

REDLANDS CITIZENS  
FINDING SHELTER in the ATOMIC AGE

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INTRODUCTION

Seventy years ago two B-29 bombers lifted off 8,000 foot runways on the island of Tinian in the Northern Marianas. Aboard were the secret payloads *Little Boy* and *Fat Man* destined for mainland Japan, a distance of 1,350 nautical miles. Released over Hiroshima and Nagasaki, these primitive nuclear weapons caused unimaginable destruction and loss of life. They also saved the lives of thousands of Allied servicemen preparing to invade Japan. Today, crumbling block houses and bunkers on Tinian and throughout the Pacific remain as timeless monuments to those who perished in the Pacific war.

In the subsequent seventy years the world has continued locked in a series of nuclear chess games. The development, testing, and the production of stronger, more deadly nuclear arms remain a part of our lives. No decade has been exempt. The black briefcase carried by a military aid at the side of the US President is a subject of popular culture and myth. Our presidents are prepared at any time to push the button. Think-tank writers, historians and philosophers, political scientists and politicians, and world leaders find themselves arguing for disarmament while stressing for the need to maintain nuclear strike capabilities and prevent others from developing nuclear weapons. In historian Robert Dallek's 2003 revealing biography of our 35<sup>th</sup> president, *An Unfinished Life: John F. Kennedy*, the reader becomes part of the October 1962 tension filled, sleeves rolled up White House discussions. What were our options as we faced Soviet missiles 90 miles from our southern border? As Kennedy, his brother Robert, Secretary of Defense Robert McNamara and others struggled; many US citizens had already taken it upon themselves to protect their families, including a select number of Redlands residents. Rather than waiting, they made their choices

My interest in civil defense has its beginning in a neighborhood created during the housing boom following World War II. The small, mostly two bedroom houses in north San Bernardino were home to many young families. Our parents had lived through the Great Depression and a

world war. If not on the battlefields, they experienced doing without, rationing, scrap drives, and weeks of not hearing from their soldiers, sailors, and marines. And then, there was Korea. It was the time depicted by author Sloan Wilson in *The Man in a Grey Flannel Suit*, a culture of evening cocktails, country club living, one income families, and wanting to get head while burying the horrors of war deep within the subconscious. This was the “Doomsday Decade”.<sup>1</sup>

We baby-boom children experienced the advent of black and white television. We watched Roy Rogers, joined Sherriff John in choruses of “*put another candle on the birthday cake,*” and learned subtle morality lessons from Engineer Bill while playing “Red Light, Green Light.” Fast food was making its mark on the city, with Richard and Maurice McDonald selling hamburgers, fries, and milk shakes at their car-friendly restaurant on E Street while fellow entrepreneurs Glen Bell, Neal Baker, and others served up fast food from their busy kitchens.

As children we were somewhat aware of the threat of atomic war. We participated in the required “duck and cover drills” in school. The danger came closer to home when our next door neighbor built a fallout shelter to protect his family of three. Nearly two decades later I was in a grad school 20<sup>th</sup> century U.S. history seminar. The memory of our neighbor’s shelter motivated me to explore how Riverside dealt with civil defense, the issues and the challenges. Was it better to be sixty miles from Los Angeles or did living in the less populated Inland Empire come with its own liabilities? Were there any family-built shelters in Riverside? I had no idea what transpired, but would soon find out.

#### DOOMSDAY DECADE

I expected to find the October 1962 Cuban Missile Crisis the motivation behind the frenzied efforts to construct private shelters. Although this threat on the doorstep of the United States would ignite the nation’s fears, no one single event initiated the urgency to seek refuge underground. I began my research with the Manhattan Project and the bombings of Hiroshima and Nagasaki.

After the end of World War II, while our leaders proposed budgets for civil defense, testing of new and improved atomic weapons continued. The US experimented in the Pacific and closer

to home, in the Nevada and New Mexico deserts. Sixty-five miles northwest of Las Vegas the US conducted above and below ground testing for over 40 years. They studied the prevailing winds and they studied the resulting damage. The Nevada testing was a promotional windfall and economic boom for the city that never sleeps. Las Vegas christened itself “The Atomic City.” Several showgirls participated in the campaign as Miss A Bomb, Miss Atomic Bomb, Miss Cue, and Miss Atom. The statuesque Candyce King, a dancer working at the Frontier, was christened Miss Atomic Blast. King “radiated loveliness” in her swimming suit and atomic hair styled costume. <sup>2</sup> The genuine radium filled clouds were easily seen from the Vegas strip. Historic photos show bleachers set up near the test sites for more intimate viewing. Other witnesses, including my wife’s late step-father, had an even closer vantage point in a waist high trench carved into the desert floor. Others watched the tests in their living rooms on network television. The National Atomic Testing Museum, just off the Las Vegas Strip on Flamingo Road, chronicles this period of history as does the National Museum of Nuclear Science & History in Albuquerque and the Cold War Museum in Warrenton, Virginia.

*Duck and Cover* was introduced to the American public in 1951 as an animated film and in booklet form. *Bert the Turtle* was our guide. The use of a cartoon character by the recently established Federal Civil Defense Administration made Bert’s message more palatable. In school we scrambled under our desks covering our heads with our arms. In retrospect, the drill would provide little protection from a hydrogen bomb and the atomic debris filled winds blowing across the landscape.

