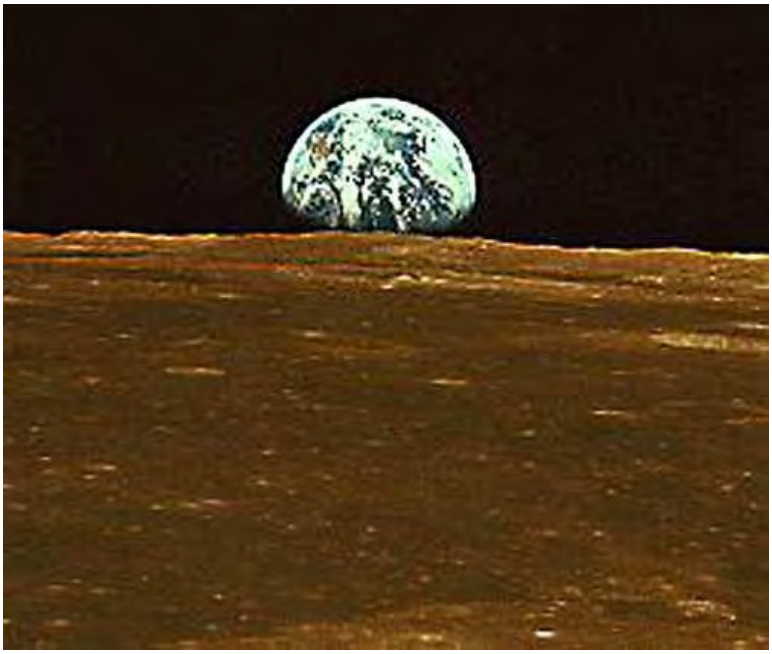
MIHS Class of 1962
Writing Collection
40th Reunion
July 20, 2002



Cover

"Earth Rise," as seen by astronauts Frank Borman, William Anders, and Jim Lovell, December 24, 1968, on the Apollo 8 Mission that first circled the moon.

See Dennis Overbye's story on page 4.

Introduction

In reality, I believe that we are all "luminaries" of the class. We have all done a lot in the 40 years since graduation, most of it unseen by each other. In recent years I have been thrilled to see some of the enclosed articles in print.

Wanting to share them with each of you, along with some unpublished pieces I have written, gave me the idea of putting together this "collection," and encouraged me to call together a committee last January to begin planning this reunion. We have had a marvelous time planning it, with as many as ten of us at some of the meetings, held at least monthly at one of the members' homes.

I hope that you enjoy the reunion, and will savor each of these stories as much as I have.

Allan

Authors

Dennis Overbye

Dennis is Deputy Science Editor of The New York Times, where his articles are frequently seen in the Tuesday Science section. He specializes in themes on the creation of, and the sub-atomic building blocks of the universe. Dennis is author of the books *Lonely Hearts of the Cosmos,* and *Einstein in Love*. Dennis has also written numerous essays published in Time Magazine.

Bill Rudolph

Bill has written numerous pieces which have appeared in the Seattle Times *Pacific Magazine*, of which two are included herein. He is editor of *Northwest Fishletter*, which covers salmon recovery, the Endangered Species Act, and hydropower. He has submitted dozens of stores to the Seattle Times and Seattle Weekly as a freelance writer. Bill's stories are a wonderful look at "the way we were," way back when.

Bob Weaver

Bob Weaver wrote extensively during thirty years of work in government human resources. His "Notes and Happenings," comprehensively recapping each of the reunion committee meetings, were most appreciated.

Allan Williams

Allan has written numerous stories describing his flying and other experiences, which have appeared as Christmas letters over the years. He works as a Flight Test planner at the Boeing Company, where he writes plans to place test equipment on the airplanes.

A Blue Oasis, Seen from Space

By Dennis Overbye

Earth was not supposed to be a tourist attraction on the way to the Moon. But as T. S. Eliot suggested, the real meaning of exploration is to get back to the starting point "and know the place for the first time."

So it was on the day before Christmas in 1968 that three astronauts, Frank Borman, William Anders and James Lovell, cruising 69 miles over the slate-rubbled surface of the back side of the Moon, having ventured farther from home than any humans in history, looked up and saw their home world, again, for the first time, as a planet, a blue oasis in the void, rising over the dead gray moonscape.

Arguably no artifact of the space age has had the emotional impact of the "Earthrise" photograph, which has decorated countless dormitory rooms and grass-roots environmental offices and has been made into a stamp -- despite long-standing uncertainty over who exactly took the famous photograph. Both Major Anders and Colonel Borman, the spacecraft commander, recalled taking the picture. In his autobiography, Commander Borman said he had snatched the camera from Major Anders, who had been photographing lunar features. Two recent historical accounts, "A Man on the Moon," by Andrew Chaikin, and "Genesis: the Story of Apollo 8," by Robert Zimmerman, tend to bear out Colonel Anders's account.

Shortly after the photograph was taken, Commander Borman, who thought the only thing more important than getting to the Moon was getting safely back, ordered his excited and tired crew to bed.

Back on Earth, Americans were coming to the end of a traumatic year that included the assassinations of Robert F. Kennedy and the Rev. Dr. Martin Luther King Jr., continuing turmoil over the war in Vietnam, a Presidential campaign fraught with violence and the humiliating seizure of a Navy tanker, the U.S.S. Pueblo, and its 84 crewmen, by North Korea. Apollo 8's Christmas mission to orbit the Moon in preparation for a planned landing the following summer was a bright surprise. Time magazine named the three astronauts Men of the Year.

Charged with conducting a live television broadcast from Moon orbit on Christmas Eve, Colonel Borman rose to the moment and reached for the best material. As Apollo 8 drifted into the shadow of lunar blackness and Earth disappeared over the horizon, the crew started to read from the Bible, "In the beginning, God created the heaven and the earth . . ."

Major Anders later remembered thinking that this moment was a new beginning for humanity. Apollo 8 circled the Moon 10 times before looping back to splash down in the Pacific Ocean on a grateful Earth. Neil Armstrong's small step, golf balls on the Moon, the desertion of lunar exploration, shuttle explosions, myopic space telescopes, and lumbering space stations were still in the future. But 30 years ago this week, there was poetry in the cosmos.

