GRANDPA WAKE AND THE ATOMIC BOMB, A MEMOIR
By Brian D. Wake

Douglas LeVern Wake graduated from Royal Oak High School in 1935, at age 17, during the Great Depression. I don’t know how good a student he was in high school but I know that when I attended the same school a quarter-century later there were teachers who remembered who he was and, in fact, sometimes accidentally called me “Doug”, a sign that he cut a wide swathe there.

Doug was ambitious. He wanted to become a physician and because he “wanted to get it done fast” he applied to the University of Michigan undergraduate school which offered a “combined program”. This program allowed a student to enter an accredited medical school after only three years of study and obtain a Bachelor of Science degree after successfully completing the freshman year of medical school. I am sure Dad was an excellent pre-med student.

His main memory of the undergraduate years is that he was poor. He paid for most of his schooling by working for his Dad (my Grandpa Wake) as a carpenter. His father, Lewis Wake (“Lew”), built houses for a living and Dad worked for him during school vacations and the summer break. By the time he was in medical school, he was able to earn at least $600 during the summer and by the time he was an intern he was earning $5 an hour (“very good work”). During the summer and Christmas vacation, he routinely worked six or seven days a week as did his father. On his first day as an undergraduate, he felt very fortunate to “land” a job washing dishes in the basement of a church fellowship hall where his pay consisted entirely of free meals. He also obtained a job doing experimental work in a laboratory for the federal government. This paid the princely sum of twenty five cents an hour. During our conversation, he contrasted his experience with that of Howard Penney, a good friend from high school. Howard was also a poor but talented young man. He could not afford college but was able to arrange to take the competitive examination for West Point. He was accepted to the Academy and subsequently obtained three star status as a General Officer before retiring. Tuition for Doug’s first term was $54. His rental room cost $2 per week and the quarters were quite Spartan, including a desk, chair, bed and towels. He mailed his clothes home to his mother.
for washing. She, on occasion, would mail him $5 in cash to help him meet expenses. Evidently, she was a woman of few written words because often there was no letter or note with the money. Lew sent him only one note during his school years (I remember receiving only one from my Dad as well). Dad remembers his academic schedule being “heavy” and weighted disproportionately with science courses, similar to my experience a generation later.

Doug applied to McGill University (in Montreal) where his mother went to school, the University of Iowa and the University of Michigan for his medical education. He was quickly accepted at McGill and the University of Iowa but there was no word from U. of M. He preferred Michigan because tuition was less and it was closer to home. Dad has always been a man of action and his approach to this problem was typical. He dropped by Professor Furstenberg’s office and asked his secretary if he could see the dean (of the medical school). He was ushered right in. Dean Furstenberg reviewed Dad’s file on the spot and he then explained that he couldn’t speak for the acceptance committee but intimated that admittance into the medical school shouldn’t be a problem and that he should “just hang around Ann Arbor for a few more weeks” until the committee acted.

Tuition, the first semester at Michigan Medical School, was $125. Doug didn’t have to work during the school year because his skill as a carpenter had improved to the point that he was able to earn $600 per summer working for his father. He also sold blood for $25 a pint (the same remuneration as when Joan and I were in medical school there many years later). He was “rushed” by Kappa Beta Phi medical fraternity. The fraternity was conveniently located near the medical school and was a very cheap place to live. He slept in a twenty man dormitory with bunk beds. There were also two-man rooms for studying. Dad kept tropical fish in his room.
There were 127 students in his medical school class, including five females, three blacks, two Japanese from Japan and one Japanese from Hawaii. Doug loved medical school and was an excellent, indeed, a brilliant student. He graduated third in his class, “behind two Jewish guys”. He was something like three hundredths of a point out of first. Steve Fajans, who went on to become Chief of Endocrinology at the school, was his good friend and first in the class. The three top students in the class were inducted into the AOA honorary society as juniors and were excused from oral examinations senior year. Most of the women in his class had earned doctorate degrees before entering medical school. One was nicknamed “two ton Tilly”. There were 107 graduates in the class. Dad was not just a bookworm. Junior year, he and Mom built a twenty-four foot wooden sailboat from scratch in their “spare time”. They built her from plans in Popular Mechanics.