Other pamphlets and printed materials followed. Referenced in the March 1951 Calelectric Bulletin was a publication titled “Survival Under Atomic Attack” in which six specific points were made, and that memorizing these points might save your life.

Seven months later *Collier’s* magazine published a special edition on the outbreak of World War III, including an account of the bombing of Washington, D. C.<sup>3</sup> *Collier’s* was not alone in presenting “what if” scenarios. *The Los Angeles Times*, Ontario’s *Daily Bulletin* and other dailies printed front page accounts describing the dropping of atomic bombs on their respective cities.

By the end of the Eisenhower administration, it appeared certain that World War III could happen at any time.

The “Great Shakeouts” so much a part of our lives today were preceded by atomic drills. One such drill occurred on June 14, 1956. The headline in the *Daily Report* declared, “Mock Attacks Alert Nation - Destruction Widespread in Ontario.”<sup>4</sup> Russia’s launch in August 1957 of the first successful intercontinental ballistic missile added to the anxiety and dread. Two months later Sputnik was launched.

The potential for nuclear attack was part of our culture. The threat of world destruction found its way into popular literature. Screen writers pondered the “what ifs.” Musicians and songwriters added atomic themed lyrics to their music. At last count, there are over 100 identified atomic or fallout themed songs, including *Atom Bomb Baby* by The Five Stars, *Love That Bomb* by Dr. Strangelove and the Fallouts, and *(My) Fallout Filly (With The Atomic Kiss)* by Chris Cerf. An excerpt from the latter goes like this,

Well nobody's likes my baby  
'Cause she shoots out gamma rays  
But when I see her fluorescent eyes  
I fall into a daze <sup>5</sup>

Newspapers and magazines were filled with information. Architects found ways to interpret the atomic age in the built environment. *The Incredible Hulk* and *Spiderman* owe their existence to the bomb. Toy makers were quick to pick up on the nuclear theme. They produced toys such as the “Atom Bomber,” the Atomic Energy Lab, and a “safe and harmless cap shooting Giant Atomic Bomb.” There was a Sears Colonial-styled metal doll house, complete with an underground fallout shelter.

Think tank writers confronted the possibilities. In a *Playboy* interview, historian and philosopher Bertrand Russell stated,

I don't see any reason to be optimistic. I still feel that the human race may well become extinct before the end of the present century. Speaking as a mathematician, I should say that that the odds are about three to one against survival.<sup>6</sup>

The tension and the uncertainty continued to build. President Kennedy's "honeymoon period" was filled with international crises. It was a challenging time for the newly elected president. There were building pressures over Berlin's future. On April 12, 1961, Russian cosmonaut Yuri Gagarin became the first human in space. The Bay of Pigs debacle was that same month. On April 28 a hypothetical strike occurred. March Air Force Base was the target. The tensions did not abate or lessen.

## SHELTERS

On May 25, 1961, Kennedy came before a special Joint Session of Congress. In his speech to the Congress and to the nation, he proposed that the United States reach the moon and return by the end of the decade. He also addressed Civil Defense, saying,

*One major element of the national security program which this nation has never squarely faced up to is civil defense. Public considerations have been largely characterized by apathy, indifference and skepticism;*

*Financial participation will also be required from State and local governments and from private citizens. But no insurance is cost-free; and every American citizen and his community must decide for themselves whether this form of survival insurance justifies the expenditure of effort, time and money. For myself, I am convinced that it does." <sup>7</sup>*

Less than three months later the Soviets were building the wall dividing Berlin.

The speeches kept coming as did information in the popular press. A civil defense themed issue of *Life Magazine* hit the stands on September 15, 1961. On the cover was a man dressed in a protective suit and the declaration,

How You Can Survive Fallout  
97 out of 100 people can be saved . . .  
Detail plans for building shelters . . .  
And a letter to you from the President Kennedy <sup>8</sup>

Adding to this building tension was the airing on September 29, 1961 of an episode of the *Twilight Zone* titled: *The Shelter*. In his opening introduction creator and director Rod Serling expressed the following:

*What you are about to watch is a nightmare. It is not meant to be prophetic, it need not happen, it's the fervent and urgent prayer of all men of good will that it never shall happen. But in this place, in this moment, it does happen.*<sup>9</sup>

Shelters were not necessarily considered the definitive answer to a pending atomic attack. The Inland Empire held no advantage over metropolitan Los Angeles. Our region was identified as a likely target. Three US Air Force military bases were within short driving distances of Redlands, including Norton and George to the northwest. On the other side of the "Canyon" was one of the country's first military air bases. The old Alessandro Field where Curtiss - built Jenny trainers first flew in 1917 was now home to the Strategic Air Command's B-47s and KC-97s. The two were fully capable of dropping an atomic bomb.

Evacuation was considered a prudent alternative to a massive and expensive shelter program. A practical question "was it possible given enough warning for the entire population of say, Washington, D.C., to flee into rural Virginia or Pennsylvania. Where would Angelenos find sanctuary?"

