

Hoping to survive an atomic attack, families built underground shelters in the backyard. In farm country, there were even shelters for cows.

There was a civil defense program of sorts in the United States during World War II. It included air raid wardens, first aid training, and blackout curtains to foil enemy bombers. There was no real danger, though, and it was a minor aspect of life in wartime. The program was abolished altogether in June 1945.

Interest in civil defense came roaring back when the Soviet Union exploded an atomic bomb in 1949. The young Rep. John F. Kennedy (D) of Massachusetts fired off a letter to President Truman warning that the nation left itself open to “an atomic Pearl Harbor” by its indifference to civil defense planning. The National Security Resources Board called for the building of public shelters in “target areas” and private basement shelters for families and neighborhood groups.

In December 1950, Truman created the Federal Civil Defense Administration with headquarters in Battle Creek, Mich. The FCDA, in cooperation with the National Education Association, produced a film, “Duck and Cover,” in 1951. An animated turtle named Bert urged some New York schoolchildren to follow his example. “Bert ducks and covers, but he has his shelter on his back,” the film said. “You must learn to find shelter.” Ground Observer Corps volunteers scanned the sky for hostile aircraft.

In the event of an attack, regular radio stations would stop broadcasting so enemy pilots could not use their signals for navigation. Small triangles at 630 and 1230 on the dials of AM radios marked the frequencies for CONELRAD—Control of Electromagnetic Radiation—to which listeners were to tune for civil defense information.

Initially, the structures in which citizens were to take refuge were called “bomb shelters.” The danger from fallout—radioactive particles drifting back to earth—increased significantly in the 1950s with the development of hydrogen bombs, which produced much greater levels of contamination. Once the hazards were fully understood, the bomb shelters became known as “fallout shelters.”

The defense strategy that ultimately got the United States through the Cold War was deterrence: maintaining sufficient countervailing military power to forestall any temptation for the Soviet Union to attack. However, politicians and others continued to search for a civil defense solution, their efforts reaching peak intensity in the late 1950s and early 1960s.



Fear of Fallout

By John T. Correll

Beyond Duck and Cover

The program got off to a poor start when Truman’s civil defense administrator, Millard F. Caldwell, spoke carelessly about providing shelters for every person in the country. The cost of that was clearly impossible and it never got beyond the planning stage. As future planners came to realize, individual citizens would not have fallout shelters unless they built them for themselves.

Between 1951 and 1953, Congress funded civil defense at a meager 10 percent of the level Truman requested. The program concentrated on converting public buildings and underground facilities to dual use as shelters, establishing



an attack warning system, stockpiling supplies, and conducting a civic education campaign.

As with the “Duck and Cover” film, the messages generally predicted survivability for those who took proper steps.

One of the most bizarre items to appear was a 1953 comic book entitled “Picture Parade,” put out by Gilberton, the well-known publisher of “Classics Illustrated.” The cover shows a boy hugging his dog while a mushroom cloud rises in the distance. Incredibly, the story inside, “Andy’s Atomic Adventure,” was soothing and upbeat, geared to fourth grade reading level. Teachers passed out copies to their pupils.

Expectations would become considerably darker in 1955 when the Atomic Energy Commission announced that after an H-bomb attack, the radioactive fallout might kill everyone within a 140-mile radius of the detonation.

Val Peterson, the new FCDA chief in the Eisenhower Administration, proposed scaling back or eliminating the shelter program in favor of evacuating the cities on warning of attack. In 1955, Peterson

said that residents in most cities had only one choice: “Stay and die, or move out and survive.”

Unfortunately, the strategy had several critical failings. Even if the public had time to evacuate and a place to go, the road and bridge infrastructure could not handle the multitude of refugees. Peterson was soon back to urging citizens to build some sort of fallout shelter and stock it with food and water to last for five or six days. Under an “evacuation to shelter” approach, individuals were to move from target areas to shelters elsewhere. Peterson suggested digging ditches along the roads for those who could not get to the shelters in time. The National Shelter Policy for 1958 put priority on home shelters instead of evacuation.