Published in New York Times, Tuesday, December 22, 1998

Best Question; Did God Have a Choice?

By Dennis Overbye

The universe is knowable -- up to a point.

'What really interests me," Albert Einstein once remarked, "is whether God had any choice in the creation of the world." Few scientists have ever poised their ambitions as poetically or as nakedly as Einstein, who spoke sometimes as if God were someone he met for coffee every day. When he spoke of God, however, the last thing he had in mind was a white-bearded man sitting up in Heaven toting up sins and dispensing favors to prayerful supplicants. The question was just his way of asking whether the universe could be any other way than it appears to be -- and if not, how much room remains in that universe for things like chance and miracles?

Is it just pure luck that our own universe has the friendly qualities it does, or if we knew all the laws of physics from a God-like perspective, would we know that the universe could not be any other way? Would we know why atoms are small and galaxies are big? Would we know not just how, but why the universe began? For Einstein, the only conceivable answer to these concrete questions was yes.

History teaches that most ideas are flops, in science and otherwise. But every once in a while a hunch that began as pure thought, a wild gem of poetry about the way nature should be, blossoms into a theory that turns out to fit the world so miraculously that its authors cannot help feeling that they have tapped into the secret order of reality -- into God's "mind," as Stephen Hawking once put it. Einstein knew that giddy feeling back in 1915 when he realized that his theory of general relativity correctly predicted a puzzling motion of the planet Mercury that had bedeviled astronomers for decades; he later confessed to a friend that he had had heart palpitations.

Today those same palpitations are being provoked in his successors by something called M theory, a shadowy concept posited to lie at the end of a mathematical labyrinth known as superstrings. The theory seems to contain everything that physicists ever wanted to know about the forces of nature but were afraid to ask. Curiously, nobody claims to know what M theory actually will say, only that it seems to be there at the end of the mathematical rainbow, still undiscovered, a metaphysical headwaters of the Nile. The source perhaps of the River Why.

Still, there are many reasons to wonder if the River Why can ever be drained. Every great triumph of adventure in thought, as Alfred North Whitehead called general relativity, has invariably bred a new batch of questions. There is no reason to think that we are at the end of the cycle yet, and no guarantee that we are or ever will be God-like enough in our comprehension to recognize the cosmic secret if it were carved on a tree trunk. It may be that humans are fated only to know many small truths rather than one big truth about the universe, while we spin off ancillary marvels like space flight, gene therapy and the World Wide Web.

A God with no choice, of course, might seem to be a cold comfort or even no God at all, at least in the traditional sense. In fact, Einstein noted that a well-ordered universe left no room for "causes of a divine nature." What role then is left for God? Only the main role. To Einstein, God was a code word for the mystery and grandeur of the universe, the wellspring of awe, a reminder that there was something at the core of existence that all his equations could only graze, as he said once, "something we cannot penetrate."

All our science, Einstein often pointed out, would never vanquish that mystery or slake our thirst for something beyond. Written on a blackboard or a T-shirt, the so-called theory of everything would just lie there waiting for something else to breathe life into it and the universe. It would not tell us what we really want to know: Does God love us? Do our lives have any meaning? Nor would it even tell us that science itself has any value. The idea that the universe makes sense, of course, is the sheerest faith of all. The most incomprehensible thing about the universe is that it is comprehensible, Einstein remarked.

In reality, we will probably never know the answer to his question. We will always be stuck in the middle of an endless journey, not knowing whether the final answer is just around the corner or a million miles away or whether we are just going in circles with our excellent particle accelerators and ingenious mathematics, projecting our own wishes for form onto chaos. Moreover, modern cosmological theories seem to suggest that our universe is not unique, but might be only one among an almost infinite variety of worlds -- worlds in which atoms are the size of bumblebees and all stars are black holes, worlds of 3 or 6 or 11 dimensions, worlds forever inaccessible to our probing eyes.

But science is nothing if not the search for reasons, for the smoking gene in our coiled cells, the atom of consciousness, the quantum butterfly flapping its wings at the heart of the world. It is the job of scientists to believe in answers. But like card players with an incomplete knowledge of how the cards lie, physicists are forced to play their cards as if there were a way to win the game of science. Without faith that there is order, as Einstein pointed out, the enterprise is doomed anyway. But with that faith, as Einstein proved, it is possible to change the world.

Images: Photo: As Einstein once remarked, the most incomprehensible thing about the universe is that it is comprehensible.

Published in New York Times, Sunday, April 18, 1999

Blue Suede Lake

By Bill Rudolph

My blue suede shoes were crossing the Mojave Desert in the trunk of a 1953 red and white Oldsmobile. They were still a little big for me but they were in perfect shape. A friend from across town had already outgrown them. His mother gave them to my mother. Everybody was growing fast but me. I had just barely got started. But the shoes were famous, they had twisted and bunny hopped on Al Jarvis' Teenage HiJinx television show, they had even been to a few parties at Annette Funicello's house and scuffed their way through the hallowed halls of North Hollywood High.

My dad turned off his headlights and steered the Olds by the light of the moon. We were doing 80, sailing past barren mountains where scrawny pine trees were the oldest living things on the planet. I had only been around for 13 years. The pamphlet in the last coffee shop said the trees had been around since the time Moses came down from the mountain, 4000 years ago. My dad said the steering felt good. We drove right down the centerline in the middle of that bright night, right in the middle of my father's life to move to an island in the middle of Lake Washington near Seattle.

A billion stars winked over the valley and sputnik was out there somewhere. I had seen it once over the garage roof one night. I knew just about all there was to know about it since I was the first and last president of the Washington Elementary School Rocket and Missile Society. After school, we mixed up gunpowder in Steve Church's basement or jammed match heads into aluminum tubing that never got off the ground. I had even lectured the Kiwanis Club on the basics of atomic structure and the benefits of nuclear power. Do you know how many houses would run on an eight-inch cube of uranium in a single year? Now it was goodbye to all those free Jell-O salads at the Kiwanis lunches and goodbye as well to the wonderful old oak trees on my street. They had originally been planted by my great-grandfather, who was a coopersmith by trade but California had turned him into a rancher and winemaker.

