which set yield limits on subterranean nuclear blasts. If either nation wanted to, it could still conduct PNEs in the territory of other consenting countries, and scientific cooperation was encouraged.

It ultimately came into force on December 11, 1990, shortly after the Soviet PNE program was shut down – and just two weeks before the Soviet Union came to an end.

The Panama Canal itself didn’t get a twin in the end, but it was ultimately widened over the last decade, all without the aid of any nuclear explosions.