

Milt Sanders Vol 1: 1943 - 1967



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01 Reflections on Vacations as a Child



Being firstborn in a large family, I had the privilege of being an only child for the first 3 1/2 years of my life. Some of my memories come from stories told by my Dad and others, along with pictures (mostly slides) that were taken while I was young. Probably one of the first stories I was told was when I was an infant: Dad and Mom liked to go places, and back then there were few freeways – most were 2-lane highways such as route 66, etc. Dad told a story of me being pretty claustrophobic. When they went on vacation they would pack the back seat with a lot of stuff, yet leave a space they could “stuff” me wrapped in my blanket when I would sleep. They mentioned that shortly after I would fall asleep, they would carefully try to put me in that small space. It wouldn’t be long until I woke up screaming because of claustrophobia. So much for them having some peace when I, the kid, was sleeping.

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When I was a little older, about 3, we went through the Colorado Mountains, through Estes Park. There was snow along the sides of the roads, and we stopped when dad saw a deer along the side of the road. This deer didn't bolt, but just stood there looking at us to see what we had to offer. I have seen a picture of me standing there in a brown winter outdoor outfit that looked pretty warm, including a cap that covered my ears and snapped under my chin. Mom (Virginia) had one Hershey's candy bar left from our snacks as we traveled. I wanted it, but she unwrapped it and held it out for the deer, which opened her mouth and carefully started chewing on it. Apparently it was acceptable to her, as the whole candy bar disappeared. I have also seen a picture of Mom holding out the candy bar to the deer, and the deer stretching out to grab it.

Another time on vacation, we went to Mexico. Somehow we got stuck in the sand. Dad must have wanted to look at something and pulled too far off the road. He was stuck and couldn't get out. After a while, a Mexican guy stopped and offered to help get us out. Mom and Dad were outside the car while I was still strapped into my car seat (nothing like the seats we have today). Dad accepted the help, and the Mexican got behind the wheel, and with his vast experience with getting vehicles out of the sand, he was able to pull out, but he sped away down the highway. I of course was crying my head off with Dad and Mom left far behind.

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Mom and Dad started to have a fit as well with their car and firstborn speeding away down the highway. However we all were much relieved when he turned around and drove back, giving the car and me back to Mom and Dad. I'm sure Dad gave him some money, but I will never know if my creating such a fuss scared the Mexican sufficiently to bring me back.



Me in a car seat of that time period

One time we went into the Colorado Mountains and stayed in a couple of cheap, inadequate cabins for a couple of days. Dad was going to go fishing in the cold mountain streams, and Mom must

have persuaded him to take me with him – you all know how persuasive a wife can be. Well he took me with him, but I didn't have a fishing pole. He took out his hunting knife and cut a branch off a small tree and cleaned it off. Then he cut some line for me and tied it onto the end of the pole, then put a hook on the "fishing" end, and baited the hook. He told me to dunk the hook and line into the water, which I did. After about 20 seconds of just standing there, with my great amount of patience about worn out (you all know how much patience a 5 year old has), I asked him: "Dad, how do I know if I catch a fish." He said, "When you feel a little jerk on the line, you just pull it up out of the water." I then pulled the line out of the water and said, "Like this?" And sure enough there was a mountain trout wiggling on the hook. Dad was flabbergasted. So that was my first fish, and I have never been that lucky in fishing the rest of my life – and I haven't fished much at all since that experience. My reason for not fishing is that I hate to match wits with a fish and lose (you see fish have such small brains).



Dad's Hunting Knife Which I Still Have

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A year or two after that vacation when we lived in Aurora, Colorado, we moved to Salt Lake City. Mom wanted us to go back to Pennsylvania for the summer on vacation. Dad was going to take us there, come back to Salt Lake to continue working, then pick us up at the end of the summer. It was a real and very nice surprise to me that he rented a dark blue 4-place Stinson Voyager light airplane, and we headed out for Pennsylvania. Now the Stinson was not a fast airplane and it was a long flight to PA. Susie had been born by then (in Dubois) and was about 2 years old, making me around 6. I wanted to fly in the front seat, but Dad wouldn't do that, because that was Mom's place, beside him. So Susie and I got the 2 seats in the rear. Susie would sometimes complain of airsickness, and I remember her sitting slumped in her seat with a large paper cup, with her kind of drooling in it, nor did she look happy at all. Our first night was spent in North Platte, Nebraska. The next night was in Cleveland, Ohio, staying with some good friends of Dad. We arrived the third day in DuBois, PA. Dad had told Bill and Mary, Mom's sister, about our trip, but asked them to keep any news of it away from Grandma Hepler. Bill and Flossie Lane (Flossie was my aunt; she had married Mom's brother, Homer who had died at a young age 2 months before I was born, in the Navy from some kind of illness). Flossie married Bill lane, and they lived at the Dubois airport in a trailer beside the hanger where Bill Lane kept his Piper Cub J-3. Anyway, Bill and Mary gave grandma some kind of

