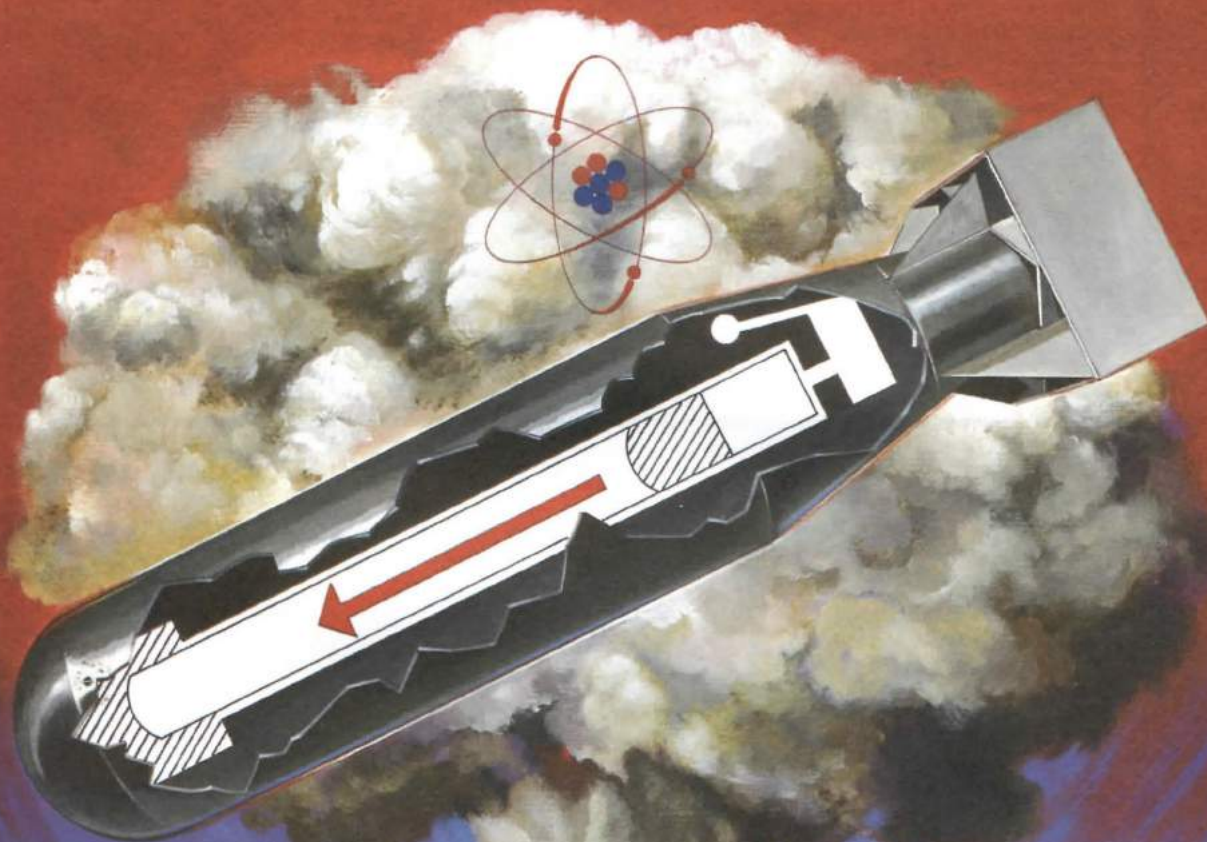


THE ILLUSTRATED STORY OF THE ATOM BOMB



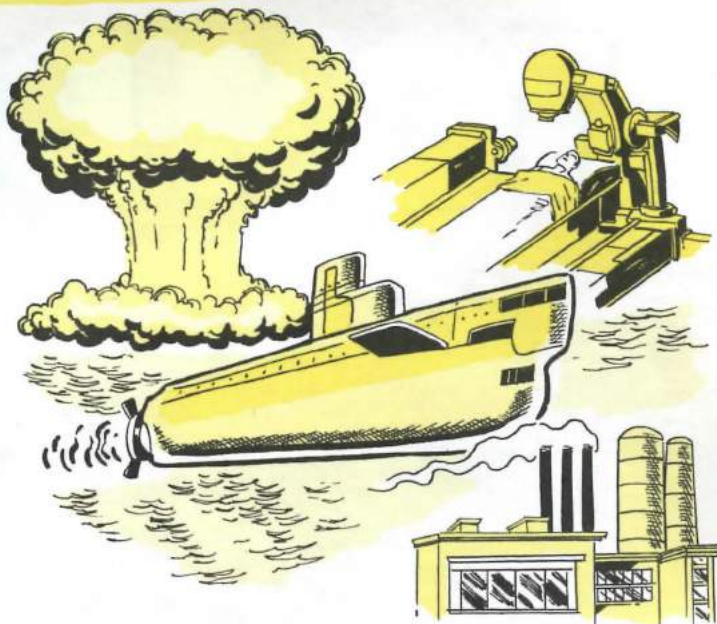
Quest For Knowledge Series

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.

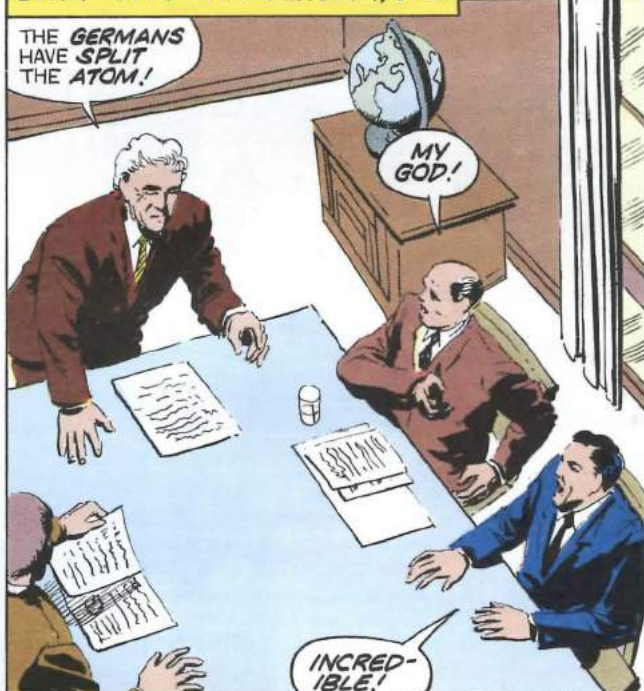
-Atoms travel all around the world and even through outer space. With each breath you inhale atoms that were once a part of great men such as Leonardo da Vinci, celestial objects such as Halley's Comet, and nuclear explosions such as the Trinity Test.



