

## R. R. Brownlee Through the Years!



(Pictures can be very enlightening)

We'll start with an early one

See the guns? (RRB is on the left)





He never wore shoes if there was no R in the month's name.  
(That's a Wallace tractor on the left.)

Here is the farm house before it burned down.



In the depression, there was no money for film.  
So, we skip to high school with Bob and Addie Leah.



Their first date was in 1940.

Graduation from HS in 1941 meant starting to college,  
then experiencing Pearl Harbor.

RRB enlisted in the Cavalry in March, 1942 when he  
turned eighteen. He eventually managed to be  
transferred to the Army Air Corps, finally became a  
Navigator, then Navigation Instructor, and made it to  
Tinian Island in the Marianas to prepare for the invasion  
of Japan. Instead, arrival was just in time for the war's  
end.

Happy, Happy, Day, for all were sure they were destined  
to die in a B-29 crash. The invasion of Japan was going  
to be that deadly!



Here is Bob's B-29 crew, flying a plane named

**THE LAST DAMNED STRAW**

Bob is the third guy standing on the left.



Theirs's was a first-rate crew selected to be a General's crew. Every member had been an instructor in his field.

It was also super to have a General as a special boss. After the war ended, they did many truly special flights in the following 6 months.

Right at the end of the war the Army Air Corps had a mission to Japan with a thousand planes, just to prove that they were as good as the guys in Europe.

Bob really enjoyed being there on that occasion. He was on the ground watching because THE LAST DAMNED STRAW had an engine problem!



B-29 crews lived in Quonsets. The next picture shows Bob in his, Reading a letter from Addie Leah.



On formal occasions, he looked like this.





Bob and his Bombardier built their own darkroom. They printed lots of pictures, mostly of B-29 “nose” jobs, but could almost never get the **fixer** they needed, so most of the pictures were not too good, as seen above.



Here's Tinian Island. Picture taken by RRB. Those four runways were for B-29's, including the Enola Gay.

Addie Leah and Bob were married in October, 1943 in Iowa. There was a surprise, for as they emerged from the church, right there was about a dozen cadets saluting with guns.

Guns at weddings meant strange things in Kansas, So, Bob was not as amused as his friends expected.

Here is how RRB and ALB looked on that day.





Not too long after the marriage this picture was taken in Hondo, Texas, with sister Donice who thought Texas a bit strange. Bob was an aviation cadet in Hondo.



Returning to Kansas in February, 1946, Bob went to Sterling to finish college. He then taught high school students for two years, and thanks to scholarships of one kind or another, went off to Kansas University for a Master's degree and Indiana University for his Doctor's degree. Immediately he went to Los Alamos National Lab in New Mexico where he could get his hands-on material hotter than that in the center of the sun. He was in the Nuclear Test Division, and started right out having enormous amounts of fun blowing things up.

He made many official trips to various parts of the world, and was soon able to take family members with him. He stopped counting trips to England at 25. Usually Bob took as many members of the tribe as he could, the necessary eligibilities being to be old enough to take care of oneself, and young enough to obey the leader. He had a habit of inviting friends to accompany family members when possible, and some of the results have been 18 in Kenya, 14 in England and Scotland, 14 in France, 22 in Peru, 18 in China, 11 in Egypt and 22 in Antarctica. For a number of trips there may have been only four or five; there were four in South Africa one time, and five were on another trip to China.

Presently many of the family have been to six of the seven continents, but a few have been to all of them.

**From here on, there are just pictures!**

Antarctica is quite a place.



The tribe loved being there, especially with the family flag.





There is more than one way to document a trip.





This iceberg has real class, including eyes.



There are food defenders in every culture.

But, somehow, our belief that CHINA was always a lot of trouble, cost the most in film, and gave us the most challenges—that's not exactly true.



Grandsons in China were a bit of a challenge. But they were also a pure delight on occasion.







Bob warned about warned them about behaviors by giving each of them some postage stamps.







The Terracotta Warriors in Xian date from about 200 BC.



Here Bob's sister Donice and her husband Melvin joining the crowd with ease.



Here the tribe visits Colca Canyon, in southern Peru. The second deepest canyon in the world is behind Bob's back.

Here is the tribe in Ushuaia in southern Argentina—very near the southernmost city in the world.



This tree was found in Buenos Aires.





Maccha Picchu is one of Peru's great places. And see that peak? That is Huayna Picchu and climbing it is truly something. But of course, done successfully by the tribe. So the family flag has been there too.





Here is a good picture of what they had to climb.



Traveling to Egypt is great sport.

And a week drifting down the Nile is time well spent.