In the heat of the Berlin Crisis, on August 2, 1961, Riverside County's civil defense and safety director Keith Dwyer, embarrassed the county and created controversy with neighboring cities to the west. In a speech to about fifty in Beaumont, the civil defense director expressed concern for the proposed evacuation of Los Angeles residents to less populated areas. Was there an adequate water and food supply to support the thousands expected to escape to our region? The *Press Enterprise* quoted Dwyer as saying, "People should buy revolvers to fight off persons who might steal the food or take it by force."<sup>10</sup> Dwyer's remarks were printed in newspapers up and down the state. Others, including *The New York Times*, *the New York Herald-Tribune*, *UPI*, and *Time Magazine* picked up the story. Even *Reuters* shared the news with their international readers. Los Angeles's long time mayor Sam Yorty said, "these remarks (Dwyer's) come from individuals who lack good judgement."<sup>11</sup> More blunt comments came

from Ernest Debs, chair of the Los Angeles County Board of Supervisors. He called Dwyer's comments "cruel, unlawful, and un-American."<sup>12</sup> Others supported the civil defense director, including Nevada officials who suggested raising a state militia to protect its citizens. The latter is someone ironic since Vegas promoted itself as "the Atomic City." Bakersfield citizens also voiced concern over the plan to evacuate the Los Angeles basin. Palm Springs, however, said they would welcome the "refugees as well as the tourists."<sup>13</sup>

Dwyer was removed as the county's civil defense director less than two weeks following his speech in Beaumont. Riverside County Sheriff Joe Rice was named acting director. Evacuation remained a topic of great debate. The Interstate highway system was far from complete. A flat tire or an accident along a state highway could stop an evacuation cold. Just in case, Secretary of Agriculture Orrville Freeman ordered a shipment of 636,000 bushels of wheat for the Inland Empire.<sup>14</sup>

Stay where you are and do your best to protect yourself was considered a safer alternative to evacuation. Building officials were not prepared for the demand for information. To encourage the construction of private shelters by homeowners and groups, no permit fees were required throughout San Bernardino County. Plans were available at no cost. Fifteen hundred copies of a 48 page booklet titled *What to Know and do About Another Attack* were made available at the Redlands Post Office.<sup>15</sup> Minimum standards for shelter design were required. In Redlands and elsewhere, underground shelters were to be three feet below the surface. There were setback requirements, as well. Informational meetings were held at the Redlands Contemporary Club and in Mentone. A presentation at the Mentone Women's Clubhouse featured speakers Jack W. Wiley and M. R. Kreston, addressing "Home Protection and Survival Program."<sup>16</sup>

The *Press Enterprise* frequently published summaries of building permits in the home and garden section of the Sunday newspaper, complete with names and addresses. They also published a series of informational articles on shelters. A hand crank microfilm reader in a darkened basement room of the UCR library served me well as I reviewed nearly 20 years of the Riverside newspaper. With addresses in hand, I went to the city's building department to inspect the permits. Although approximately fifty permits were issued, not every project was

completed and some, never begun. It is impossible to know if any non-permitted shelters were ever built. I reached out to speak to the homeowners. Calls and knocks on doors were often greeted by long pauses or blank stares, followed by “we don’t have a fallout shelter.” The latter was not always the case. One significant exception was at a house near the Riverside Plaza. In 1978 the retired Air Force intelligent officer homeowner had a fully stocked and equipped shelter 7 feet wide by 33 feet long for his family of three. Manufactured by William A. Allen’s National Saf – T Shelter Company in San Bernardino, the shelter was buried beneath the officer’s driveway.

Publishing building permits in daily newspapers was not limited to the *Press Enterprise*. Researchers today have access to thousands of digitized newspaper collections and the ability to conduct word searches. I crossed the great Santa Ana “wash” to ascertain how Redlander’s addressed civil defense. I began searching for records of any Redlands fallout shelters in the Heritage Room of A. K. Smiley Public Library. Archivist Nathan Gonzales had secured a subscription to newspapers.com (I later got my own subscription) and access to digitized copies of the *Redlands Daily Facts*. Associate Archivist Maria Carrillo guided me through the initial search process. The paper regularly published articles listing projects, name of owner, address, and estimated project value. A swimming pool, a house, an entire subdivision or a fallout shelter were listed. As I had in Riverside, I headed off to the city’s building department with an alphabetized list of addresses. Several visits were required as some addresses had changed. Perhaps someday the Redlands permits will be accessible in a digital format online. There are advantages to examining the primary resources and a friendly city staff willing to pull the original documents. The first known record of a permit issued for a private shelter was on August 24, 1961.<sup>17</sup> The permit was for a self-built shelter. The applicant was future City of Redlands Mayor Charles “Chuck” DeMirjyn.

Not everyone had the financial means or opportunity to build a private shelter. Cost was a significant factor for the average family. There was great debate throughout the country. Renters versus homeowners or owners versus apartment dwellers were two main points of contention. And there was the wealthy versus the modest income. Fallout shelters were built

for the President near his vacation homes in Massachusetts and Florida. The latter was constructed in December 1961 by a crew of Navy Seabees. Marjorie Merriweather Post, one of the wealthiest women in the world and one of the President's Florida neighbors had a shelter built at her Washington, DC Hillwood estate. The interior was painted a "Mamie pink." It remains intact today. Celebrities Pat Boone, Groucho Marx, and Dinah Shore also had shelters.