Doug and Maggie (Dad and Mom) met in November 1938 when Doug was a freshman in medical school. At the time he was dating Howard Penney’s younger sister, Ruth. My Grandma Wake (Mary Alice Pratt Wake, “Allie”) encouraged Dad to bring friends home during school breaks. One of Doug’s good friends, Mike Monroe, was a “prompter” in the Spanish play at Michigan. Maggie was the lead actress in the play and Mike and Maggie therefore met each other. They were not dating. Doug invited Mike home for Thanksgiving. Since Maggie’s home was 600 miles away, in the Keweenaw Peninsula of Upper Michigan, he brought her along with him. Thanksgiving weekend included the biggest football game of the year in Royal Oak, pitting the Acorns against their main rivals from nearby Birmingham. Mom and Dad danced at the homecoming dance. There was a mutual attraction and they were married at the end of Dad’s sophomore year, August 18, 1940. Maggie worked at the Ypsilanti State Mental Hospital as a clinical psychologist. Before her marriage, Mother took the State of Michigan Civil Service Department Institutional Psychologist examination. She did well, placing second in the state. They rented a room on Huron Street in Ann Arbor. Mom mentioned that they “shared a bathroom with a beer drinker”. Their second apartment was on Packard in Ann Arbor.
Doug was in ROTC early in college but he quit after one year. Politically he was an isolationist and he did not foresee a war at the time. He believes that if he had remained in ROTC he never would have made it to medical school. He received a letter (he remembers it as coming before the Japanese strike on Pearl Harbor) while he was in medical school asking him to volunteer for the Army so he joined-up when he was a junior. He became a 2nd Lieutenant on inactive duty with orders to remain in Ann Arbor and finish school. By the time Pearl Harbor came along Doug had come to realize that Japan was an aggressive and dangerous country to be feared. He claims that he personally was not surprised by the surprise attack on the USA but that it was still a shocking event. When Dad was a senior, two U. S. Army General Hospital units were drawn from the school faculty which left the staff short of physicians but presented an opportunity for Doug. Three or four top students, including him, were assigned duties such that they acted essentially as unpaid interns. Senior year, Dad felt he looked too young so he grew a mustache. Mom worked at the Lapeer State Home and Training Center, also as a clinical psychologist.

The University of Michigan wanted Doug to stay on in Ann Arbor for his internship. They offered him $15 a month, uniforms, food and a cot on the upper floor of University Hospital. By word of mouth, Dad heard that Henry Ford Hospital, built by Henry Ford in downtown Detroit, was offering interns $125 per month, with laundry (but no uniforms) and food. Prior to this he had not heard of the hospital. This internship was popular with medical graduates from schools on the East Coast, such as Yale and Princeton. It was popular with Doug because of the large salary! A four-day competitive examination was required to winnow the field. He had orders from the Army to go ahead and take an internship so he graduated from Michigan on May 2, 1942, and began his internship at Ford on May 3rd.

He was the first intern ever accepted from the U. of M. Ford also provided the Army with a general hospital unit so Dad was obliged to work a seven day week because of the staff physician shortage. Some nights he slept in a junior bed in the pediatric ward keeping him close to the action. Mom and Dad rented an apartment at the corner of Seward and Twelfth
Street near the hospital. It was located on the fourth floor of the building which presented a problem when I arrived on the scene. Mom remembered hauling the perambulator and me, with difficulty, up and down the stairs. There was one bedroom, a bathroom, kitchen and a living room with a Murphy bed. When I came home from the hospital as an infant I slept in the bedroom and Doug and Maggie used the Murphy bed. Until my arrival, Mother worked in social services for the City of Detroit Children’s Aid Society. When the city hired her they matched Dad’s salary, a fact that Mother related with pride.

