

THE ILLUSTRATED STORY OF
THE
ATOM BOMB



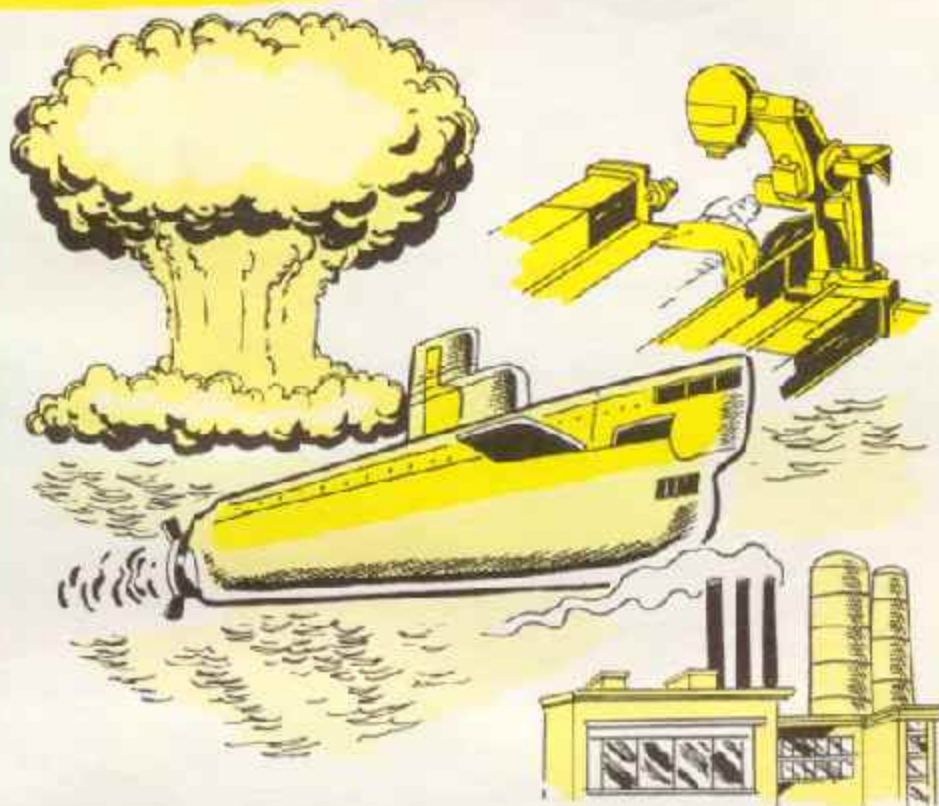
Quest For Knowledge Series

THE ATOM -FRIEND OR FOE?

Within the tiny atom lies a tremendous power. This power first entered the modern world as a means of destruction, unleashing a terrible fury on countless thousands.

But like any great force, the atom can also be used to serve man. Atomic power plants provide clean, dependable energy. Nuclear-powered submarines glide beneath the North Pole. Numerous lives are saved by radiation treatment. And radio-isotopes analyze soil, plants, and animals to help increase food production around the world.

How did we first harness this amazing power? Let's go back in time to find out...