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!**

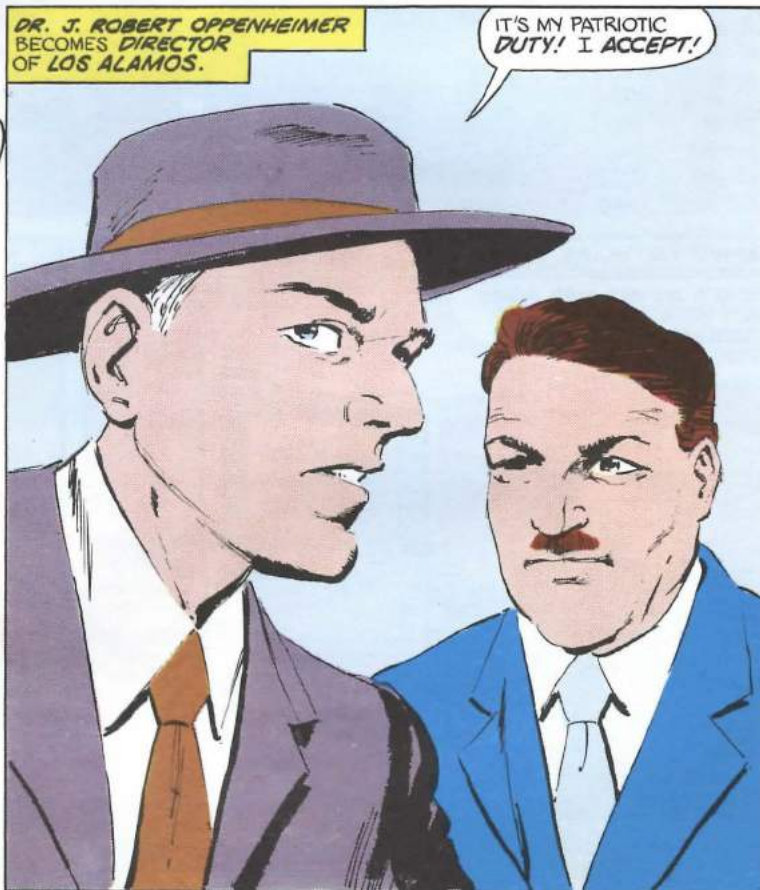
NOW WE CAN MAKE **NUCLEAR FUEL** FOR THE **BOMB!**

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?

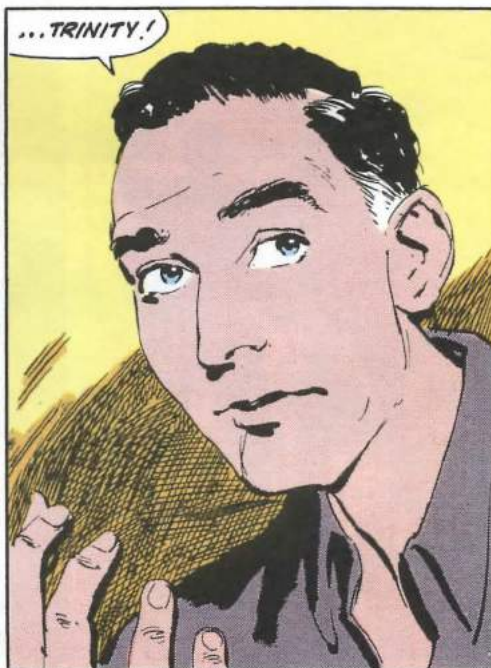
NOT NOW, KITTY! WE'RE SO CLOSE!

AFTER TWO YEARS, THE BOMB IS ALMOST READY.

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

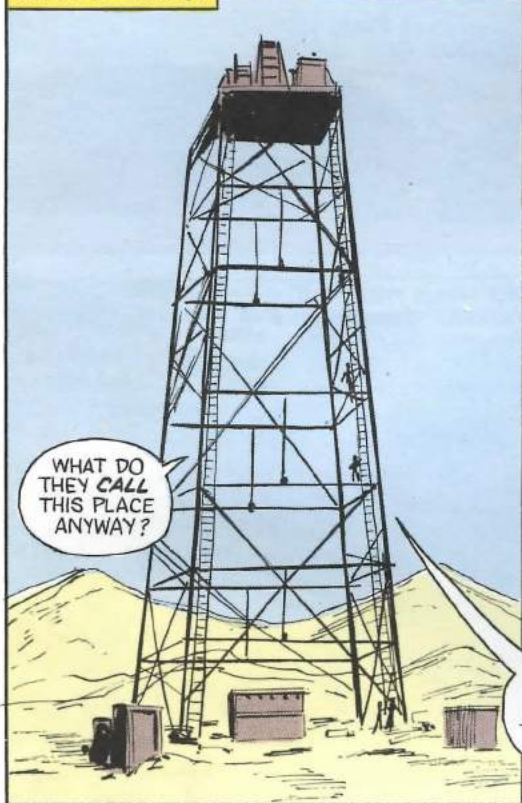


LET'S CALL IT...