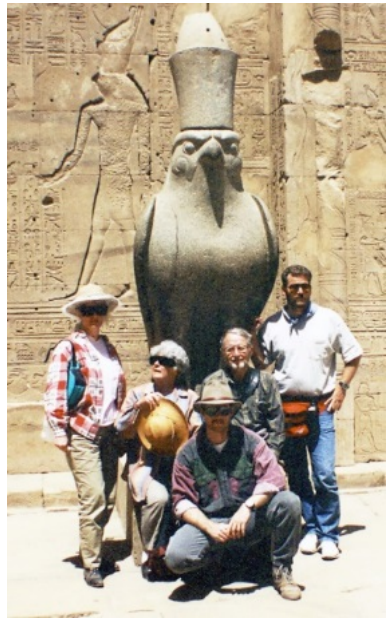


With

sail boat crew.

the





Occasionally there was a magnificent place for every camera.



Wayne is sometimes a bit overactive.





Addie Leah is at the location of the home of Joseph, Mary and Jesus in Cairo when they were escaping the death of Jesus as desired by Herod.



Sometimes there is a massive column for each of us.

At other times, a wall seems about right.



**Subject:** Heaviest element yet known to science.

Lawrence Livermore Laboratories has discovered the heaviest element yet known to science. The new element, Governmentium (Gv), has one neutron, 25 assistant neutrons, 88 deputy neutrons, and 198 assistant deputy neutrons, giving it an atomic mass of 312.

These 312 particles are held together by forces called morons, which are surrounded by vast quantities of lepton-like particles called peons.

Since Governmentium has no electrons, it is inert; however, it can be detected, **because it impedes every reaction with which it comes into contact.** A tiny amount of Governmentium can cause a reaction that would normally take less than a second, to take from 4 days to 4 years to complete.

Governmentium has a normal half-life of 2- 6 years. It does not decay, but instead undergoes a reorganization in which a portion of the assistant neutrons and deputy neutrons exchange places.

In fact, Governmentium's mass will actually increase over time, since each reorganization will cause more morons to become neutrons, forming isodopes. This characteristic of morons promotion leads some scientists to believe that Governmentium is formed whenever morons reach a critical concentration. This hypothetical quantity is referred to as critical morass.

When catalyzed with money, Governmentium becomes Administratium, an element that radiates just as much energy as Governmentium since it has half as many peons but twice as many morons.

There are some other interesting places that have been visited. One was the island of Tristan da Cunha, the most isolated island in the world. It is located in the southern Atlantic.



A railroad car off the tracks in Peru is great to experience.





Some of the tribe had a hot air balloon trip while they were in Kenya.



Getting kilts and Japanese in the same picture is not very usual except on a trip to Antarctica.





Being on a floating island made of reeds is the thing to do when visiting Lake Titicaca, located on the border of Peru and Bolivia.



On one of the trips to England, this picture was taken at the Tower of London.



This one? In China, of course.





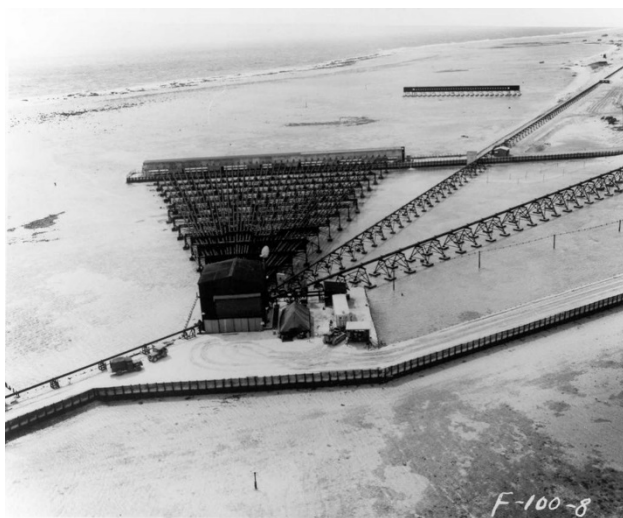
Meanwhile, back at Los Alamos, Bob was having a wonderful time with nuclear testing, first in the Marshall Islands, but mostly in Nevada, where through the years he was present for about 300 tests.

The first thermonuclear test for which he was present was named **Cherokee**, detonated in May of 1956. It had a yield of 3.8 Megatons. Such tests are really utterly different from normal nuclear tests. The fireballs and their behavior cannot be put into words, for no language contains them.





Fired 16 days earlier than Cherokee was the test Lacrosse. This particular test was really a determining factor in Bob's nuclear career. He and two others designed the entire test, and pre-shot it looked like this.



That “black triangle” consists of 40 vacuum pipes.