So we moved to this island into a house that was built out of lumber sawn from trees cut down on this half acre. We had an artesian well, a pump from Sears, a marginal septic tank and a great view of the south turn out on the lake where the hydroplanes raced every August.

The shoes ended up in a box along with my narrow belts, pink socks, my turquoise shirts and my old white Peggers, stored in a basement room that the original owner claimed he had designed as a walk-in freezer. It had thick concrete walls and ceiling. Those were the days when you didn't advertise the fact that you had a fallout shelter in the basement. It could lead to embarrassing moments if the neighbors showed up during a nuclear attack.

Those were troubled times. Elvis had just joined the Army and was being sent to Europe to bolster NATO forces. Unfortunately, my old 78 of `Love Me Tender' didn't survive the trip north in one piece.

It didn't take long for my brother and I to explore this wild territory. We followed deer trails down through the woods to the shore of the lake where muskrats and raccoons raided the duck nests. Sam Cooke's voice crooned from runabouts that drifted around in the afternoon heat. We could hear `You Send Me' coming from three or four directions at once. Sometimes a roving band of Evinrude-powered teenage pirates would raid the empty burrow of a doctor or a lawyer and speed off full of expensive liquor in the direction of the city, weaving wake and all.

The second strata, 100-300 feet above lake level, was occupied by several thousand Boeing engineers. Like us, they all had unfinished basements and were easily identified by the six or seven ball point pens in their shirt pockets where packs of Kools were faintly visible through the fabric.

Up on the central plateau in the dwindling forest, civil servants were taking over from the deer. According to Indian legends, an evil spirit was supposed to dwell on top of the island exactly where the high school was built.

At the first school dance, I did a lot of watching. I had on those blue suede shoes and I got blisters when I did the twist. But in a world of wingtips, I was a standout. I didn't wear them again until I went to the Science Fair with my Repulsion Coil, which was a metal ring that hovered over a laminated iron core and overcame gravity with its own magnetic field.

To leaven this boorish fascination with technology we were forced to read Great Expectations and take part in dusty cultural exercises but nothing could shake our fascination with the real world. I heaped up mountains of magnesium and ignited them in volcanic splendor, totally oblivious to the fact that 20 feet into the sediment layer of my nearby lake lay a deposit of ash from the from the eruption of Glacier Peak, fully 12,000 years before I developed this perverse interest in magnesium.

The lake came in real handy; it provided the breeding ground for my friend Reggie's frog experiments. He invented a heartbeat monitor that went through a lot of frog hearts. Since sputnik, we were all trying to catch up to those sneaky Russians.

We tried to be like other kids by playing baseball but the sport was not a big hit on our island paradise. The ball field was a combination of glacial moraine and baked clay. After a good downpour, the infield was as hard as a day-old pizza. When the weather cleared we always seemed to end up down by the water. To any budding Columbus, that meant sailing lessons. Our mothers ferried us over the floating bridge to Leschi for instruction in the art. But first, we had to prove to our instructors that we could swim. One muggy day we were herded into the water off Madrona Beach by a Stanford sophomore whose mother had probably bronzed his first pair of Topsiders. He sported a great tan and displayed obvious relish at the administration of the swimming test.

"Don't swallow any of that water," he advised, with a knowing grin. We floundered out to the float and climbed aboard. The ducks took off, honking and beating their wings while we stood in the wind, wet and shivering and full of goosebumps.

All of a sudden, I realized I was standing among a shakey forest of female legginess. A buzzer went off in the pit of my stomach while I tiptoed around the duck squiggles on the canvas deck and waited for further orders as I studied the mallards' attempt at calligraphy. It wasn't a bad imitation of a large Mark Tobey that hung in the local museum.

The order came to jump and we did. If we could float for five minutes, the world was ours. Young Mr. Stanford rowed around our bobbing heads, wondering out loud just what happened to a lake when twenty million gallons of raw sewage drained into it every day. After that, I never developed a taste for swimming in this body of water.

One lazy afternoon, five or six of us were in our sailing dingies, becalmed in the middle of an impromptu race. I had a Camel cigarette that I'd filched from my dad and used it to detect slight shifts of wind that would lead my to victory. It was a psychological edge as well, to puff clouds of smoke through the motionless fleet.

On this particular afternoon, the smoke was going straight up. We were never taught how to sail a boat with the wind coming from that direction, so my crew and I finished off the cigarette, tossed it over the side and watched it bob next to the boat, reminding us that we were slowly going nowhere.

Two hundred yards away, a bolt of lightning hit the water.

God didn't want us to smoke. A fine mist began to fall and another jagged flash struck the water. For half an hour we drifted aimlessly among the discharges, scared to death. I tried to keep calm by telling my crew about the great little experiment I had done, getting a neon bulb to light up by collecting static charges from falling drops of water. Lord Kelvin, a famous British scientist had done it all before and had explained it to the Royal Society. And there was Nick Tesla, another high voltage guy, whose electrical experiments in Russia were thought by some conspiracy freaks to have actually changed the weather.

The greasy scent from Kobey's old fish and chips stand floated by with the promise of a light westerly. Soon we were ghosting home in the mystical twilight to the drum rolls of passing gods.

My brother and I prowled up the east shore in our 18-footer, an old flattie we kept moored at the south end of the island. Sometimes we sailed through the local version of the canals of Mars, a dredged-out subdivision waiting for another influx of capital that would transform the gravel lots into a Venetian real estate development. Just north was Mercer Slough, full of quick sand, cattails, muskrats and water snakes. We got our centerboard stuck in the mud and barely made it out alive.