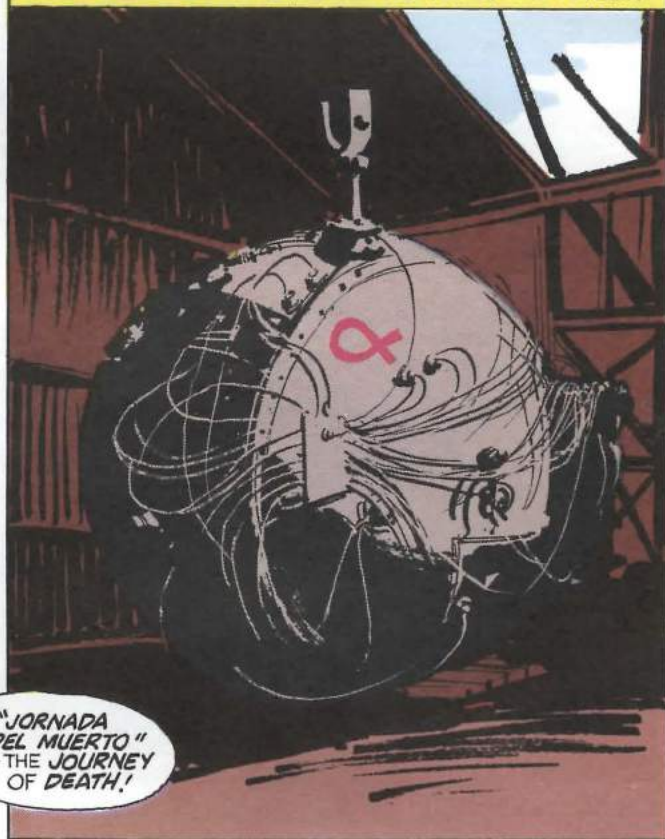


...TRINITY!

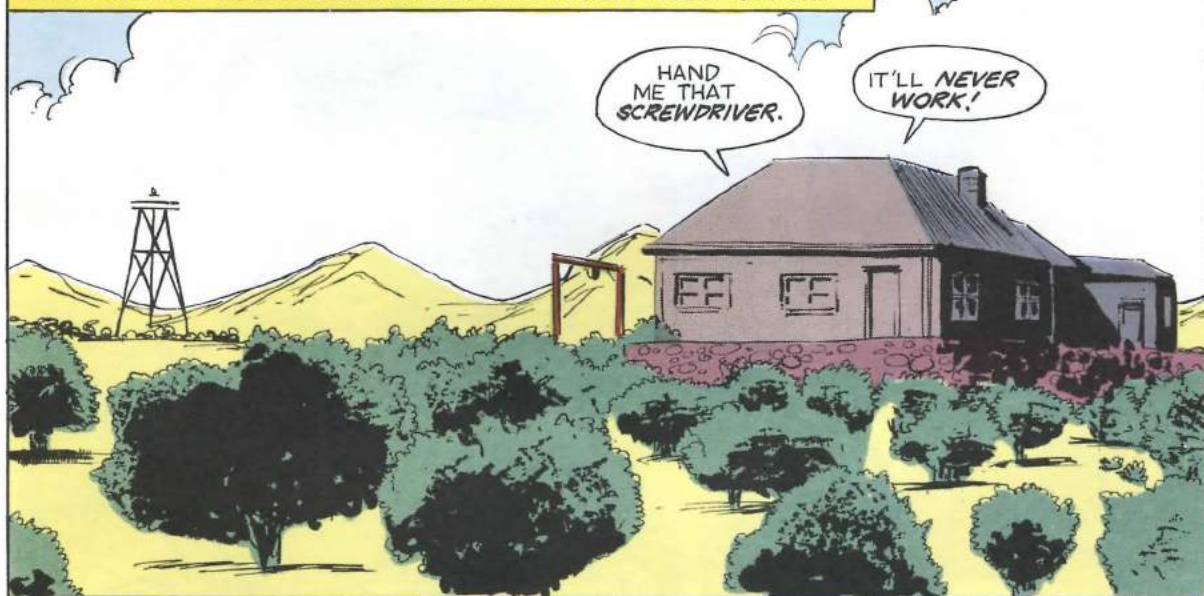
A 100-FOOT STEEL TOWER IS ERECTED IN THE NEW MEXICO DESERT, MILES FROM THE NEAREST TOWN.