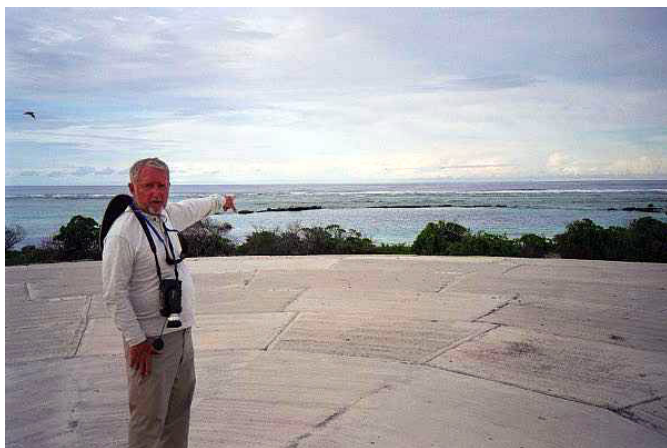
Located just off of the island of Runit, LACROSSE was expected to have (and did) a yield of 40 kilotons and the device was fired in a huge cylinder that had in it 40 windows. The light emerging from each window sped through a vacuum pipe to a mirror that sent the light down the atoll reef to a safe place for high-speed streak cameras. The film was especially made, and could only be developed in total darkness. Bob had that experience with observatory film so he single handedly developed the 40 films. Everything in the test was completely successful. Its cost (in 1956) was \$40 million, and Bob was told recently that the same experiment in 2016 would have been more than 2 Billion Dollars! From this test onward, Bob had increasing responsibilities and had several nuclear tests that were totally his responsibility.

Two years later there was a test named Cactus that was fired on the island of Runit. A good many years later its crater was filled with contaminated material from the rest of the atoll and covered with concrete. The atoll was now cleaned up.

Today the LACROSSE crater, filled with water, contrasts beautifully with CACTUS in the following picture.



The next picture shows it all—Cactus dome to Lacrosse crater.





TEWA, 5 megatons, was fired at Bikini Atoll when Bob was 200 miles away at Enewetak Atoll. Nevertheless, this test has always meant a lot to him, for a small portion of the huge radiation cloud came directly to Enewetak even though most radiation went into an empty area of the Pacific—where it was supposed to go! As a result, Bob got about 5 “years” of radiation in 30 hours. He was then flown back to Los Alamos the next day.

The good news is that neither Bob nor his colleagues ever suffered anything but education and amusement from the whole experience.

Late In WWII the Navy regarded the Pacific as a Navy Lake, and the Army Air Corp guys knew that their number one enemy was not the Japanese, but the United States Navy. So imagine Bob's delight when for an atmospheric test in Nevada two of the Navy's blimps were to be tested, for he regarded the idea as being stupid. Any thinking person could predict exactly what would happen.

Well, maybe not. Before the nuclear test, with Bob watching from the control point, a dust devil on the dry lake bed where the blimps were tethered brought down one of them. Imagine a Kansas boy seeing a Navy blimp brought down by a dust devil!! How could anyone ask for more?

The second was brought down exactly the way Bob told the Navy guys it would be. Sound velocity in Helium is much higher than in air. With the balloon aimed away from the test, the shock wave would arrive at the tail then blow the front away. See?





This picture of Bob was taken on Johnston Island when he was the Scientific Deputy Commander of Joint Task Force Eight for three missile launches. Each missile was pretty good sized, as you can see.



Earlier, Johnston Island was used for a few nuclear tests, and Bob has spent a lot of time there.



The Nevada Test Site is a great place to see.



The Sedan Crater



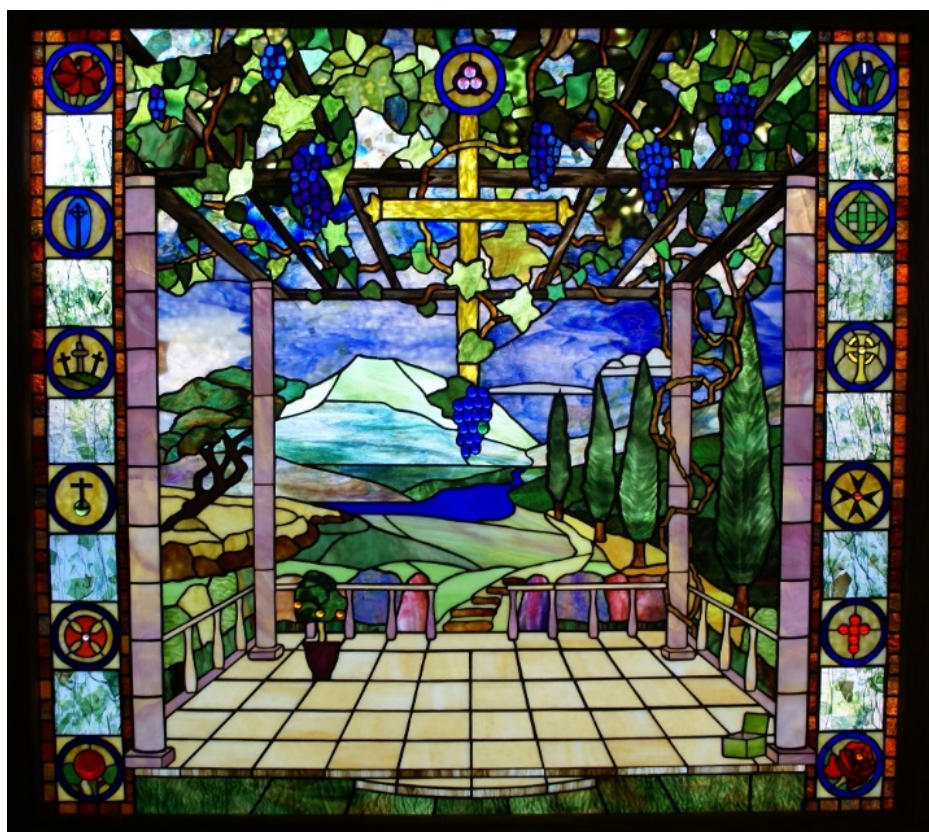
Sedan Crater visitors can include Loveland types.