In a report issued in 1963 for the year 1961, it was reported that,

For the country as a whole, the average (median) income of families in 1961 was about \$5,700; but for families headed by college graduates, the average was \$9,300, according to estimates released today by the Bureau of the Census, Department of Commerce.<sup>18</sup> In 2015 dollars the range would be \$45,431 to \$74,125.<sup>19</sup>

The average or median cost of a shelter in Redlands was \$1,495. Adjusted for inflation and today's dollars, a \$1,495 project in 1961 would cost \$11,916 or between 16% and 26% of a family's annual income in 2015. Contractors and others provided incentives, including 100% financing, FHA qualified, no money down, and 5 years to pay. As a comparison, I discovered permits for swimming pools issued at the same time costing \$2,800 and \$3,200.

In a speech in October of 1961, the President promised that the Federal Government would unveil a program to get the cost of a shelter down to \$150. An editorial in the *Facts* on October 10, 1961 expressed,

Coming from the president this line of talk is likely to cripple the present shelter building program. Cost is the factor that keeps a lot of people from installing fallout protection at the present and if there is a cheaper way just over the near horizon they would be inclined to wait . . . They had better be sensible or many will feel that the already muddied waters of Civil Defense have been furthered roiled by the President himself.<sup>20</sup>

Cost was one thing to overcome. There was no national consensus. An article in the September 23<sup>rd</sup> issue of *The Nation* labeled the promotion of shelters a "racket" and further reported, "Thus the greatest campaign of persuasion in the history of American public relations is gaining irresistible headway."<sup>21</sup>

Advice columnist Ann Landers was subject to a 90% negative response for advice given a reader wanting to know if her family should go ahead and spend \$800 on a recreation room or instead, invest the money in a shelter. Landers told the woman to build the shelter. A response from a Minneapolis reader contained the following,

The fallout shelter racket is an unconscionable scheme to part folks from their money. It is the lousiest fraud ever perpetuated against a nation of sheep. Shame on you (Landers) for falling for it. <sup>22</sup>

The Methodists were not convinced. At the 112<sup>th</sup> session of the Southern California - Arizona Annual Conference held at the U of R in June 1962, a general resolution passed by the assembly read in part,

Adherence to the concept that shelters can save humanity results in a false sense of security and may psychologically prepare the nation to accept the inevitability of all out nuclear war. <sup>23</sup>

Both critics and supporters of shelters were concerned in this anxiety induced decade of doom.

A third challenge might be called "shelter morality." The September 1961 *Twilight Zone* episode addressed this challenge. When the family sought refuge in their private shelter, they were forced to deal with neighbors demanding to get in and a resulting physical altercation. Some shelter owners kept quiet. They did not want their neighbors to know about the structure buried in their backyard. They intended to control entry. The term "gun thy neighbor" became a sobering and disturbing concept.

Advertisements compared shelter living with camping in the woods. Perhaps they were correct at least in terms of insects and various critters. Psychological studies had shown that low ceilings, confined living, and the lack of lighting bore little resemblance to sleeping under the stars.

And finally, despite the best circumstances and ample warning, what was the likelihood that an entire family would be home in the event of a pending attack? With the husband at work, the

children at school, and mother home with her preschoolers, what would they do? This was a dilemma no family was prepared to confront.

Despite the controversy, many contractors, entrepreneurs, and those seeking to make a quick buck off citizens besieged by anxiety rushed to take advantage of the business opportunities. The quickly formed companies did business as Safety Fallout Shelter, Lounge Shelters, Nu-Hope Construction Company, Atomic Fallout Shelter, Living Circle Fallout Shelter, Titan Shelters, Sta-Live Shelters or under a variety of other atomic-themed monikers.

Already existing products were often retrofitted or customized to meet FCDA standards. The Concrete Conduit Company in Colton manufactured large reinforced concrete pipe. Steel tanks similar to those utilized for underground gasoline storage were customized. Survive – All Shelter located on West Holt Street in Ontario sold cylindrical steel structures that could accommodate three to twenty-four persons. They featured ample storage, an escape hatch with jam proof construction, and the interior color scheme scientifically designated for cheerfulness. The actual color remains unknown. Would any of us be comfortable in an 8 ‘x 14’ shelter with “Mamie Pink” walls or would powder blue or battleship grey be more soothing? Hopefully, yellow was not an option.

Catalina Pools in the San Fernando Valley produced shelters utilizing materials and methods designed for swimming pool construction. The Fox Hole dome-shaped structures were made with a steel lattice and six inches of gunite. A historic photograph of Catalina President Lee Bourdon’s sales office in Reseda features two attractive (and blond) young women in bathing suits in and around a swimming pool. Seen on a printed sign attached to an adjacent chained link fence was the following, “Nuclear Bomb! Fall Out Shelter *On Display Here!* Public Invited.”<sup>24</sup>

A Fox Hole advertisement published in the Van Nuys *Valley News* predicted dire consequences as well as the promise of hope, “It’s a Hit. Los Angeles is one of nine cities marked for death. Eighty-five percent of population can be saved with shelters.”<sup>25</sup> The company had offices and/or distributors in Fresno, Ventura, Downey, Santa Barbara, North Hollywood, Pomona, and were seeking others to join them. On La Cadena Drive in Highgrove, just north of Riverside and adjacent to the now 215 freeway, were the offices of Western Pools. The distributor or

franchise owner was Mr. Marshall Richardson of Live Oak Canyon. Richardson was owner and president of the Richardson Poultry Breeding Farm. Western Pools was Richardson's agent. Protective suits, air filters, food, and other supplies were available for purchase. Of the two model shelters they had, one was installed on Richardson's Live Oak Canyon property.<sup>26</sup> For at least a decade, the second Fox Hole shelter occupied space on the asphalt parking lot (now occupied by high end "dream" used automobiles).