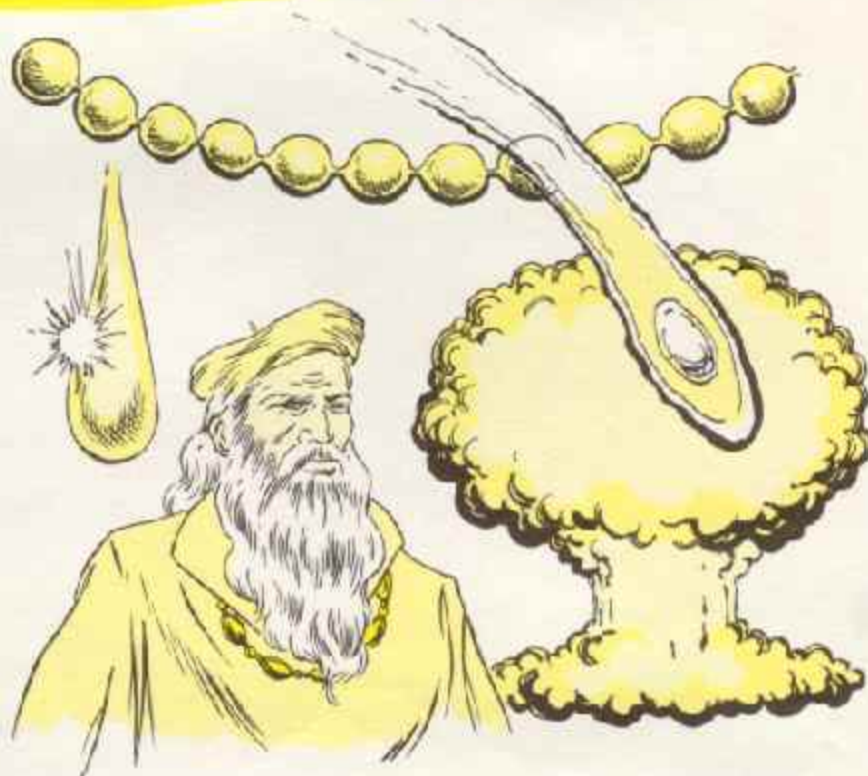
ATOMIC FACTS: *Stranger Than Fiction!*

-If you wanted to make a necklace of atoms 25 inches long, and strung them together at the rate of one atom per second, it would take over 200 years to complete the strand.

-A drop of water contains 6,000,000,000,000,000,000 atoms.

-There are 25,000,000,000,000,000,000 atoms in a breath of air.

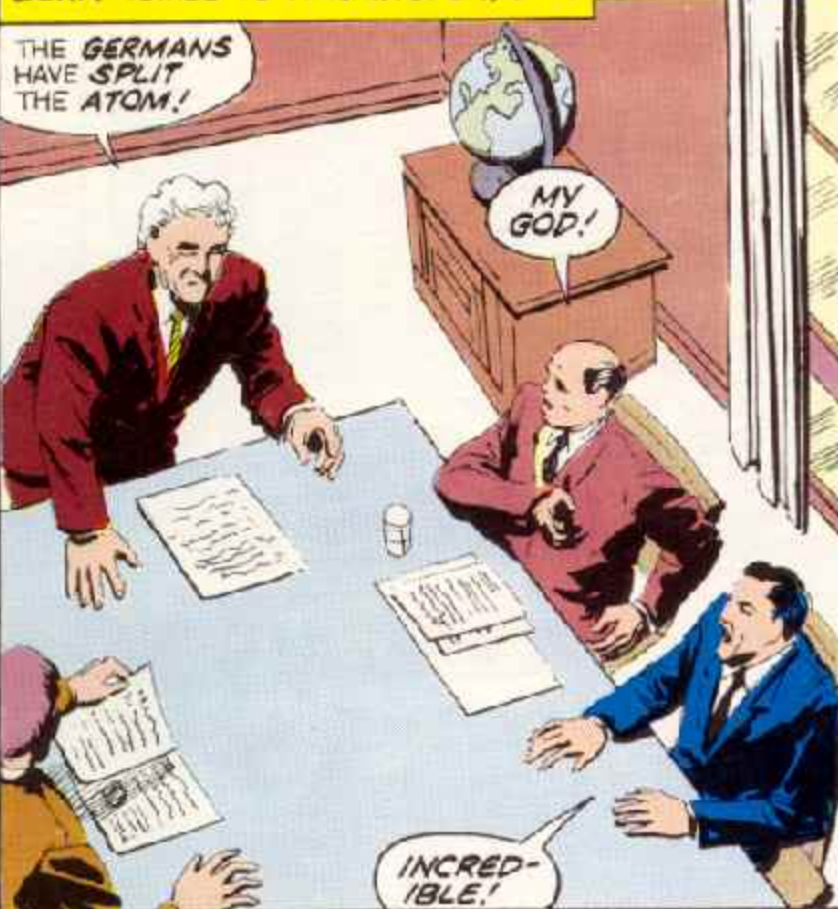
-Atoms travel all around the world and even through outer space. With each breath you inhale atoms that were once a part of great men such as Leonardo da Vinci, celestial objects such as Halley's Comet, and nuclear explosions such as the Trinity Test.