Doom Towns in the Desert

Between 1954 and 1961, the government conducted “Operation Alert” civil defense exercises annually in dozens of major cities. Public education was one of the main objectives, and newspapers, recruited to help, published reports of the fictitious attacks. The headline in the

Operation Alert edition of the *Buffalo Evening News* in July 1956 announced “125,000 Known Dead; Downtown in Ruins.” There was an illustration of City Hall crumbling. The *Grand Rapids Herald* headline said, “16,200 Die as H-Bomb Levels Grand Rapids,” but the message was in the drop headline: “Evacuation Saves 136,000.”

Today’s readers may recall a scene from the 2008 movie, “Indiana Jones and the Kingdom of the Crystal Skull,” in which Indiana is chased into a mocked-up desert town where the clock is ticking down toward a nuclear explosion test. Indy escapes by closing himself in a lead-lined refrigerator.

Such “doom town” tests were actually conducted in the Nevada desert in 1953 and 1955. The tests were filmed and shown on television to encourage the public to invest in fallout shelters. To add “realism,” families of mannequins were placed in the

This family is calm and composed, but then, the picture is posed. How their composure would have held up after two weeks in such close quarters might have been an altogether different matter.

Photo via Library of Congress





Left: This model of a fallout shelter cost \$1,000, well below the average price, but there was not much room to move around. **Above:** Schoolchildren were urged to follow the example of Bert the Turtle and “duck and cover.”



targeted structures, dressed in clothing donated by J. C. Penney with furniture and household items all around them. Mannequins in shelters survived. The others did not.

Boy Scouts and Girl Scouts distributed millions of copies of a civil defense handbook put out by the government with instruction on first aid, air raid warnings, fallout protection, and how to build home shelters.

In January 1959, the civil defense chief for New York state predicted that within five years most Americans would be living in fallout shelters and “would see sunshine only by taking a calculated risk.” The Joint Congressional Committee on Atomic Energy estimated that 50 million Americans would die in an atomic attack, with another 20 million seriously injured, but that civil defense could cut radiation casualties from 25 percent to three percent.

If the public needed any further scaring, *On the Beach*—a best-selling novel by Neville Shute in 1957, made into an even more successful movie in 1959—did the job. World War III, us-

ing enhanced nuclear weapons, destroys life in the northern hemisphere. The last survivors on Earth wait helplessly in Australia as the fallout drifts southward toward them.

The bureaucrats were always more enthusiastic about civil defense than the citizens were. Officials often depicted the public as ignorant and reckless, but in some respects, the public may have had a better assessment of reality than the bureaucrats did.

JFK Inspires a Boom

The fallout shelter campaign got a huge boost from a July 25, 1961, speech by President John F. Kennedy, generated by the latest Berlin crisis and the prospect of nuclear war with Soviet Union.

It was essential, Kennedy said, for the public to know “what they should do and where they should go if bombs begin to fall.” New public fallout shelters would be identified and stocked, but that would not be enough. “The lives of those families which are not hit in a nuclear blast and fire can still be saved—if they can be warned to take shelter and if that shelter is available,” he said. “In the coming months, I hope to let every citizen know what steps he can take without delay to protect his family in case of attack. I know that you will want to do no less.”

It was the first time a President had ever spoken to the nation about the need for shelters. His immediate goal was to provide fallout shelters in existing buildings for a fourth of the nation’s population. Within a few months, he set a goal of “fallout protection for every American as rapidly as possible.” Administration officials said that those who could not afford commercial shelters could dig a hole in the backyard, roof it with planks and sandbags, and store emergency water and canned goods.

The news media were fully aboard. A *Life* magazine cover in September 1961 touted “How You Can Survive Fallout.” The contents included a message from President Kennedy. Another *Life* cover in January 1962 focused on “The Drive for Mass Shelters.”