On August 25, 1961 an article titled "Sample Fallout Shelter on Exposition" appeared in the *Facts*.<sup>27</sup> An 8 foot in diameter 12 feet high shelter weighing 13 ½ tons required a massive crane to lift it from a semi-truck trailer onto the Bank of America's parking lot on West State Street. Richardson ran an ad in the *Facts* proclaiming, "It's the talk of Redlands! The Fox Hole Fallout Shelter, Pre-fabricated, fully equipped."<sup>28</sup> The shelter was designed to accommodate up to eight people and included chemical toilet, 7 transistor radio, 3 bunkbeds, first aid kit, hand powered blower or air inlet system with filter, lantern and spare batteries, and shelves for food storage. Water was provided by a connection to the above ground water supply. Four pipes extended skyward – for fresh air, exhaust, water, and electricity (the latter two if desired). The cost was \$2,495 or in 2015 dollars, \$19,660. A smaller version selling for \$1,960 was on exhibit at the Flying A gasoline station at East State and Highway 99 (Redlands Boulevard). This prime location could catch locals and many traveling between Los Angeles and Palm Springs.

It was a common marketing tool to haul the pre-fabricated shelters to shopping centers, fairs, and other venues frequented by the general public. An advertisement in the *Chula Vista Star News* stated that four shelter models were scheduled for exhibit in front of Montgomery Wards at the South Bay Plaza. Fifty cent polio inoculations were also available.<sup>29</sup> Other localities included the Eastlake shopping center in West Covina, at the National Orange Show, and in front of the Corona Chamber of Commerce. In Ontario the public was invited to tour shelters under construction. The shelters were within a two or three block area of each other.

Masonry contractor Joseph Harrison had a large percentage of the Redlands' shelter business. He is listed as the contactor for approximately ten of the 25 known permits issued. The former US Marine Raider who fought on Bougainville, survived the Battle of Okinawa, and arrived in

Japan a few days before the surrender, personally witnessed the firebombed damage in Tokyo and Yokohama.

Harrison did not haul his shelters to supermarket parking lots. His shelters were built in place with a concrete floor, steel reinforced concrete block walls, and a concrete lid or ceiling. In an interview, Harrison stated that it was not easy building underground, especially in areas of Redlands with sandy, rocky soil. The earthen walls would often cave in around the concrete block walls.<sup>30</sup>

The Harrison's Fallout Shelter Company was located at 206 West Colton from which sales manager Donald Colony sold various supplies, including food, a home air raid warning system, transistor radios, air filters, and plastic fallout protective suits.

The largest of Harrison's projects was at the SW corner of Nordina and Clark Streets. Once the Redlands Community Hospital, the Casa De Rey Hotel was advertised "for older folks, clean, quiet, three meals a day, TV, fallout shelter."<sup>31</sup> This shelter was double in size – two times 8 x 14 side by side, 8 feet in height, and a doorway in between. Each room would have an independent air supply and escape hatches, and furnished with 12 bunks. Harrison's design could accommodate either a hatch and ladder entrance or stairway. The permit was issued on September 18 with the final inspection 11 days later. The cost was \$2,950 for proprietor Earl Hart.<sup>32</sup> A call to the Good Shepard Manor, formally the Casa de Rey Hotel, revealed staff having no knowledge of a shelter. They did wonder about the padlocked metal door in the middle of the lawn north of the facility. The staff member said she assumed the owners knew nothing about a fallout shelter.