THE YEAR IS 1939. THE FREE WORLD WATCHES WITH GROWING ALARM AS THE SHADOW OF NAZI GERMANY SPREADS ACROSS EUROPE, LED BY THE MAN WHO WILL ONE DAY BE KNOWN AS HISTORY'S GREATEST VILLAIN.



IN JANUARY, THE GREAT DANISH PHYSICIST NIELS BOHR COMES TO WASHINGTON, D.C.



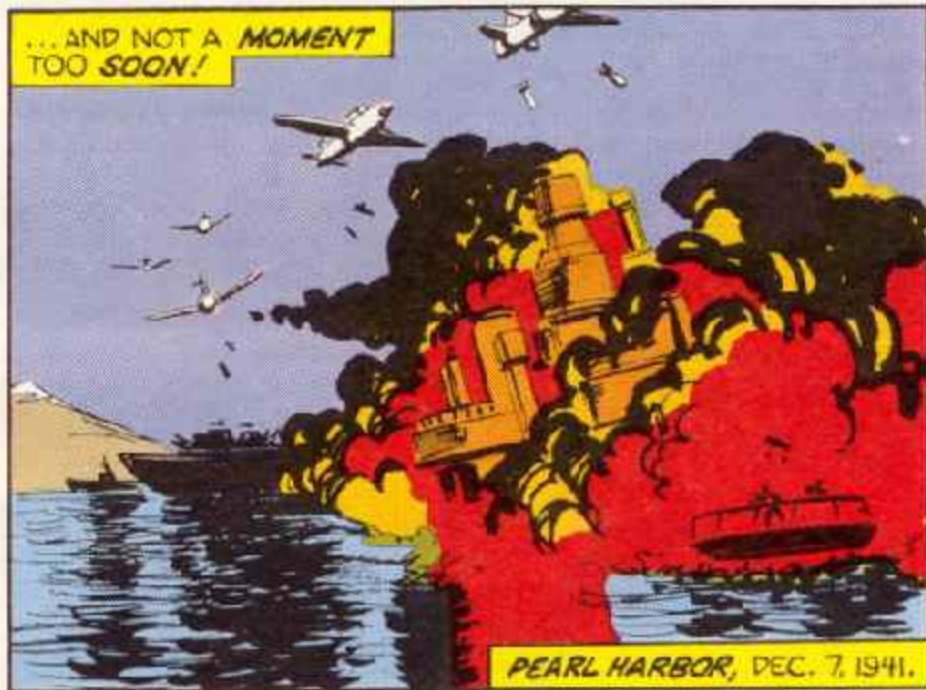
IF HITLER BUILDS AN ATOM BOMB, NOTHING WILL STOP HIM!

THE WORLD WILL BE PLUNGED INTO A THOUSAND YEARS OF DARKNESS!



WE MUST BE THE FIRST!





ON DECEMBER 2, 1942, SCIENTISTS AT THE UNIVERSITY OF CHICAGO, LED BY ENRICO FERMI, PRODUCE THE WORLD'S FIRST ATOMIC CHAIN REACTION.

THE REACTION IS SELF-SUSTAINING!

IT WORKS!

NOW WE CAN MAKE NUCLEAR FUEL FOR THE BOMB!

A SECRET LABORATORY IS SET UP IN THE MOUNTAINS OF NEW MEXICO TO DESIGN AND BUILD THE NEW WEAPON.

I'LL GET YOU ANYTHING YOU NEED. MEN! MONEY! MATERIALS! WILL YOU DO IT?

DR. J. ROBERT OPPENHEIMER BECOMES DIRECTOR OF LOS ALAMOS.

IT'S MY PATRIOTIC DUTY! I ACCEPT!



OPPENHEIMER AND HIS FELLOW SCIENTISTS WORK LONG AND HARD TO MAKE THE **ATOM BOMB** A REALITY.

PLUTONIUM
WILL MAKE
A **BIGGER**
EXPLOSION!

IT'LL NEVER
WORK! LET'S
STICK WITH
URANIUM!

THERE'S
NO TIME TO
ARGUE! TRY
BOTH!

$$E=mc^2$$
$$t_2 = t_1 \sqrt{1 - \frac{v^2}{c^2}}$$



OPPIE, DID
YOU **HEAR** THE
NEWS?