There was no bigger advocate of fallout shelters than Nelson



Photos via Library of Congress

A. Rockefeller, governor of New York. Since 1959, Rockefeller had been pushing for a law to make it mandatory for every homeowner to build a private shelter, but had withdrawn the proposal in 1960 under an avalanche of criticism. After Kennedy's announcement, Rockefeller returned to his original position, proclaiming that a fallout shelter in every home was "essential to national defense and individual survival."

There was money to be made from this, and a civil defense industry sprang up almost overnight. Forty different manufacturers sold fallout shelters, made of reinforced concrete, corrugated metal, aluminum, and other constructions. Some of them cost more than \$4,000, which was the median US income in 1960.

Cheaper (and smaller) shelters were available, with tiered bunks and low ceilings. The Pentagon furnished civil defense offices plans for eight kinds of inexpensive shelters, including a sand-filled lean-to that could be set up against a basement wall.

Vendors offered packaged food and water, generators, lanterns, exercise bicycles, and other items. General Mills developed a granulated protein mix called "Multipurpose Food." It came in a gallon can labeled "MPF" and three scoops of it, hot or cold, wet or dry, met an individual's daily requirements. Radiation-shielding windows from Corning Glass promised to relieve claustrophobia during an extended stay in the shelter. One company took over an abandoned iron mine and rented space in it for firms to store copies of their vital business records.

In February 1962, Steuart L. Pittman, assistant secretary of defense for civil defense, predicted that the Administra-

tion's fallout shelter program would give protection for substantially all Americans within five years.

A Hideaway in the Hills

Fallout shelters were not just for the big cities. Small towns were caught up in the frenzy, too. Catawba County in the foothills of North Carolina, far from any nuclear war target, had its own civil defense director who made speeches to civic clubs promoting fallout shelters. Catawba Dairy packaged water in milk cartons marked with the distinctive Civil Defense triangle.

In 1962, the US Department of Agriculture published *Your Livestock Can Survive Fallout From Nuclear Attack*. "For animals as well as humans, shelter is the best protection against fallout," the guide read. Another Agriculture Department booklet in 1964 said that such shelters "could be modified for use by sheep, hogs, or poultry."

Roberts Dairy in Elkhorn, Neb., achieved a certain amount of notoriety with its underground concrete shelter for 200 Golden Guernsey cows and a couple of bulls. In addition to the storage space for cattle feed, there was a 10,000-gallon water tank beneath five feet of dirt. A fan carried away offensive odors. The dairy conducted a two-week test with 35 cows and two cowhands. The cows were not bothered by the experience but the cowhands said they did not want to look at another cow for a while.

Only five state governors had their own fallout shelters, and only one member of the Kennedy cabinet, postmaster general J. Edward Day, had a home fallout shelter. However, the Army Engineers built a fallout shelter for Kennedy at his summer home in Hyannis Port, Mass., on Cape Cod, and the Navy Seabees built another one for him at Peanut Island off the Florida coast, five minutes by helicopter from his winter home at Palm Beach. It had 15 metal bunks and room for 30 people.

Nothing, though, ever came close to comparing with the secret bomb shelter built for Congress in a hillside adjacent to the Greenbrier resort hotel in White Sulphur Springs, W.Va. Construction began in 1959 and was finished in the spring of 1962, but its existence was not widely known until *The Washington Post* revealed it in 1992.

The big exhibit halls in the hotel's West Virginia Wing were designed to double as legislative chambers. In emergency, disguised blast doors would close to seal off the wing. A nearby corridor led

to the underground shelter, which included a dormitory with hundreds of metal beds. According to *Post* reporter Ted Gup, there was also a television studio "from which the legislators would be able to address what was left of the nation." The facility was never used, although it was put on high alert during the Cuban missile crisis.