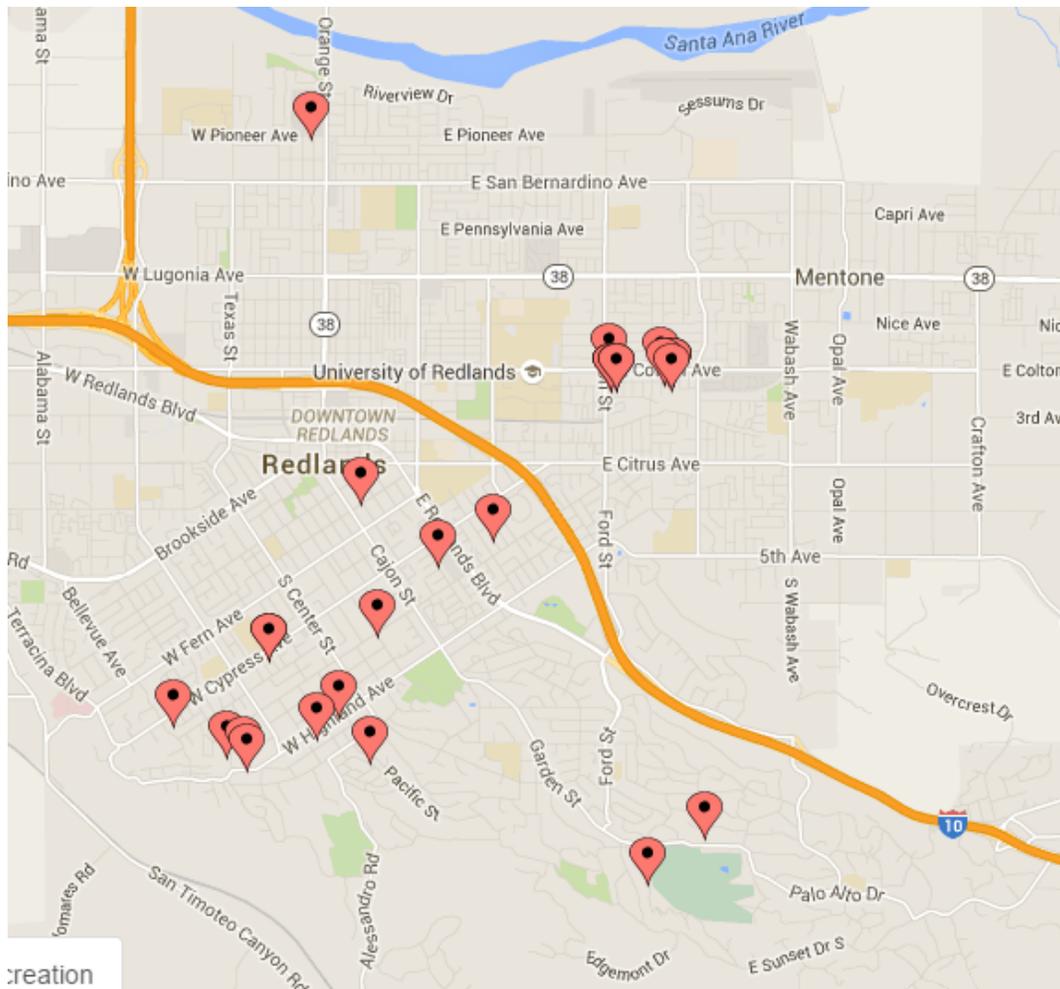
Chuck DeMirjyn, a US Navy veteran from Detroit who served in the Pacific fight, was one of three known RUSD teachers who built or had shelters built. The future city council member and mayor went into the short-lived shelter business with another future Redlands mayor, contractor Swen Larson.

Larson sold reinforced concrete pipe shelters manufactured by the Concrete Conduit Company. According to fellow RHS colleague, council member and Mayor Bill Cunningham, Larson did the

construction and DeMirjyn handled the electrical work.<sup>33</sup> These shelters had 8” reinforced concrete walls that met the Office of Civil Defense Mobilization standards. They came in a variety of sizes, including a model seven foot in diameter and twelve feet in length with a manually operated air control unit (filter) and shelving for supplies. The conduit shelters were promoted as “Maximum fallout protection at a sensible price - within the reach of most families.”<sup>34</sup> Those interested were directed to call DeMirjyn or Larson’s office. Larson sold and installed two shelters, one on Georgia Street and the other on East Colton Avenue.

Three permits were issued during the last week of August, including DeMirjyn’s, with five more the following week. Between September 18 and October 17<sup>th</sup>, fifteen permits were issued for a total of twenty-three.<sup>35</sup>

As shown on these slides, the shelters were distributed throughout the city.



Upon closer examination, there appears to be an implied relationship based on geographical location. Word searches of the *Daily Facts* revealed possible connections between “shelter families,” including the Redlands Republican Women’s Club and the Parent Teachers Association. Had these women shared their concerns over coffee as they planned Halloween carnivals, other school related projects or prepared to voice their recommendation to the school board favoring building the new Terrier gymnasium underground?

In northeast Redlands there is a shelter cluster, including the Cardinal and Falcon Lanes neighborhood. Homeowners Fred A. Gunther, who lived at 617 Cardinal Lane and his neighbor, Major Richard A. Hughes, directly behind him at 620 Falcon Lane hired Joseph Harrison to build two 8’ x 14’ shelters back to back with a community wall at their property line. The shelters were empty at the time of the final inspection on April 13, 1962.<sup>36</sup>

A shelter built in the backyard of a Coronado Drive home was designed for two families: homeowners Gene and Claudia Smith and their neighbors on Roosevelt Road, Larry and Lavonne Jones. Although not directly back to back neighbors, Gene and Larry built an access gate at the corner of their properties. Lavonne recalls the husbands built the reinforced concrete block shelter. She also said that they had it fully stocked with supplies. A search of the *Daily Facts* revealed no article about their shelter and no shelter permit was found for either the Coronado Drive or Roosevelt Road properties. This is a bit of a mystery given no permit fees and the publicity surrounding the construction of shelters in Redlands.<sup>37</sup>

Another cluster is near eastern edge of Smiley Heights, with a shelter on Highland Avenue, one directly across the street on Nottingham, a third on Sunnyside, and a fourth, on Serpentine. Col. Kenneth F. Pletcher owned the home on Nottingham. The Colonel was a physician and Assistant for Life Sciences in the Office of the Deputy Inspector General for Safety at Norton. Soon after the issuance of the permit, Pletcher transferred to the mid-West. He indicated in an article in the *Facts* that his successor, Colonel Emmert Lentz, was renting the home and the project would continue. At this time of crisis, I wonder what Lentz was thinking? Nineteen years earlier Col. Lentz was captured in the Philippines, survived the Bataan Death March, and

spent more than three years as a Japanese POW.<sup>38</sup> The final inspection of the Harrison-built shelter was on April 11, 1962.<sup>39</sup>