AND Loveland types are just great.



These people are stuck with a stained-glass window.





thers are stuck with lampshades.



A Stained-glass window Bob always remembers is this one from the United Church in Los Alamos.





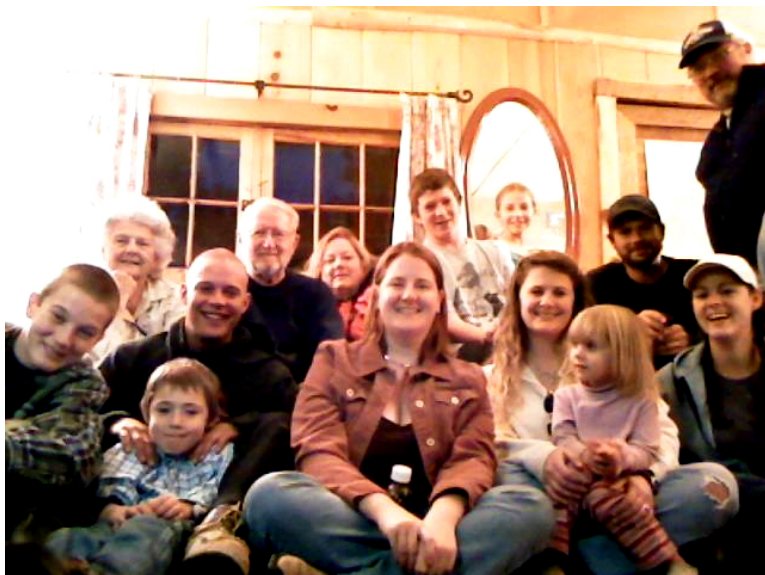
The Canton Palace has been a good place for Brownlees for many years now. So is the cabin at Allenspark.







For most family members, laughter is an everyday occurrence.





For one of Don Pettit's launches into space at Cape Canaveral, Danny Stillman and son David, Wayne and



Sharon were present.

Every launch is spectacular, but the one that Chip and Bob saw in Kazakhstan was truly special.



Brook Sanford is on the left.

Here Bob is pointing out just where Kazakhstan is located.



It is half way around the world from Loveland, and the city Baikonur is the place from which all the Russian launches into space have been and are being made.



“Family” guests flew to Baikonur from Moscow.



The top picture of Addie Leah shows her in her usual beauty. The last picture was taken shortly before her death in 2013—just two months from the 70<sup>th</sup> wedding anniversary.

## MY OWN PSALM

The Lord is my shepherd, just what I want.  
He has blessed me with parents of keen minds,  
and beautiful faith.  
He has challenged me with children,  
And has showered me with their children's children.  
He has guided me through myriads of dead end thinking  
And my computer runneth over.  
Often since I was a boy I have been dim-witted under bright lights.  
Many doubts have beset me. But the doubts have never prevailed.  
But hear me Lord in my plea for greater understanding,  
And a clearer eye.  
Why have I been so slow to see, so fast to forget?  
Where is the strength to break bad habits?  
I have followed your path with occasional stumbling,  
And have suffered periods of your silence.  
I had wandered through terabytes of misinformation.  
Yet Your love has provided a spring in my step,  
And laughter in my heart.  
Now that I understand my limitations, pray increase my vision of  
the times ahead, and our abilities to probe your creation.  
There we find mystery and puzzlement, majesty and glory, wonder  
and awe.  
There our knowledge grows exponentially.  
Even more awesome than that, how wondrous it is to have been  
selected to play a role in your creation.  
Oh Lord our Sovereign, how glorious is Thy Name  
Throughout the Universe  
And beyond.