NOT NOW,
KITTY! WE'RE
SO CLOSE!



AFTER TWO YEARS, THE BOMB IS ALMOST READY.

HERE'S AN ISOLATED PLACE,
BUT WE STILL NEED A
CODE-NAME FOR THE
TEST.

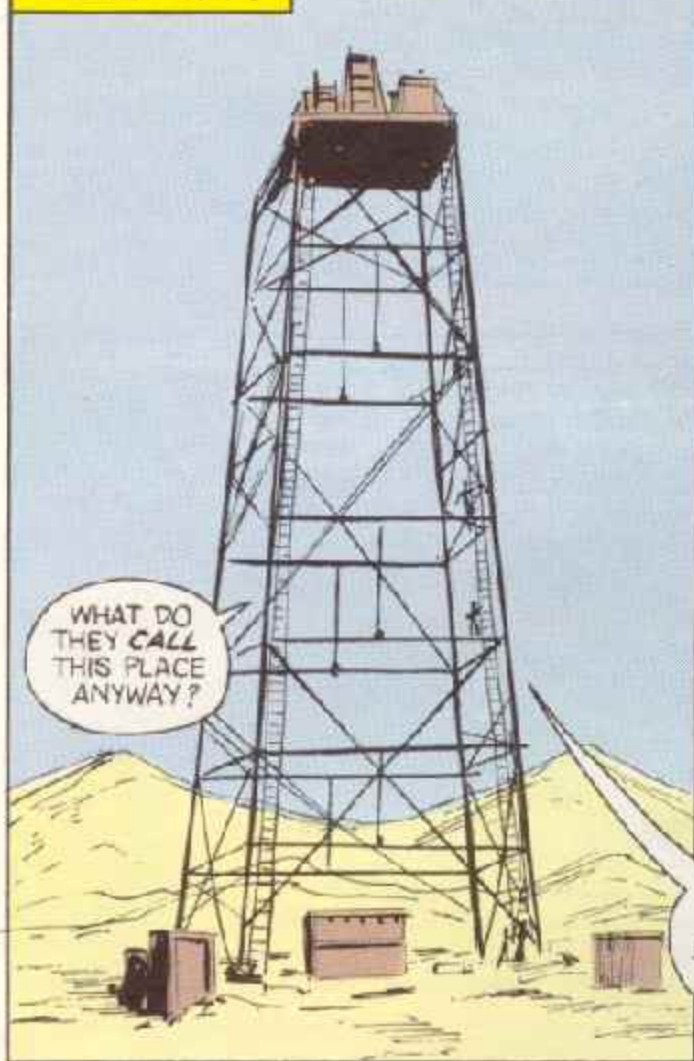


LET'S
CALL IT...