Back in 1926, the upper reaches of the slough had been drained and local farmers planted blueberries on the reclaimed land. When I needed money for a pair of kangaroo leather baseball shoes, I went over there to pick berries. Lonnie, the row boss, was a mean kid with a drawl as long as his arm. He stood on the bed of a truck and tallied up our flats. He had a muskrat face and a girlfriend who looked like she was about twelve. If he thought there were too many leaves in with your berries, you were docked half your pay. I didn't care, I always ate too much product to file a serious complaint and had too much of a stomachache by the end of the day to even care.

Whole families picked there, mostly Mexican folks who followed the crops. From grandmothers to toddlers, they were all out working the bushes. Babies slept in the tall grass while mothers gossiped in Spanish, their fingers never stopped stripping those branches. I bet they picked in their sleep. They lived in tents and campers at the edge of the field and cooked on Coleman stoves less than two miles from the fancy Frederick & Nelson store in downtown Bellevue.

After baseball season we had a class party. I went down in the concrete room looking for those old suede shoes. The light had burned out so I picked around in the dark with a dim flashlight.

It was quite a sight. Since we had moved, this room had become a musty Valhalla for broken skis and outworn boots, old encyclopedias, toys and Indian baskets. A string of tinsel spilled out of a box of Christmas decorations.

I put my hand against that hard cold wall. This room had been the center of a dream I'd had where great orange balloons drifted across the lake from Seattle with a fat cartoon bomb hanging from each one. As they drifted closer, I could see the bombs swung like slow pendulums. Then they started to explode. We ran down to the concrete room where we tossed out the skis, the ornaments, the records and the old clothes and huddled in the dark, choking on dust, wedged between boxes. The baby slept in a makeshift bed on a shelf where I now aimed my flashlight and saw that famous pair of blue suede shoes. Dear Nikita, you can do anything you want, but lay off of my blue suede shoes.

Down at the beach club, rock and roll oozed out the clubhouse door. It was `Silhouettes On the Shades.' Volleyballers screeched above the whine of outboard motors as I gazed out across the water next to a girl who had suddenly developed great eyes. Brown, too. She wore a Mexican blouse pulled below her shoulders and a full green skirt with a sequined cactus sewn on it.

Out on the lake, a tugboat churned towards the log boom on the far shore. I started telling her about how we used to run along those logs, get them spinning and hope the other guy would fall in first. At the moment, it sounded so immature. I was afraid to look into those eyes again. It was getting really hard trying to live my life according to the principles of quantum physics.

A nearby mermaid who later became a local television celebrity stood next to us, poised and ready to take off on her slalom ski. A fancy varnished speedboat backed in and, who else but the varsity fullback tossed her the yellow towline. She smiled, tossed her mane, and tugged at the bottom of her bathing suit. She arched her back and yelled, "Hit it!" The motor wound up, she flew into the air, and landed perfectly on the water, skimming over the sunken forest where legend had it that an Indian had once paddled over from the mainland to strip bark from the cedar trees. The spirits in the trees resented this guy who tried to steal their clothes and they promptly drove the poor warrior mad on this very spot.

I was going a bit mad myself. The algae was blooming, the girls were blooming and the leaves on the willow trees danced in our wakes. The sound of laughter and the gentle clink of beer cans came from the blackberries behind the tennis court. Japanese lanterns swung from the deck of the clubhouse. The heady smell of dusty ripe blackberries filled the air. She noticed how much I had grown. It was true our lips were about even. I had finally caught up with her. I looked down at my shoes. My feet were killing me but it didn't matter a bit.

Published in the Seattle Times *Pacific Magazine*

The Revenge of Sputnik II

By Bill Rudolph

While Laika, the Russian space dog circled the earth every 90 minutes in her orbiting doghouse, I jammed hundreds of match heads into an aluminum tube with my good buddy Craig. It was 1957 and the race to the moon had just started. Our own little rockets never got off the ground so we marshaled all the brainpower of the eighth grade under a single umbrella group and called it the Washington Elementary School Rocket & Missile Society. I was president.

Elementary it certainly was, but we were still light years ahead of the rest of the class. Those bozos were inflating balloons over flasks of boiling water or dropping baby teeth into Coke bottles while our little group became part of a dog and pony show that the school principal dragged around to show off the American educational system. One day I even lectured the local Kiwanis Club on the basics of atomic structure and showed those insurance brokers how to detect cosmic rays in the privacy of their own home with a gizmo called a cloud chamber. It was made out of an ordinary peanut butter jar. "YES INDEED, LADIES AND GENTLEMEN, THOSE LITTLE PARTICLES ARE PASSING THROUGH YOUR BODY RIGHT THIS SECOND."

I had them worried but there was still hope for America. With kids like us to lead the technological charge, that is. We were more than willing to charge down the hill and lead America to the moon or Mars or wherever else our budgets would let us. I had but one question. Just what were those weird particles suspended in the Jell-O salad that shook from every passing truck?

After school we made our own gunpowder and poured it into empty CO2 cartridges. But like the scientists on Project Manhattan, we had trouble engineering the trigger mechanism. A nail and a rubber band worked okay if you threw the projectile so it hit a neighbor's wall just right. We never caused serious damage but we should have. The sound of shrapnel whistling over our heads considerably dampened our scientific curiosity.

Our dream of sending a white rat 1000 feet into the air and bringing it back to earth alive was fast disappearing. In my blue moments, about all I could do was scratch my old beagle's ears and ponder the fate of Laika, who would not be coming home because the Russians hadn't figured out how to engineer the return flight.

I usually fell asleep with Werner von Braun's book under my pillow. It was a classic text on rocketry and was full of pictures of stubby V-2s poised for launch at Peenemunde, a resort town near the Baltic Sea where the Germans developed their expertise.

Peenemunde. The word used to roll around in my head before I dropped off to sleep. The sound of it had a rise and fall, a rocket's trajectory, built right into the language, that old parabolic curve showing the path of the love affair between objects and the center of the earth. The iron fist of gravity always won in the end. Germany fell, too.

When von Braun came over to help us beat the Russkies, he left out that part of his resume where he helped run a slave labor camp at Peenemunde. But he was a good kid at heart. He had once built a model car powered by fireworks. I had done the very same thing.