As Dad remembers it, both his internship and pediatric residency were cut a little short due to the war. In total, he was in training for about thirty-two months, four months short of the usual thirty-six. In particular, about this time in his life, he remembers he loved his pediatric residency and found it very exciting. Initially, as he began his training, they lost about a child a day from infectious diseases despite the availability of sulfanilamide which was useful for treating urinary tract infections but not much else. Dr. Johnny Johnson, the chief of the pediatrics service, had been exposed to many infectious diseases and was a universal blood donor (O negative). As a “last ditch” effort he would donate 50 cc. of his blood to a child dying from infection and sometimes it helped and the patient survived. While Doug was a pediatric resident, Princeton and Henry Ford Hospital became the first two facilities in the country to receive penicillin from London, United Kingdom. Penicillin was truly a “wonder drug”, saving many lives.
At the end of his residency, Dad was ordered to Carlyle Barracks in Eastern Pennsylvania for six weeks of basic training for doctors and dentists. He left Ford in early January of 1945. I had been born in May 1943 and Mom was full-term with Patty Jo. Mom and I moved in with Grandma and Grandpa Wake (Allie and Lew). It took several days for Doug to receive a message about Patty’s birth later in January. While at the Barracks, he was called out of class one day to speak to a mysterious Major who without explaining his purpose, asked him questions about his education. Dad’s Colonel thought “something was up”; perhaps the Army was searching for German-speaking physicians to assign to the European Theater of Operations. Shortly afterwards, he received unusual orders to report to the Knoxville, Tennessee, train station. After he arrived, he was “standing around the station wondering why he was there” when a Sergeant showed up with a car. He was taken to the 59,000 acre Site X of the Manhattan Project (or Manhattan Engineering District as the Army called it) which he had never heard of. Site X (Dad refers to it as Oak Ridge) was a highly secret compound located along the Clinch River, a tributary of the Tennessee, about twenty miles west of Knoxville in eastern Tennessee. It was near the Great Smoky Mountains National Park which Mom and Dad visited some months later. On the trip to the Army base, through isolated semi-wilderness, he noted that they passed an enormous amount of mud and forded several streams. They passed many shacks with appliances on their porches and junk in their yards. The Army base was appropriately nicknamed “Dog Patch” by some, after the “Li’l Abner” comic strip. They arrived at their destination at eight or nine P.M. and the mysterious Major briefly reappeared to identify Doug and he was then taken to the emergency room where he spent his first night in Tennessee working. He was assigned to his billet in the morning. His main professional responsibility was to practice pediatrics in the 250
bed hospital but he also worked in the V. D. clinic every tenth night. This clinic was for the laborers, mostly black, who worked on the base. Although he didn’t mention it on this occasion, I remember Dad telling me that he resented using precious penicillin to treat venereal disease when he had sick kids who needed it and I recall him telling me he stole penicillin to use on the pediatric ward.

Most of the physicians, including Dad, quickly surmised that something “big” was going on and were soon asking questions. The engineer who oversaw the building of the Pentagon, General Groves, was on the base supervising some “super-secret thing”. No one was directly answering questions but within 24 hours of his arrival, “one of the guys” suggested that Doug re-read the last chapter of his college physics text which dealt with the theoretical splitting of the atom. According to Dad, at its peak, the population at Oak Ridge was 125,000. There were three main groups of people living there: Builders, physicians/allied health professionals and scientists. The scientists were predominantly associated with the University of Chicago but he mentioned that there were a few Canadians. There was great concern within the physician community that the bomb would be very devastating for the world by poisoning the atmosphere with radioactive material.

