



[HOME](#) | [ABOUT THE SERIES](#) | [ABOUT THE FILM](#) | [ABOUT THE DOCUMENTARY](#)
[ABOUT THE TV SERIES](#) | [ABOUT THE TV SERIES](#)
[ABOUT THE TV SERIES](#) | [ABOUT THE TV SERIES](#) | [ABOUT THE TV SERIES](#) | [ABOUT THE TV SERIES](#)
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Race for the Superbomb KIDS | HOME

THE FILM & MORE
SPECIAL FEATURES
TIMELINE
MAPS
PEOPLE & EVENTS
TEACHER'S GUIDE

AMERICAN EXPERIENCE

More About the Film "Race for the Superbomb"

At the dawn of the Cold War, the United States initiated a top secret program in New Mexico to build a weapon even more powerful than the atomic bomb dropped on Japan. [Note: This program aired in January, 1999.]

Program Description

A synopsis of the film, and film credits



Feedback

Enhanced Transcript

A transcript of the broadcast program, along with additional information

Reference

Interview Transcripts

Extended interviews with the program participants

Bibliography

A list of books, articles, and Web sites relating to the program topic

Primary Source Documents

Speeches, letters, reports and statements

To order "**Race for the Superbomb**" for home use, visit [Shop PBS](#).

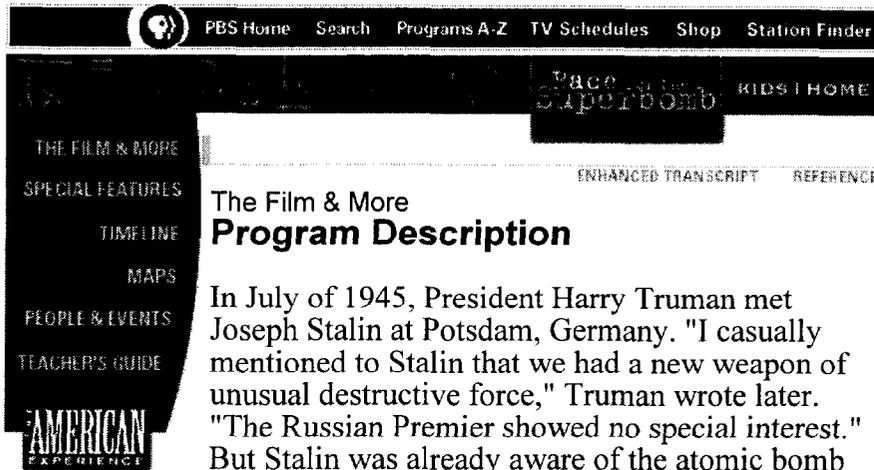
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[THE FILM & MORE](#) | [SPECIAL FEATURE](#) | [TIMELINE](#) | [MAPS](#)
[PEOPLE & EVENTS](#) | [TEACHER'S GUIDE](#)

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The screenshot shows the PBS website interface. At the top, there is a navigation bar with links for "PBS Home", "Search", "Programs A-Z", "TV Schedules", "Shop", and "Station Finder". Below this, a banner for "Race for the Superbomb" is visible, with "KIDS | HOME" on the right. A left-hand sidebar contains a menu with the following items: "THE FILM & MORE", "SPECIAL FEATURES", "TIMELINE", "MAPS", "PEOPLE & EVENTS", and "TEACHER'S GUIDE". The "AMERICAN EXPERIENCE" logo is at the bottom of the sidebar. The main content area displays "The Film & More" and "Program Description" in large text. Below the title, there are links for "ENHANCED TRANSCRIPT" and "REFERENCE".

The Film & More Program Description

In July of 1945, President Harry Truman met Joseph Stalin at Potsdam, Germany. "I casually mentioned to Stalin that we had a new weapon of unusual destructive force," Truman wrote later. "The Russian Premier showed no special interest." But Stalin was already aware of the atomic bomb thanks to Soviet spies lodged at the heart of the American bomb project in Los Alamos. Soviet scientists were scrambling to catch up.

The new weapon was revealed to the world a few weeks later when a single atomic bomb destroyed the city of Hiroshima. Stalin's reaction was immediate. "Speed things up," he reportedly ordered.

As an unpredictable Cold War settled in, several U.S. scientists argued for an all-out effort to build an even more powerful weapon: a hydrogen bomb. Edward Teller, an émigré physicist, pushed for a program to build what he called "the Super"-- a hydrogen fusion bomb. "If the Russians demonstrate a Super before we possess one," said Teller, "our situation will be hopeless."

Andrei Sakharov, a brilliant young Russian physicist, had also been given the task of designing a fusion bomb for the Soviet Union. Thanks to the Soviet spy Klaus Fuchs, Sakharov was familiar with Teller's design, but he soon decided on a different approach.

By 1952 the Super was ready for its first test. The fireball of the first H-bomb grew to a diameter of three miles and vaporized an entire island in the Pacific atoll of Eniwetok. The H-bomb's yield was ten megatons, a thousand times greater than the atomic bomb dropped on Hiroshima.