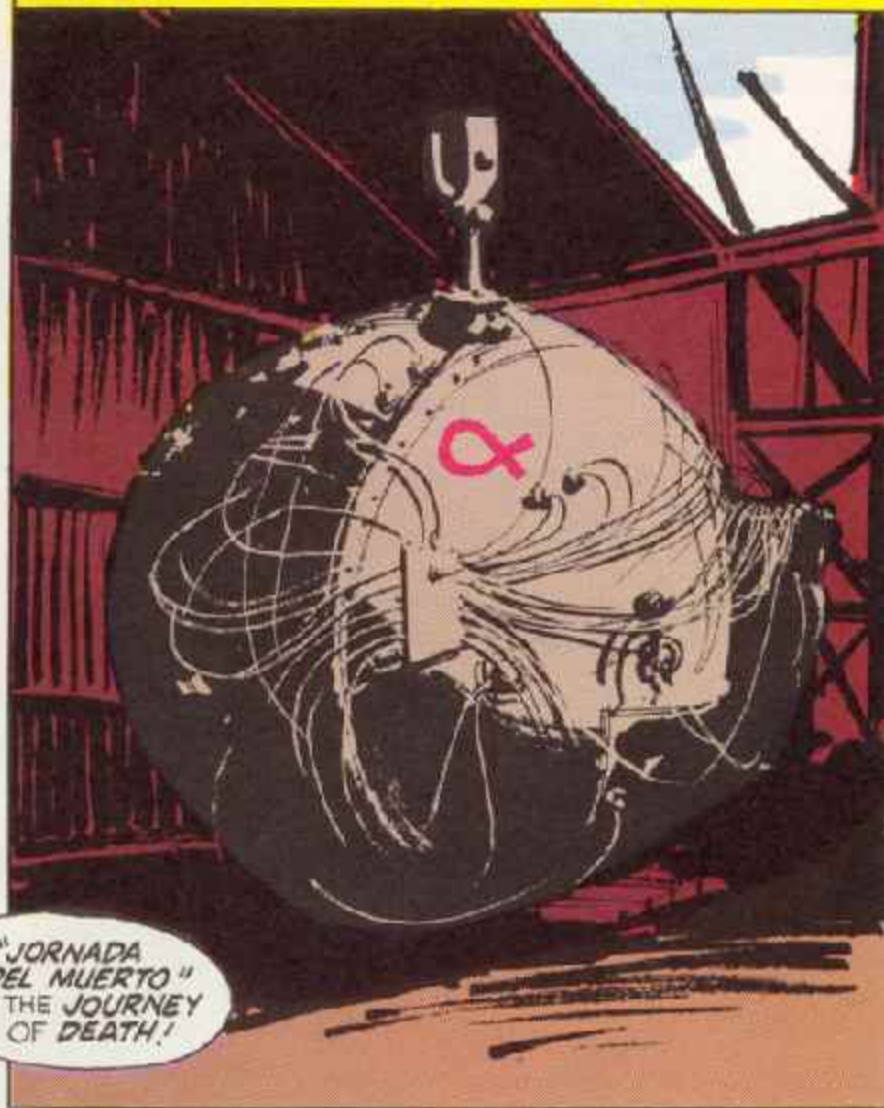
...TRINITY!



A 100-FOOT STEEL TOWER IS ERECTED IN THE NEW MEXICO DESERT, MILES FROM THE NEAREST TOWN.



THE "GADGET" IS IN A SHACK AT THE TOP OF THE TOWER.



FINAL ASSEMBLY TAKES PLACE IN A DESERTED RANCH HOUSE NEARBY.



IN THE PRE-DAWN HOURS OF JULY 16, 1945, V.I.P.S FROM ALL OVER THE COUNTRY GATHER ON A HILLSIDE TWENTY MILES FROM THE TOWER.

THIS *SUNTAN* LOTION WILL PROTECT US FROM *ATOMIC RAYS*!

I MUST BE ALERT. THE *RUSSIANS* WILL WANT A DETAILED ACCOUNT.



KEY PERSONNEL HIDE IN AN UNDERGROUND BUNKER, ONLY FIVE MILES SOUTH OF "GROUND ZERO."

KEEP THOSE JEEPS *RUNNING*! IF THE ATMOSPHERE CATCHES *FIRE*, WE'LL HAVE TO GET OUT OF HERE *FAST*!



THE *TENSION* IS ALMOST *UNBEARABLE*.

ZERO MINUS TWENTY MINUTES!

KEEP AN *EYE* ON HIM!



FOUR...

THREE...

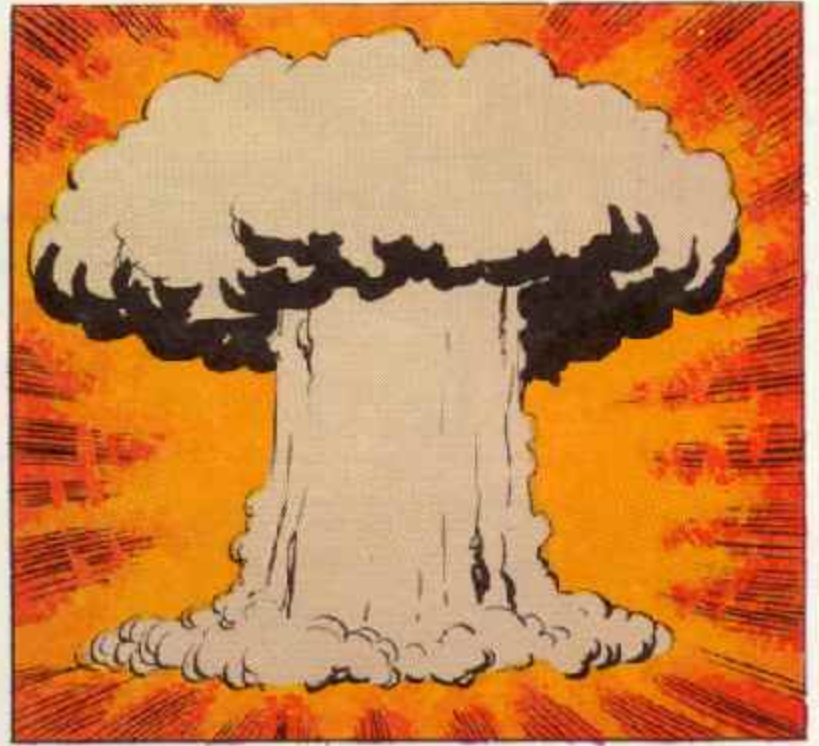
TWO...

