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**Title:** Trinity 78th Anniversary: re-discovered and newly edited unclassified footage shows use of tanks to collect radioactive samples immediately after Trinity test

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**Trinity 78<sup>th</sup> Anniversary: re-discovered and newly edited unclassified footage shows use of tanks to collect radioactive samples immediately after Trinity test**



**Caption:** First Lab director **J. Robert Oppenheimer** (center left) and Manhattan Project commander **Leslie R. Groves** (center right) with the remains of the steel tower at Trinity test ground zero, September 1945. The successful detonation of The Gadget on July 16, 1945 marked the dawn of the Atomic Age.

Photo file: [https://drive.google.com/file/d/1tnJznEeGsCJZGOzQKIU-6OXGgDpqlP7D/view?usp=drive\\_link](https://drive.google.com/file/d/1tnJznEeGsCJZGOzQKIU-6OXGgDpqlP7D/view?usp=drive_link)

By [National Security Research Center](#) staff

On July 16, 1945, at 5:29 a.m., a team of Los Alamos scientists successfully detonated the world's first atomic bomb at a remote section of south-central New Mexico desert, then known as the Alamogordo Bombing Range.

This full-scale test, [dubbed "Trinity" by the Lab's first Director J. Robert Oppenheimer](#), proved the viability of the implosion-type bomb known as [The Gadget](#) and ushered in the Atomic Age. Three weeks after Trinity, two Los-Alamos created atomic weapons – Little Boy and Fat Man – were released above Japan, helping to end World War II and changing the course of history forever.

This month marks the test's 78th anniversary.

**Re-discovered and newly edited video shows post-test work**

In Trinity's immediate aftermath, however, its participants were faced with the hazardous task of entering the test area to measure radioactivity levels. A brief film taken at the time depicts the important role played by specially modified tanks for this work.

Through firing tethered rockets equipped with scoops and dragging them back across the ground, samples could be taken and retrieved remotely. The film also shows the lead-lined Sherman tank that carried scientists – according to some accounts, [Enrico Fermi](#) among them – into the ground zero crater to collect samples.



Caption: One of the specially-modified tanks used to collect soil samples shortly after the Trinity Test, July 16, 1945.

Image file link:

[https://drive.google.com/file/d/1vtLFoQSlivKlo03KVADHJjY34zHadeYp/view?usp=drive\\_link](https://drive.google.com/file/d/1vtLFoQSlivKlo03KVADHJjY34zHadeYp/view?usp=drive_link)

The footage is about 7 minutes long and was originally digitized by Lab archivists in 2017. The digital version was recently rediscovered in the collections of the National Security Research Center (NSRC) and newly edited for clarity by motion picture archivist **Megan Kilidjian** (WRS-NSRCDC). It [can be viewed here](#).

“The film depicts the ingenuity and inventiveness of staff to meet a critical need – the recovery of radioactive samples to assess the performance of the Trinity device,” said Lab historian **Roger Meade**. “The film also depicts safety measures – remote recovery and handling – to keep staff safe from radioactive exposures ... [and] the rugged and primitive environment in which wartime staff worked.”

According to Kilidjian, “Motion picture film is exciting because it allows you to see history as it was being made. Many of the NSRC’s films document the technological processes of the past,

which can help guide the Lab's current mission. Digitizing these films before they degrade and making them discoverable is integral to unlocking innovative, historical discoveries."

### Looking for more on the Trinity test?

- Check out the next session of the NSRC's [Weapons Knowledge Management Program](#)'s quarterly classified video series, **Unlocking the Vault**, which will feature classified and newly re-discovered unclassified Manhattan Project-era video footage and Q&A with experts **Alan Carr** and **Glen McDuff** [on Thursday, July 27](#). Open to Q-cleared personnel with U.S. citizenship.
- The NRSC curates a significant collection of photographs, films, notes, unclassified artifacts and other materials related to the Trinity test – including several commemorative posters designed for Lab staff to download and print. [Learn more here](#).
- Experience the sounds, voices, and images of the events and history surrounding the Trinity test with these NSRC-created films: "[Trinity Test 75th Anniversary](#)," "[The Science of Trinity](#)," "[Overview of the Trinity Test](#)" and "[Trinity and the British Mission](#)."
- Catch the NSRC's documentary, "Oppenheimer: Science, Mission, Legacy," when it premieres for Lab staff later this summer! [Watch the trailer](#) here.