Redlands masonry contractor, O. K. Wall, lived on Serpentine. Instead of a concrete block wall built shelter, Wall selected a National Saf-T all steel shelter manufactured by Allen and Sons Iron Works in San Bernardino. The fourth generation company founded in 1885 by O. A. Allen, was owned by William A. Allen.<sup>40</sup> O.A. was William's grandfather and great – grandfather to Curtiss Allen, Sr. of Redlands. According to an article in the *Facts*, the company “sold over 50 shelters in the last two months to San Bernardino Valley residents.” The Allens’ produced four models made of ¼” steel. Each was 8’ wide, but varied in length from 17 to 31 feet. Their shelters featured a 150 gallon water tank, hand-cranked air filter, and enough space for a years’ worth of supplies. They also sold survival kits, including a square five gallon can of food for two good for fourteen days. Redlands photographer Stan Shuttleworth was the local sales representative. A National Saf-T model that could accommodate 6 to 7 people was displayed in the parking lot of Sages’ supermarket at Cypress Avenue and Highway 99 from September 8 – 12, 1961. <sup>41</sup> The company promoted peace time uses as family rooms and dens or as a library, office, and playroom. <sup>42</sup> While many of the shelters were located in the backyards or behind fences, Wall’s shelter was in his front yard. Three vents approximately two feet in height remain clearly visible today.

The majority of the homes with shelters were track homes built in the late 1950s. The exceptions were 925 West Highland Avenue, the old community hospital building on Nordina, Canyon, West Palm, and the Spanish Revival home on Monterey.

I asked the ninety-two-year-old Joseph Harrison if he built a shelter for his own family. The retired contractor and veteran replied with an affirmative “no”. <sup>43</sup> He had been much too busy, often working seven days a week, to build a shelter at the family’s home on LaSalle. How about the other contractors or dealers? An examination of the permits for Swen Larson’s homes on Eureka and Crown revealed no evidence of shelters or at William Allen’s home in San Bernardino near the Arrowhead Country Club.

The rush to build private shelters plummeted within a few months. The last known private shelter permit issued by the City of Redlands was on November 11, 1961.<sup>44</sup> The applicant was Lt. Col. C. A. Barnes, (Ret) and the contractor, Joseph Harrison. In a *Grain of Salt* column, printed in the *Redlands Daily Facts* just three months after the construction began on the Berlin Wall, brothers Frank and Bill Moore penned the following,

In Redlands the fallout shelter building flurry has ended as suddenly as it started . . . It is hard to recall anything that has had such a short vogue, hoola hoops included . . . In short, whatever your particular opinions or prejudices, you can take the shelter business and argue to whatever conclusion seems logical to you. Let a man give you the last 20 words of his conclusion and you construct his viewpoint, unaided.<sup>45</sup>

#### CONCLUSION

Today in the United States, the post-modern private and community shelters are viewed as objects of curiosity and nostalgia. For those seeking a house with a shelter, one can peruse the website [www.estate.com](http://www.estate.com). Newly discovered underground structures have inspired museum exhibitions. In Neenah, Wisconsin a family finally opened the doors to an underground bunker 10 years after purchasing their home. This discovery in Wisconsin's Fox River Valley served as the inspiration for the "Take Cover Neenah" exhibit that received a national award and nationwide media coverage. Their time capsule finding revealed watertight ammo boxes floating in five feet of water. Preserved in the boxes were various food items, Kleenex boxes, and other supplies required for the projected two week underground experience. Canisters of MPF or Multi Purpose Food remained untouched. The latter, a granulated protein mix, was created by a Cal Tech biochemist during World War II with funding from Los Angeles businessman Clifford Clinton, celebrated for his South Seas Tiki themed Clifton's Cafeteria.

Fallout shelters inspired movies and fiction. The movie *Blast from the Past*, released in 1999 and starring Christopher Walken, Sissy Spacek, Brenda Fraser, and Alicia Silverstone, is a comedic twist on the September 29, 1961 *Twilight Zone* episode. Parents Spacek and Walken are hosting a cocktail party in their suburban home in a quintal sensual tree-lined San Fernando Valley neighborhood. During the party they learn of a pending atomic attack. Father Calvin,

mother Helen and five-year-old Adam escape into their massive underground shelter built by the eccentric scientist Calvin Webber. The shelter includes a tank for fresh seafood and a mini grocery store complete with shopping cart. Thirty-five years later they emerge in need of supplies to discover their idealized neighborhood a collection of boarded up buildings, adult bookstores, bars, and chained linked fencing. Their initial perception is that there had been a nuclear attack, only to learn that the neighborhood transformation was caused by other factors.

Remaining unanswered is how many of the twenty-five or so private shelters in Redlands were ever fully stocked with emergency supplies. If the permits are of any help, only three or four were stocked at the time of the final inspections. There is little visible evidence of shelters in Redlands from the street. The exceptions are the houses where the shelters were built in the front yards and under driveways. One Redlands homeowner indicated that the hand crank air filter still exists. When he and his wife purchased the home in the 1990s there were several containers of water in the shelter, water that had been there nearly thirty years. Today, he uses the shelter to house his modest collection of wine.