ONE...



ZERO!!





ON AUGUST 6, 1945, AN AMERICAN B-29 BOMBER EXACTS A TERRIBLE VENGEANCE ON THE CITY OF HIROSHIMA.



IT... IT'S MY PATRIOTIC DUTY.



NAGASAKI MEETS THE SAME FATE THREE DAYS LATER.

I HEAR AN AIRPLANE.



IT IS A HARNESSING OF THE BASIC POWER OF THE UNIVERSE!

TRUMAN ADDRESSES THE WORLD AFTER V-J DAY



BUT THE AMERICAN MONOPOLY ON A-BOMBS IS *SHORT-LIVED*.

READY TO *TEST*, COMRADE!

OUR SPIES DID THEIR JOB WELL!

ЭТО НИКОГДА НЕ ВЫЙДЕТ!*

*"IT'LL NEVER WORK."

AMERICA IS SHOCKED BY THE NEWS.

THE WORLD WILL BE *PLUNGED* INTO A THOUSAND YEARS OF DARKNESS!

OUR NATIONAL SECURITY IS IN JEOPARDY!

DAILY MIRROR
REDS EXPLODE A-BOMB

BUT DR. EDWARD TELLER IS A MAN WITH A *VISION*.

IF WE FIND A WAY TO *FUSE* HYDROGEN, WE CAN BUILD A *SUPER-BOMB*!

$$E=mc^2$$
$$t_2=t_1\sqrt{1-\frac{v^2}{c^2}}$$
$$2_1H^1+2_0n^1\rightarrow 2_2He^4$$

IMPOSSIBLE!

IT WOULD REQUIRE A TEMPERATURE OF MILLIONS OF DEGREES.