Eighteen months later, Sakharov and his team exploded the first Soviet H-bomb. The nuclear arms race had begun.

- [Film Credits](#)

[Program Description](#) | [Enhanced Transcript](#) | [Reference](#)

THE FILM & MORE | SPECIAL FEATURE | TIMELINE | MAPS
PEOPLE & EVENTS | TEACHER'S GUIDE
THE AMERICAN EXPERIENCE | KIDS | SEARCH | FEEDBACK
WGBH | PBS Online



PBS Home Search Programs A-Z TV Schedules Shop Station Finder

Race for the Superbomb KIDS | HOME

THE FILM & MORE
SPECIAL FEATURES
TIMELINE
MAPS
PEOPLE & EVENTS
TEACHER'S GUIDE

PROGRAM DESCRIPTION REFERENCE

The Film & More
Enhanced Transcript

David McCullough:
I'm David McCullough. Welcome to The American Experience.

AMERICAN EXPERIENCE

The debate had been intense for months. But then on Tuesday, January 31, 1950, after hearing the recommendation of his Secretary of State, Secretary of Defense, and the Chairman of the Atomic Energy Commission, Harry S. Truman made one of the most far reaching decisions of his or any presidency.

As the world learned that same day, the United States was to proceed with "work on all forms of atomic weapons, including the so-called hydrogen or superbomb."

The announcement was one of a chain of startling events, an onrush of bad news, all in less than a year, that left Americans reeling.

The previous summer, China was overwhelmed by the Communist forces of Mao Tse-tung. That September came the stunning news that the Russians, too, had an atomic bomb; and after this, the revelation that one of the physicists on the Manhattan Project was in fact a spy for the Russians.

And now the arms race of the Cold War was to move to a level of cost and horror dwarfing anything in past experience, even the atomic bomb.

Our film is a chilling drama covering ten years and made especially riveting by the presence of several of the scientists who played key roles. It is not often in a documentary film that one senses such a range of intellectual virtuosity and moral struggle, of genius, fallibility, and sheer terror.

Nor should we let ourselves imagine that the peril at the heart of it all is only a thing of the past.

Race for The Superbomb.

continue to Act One

THE FILM & MORE | SPECIAL FEATURE | TIMELINE | MAPS
PEOPLE & EVENTS | TEACHER'S GUIDE

[THE AMERICAN EXPERIENCE](#) | [KIDS](#) | [SEARCH](#) | [FEEDBACK](#)

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The Film & More

Reference

Interview Transcripts | [Bibliography](#) | [Primary Sources](#)

Harold Agnew, Physicist, on:

- [His Memories of Los Alamos](#)
- [The Hiroshima Mission](#)
- [The "Mike" Test](#)

Barton Bernstein, Historian, on:

- [The U.S. Decision to Build the H-bomb](#)

Tami Biddle, Historian, on:

- [Strategic Bombing](#)

Lynn Eden, Sociologist, on:

- [Predicting Damage from Nuclear Blasts](#)

James Edmundson, SAC Lt. General, on:

- [His Memories of World War II](#)
- [Curtis LeMay](#)
- [Firing Bombing Japanese Cities](#)
- [Bombing Campaigns in the Korean War](#)
- [Strategic Air Command Bomber Response Time](#)
- [The Mission of the Strategic Air Command](#)
- [Living with the Possibility](#)
- [His Reaction to Atomic Tests](#)
- [The H-bomb Effect on Target Selection](#)
- [B-36 and B-47 Planes](#)
- [Strategic Air Command's War Plans](#)
- [Understanding the Power of Nuclear Deterrence](#)
- [Strategic Air Command's Role in Ending the Cold War](#)

John Lewis Gaddis, Historian, on:

- [The Soviet Response to Hiroshima](#)
- [Breaking the Spirit of the Yalta Conference](#)

- Stalin's Reaction to American A-bomb
- Political Use of the Bomb
- The Role of the Atomic Bomb in the Korean War
- Military Support for the Hydrogen Bomb
- President Eisenhower's Military Strategy
- Cold War Nuclear Diplomacy
- Eisenhower's Economics and the Bomb
- Lessons from 50 Years of Nuclear History

Richard Garwin, Physicist, on:

- The "Need" to Build Nuclear Weapons

General Andrew Goodpaster, Eisenhower Aide, on:

- Eisenhower's Views of Large-Scale Nuclear War
- Eisenhower's Civil Defense Program
- Eisenhower's Comments About Atomic War
- Strategic Reconnaissance Flights Over the Soviet Union

Cargill Hall, Air Force Historian, on:

- U.S. Need for Soviet Information
- British Pilots Flying Over the Soviet Union
- SAC Intelligence Gathering
- U.S. and Soviet Fears of a Surprise Attack

David Holloway, Historian, on:

- The Beginning of the Soviet Nuclear Program
- International Connections in the Physics Community
- The Impact of Hiroshima on the Soviet Nuclear Program
- Stalin's Motivation of Soviet Nuclear Scientists
- Soviet Reactions to Hiroshima
- Stalin's Efforts to Create a Nuclear Program
- Slave Labor, Scientists and the Soviet Nuclear Program
- What Klaus Fuchs Told the Soviets
- The Second Soviet Scientific Team
- Sakharov's H-bomb Design
- Consequences of the First Soviet Test
- Political Importance of the Sakharov Design
- Fear on Both Sides of the Iron Curtain
- Military and Political Struggle over the use of Nuclear Weapons
- Kurchatov and Sakharov Reactions to the 1955 Soviet Test
- The Symbolic Importance of Nuclear

- Weapons
- How Soviet Military Adjusted to Nuclear Weapons
- Andrei Sakharov
- Deterrance and the Nuclear Future

Valentin Larionov, Soviet Army Major General, on:

- Nuclear Weapons as a Diplomatic Tool
- Soviet Cold War Fears
- Soviets and Americans at the End of WWII

Laura McEnaney, Historian, on:

- The Federal Civil Defense Administration
- The Message of Self-Help
- Civil Defense Films
- America's Response to the Civil Defense Message
- Evacuating Cities
- Flaws in Civil Defense Plans
- African Americans and Civil Defense
- Integration During Evacuation
- Women's Role in Civil Defense
- The Militarization of American Families
- Civil Defense Literature
- Helping People Manage Fear
- Fear of Fallout

Richard Rhodes, Writer, on:

- The Significance of Developing the Atomic Bomb
- The Super Conference at Los Alamos
- Klaus Fuchs' Role on the Manhattan Project
- Calculations for the Hydrogen Bomb
- The Superbomb Design Breakthrough
- General Curtis LeMay, Head of Strategic Air Command
- LeMay's Vision of War
- The Arms Race
- The Arms Race Legacy
- The Fear Caused by U.S. Overflights of the Soviet Union
- The First Test of a Thermonuclear Device
- Edward Teller's Role in the Oppenheimer Hearings

David Alan Rosenberg, Historian, on:

- The Attitude Toward Nuclear War
- U.S. Planning for a Soviet Nuclear Attack
- The Bureaucracy of Death

Martha Smith, Historian, on:

- The Impact of the Bravo Test
- The Atomic Energy Commission's Response to the Bravo Test
- Scientific Evidence of the Effects of Radiation

Herbert York, Physicist, on:

- Strategic Reconnaissance of the Soviet Union
- Civil Defense

Dee Garrison, Historian, on:

- American Response to the Atomic Bomb
- Civil Defense Portrayal of Nuclear War
- The Effects of Civil Defense

German Goncharov, Physicist, on:

- Andrei Sakharov
- What the Soviets Learned From Klaus Fuchs
- Radiation Implosion
- Soviet Response to the Announcement Made by President Truman
- The Development of the "Layer Cake" Design

Marshall Rosenbluth, Physicist, on:

- Enrico Fermi
- His Experience at Los Alamos
- The George Test
- The Mike Test

Yuri Smirnov, Physicist, on:

- His Memories of the Death of Stalin
- His Work on the Nuclear Bomb

Vladislav Zubok, Historian, on:

- The Soviet Reaction to Hiroshima
- Stalin's Use of Soviet Resources to Build the Bomb
- Stalin's 1946 Speech
- The Soviet Reaction to SAC Buildup

Elaine Tyler May, Historian, on:

- American Reaction to Hiroshima and

Nagasaki

- Oppenheimer and Hiroshima
- Civil Defense
- American Nuclear Fears
- Fear of Sexual Chaos After Nuclear Attack

[Program Description](#) | [Enhanced Transcript](#) | [Reference](#)

[THE FILM & MORE](#) | [SPECIAL FEATURE](#) | [TIMELINE](#) | [MAPS](#)
[PEOPLE & EVENTS](#) | [TEACHER'S GUIDE](#)

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THE FILM & MORE
SPECIAL FEATURES
TIMELINE
MAPS
PEOPLE & EVENTS
TEACHER'S GUIDE

AMERICAN EXPERIENCE

Race for the Superbomb

KIDS | HOME

PROGRAM DESCRIPTION ENHANCED TRANSCRIPT

The Film & More
Reference
Interview Transcripts | **Bibliography** | Primary Sources

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[Program Description](#) | [Enhanced Transcript](#) | [Reference](#)

[THE FILM & MORE](#) | [SPECIAL FEATURE](#) | [TIMELINE](#) | [MAPS](#)
[PEOPLE & EVENTS](#) | [TEACHER'S GUIDE](#)

[THE AMERICAN EXPERIENCE](#) | [KIDS](#) | [SEARCH](#) | [FEEDBACK](#)

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Race for the Superbomb KIDS | HOME

PROGRAM DESCRIPTION ENHANCED TRANSCRIPT

THE FILM & MORE
SPECIAL FEATURES
TIMELINE
MAPS
PEOPLE & EVENTS
TEACHER'S GUIDE

AMERICAN EXPERIENCE

The Film & More
Reference
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[Program Description](#) | [Enhanced Transcript](#) | [Reference](#)

[THE FILM & MORE](#) | [SPECIAL FEATURE](#) | [TIMELINE](#) | [MAPS](#)
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