At this point in our interview Dad segued into a story about his father. It seems that two senators visited Oak Ridge in an effort to determine what secret project President Franklin Delano Roosevelt was spending so much money on. People who were to be questioned by the senators had been instructed to keep their answers short and vague so as to keep the men in the dark about the goings-on there. One of the senators, Harry Truman, was chairman of the Senate Committee to Investigate the National Defense Program. Students of history know that when Mr. Truman became president he had no knowledge of the atomic bomb, so obviously a good job of obfuscation was done that day. At any rate, Dad can’t remember the name of the other senator who “was someone from Minnesota”. This senator’s father had been the chief of surgery at the Mayo Clinic. Some years earlier when Grandpa Wake (Lew) was a young man he became very ill from hyperthyroidism. His weight dropped from 190 to 110 pounds and he was close to death. He spent six months at the Mayo Clinic under the care of
the senator’s father. His disease was treated first by ligation (tying off) of the superior pole arteries of the thyroid gland and then, after a few weeks of rest, by ligation of the inferior pole arteries. He went on to a complete recovery.

At this point in the story Maggie, Brian and Patty Jo were living in Royal Oak, Michigan, at 302 S. Maple, with Lew and Allie. Dad was living in a “hutment”, a building with lots of rooms, two men to a room. He wished to have his family join him at Oak Ridge so he needed to arrange for accommodations for them all. At the time, he was not considered particularly important to the war effort. Higher ranking career officers and important civilians were qualified for renting homes built along the Clinch River. He worked with a civilian nurse, whose husband was stationed in Europe, who was eligible to rent a house and was willing to sublet it. Thus, the way was paved to bring the family to Tennessee. Doug probably took the train to the Detroit area to fetch the family. (During the interview he stated that Uncle Jack drove them to Tennessee but Jack says “no”.) At any rate, the family took up residence in a small house along the River. It was the usual wet Tennessee spring and there was red mud everywhere and Brian liked to get into it. Sometimes, he would return home with no shoes—they were lost in the quagmire somewhere. Maggie, who was caring for an infant as well, became exasperated with Brian on occasion and once she abandoned him to the sticky stuff and it was left to a neighbor to rescue him, but only after asking permission to do so (if you know Mom and Dad well, you know why permission was asked for). There were flies in the house and Brian earned spending money by killing them with a fly swatter for a penny a piece. This lucrative arrangement lasted until it was discovered that he, no dummy as a toddler, was killing flies outside of the house and collecting them for payment. Other members of the family assumed new duties in Oak Ridge as well. As they forded streams in the countryside near the base, Maggie would wade across ahead of the car to test the depth of the water. Despite the frequent rains, the county was “dry” in one important aspect and Dad sometimes made a “booze run” to the next county over for he and his fellow officers. Dad also recalled that many of the “natives” were “packing” guns. He was in the barbershop one day and discovered that everyone but him was “carrying”.

The Clinch River is seen in the background.
By the spring of 1945, Dad had become more aware of the specifics of what was going on at Oak Ridge. A powerful magnet had been built and was being used to separate uranium isotopes and if you wore a watch nearby, it would become permanently magnetized and cease functioning. He mentioned that a large amount of silver had been used for the magnet. Site X was administered by Brigadier General Leslie Richard Groves who had been Deputy Chief of construction for the U. S. Army. He had just finished the building of the Pentagon when he was placed in complete charge of the Manhattan Project and promoted from Colonel. Under his command, fifty-five miles of rail roadbed and three hundred miles of paved roads and streets were built at Oak Ridge. Electromagnetic isotope separation plants and gaseous-diffusion plants were built as well as a good deal of housing and other facilities. The overall purpose of the facility was to separate U235 from U238 in sufficient quantity to make an atomic bomb.