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.

BOMB AWAY!



IT... IT'S MY PATRIOTIC DUTY.



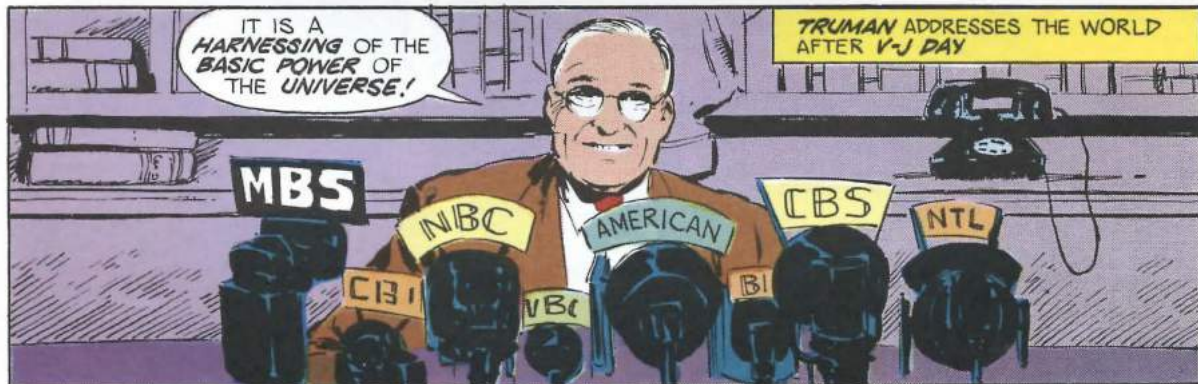
NAGASAKI MEETS THE SAME FATE THREE DAYS LATER.

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.

OUR **NATIONAL
SECURITY** IS IN
JEOPARDY!

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

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**!

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

IMPOSSIBLE!

IT WOULD
REQUIRE A
TEMPERATURE
OF **MILLIONS**
OF DEGREES.

I CAN **PROVIDE**
SUCH TEMPERA-
TURES!