Without my knowledge or consent, my own internal systems were getting an engineering update. The boys in the class were marched off to see a short film full of innuendo and murky biological facts that told us we were all part of nature's great plan and that these nocturnal whatchamacallits were nothing to lose any sleep over. It does provide a lucid explanation for mankind's fascination with fireworks and the creation of NASA can be seen as a bureaucratic manifestation of visceral longings in the hearts of all real men. How clever these scientists and engineers were to harness millions in tax dollars just to get their personal rockets off.

In high school, I built volcanoes out of magnesium, ignited them and filled the lab with sparks while Reggie cut out the hearts of live frogs and hooked them up to his homespun cardiograph whose main element was a Hills Brothers coffee can with a piece of paper taped to the outside of it.

I was on the fast track and even made it into the elite calculus class where ten of us met every day in the Home Ec room where we were taught by a talking head on television. Surrounded by refrigerators full of Jell-O salads that went from one end of the visible spectrum to the other, we absorbed a branch of mathematics that Sir Isaac Newton had invented in his mid-20s. Newton had been incredibly shy, a terribly morose chap with a lifelong fear of women. Hence, his flight into the abstract. He was the perfect role model for the scientific life.

My neighbor Bruce helped me build a contraption called a Repulsion Coil, a two-foot-high core of laminated iron with heavy wire coiled at its base. When a metal ring was placed over the core, it developed a magnetic field powerful enough to propel it to the ceiling. When the juice was applied, the lights dimmed while it hummed merrily and propelled us right into the Science Fair. One problem. It seemed that if you spent much time in the proximity of that magnetic field, girls wouldn't get near you for weeks at a time. It did help our crew cuts stand up straight, though.

Our brains were soaking in a marinade of physics and math that had been cooked up by some of the best scientific minds in the country. The 30 pounds of collective gray matter that spent the whole year in the Home Ec room absorbing a few bits and pieces of Newton's tortured psyche, was reaching critical mass and getting ready to split and spread across the country.

The brains went to places like Harvard, Yale, Dartmouth and Reed. The brightest star of all, our lone skinny female, went off to the University of Washington. Five guys, about half the class, marched off to M.I.T.

In college, I found myself in yet another lab, timing the descent of a lead ball down an inclined plane. My partner, Lorna, tapped out the time with a finger on the inside of my leg. Now, this was hands on physics! Our instructor in this Newtonian simplicity was a pockmarked senior who sported a radiation badge, a coveted symbol of courage and mystery. Sometimes, he condescended to drink beer with us and discuss stuff like the second law of thermodynamics and his large collection of pornography.

But something was out of whack. I read Jack London on the sly. When Jack was my age, he was the king of the oyster pirates on San Francisco Bay. I was just stuck in a swamp of differential equations. One day I was working on a problem of finding the velocity of a steel ball spiraling down the inside on an inverted cone. That ball picked up speed and spun right out of my physics book, never to be seen again.

It was a bad year for the Russians, too. Vostok II missed its landing site by more than 2000 miles. Some very nervous cosmonauts spent the night in a dark forest surrounded by wolves crooning for the spirit of Laika, howling revenge under the Dog Star.

After all these years, that steel ball has circled back and lodged under my skin, making me wonder just what happened to the other 27 pounds of marinated brain power that grew in the mathematical hot-house of our high school calculus class, brains nurtured by countless bowls of stolen Jell-O salads.

Now the scorecard is in, the envelope please...

It looks like the final result is Science 6, Art 4. On the Newtonian side of the universe, we have three computer engineers, one chemist, a real professor of fusion engineering and one software entrepreneur.

On the other side, we have one lawyer (a guy who did a great imitation of `Hound Dog' before he developed a Harvard accent); a magazine distributor who is working on a book on the philosophy of science in his spare time; a professor of classics (our brainiest, she dumped her degree in physics for a love of Greek); a writer who lives in Woodstock down the road from Bob Dylan's old mansion and is finishing a book on the history of cosmology; and, yours truly, a reformed fish pirate of sorts, who once stood hip dip in an Alaska stream and gaffed dog salmon as they swam up to rendezvous with destiny. I'm now atoning for such behavior by working on a book about the connections between Jell-O salad and ultimate particles.

Published in the Seattle Sunday Times *Pacific Magazine* in the late 1980s'.

FRIENDSHIPS

By Bob Weaver

An original verse written in the aftermath of the
World Trade Center attacks, September 11, 2001

Among the things I hold most dear in life
true friendships are the best.
For they can last for time eternal
and will always pass time's test.

Friendships have a common bond
yet can be so very different.
Each has a comfort zone alone
depending on who is in it.

Some friendships are held from points afar,
distance fails to make them dimmer.
They blossom and grow without a touch,
true caring makes them glimmer.

Our friendship is of a special kind
bound not by month nor day nor year.
It, for another I would not trade,
for ours I hold most dear.

So on this sad and memorable day
amid pain and shock and sorrow,
to have you for my special friend
will help me through the days to follow.

Blackberries

By Allan Williams

I went out today to pick some blackberries that were growing along the fence behind our apartment here in Monterey. I saw some on the other side of the fence that I wanted to pick. I knocked on their door and got no answer. So I climbed over the fence and started picking. All of a sudden I start to remember being a kid and picking blackberries with the family.

I'm 7 years old, Mom's 25, Dad's 30, Paul's 5, and Mark is 3. First we were down by the big hill near Bryn Mar, just west of Renton by Lake Washington. I remember the big green water tank. The big planks we used to push down the blackberry vines with. All of our pails and large pans. Seems like we went there many times. We made blackberry jam from the berries. I remember helping to make it and the tons of sugar it took. Remember everyone feeling ok and having a good time.

I think we had moved to Mercer Island now, and we were getting sawdust down by an old mill near Kennydale, just east of Renton on Lake Washington. Big old navy boats were tied up there in a mothball fleet. I recall one time when Dad was trying to pull one of the cars (old Ford?) out with the other one (little English Ford?). Mom or Dad would get out of sync with the other one and the chain would snap, go slack, and snap again. Voices and tempers would rise, with Dad trying to get Mom to do it right, and Mom having trouble.