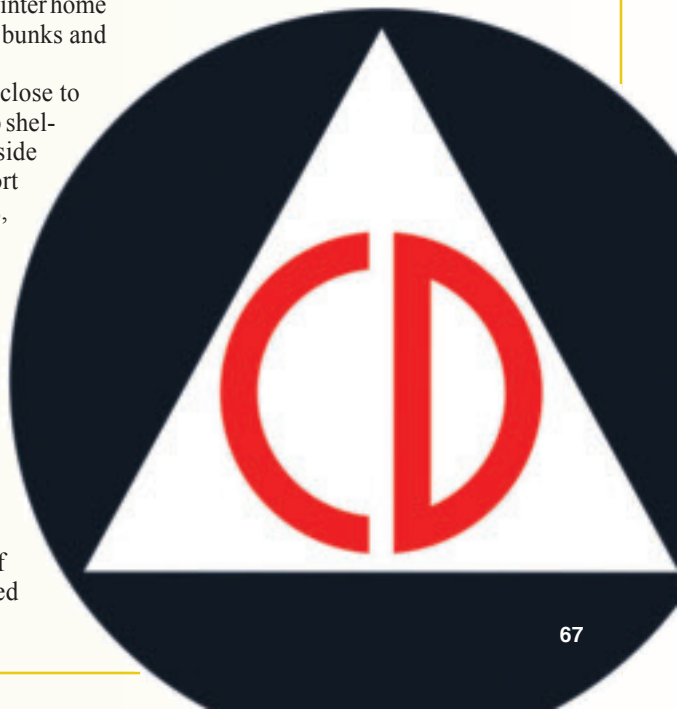
Most members of Congress did not know about the secret shelter in the mountains and mobilizing them for the 250-mile trip would have been a problem. They would not have been allowed to bring their spouses and children, and after the existence of the shelter was disclosed, some said they would not have left their families to go there.

Gun Thy Neighbor

In the posed publicity pictures for the backyard shelters, the families were always neatly dressed, calm, and seemingly content with their books and knitting projects. How well their composure would have held up for two weeks in close quarters remained to be determined. In those days, many people smoked and incredibly, some smokers apparently expected to continue indulging their habit while underground.

Whether a family would be together in their shelter depended on the timing of the attack. Except at night, family members were likely to be dispersed to work, school, or elsewhere when the critical moment arrived.

Conversely, Rep. Martha W. Griffiths (D-Mich.) pointed out to the *Los Angeles Times* that most of the public shelters were in downtown urban areas so "if the bombs fell at night, you would save nobody but skid row characters, drunks, a few people in hospitals, and maybe the night shift on the local newspapers."