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

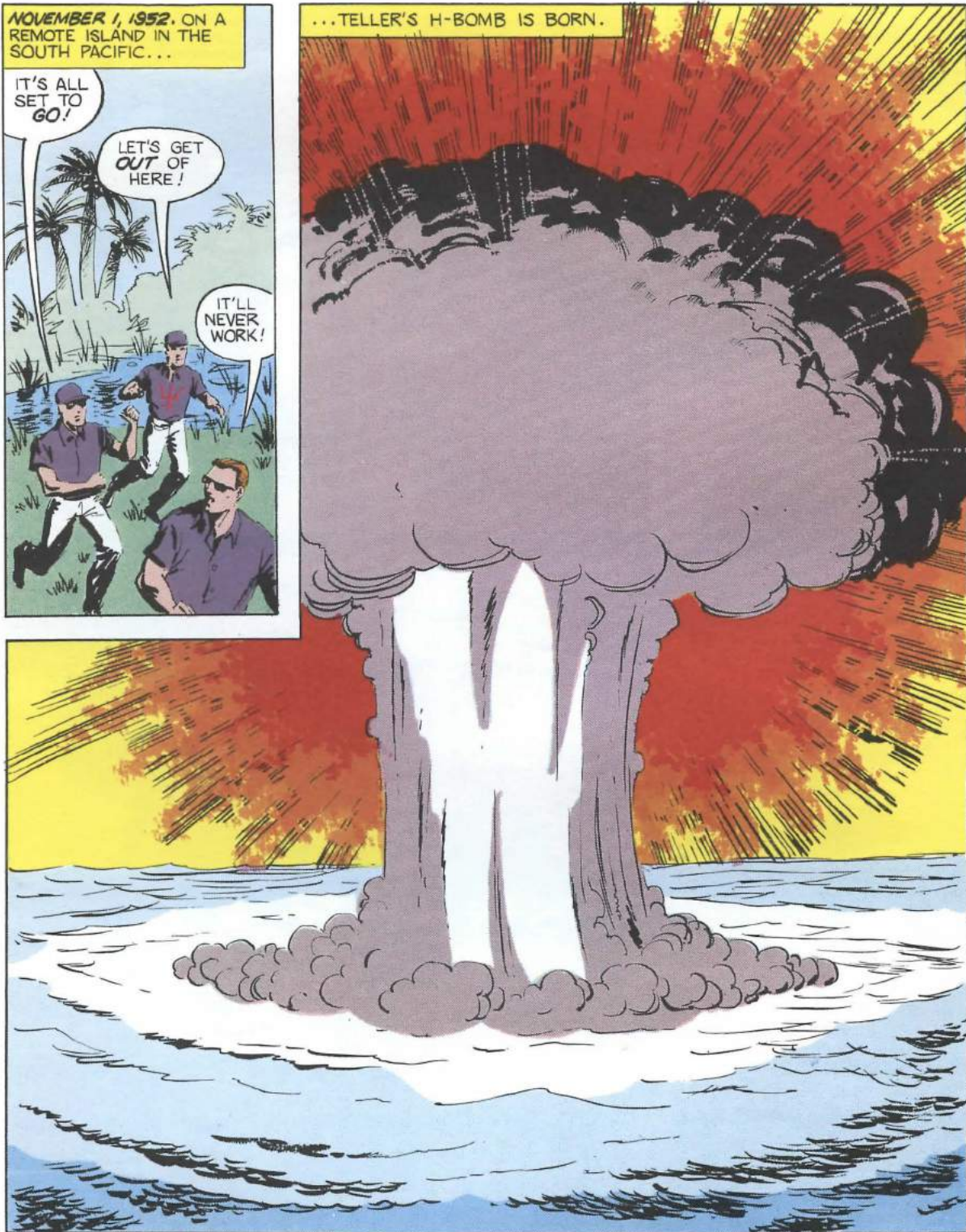
IT'S ALL
SET TO
GO!

LET'S GET
OUT OF
HERE!

IT'LL
NEVER
WORK!



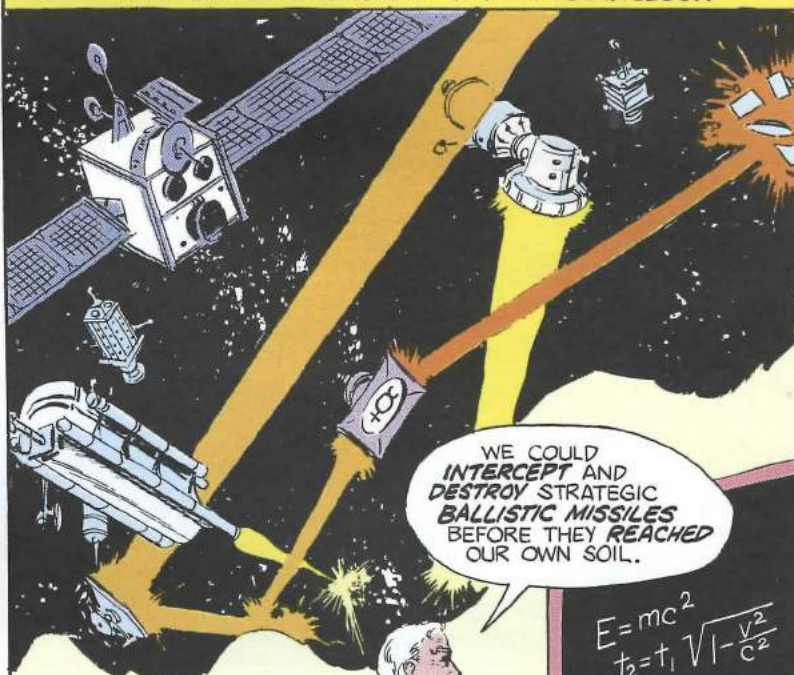
...TELLER'S H-BOMB IS BORN.



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



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



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

"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!**