Doug spent several weeks traveling around the country in the spring and summer of 1945. He was sent to the Philadelphia Naval Yard for a short period of time where uranium isotope was also being separated. His role was to learn physics. He went to Rochester, New York where “German Jews” (scientists) were studying the effects of radiation on fruit flies and extrapolating the data to humans. He attended lectures at the University of Chicago, on the south side of Chicago, where the first nuclear reaction had been observed (under the stadium). He tells the story of a brilliant, very young, physicist delivering a lecture to a group of physicians, including Dad, believing they were fellow physicists. It was unintelligible, with numerous equations and other symbols being written on a blackboard and it was left to Dad to interrupt the lecturer and rectify the embarrassing situation. He informed the young prodigy that they were physicians who were studying the medical effects of radiation. Later, he traveled to the University of California, Berkeley, where he met the premier experimental physicist of his generation, Ernest Orlando Lawrence, whose forte was big machine physics and who was largely responsible for the design of the process for electromagnetic separation of uranium isotopes to liberate U235 from U238.

Still later on he went to Los Alamos (Site Y) about seventy miles northwest of Santa Fe, New Mexico, where he was introduced to the Geiger-Mueller counter which was used to measure radioactivity. He described the
“screaming” of the counter when there was a large amount of radiation detected in one area and as an aside, he mentioned that Geiger counters went along with the troops to France after D-Day because it was feared that the Germans had the atomic bomb and would use it in Europe. Critical mass experiments were being performed at Los Alamos and, while he was there, he heard of a critical mass explosion with a large whole body dose of radiation delivered to three men. They were taken to the hospital and the dose was calculated. The physicists thought the victims would be fine but the physicians disagreed. The man closest to the accident died in about a week of renal failure, as expected. A second died years later of possible side effects and Dad never learned the fate of the third. Doug met a young woman scientist who was conducting implosion experiments which were designed to use conventional explosives to set off an atomic bomb. According to him, physicists were often quite casual about handling radioactive materials. For example, one time he found a few grams of mislaid radium in a bag in the bottom drawer of a physicist’s desk and, on another occasion, he discovered cast-off radioactive uranium in a machining waste pile.

Dad visited Alamogordo soon after the first bomb test. The Trinity atomic bomb test took place on July 16, 1945, in the desert, sixty miles northwest of Alamogordo. He flew over the saucer-shaped crater in a DC-3 and later from a jeep he took radioactivity measurements, reaching his maximum daily dose in about ten minutes. He “liberated” a few pieces of greenish glass (Trinitite) from the crater created by the incredible heat from the explosion (100 million degrees C) which had fused the sand of the desert into glass. Some years later he buried the fragments in the backyard of our home at 1406 Woodsboro in Royal Oak. They were “mildly” radioactive (as a radiologist I was struck throughout the interview that Dad was quite blasé about radiation exposure). He mentioned that the bomb was exploded from a high tower and that the radioactivity measurements in the area were relatively low since much of the material went into the atmosphere and traveled downwind.

Dad related a fascinating and poignant experience from his time in Oak Ridge. He made a house call to a home in the community. Hanging on one of the walls of the home was a black-banded photo of a man who Dad recognized as Francis Flaherty, a good friend of his from college. They had been in ROTC together and both hoped to some day attend medical school as classmates. Francis had stayed with ROTC and never made it to medical school. The photograph was, upon closer inspection, found to be the cover of either Look or Life magazine (Dad couldn’t remember which). The Congressional Medal of Honor hung on the wall nearby. It seems that Francis had served as a Lieutenant in the Navy and was on the battleship Arizona when she was sunk at Pearl Harbor. (His job on the ship had something to do with the ventilation system so he knew the duct system through and through.) He had saved many men who had been trapped in air pockets in the sunken vessel by
finding his way to them through the ventilation system and leading them to safety. He didn’t return from his last trip. The woman of the house was Francis’ sister.

By August of 1945, Doug had to move to Los Alamos and the family needed to move elsewhere. Uncle Jack (John Hextel Leroy Wake) drove Maggie, Brian and Patty Jo to Royal Oak in a Chevrolet Business Coupe. They would stay with Lew and Allie. Jack was recently discharged from the Army Air Corps. He had earned his wings as a navigator, then as a bombardier and finally as a radar-navigator. He finished his tour of duty as an instructor in radar-navigation and never flew a mission in combat. At some point, the family moved to the Keweenaw Peninsula to live with Grandma (Laura Mae Kahl Bryant) and Grandpa Bryant (Frederick William Bryant Sr., DDS) at their home at 110 Woodland Avenue in Laurium, Michigan.