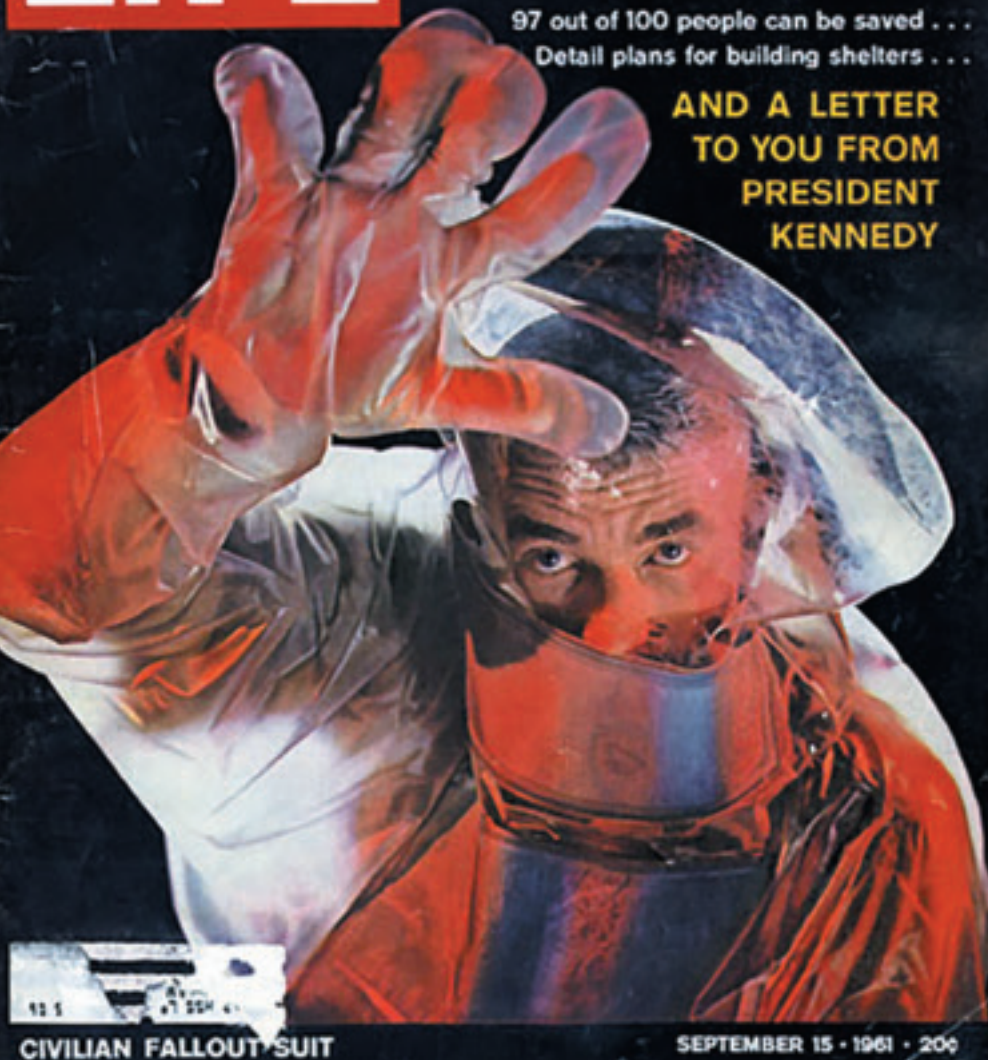


LIFE

HOW YOU CAN SURVIVE FALLOUT

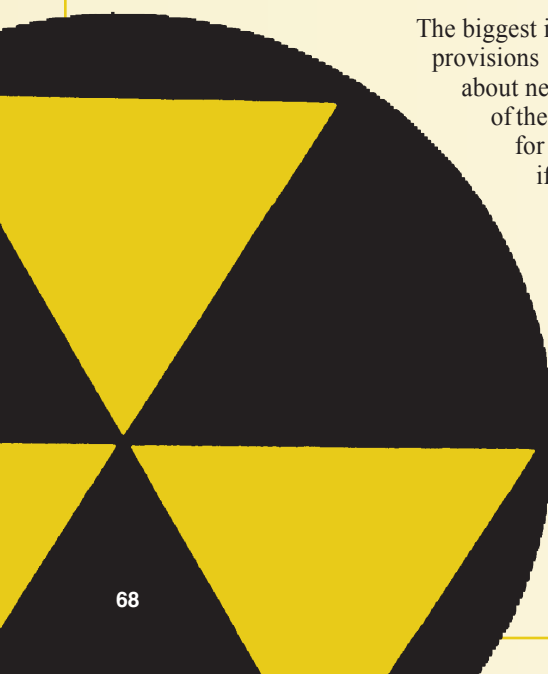
97 out of 100 people can be saved . . .
Detail plans for building shelters . . .

AND A LETTER
TO YOU FROM
PRESIDENT
KENNEDY



CIVILIAN FALLOUT SUIT

SEPTEMBER 15 • 1961 • 200



The biggest issue was a moral one. With only space and provisions enough for one's own family, what to do about neighbors who wanted admission and a share of the food when the balloon went up? The answer for many was to repel them, with lethal force if necessary.

In a *Time* magazine article titled, "Gun Thy Neighbor," a Chicago suburbanite said, "When I get my shelter finished, I'm going to mount a machine gun at the hatch to keep the neighbors out if the bomb falls." One observer, cited by Kenneth Rose in *One Nation Underground*, speculated that a shelterless neighbor might retaliate by slipping a plastic bag over the air intake.

Evangelist Billy Graham told *The New York Times*, "I feel a primary responsibility for my family but I don't

believe I myself could stay in a shelter while my neighbor had no protection." The civil defense director for Jefferson County, Colo., near Denver, felt no such hesitation. He equipped his personal shelter with weapons to keep out intruders.