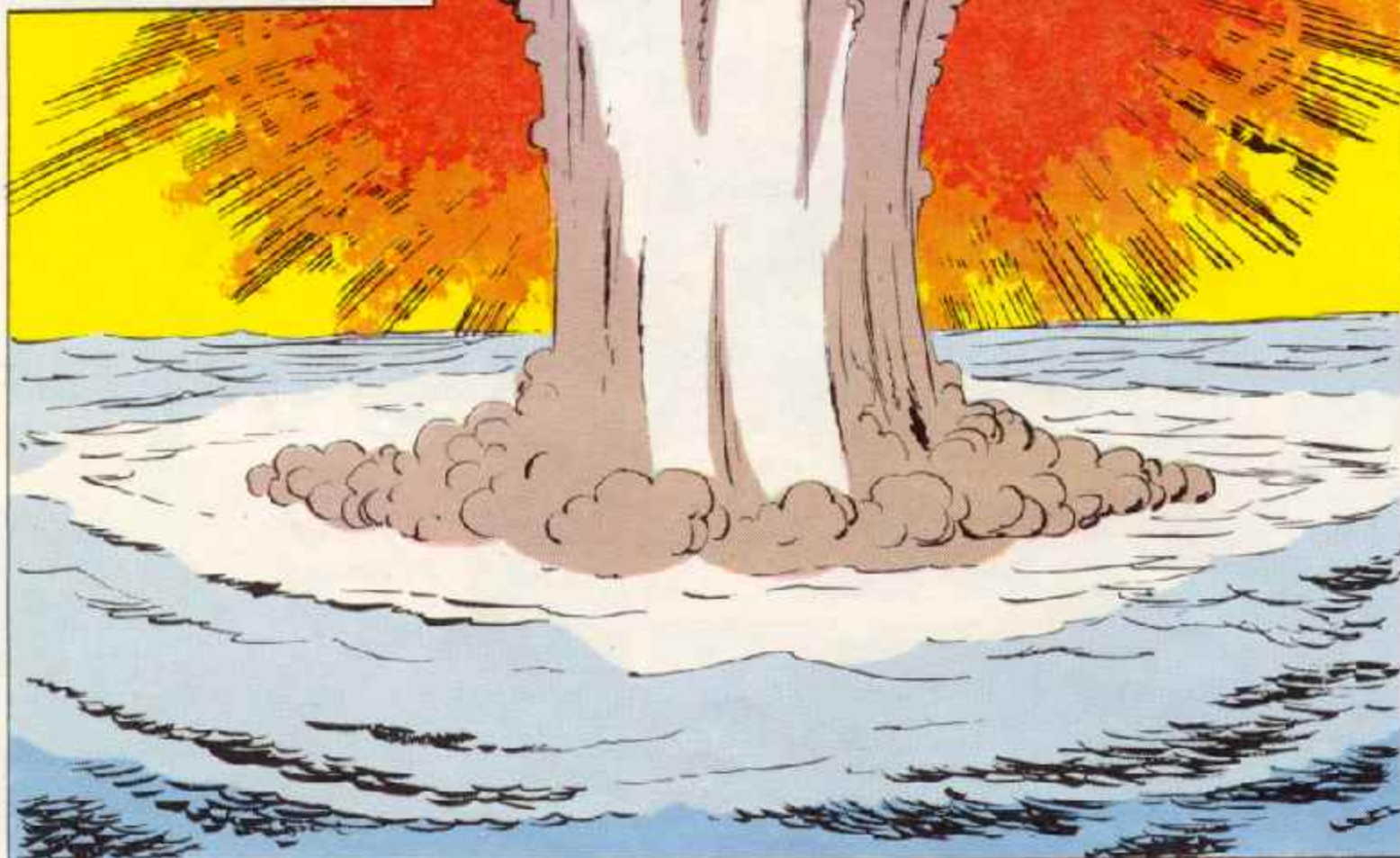
I CAN *PROVIDE* SUCH TEMPERATURES!

NOVEMBER 1, 1952. ON A
REMOTE ISLAND IN THE
SOUTH PACIFIC...

IT'S ALL
SET TO
GO!

LET'S GET
OUT OF
HERE!

IT'LL
NEVER
WORK!



...TELLER'S H-BOMB IS BORN.

TODAY, UNDERGROUND TESTS
HELP US TO BUILD **MORE** AND
BETTER NUCLEAR WEAPONS.



FOUR...THREE...
TWO...ONE...

OUR **SCIENTIFIC** KNOW-HOW HELPS US TO **DEFEND** THE **FREE** WORLD
BEHIND AN **ORBITING "UMBRELLA"** OF **HIGH** TECHNOLOGY.



WE COULD
INTERCEPT AND
DESTROY STRATEGIC
BALLISTIC MISSILES
BEFORE THEY **REACHED**
OUR OWN SOIL.

$$E=mc^2$$
$$t_2=t_1\sqrt{1-\frac{v^2}{c^2}}$$

"WE COULD **INTERCEPT**
AND **DESTROY** STRATEGIC
BALLISTIC MISSILES
BEFORE THEY **REACHED**
OUR OWN SOIL."



IT'LL NEVER
WORK!

NOW THAT AMERICA'S NEW *SPACE DEFENSE SYSTEM* IS IN PLACE, THE ENTIRE PLANET IS *SAFE* FROM THE *THREAT* OF *ATOMIC WAR*.



OUR CHILDREN CAN LIVE *SECURE* IN THE KNOWLEDGE THAT THESE *THOUSANDS* AND *THOUSANDS* OF *OBSOLETE MISSILES*, BUILT IN THE *OLD DAYS* OF *MUTUAL FEAR* AND *DISTRUST*, WILL *NEVER NEED TO BE USED!*