Dad had been a “shutterbug” for some time and he tells a story about seeing a mock-up of one of the first atomic bombs while at Los Alamos. He took photographs of it even though he knew this would be frowned upon by the security people and he developed the film surreptitiously and possessed the photos for a few weeks. Eventually, when security got really tight, he decided to destroy the photos and negatives so as to avoid trouble with the authorities.

The atomic bombs had been dropped on Hiroshima and Nagasaki in August 1945. The war was over for many people but not for Doug who was assigned to the Navy to participate in Project Crossroads, and sent to
Bikini Atoll in the Marshall Islands where two more bombs were to be tested. He departed the United States, from Oakland, California, on a hospital ship, named the USS Haven which was a converted, Kaiser-built, oil tanker. The first bomb detonated at Bikini was exploded in the air like the bombs dropped on Japan. For that test, on July 1, 1946, Dad was on the hospital ship about five miles away upwind of the explosion. According to him the first explosion did little damage to the fleet of boats, many of them Japanese, assembled at the Pacific atoll but the goats tethered on the ships were singed by the heat. There was relatively little radiation at the site as with the test at Alamogordo. The second bomb detonated underwater did a great deal of damage to the ships, sinking many. Dad was on a seagoing tug ten miles away. A lot of radiation was left behind. After the explosions, Doug was involved in the initial boarding of most of the surviving ships. Three men carrying instruments boarded from Landing Craft Personnel via rope ladders. With the wind and waves, this maneuver could be quite dangerous, especially for those who were not experienced sailors as Doug was. He, of course, had no difficulty timing the rise and fall of the boarding craft and often stepped directly onto the deck of the ship to be inspected. One unfortunate person fractured his leg boarding one of the ships. Dad, more or less, took over command of the boarding parties. He often received his maximum permissible daily dose of radiation within a few minutes and, because of the contamination, he was sprayed with a fire hose and issued a new uniform every day.

Doug really enjoyed sailing on the 120 foot tug—it was “good living”. He hit it off well with the captain who was smart and had worked his way up from a deck hand and was therefore referred to as a “Mustang”. Dad was still interested in tropical fish and managed to wangle the Admiral’s (William Henry Purnell, Admiral USN) gig to travel to shore to collect fish in the shallows near the beach which he then put in radioactive water and placed on photographic film to obtain an auto-radiograph. He remembers some of the
photographs may have been published in National Geographic or Look magazine. While living on the tug, a typhoon blew through the area. For safety’s sake, the ship moved well away from the islands in the area and steamed a square course, ten miles on a side, until the storm subsided. The wind blew to 50-60 knots at its height. The conditions were rough and on two of the four legs of the box they sailed, the tug rolled on her beams-end. Dad bunked with the skipper and they were the only two sailors on board the craft who didn’t suffer from seasickness. After about seven months at Bikini, Doug became bored with the routine. He finagled an assignment to Japan to study the effects of the bombs on the populace. He was dispatched from Bikini in August of 1946 with “orders to go anywhere in the world” signed by the “top guy” in the Navy (Secretary of the Navy?). He had “top secret” security clearance and his orders made it clear to others that his mission was high priority and he traveled well, sometimes bumping others from planes. He flew to Yokohama, Japan, part of the way by flying boat, with multiple stops along the way (Quadulan, Guam, and Iwo Jima). While in Japan, he traveled with an interpreter, a photographer and a Japanese physician. He spent several weeks in the country, collecting data. He recalls that many people suffered from eosinophilia in their blood. Initially, he thought this was related to radiation exposure but later he came to understand that it was caused by chronic parasitic infestation which was very common in Japan. Eventually, articles were written and published in the medical literature. His name was left off the articles. (His body language and tone of voice suggested that this did not please him). He related some interesting experiences. At Nagasaki Children’s Hospital he discovered and liberated two patellae (knee caps) which he believes he still possesses somewhere. Stomach cancer is common in Japan and while he was in the country he observed gastrectomies being performed successfully under local anesthesia.
Doug lived in a hotel in Tokyo, sharing a room with another officer who worked for General Douglas MacArthur who administered Japan. MacArthur was the Supreme Commander of Allied Forces in the Pacific and after the Japanese surrender in August 1945, he became the head of the occupation forces in Japan. He was responsible for a great deal of the rebuilding of Japan and he habitually worked ten to twelve hours a day, six days a week. The General was bigger than life and very much into pomp and circumstance. For example, there was a parade which Dad observed one year after the bombing of Japan which MacArthur led in his Packard automobile followed by 5,000 Japanese, many riding white horses. The participating U. S. jeeps were freshly painted and varnished. Dad obviously much admired MacArthur (the same self-assurance and self-absorption?).