Kennedy was taken aback by the rancor. "He remarked ruefully that he wished he had never said the things which had stirred the matter up and wanted to diminish the excitement as expeditiously as possible," said Arthur M. Schlesinger Jr., the Administration's court historian.

With Enough Shovels

The shelter boom was over. Civil defense was a low priority for the Johnson Administration, which took office in 1963. "The topic began to fall slowly off



Photos via National Archives



Far left: Life magazine for Sept. 15, 1961, included an upbeat message from President Kennedy. The promise on the cover that 97 percent could survive fallout severely strained credulity. Above: People were advised to stock enough food and water—and, apparently, soda pop—to sustain their families for two weeks. Left: In “tests” in the desert, staged for publicity purposes, mannequin “families” were subject to nuclear attack. Mannequins who took shelter survived. The others didn’t.

the public radar, and President Lyndon B. Johnson allowed it to slip further by not pressuring Congress to pass the Shelter Incentive Program bill, which proposed to give every nonprofit institution financial compensation for each shelter it built,” says the official history of the Civil Defense program.

The total number of fallout shelters built is unknown. Many of them were installed in secrecy, hoping to escape the notice of neighbors. By one estimate, there were about 200,000 shelters in 1965, but as Kenneth Rose notes in *One Nation Underground*, that was a tiny fraction of American households—with only one out of every 266 having a shelter.

The demise of the shelter movement was partly attributable to the emergence

of arms control agreements and the unwillingness of the government to fund the shelter programs. The main factor, though, was lack of public interest.

Nevertheless, Civil Defense managed to hang on. After several name changes and organizational realignments, the program was assigned to the Defense Preparedness Agency in 1972 and a few pages were allocated to it each year in the Pentagon’s annual report to Congress.

Civil defense made the headlines again in 1982 when deputy undersecretary of defense T. K. Jones declared that nuclear war would not be as devastating as the nation had been led to believe. “If there are enough shovels to go around, everybody’s going to make it,” he said. The shovels were for digging holes, to be covered with a couple of doors and three feet of dirt on top. “It’s the dirt that does it,” Jones said.

The absurdity of doomsday planning was not yet over. In his *Washington Post* article revealing the congressio-

nal shelter at Greenbrier, Ted Gup also reported that as recently as June 1990, “the nation’s defense planners still designated Greenbrier County as the place to which some 45,400 residents of Fairfax County would be evacuated in the event of a nuclear war, under a master plan to relocate civilian populations living in key East Coast target areas.”

Citizens were supposed to drive five hours to a place where there would be nothing to help them once they got there. “The sudden influx of people would more than double the county’s population,” Gup said. “Not only is there no vast and well-stocked bunker waiting to take them in, there is no food or shelter set aside for them at all. Instead, they would be expected to show up with recreational vehicles or tents and to bring their own food, medicine, and supplies.”

The Civil Defense program became part of the Federal Emergency Management Agency when it was created in 1979. In 2003, FEMA was absorbed by the new Department of Homeland Security and the program currently resides there.

In 2006, the traditional civil defense insignia—a red “CD” inside a white triangle on a blue disk—was dropped after 67 years. The announcement came from the National Emergency Management Association, a group representing state emergency managers. The new symbol—depicting “what our profession is all about”—was developed by a marketing firm and is built around the letters “EM,” which focused attention on the association.

In 2010, a plan developed by a federal interagency committee called for educating citizens to take cover and “shelter in place” in the event of attack by a terrorist atomic bomb. One program official said that such an attack would be “more survivable than most people think.” A 130-page planning guide advised citizens to get inside a building or hunker down in a basement. Radiation dosage could be reduced by piling up anything, such as books and furniture, overhead.

“That advice,” said Glenn Harland Reynolds, writing in the *Atlantic*, “sounds a lot like what they were saying in my grandfather’s day: Duck and cover.” ■

John T. Correll was editor in chief of Air Force Magazine for 18 years and is now a contributor. His most recent article, “Weinberger Doctrine,” appeared in the March issue.