While we were there getting sawdust someone noticed the blackberries, so we came back in force with all our pans and goodies. Terry would have been born by now, and maybe even Pat.

We picked the berries all right, but Mom seemed to have an edge on, like something was going on. Maybe she was feeling that raising these kids and making blackberry jam wasn't all there was in life. Dad was having a great time playing on his day off, but to Mom it was all work.

Flying

Dad had been taking flying lessons while we were in Skyway. There were many memories including circling Mount Rainier to get pictures while enroute to Spokane, and flying over the great gray expanses of eastern Washington which made a person sick to their stomach just to look at. Feeling the "air pockets" as the plane bumped up and down in the thermals. Remember eating some animal crackers just before we took off from Wenatchee to come back, and then trying our darndest not to get sick as we came back in very bumpy weather just below storm clouds that had built up over Snoqualmie Pass. What a relief to get back on the ground. Remember listening to the dah-dit-dah's of the old four course navigation range Dad used to navigate with to Spokane and back, with the static in the background.

Remember flying into Lake Air airport across the lake from our house, a short distance south

of the East Channel Bridge. Planes would come over our place while they were in the pattern. Dad said some people complained about the noise. I remember the gentle chug-chug-chug and swish of air as the planes glided overhead on the warm summer afternoons. Remember landing on the Lake Air strip with Dad and the family one afternoon. He said the takeoff was done by starting down the runway, then pulling the flap handle up to the first notch, and continuing the takeoff from a couple of feet off the ground.

They tried to make the Coal Creek area, where the airport was located, into a park, but it was bought to make Newport Shores. We called it Venice because of the canals. I remember taking a rowboat near the mouth of the old Coal Creek, and seeing all the little pieces of coal along the creek bottom. We also picked blackberries along the steam where the bushes grew.

The family stopped flying when I started Junior High. Our family of seven was just too big for the four-place Cessna. I remember the last flight well, with us three older boys in back being very hip-to-hip.

Boating

For my Boy Scout Nature merit badge I took Captain Gilbert, a retired neighbor who had skippered ferryboats before the floating bridge went in, with me up Mercer Slough. He told me how the lake level used to be ten feet higher - at that time the slough had some old sawmills on it. He said there was a spot where you could always put your hand down into the water and pick up a pevee handle, (used to move floating logs) honeycombed by age. I took him up and back in the green rowboat with the *5* hp motor on the back.

I remember the first Christmas when I first got that rowboat. That morning I vividly remember following a string all around the house, then leading downstairs to this great green rowboat. It was one of my favorite Christmases ever. Dad kidded me about the "Nalla" jokes. Before Christmas he had been dropping hints about the "Nalla," which turned out to be Allan spelled backwards. As each of us kids passed our Beginner swimming we could have our names painted on the boat, later to become the "Allan, Paul, Mark."

I lived on that rowboat. Many times I rowed across the lake and back. Sometimes we would horse around with the neighbor kids, who were in the process of building all kinds of fancy log rafts, some even with houses on them. Back in the rowboat I would just row and row. Sometimes I towed in big logs that would be used in building our floating docks, or I towed out deadheads that would be endangering the other moored boats.

When I passed Intermediate swimming and Rowing merit badge (the latter with Mr. Garrison which involved rowing down to the middle of the island and back twice to take the test in two parts) and paid $37.50 to buy half of a *5* hp Mercury engine. I remember filling up the gas tank on the top, back of the engine with a red one-gallon gas can with a bendable tube nozzle that one screwed on the can. I used the motorized rowboat to tow logs also.

I most remember going to swimming lessons at the far end of the lake in the rowboat. I would wear one of several large inflatable Air Force Mae West style lifejackets that Dad had bought, turn up the motor full blast, point the motor straight ahead, and crawl up to the very front of

the rowboat to "plane it off." I could turn the boat a little bit by leaning from one side to the other. Sometimes I would have to go back to the motor to make a larger steering adjustment if I didn't get it just right. There I was, Captain of my ship, skimming along the water at about 10 mph, a little roostertail coming up from the side of the motor.

I must have been quite a sight, sitting up in front of the boat, sporting the large yellow Mae West. I prided myself on cutting a very straight path, which would usually call for a course change at the Stansbury's, and then again rounding the bottom of the island towards swimming lessons at the Mercer Island Beach Club. Usually I remember the water being very calm, or with a slight ripple, and it was really fun to sit up there with the noise of the motor in your ear.

Halfway back the fuel would run out in the motor tank, and for a minute the motor would run even faster on the lean mixture. Then I would refill it with the reserve tank as I bounced around out in the middle of the lake. When the motor stopped the hypnotic reverie would be broken, and a person would realize how vulnerable they really were. I would look around and see the houses near the lakefront with the thick trees overhanging the lake. Quick to restart the engine and be on my way again, aiming for the large yellow boathouse on the Skoog's dock, with the East Channel Bridge in the background.

I would make that trip many times during the summer going to and from swimming lessons. I remember having difficulties finding a place to moor the boat at the beach club sometimes, and occasionally pulled the boat up on top of some logs. The old buildings we used to change in have since been replaced. We would always yell "ladies first!" when it was time to jump into the water, sometimes on a cold, overcast, rainy morning. I couldn't say that I enjoyed swimming lessons, but I got through them.

My outboard motorboat reverie was not to last forever. When Mark was eligible to run the boat he liked to horse around a lot. First I went to take the boat out and the propeller was broken off. Later he and the neighbor kids were spinning the boat around on the top of waves and the motor came off and fell into the lake. That was the last of my motorized rowboat days, and I felt a great loss to see it go. I was very angry with Mark, but it didn't seem to do any good. Dad got another motor, but the starter cable was always jammed. I even remember doing a pantomime in Seventh grade speech class about starting the old motor.