In November of 1946 Dad returned to the United States. He still feels fortunate not to have spent four or five years in Japan as many servicemen did. He was placed on leave in Detroit and bought a brand new Ford for $900. His discharge from the service was pending and to cut through the red tape and move things along faster, he drove to Fort Oglethorpe, Georgia, in the new car, where with his usual self-assurance and confidence he filled out his own discharge papers and convinced a Lieutenant to sign them.

He returned to Royal Oak to practice pediatrics as a civilian, opening an office at 735 South Washington Avenue, where patients had a challenging walk up twenty steps to reach the waiting room. While Dad was on the road, Lew had built two wooden examining tables for him and the
practice began the day after he returned home from Georgia. Many patients were immediately referred to him by other physicians in the community who knew of him from his Ford Hospital days, so he was busy from day one despite the slog up the steps to the waiting room. Office visits were $3 and house calls $5. But that’s a story for another day.

This memoir is based upon several hours of interviews in March and July, 2006 when Dad was 88. Mother was present much of the time as well and made some contributions to the story. I also spoke to Uncle Jack for a few minutes to clarify his role in the memoir. Dad was unfocused and disorganized some of the time when we spoke but the stories are wonderful. I tried to verify names, places and dates when feasible, especially when Mom and Dad’s memories were particularly hazy. I hope readers find the end product interesting and enjoyable.

VISIT TO THE TRINITY SITE IN 2007
Trinitite, found in 2009 in a biscuit tin in Grandpa’s den at the Riverhouse apartment in Detroit. Some of these samples are quite black in color and may contain iron from the tower. Yes, there was a patella in the tin as well. So, what is buried in the backyard on Woodsboro? Fat boy? Your guess is as good as mine.

Dad died on October 18, 2012.
By direction of the Secretary of War, Captain Douglas L. Wake has been awarded the Army Commendation Ribbon.

CITATION

Captain Douglas L. Wake, with Operation Crossroads, performed meritorious service with the Radiological Safety Section of Joint Task Force One from 17 January to 16 August 1946 as a Boarding Team Monitor. In his capacity as monitor with the Initial Boarding Teams Captain Wake carried out his missions with great resourcefulness and untiring efforts. He was instrumental in developing new methods of decontaminating highly radioactive ships thereby reducing the delay in reboarding thereby contributing greatly to the success of the Bikini tests.
WAR DEPARTMENT

THIS IS TO CERTIFY THAT
THE SECRETARY OF WAR HAS AWARDED

THE ARMY COMMENDATION RIBBON

TO

Captain Douglas L. Wake, 0 553 073, A A S

FOR

MERITORIOUS ACHIEVEMENT

Southwest Pacific, Bikini, 17 January - 16 August 1946

GIVEN UNDER MY HAND IN THE CITY OF WASHINGTON

THIS 18th DAY OF July 1947

OFFICIAL:

Major General
The Adjutant General

SECRETARY OF WAR