Whereas we look at shelters in the US as past history, it is easy today to find literature and sources for fallout shelters on websites, blogs, television, and other sources. The Discovery Channel airs *Doomsday Bunkers* and on its sister National Geographic channel, a program titled *Doomsday Preppers* has a loyal following. Just north of the I-5 in Montebello is the Atlas Survival Shelter Company. There one can purchase corrugated steel shelters for \$49,900 to \$109,900<sup>46</sup> Should you opt to write a check for \$100,000 or better yet, put it on a credit card to get the miles, I leave you with the following from the November 9, 1961 *Redlands Daily Facts* editorial page,

Aunt Phoebe wants a list of everybody in town who is building a fallout shelter so she can decide whether they are the sort of people she'd care to survive with.<sup>47</sup>

## Endnotes

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<sup>1</sup> P. D. Smith, *Doomsday Men: The Real Dr. Strangelove and the Dream of the Superweapon* (New York: St. Martin's, 2007), Chapter 17.

<sup>2</sup> [http://www.nv.doe.gov/library/factsheets/DOENV\\_1024.pdf](http://www.nv.doe.gov/library/factsheets/DOENV_1024.pdf)

<sup>3</sup> *Collier's* October 27, 1951 *Preview of the War We Do Not Want* The Crowell-Collier Publishing Company, Chicago and New York.

<sup>4</sup> *The Daily Report*, September 20, 1956, vol. XLVI, No. 173. P. 1

<sup>5</sup> [http://www.atomicplatters.com/more.php?id=94\\_0\\_1\\_0\\_M](http://www.atomicplatters.com/more.php?id=94_0_1_0_M)

<sup>6</sup> *Playboy*, March 1963, Vol 10, No 3, p. 46

<sup>7</sup> [http://www.jfklink.com/speeches/jfk/publicpapers/1961/jfk205\\_61.html](http://www.jfklink.com/speeches/jfk/publicpapers/1961/jfk205_61.html)

<sup>8</sup> *Life Magazine*, September 15, 1961

<sup>9</sup> *Twilight Zone*, Season 3, Episode 3, *The Shelter*

<sup>10</sup> *Riverside Press Enterprise*, August 4, 1961, pp. B1 and B2.

<sup>11</sup> *San Bernardino County Sun*, August 11, 1961, p. 17

<sup>12</sup> *Independent*, Long Beach, August 8, 1961, p. 7.

<sup>13</sup> *Press*, August 8, 1961, p. A13

<sup>14</sup> *Ibid.*, August 16, 1961, p. B 5

<sup>15</sup> *Redlands Daily Facts*, January 3, 1962, p. 1

<sup>16</sup> *Facts*, December 5, 1961, p. 2

<sup>17</sup> Permit 3466 issued August 24, 1961, City of Redlands

<sup>18</sup> *Current Population Reports Consumer Income February 28, 1963*, Series P-60, No. 39 , p. 1. US Government Printing Office, Washington, DC. <http://www2.census.gov/prod2/popscan/p60-039.pdf>

<sup>19</sup> [http://www.bls.gov/data/inflation\\_calculator.htm](http://www.bls.gov/data/inflation_calculator.htm)

<sup>20</sup> *Facts*, October 10, 1961, p. 14

<sup>21</sup> *The Nation*, September 23, 1961

<sup>22</sup> *The Post Crescent*, Appleton, Wis., November 13, 1961, A 13

<sup>23</sup> *Facts*, September 23, 1962, p. 5

<sup>24</sup> <http://aquamagazine.com/builder/when-pool-builders-built-bomb-shelters.html>

<sup>25</sup> *Valley News*, Van Nuys, May 28, 1961

<sup>26</sup> John Elliot, Interview, Riverside, April 14, 1978.

<sup>27</sup> *Facts*, August 25, 1961, p.5

<sup>28</sup> *Ibid.*, August 31, 1961, p. 4

<sup>29</sup> *Chula Vista Star News*, October 5, 1961, p.29

<sup>30</sup> Joseph Harrison, Telephone Interview, September 7, 2015

<sup>31</sup> *Facts*, November 24, 1961, p. 19

<sup>32</sup> *Ibid*, September 23, 1961, p.5

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<sup>33</sup> William Cunningham, Interview, Redlands, September 17, 2015

<sup>34</sup> *Facts*, September 21, 1961, p.5

<sup>35</sup> *Ibid.*, October 28, 1961, p. 5

<sup>36</sup> Permit 3510 & 3511 issued September 7, 1961, City of Redlands

<sup>37</sup> Lavonne Jones, Telephone Interview, October 10, 2015

<sup>38</sup> *Facts*, September 4, 1961, p. 5.

<sup>39</sup> Permit 3558 issued September 27, 1961, City of Redlands

<sup>40</sup> *San Bernardino County Sun*, May 8, 1949, p. 38

<sup>41</sup> *Facts*, September 9, 1961, p. 5

<sup>42</sup> *The Sun*, August 17, 1961, p. B-15.

<sup>43</sup> Harrison, September 7, 2015

<sup>44</sup> Permit 3829 issued November 11, 1961, City of Redlands

<sup>45</sup> *Facts*, November 22, 1961, p. 10

<sup>46</sup> <http://www.atlassurvivalshelters.com/aboutus/nbc/corrugated/>

<sup>47</sup> *Facts*, November 9, 1961, p. 14

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