The Deep

The motor was on the bottom of the lake, and there it did lie. I remember seeing "sunken forests" written in a couple of places on nautical charts of the lake and island. Evidently fishing nets had snagged there, and special equipment had been used to knock the tops off the trees after the lake was lowered when the locks were put in. What I'm trying to get at is "The Deep" for me. I had quite a few "boogy men" about being deep in the water in the lake. In the first place all during the time I was growing up the lake was getting more and more treated sewage dumped into it, which made the algae grow like mad. The algae in turn would settle on the bottom in a green layer over everything - kind of like a Martian moonscape, which lent it-

self to weird feelings. Sometimes we would pull up pieces of sunken wood, or recover one of the old fiberglass snow sleds that had sunk to the bottom, and they would be covered with green growth, kind of like green fur or short grass, and it would smell to high heaven.

The deep was "the deep" for me, dark, green, and mysterious. I remember diving for eyeglasses that had fallen off. Feeling the intense pressure and pain on my ears. The total pitch-blackness, just feeling around with my hand till I felt the glasses and brought them back up. It was like you carried a veil down with you to protect you. Being down that short a time nothing was going to hurt you. I can remember swimming and feeling the different water temperatures, sometimes hitting a cold spot with your foot. All of this would lend itself to a feeling of scaredness about looking at what was "down there."

Later on in college I was studying oceanography and during a summer work project was taking Bathythermograph temperature samples using smoked glass slides. I would lower the large metal tube holding the slide into the lake and run it down a hundred feet or so, then raise it. One time the "BT" hit the bottom of the lake, and it really got to me. There was a bottom to the lake! And I was totally avoiding and hiding from it. I was completely spooked. Again, floating out there in the middle of the lake with the engine turned off, all those feelings of the "bottom" came back.

Later I learned how to Scuba dive. I came back to the lake as an adult from a faraway place. It was a rainy, misty morning, and I was to dive for tools that had been dropped in the lake from our floating dock. Dad had rigged up an electric lantern that I was to use, followed by two large wires to the surface. Here I was, underwater, looking at this dreaded place. It was about as scary as the bottom of a swimming pool. Was this the place I had feared so much? A few dark forms of mossy piling, light colored sand on the bottom, very quiet. I found no tools, but did locate some other items that had fallen down. I remember yelling at my youngest brother Pat to hurry to move the electric wires. I was shaking from the cold and tension.

The dive was finally over and I was getting out. I had seen and conquered all. Yet I still felt myself holding onto the exciting fears instead of feeling the peaceful reality that nothing was really there. An absence of evil spirits, a calmness, a quietness saying "I'm OK" down there.

To this day I still feel myself putting up barriers to my movement. Saying “I can't do that." Safe, secure, not wanting to let go. Afraid to explore and know, to go against that inner voice crying for safety and comfort. Wanting to run back quickly to that knowing smile of another age.

Thursday, July 27, 1978,
with additions July 2002

Merry Christmas - 1982

By Allan Williams

Prologue

I'm now working for a commuter airline called Air North here in Fairbanks. I'm flying co-pilot on a 16-passenger 3-engine plane called a Britten-Norman Trislander, and also piloting 5 and 6-passenger Cessna 206 and 207's. The following story took place October 4, 1982 and is a sample day at my new job.

Monday Morning

Woke up feeling a little apprehensive. I was scheduled to fly a Cessna 207, a plane that I had flown many times. However, I had not flown this particular one before. I was to go from Fairbanks to Nenana, Manley Hot Springs, Minto and return as part of our new fall schedule that would commence today. I looked outside my window at my thermometer, which read 27 above. "Time to get out the long johns," I thought. I always liked to be prepared in case there was a wind, which would increase the chill factor considerably. It had been a late fall. Normally there would be snow on the ground by this time and colder temperatures. Certainly not the 50's that we had had last week. It was a nice day with high overcast and light frost, the latter being quickly removed from car windshields and airplane wings.

As I ate breakfast I turned on my cable TV and came across an old movie showing a stewardess completing her initial ground training and going on her first flight on a DC-7. I enjoyed watching for a while and then turned it off as I was getting ready to leave thinking, "I don't want to see her running around bumping into everything on her first day on the job on my way to work, when I'm feeling a little uneasy already

The Office

I arrived at work and walked into the dispatch office to look at the schedule board. I had been changed to possibly fly a later flight with choice of airplane open at this time. Further checking revealed that several flights had already been juggled on this new schedule day.

I felt relieved, as I was still feeling a little tired from flying Friday and Saturday. and was Just as happy to start this clay off slowly, with the possibility of a day off if my presence was not required. Even though I felt tired. I could feel myself proceeding slowly forward, part of me knowing that I would go flying

The only plane left was a fifteen-year-old Cessna 206, a 6-place single engine plane. If I did fly it, this would be my first time flying a 206 for this operator, and I knew a written quiz on the plane would have to be completed and incorporated into my pilot records before I launched. This necessitated obtaining a blank quiz and locating the aircraft operating handbooks and weight and balance papers. Sometimes I feel like I got "boggled out" fussing about all the details of a flight and its paperwork, but I felt this one coming together. It was as if my feet were in charge, carrying my body along, with my head going along for the ride and observing what was going on. After a visit to the Chief Pilot's office and finding no one there, I returned to the dispatch office. I mentioned offhand that I was looking for a quiz, when Phil the dispatcher popped one in my hand with my name across the top. "I don't believe it," I said bewildered. "We can't be this organized." The Assistant Chief Pilot had already anticipated my need and had previously dropped off the form. After completing it, including a trip to the plane to verify a few numbers, I asked Phil who was going to fly the Stevens-Rampart trip.

“You’ve got it,” he replied. “J.R. said that you sat in the plane, so it’s yours.”

I was at once surprised and confident that the trip was mine. I completed the pre-flight inspection, gassed, oiled, checked the cargo loading and installed my headset before picking up the manifest and flight log and walking to the waiting room to call the passengers.

On my way, Jacques, one of the Trislander captains that I fly with, asked me if I had test flown the plane.

“No,” I replied.

“You’re crazy to take it,” he counseled. “That plane’s been brought back twice by a prospective buyer complaining about it not running right.”

With a send off like that, I knew it was going to be a perfect flight. It was.

Stevens Village

As I loaded my passengers, I had a feeling of wanting to shout aloud that another pilot had voiced doubts about the plane and that I had not flown this particular bird before. But wisely this was not allowed. The burden of completing the flight safely was on my shoulders. I had never had a complete engine failure, accident or incident in my 5000 hours of single engine flying. I’m sure that this is at least partially a result of my very meticulous pre-flight inspections, trip planning, weather briefings and all the other details of a properly conducted flight. Sometimes it seems like it takes forever to get a flight off the ground. But once off, I like to speedily and competently reach the destination and return.

We were soon safely airborne and on our way. I climbed to 4500 feet to escape some light turbulence over the mountains north of Fairbanks. My magnetic course was 307 degrees, which would take us along the Alaska Oil Pipeline and North Slope haul road.

I always like to have my map out to pick out a perfectly straight line and frequently have the person sitting alongside of me pretend to be the navigator. Some passengers get very nervous if they see a pilot use a checklist or map, evidently assuming anyone who does so is a novice. The checklist is required for use on all passenger - carrying flights to ensure nothing is forgotten. I like maps and it is difficult to memorize thousands of square miles of Alaska wilderness. I have been surprised at how different the same route can look with variations in visibility, cloud patterns and sunlight. Frequently a flight path is changed to avoid clouds or turbulence. It is very different than driving a car on a fixed road.

We made our approach into Stevens Village after first informing other pilots who might be in the area of our presence on pilot-to-pilot frequency of 122.9 megahertz. I was still feeling a little nervous in anticipation of our forthcoming landing. However, we touched down very smoothly on the runway, now covered with a light dusting of new snow.

“Nice landing,” remarked the passengers as they disembarked. I unloaded part of our freight and mail. The rest would continue on to our next stop.

Rampart

Now we were off to Rampart. Both villages were along the Yukon River, a waterway stretching over a thousand miles across the center of Alaska. Its headwaters originate in the Yukon Territory of Canada and empty into the Bering Sea after traversing the entire breadth of mainland Alaska. The river is very impressive and has extensive barge traffic on it during the summer months, carrying heating and motor fuels, building materials and foodstuffs to villages along the river. There are no roads connecting these villages and towns. Winter trails are used to provide sled dog, snow machine and occasional. Caterpillar-train traffic. Before the advent of the bush airplane these trails were used much more extensively in providing mail and freight service.

We followed the river and its meanderings, proceeding down - river. Along the route we again passed the haul road and the oil pipeline as they bridged the river and continued their journey northward to the Arctic Slope. We proceeded uneventfully to our landing at Rampart, a former boom—town during gold rush days. Commercial salmon fishing and gold mining continue here at this time.

I had landed at Rampart many times before during my 2- years of work for Larry's Flying Service in Fairbanks. Often I had walked the mile-long road into town with Don Johnson, engineering troubleshooter for the Yukon Flats School District. I had watched him oversee installation of larger capacity generators and storage sheds for the school, as well as perform site planning for a large new school soon to be under construction above the present one. I had also brought in soils people and surveyors to inspect the new site.

On these walks I enjoyed passing an old rusted horse-drawn road-grader, almost hidden behind tall grass by the side of the road. I could imagine its operator standing high, manipulating its controls while maintaining forward progress of the horses under his command.

One of my trips along this road had been to seek payment for an overdue bill, which had been mistakenly sent to Pete Evans Sr. I found his cabin in a part of town that I had not been in before. I was very impressed with the neatness of his place. Close-cropped green grass formed a small meadow along the pretty stream winding past his cabin. Firewood was neatly cut and split and a clean pile of yellow-white sawdust lay at the base of a chopping block.

As I talked to him, I thought of wanting to include this panorama in a story, as one picture of an "Alaska dream". I was intrigued to hear that Pete's father had been one of the gold-rush miners who came to Rampart at the turn of the century. As we continued chatting, I noticed some virga, rain falling but not reaching the ground, descending from clouds above the Ray Mountains on the far side of the river. I asked Pete if he knew a native name for the virga. He recalled none as we spoke. To me the virga was one of my favorite parts of Alaska. It has a very mystical quality to it, almost spooky as it quietly shimmers in the distance during summer afternoons.

Fairbanks

We had now unloaded our mail and freight and Mary Drummond was to be my passenger for the trip into Fairbanks. She was the wife of Hal Drummond, principal of the Rampart school. Numerous times I had shared their hospitality as I waited for the clients I had taken to the school to complete their tasks, staying for a few hours in their living room adjoining the classroom.

“Is there any snow yet in Fairbanks?” Mary asked as she came on board.

“No," I replied, “the ground is clear yet.’

As at Stevens, an inch or two of snow was on the ground at Rampart, signaling that winter had arrived along the Yukon.

We were soon airborne, leaving the river and proceeding magnetic East back towards Fairbanks. The Sawtooth Mountains rose to our right, and I circumnavigated them slightly to stay over less forbidding territory. I pointed out landmarks, including the Manley Hot Springs road, the Livengood gold mine and the waterlogged tundra of Minto Flats.

I had again climbed to a smooth altitude, staying just below thin clouds at 5,000 feet. A clear spot in the clouds opened up above us and the turbulence increased. I had noticed this phenomena of air getting rougher in clear areas before, and pointed it out to Mary. Sometimes the reverse takes place, with clouds indicating areas of turbulence in an otherwise clear sky.

We continued on and I pointed out the North Slope haul road and Alaska oil pipeline pump station 7 in the distance as we neared town. We made an uneventful, return to the metropolis of Fairbanks and to Metro airport, our home base. I wished Mary a successful shopping expedition, completed my post-flight paperwork and removed my gear from the airplane. It had been a nice trip.

Postlogue

My work continues to go well. I spent two different weeks recently in Galena, a town on the Yukon River 275 miles east of Fairbanks, flying a Cessna 207 at Air North’s new base there. Winter has now set in and it’s time to start looking forward to spring and other new adventures.