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story to get her to come out to Bill and Flossie's place. We landed at the airport, and taxied towards the hanger. Grandma said something like, "That's not Bill Lane, but I don't know who that is". As we got close to the hanger, she suddenly blurted out, "That's Milt and Ginny!" She just about had her socks knocked off at the surprise. That was a fun summer. At the end of the summer, Dad flew out, bought a car, and drove us all back to Salt Lake City.



Stinson Voyager which Dad called The Blue Goose

We spent quite a few summers in DuBois, Mom's home town, and all of them were very nice. We went on picnics to Parker Dam, Peewee's Nest, and also swam at the Sabula reservoir.

Mom, Mary, Bill, and Grandma and Grandpa kept us busy and occupied. One summer when I was 9, we spent the summer out there. Uncle Bill had a stationary store, but he also had a small hobby department. Bill's good friend was Bill Divins who had a large interest in model airplanes and was very handy and skillful in constructing. He would build HO train layouts that would exactly fit into the irregular shape of the store's display window for Christmas. We must have been there also for at least a couple of Christmas's as well, because I was completely fascinated by that train layout. I remember that it had a crossing guard that would come down whenever the train would come by. There was also a man figure in a field flying a control line model plane. The man was set up to rotate around and around and his plane was attached to a piece of music wire and went around with him. There was another man standing at a far edge of the field to fly a radio controlled plane. His plane was on the ground beside him as was his transmitter, which indicated to me that it was really an RC plane and not just a free flight. It was really cool.

Anyway that summer Bill decided that they could keep me busy and out of mischief (Ha!) by having me work in the store. He offered me 25 cents an hour, which was pretty nice in 1953 for a 9 year old. So I worked at the store as a cashier, gofer, stock boy, etc. I made friends with Bill Divins that summer, and I wanted to build and fly a gas model plane. I was able to buy a small plane

kit, and a motor (OK Cub .049) with flying lines and all the accessories needed. My cousin, Dave Hepler, Homer and Flossie's son, was 6 years older than me, and he was always interested in what I was doing as well as seeing how much mischief he could get us into. I started to build that plane, and discovered that the wing leading edge piece was missing from the kit. I took the kit to Uncle Bill and told him about it. The next thing I knew – probably a couple of days later- Bill gave me back a completely finished plane ready to fly. Bill Divins had built it for me. Dave and I had a devil of a time getting the little engine started, but we finally learned how. We took it out to a dirt ball field by the high school, ran out the lines, started the engine, and I took it off on the first gas powered model flight of my life. My knees were trembling, and my hand was shaking. I managed to fly one and a half laps when I inadvertently let it hit the ground, breaking the prop. Both Dave and I learned quickly to fly it well. We would go down to the elementary school on Olive Ave, down the hill from Aunt Mary's house, and fly it on the asphalt. We discovered that props made a big difference, and we found one that would fly it fast. We took turns flying and had a blast. One early evening after dinner we went flying, and it started to get dark. We kept flying until all we could see was the glow of the exhaust ports, but not the airplane. The school yard was not quite flat, and sloped down toward the sidewalk. Dave told me that he could see the plane's exhaust until it went on the sloped

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down side, and even the exhaust would disappear because I was flying very low. That was a fun summer!

There are many more adventures as I kept growing up, but they happened as I got further out of childhood, so I will stop for now.



Cruise on Princess to Alaska - July 2010 Milt

02 Adventures as a Child



My earliest adventures as a child have been told to me at various times by my Dad, Mom, and other relatives, and some I have seen in family 16mm movies. I do believe that they are actual adventures and experiences although my Dad was a great story teller and has been known to embellish a few stories. The first one that comes to mind is one that Dad tells in an audio recording I have of him relating some of his life as I interviewed him in Washington DC a few years before his passing.

Visit by a senator and his wife: I was born in Tallahassee, Florida on December 15, 1943 while Dad was training for WW II in the P-47 Thunderbolt fighter aircraft. My birth was in the Dale Mabry Army Air Corps field hospital. Dad was friendly with a senator, Senator Claude Pepper of Florida, and his wife, and they were delighted to learn of my birth. They came to visit us at the apartment where we were living to view this brand new boy child. The senator's wife was oohing and awing over the baby

(me), and she said that she just had to make sure this baby was a boy. Dad was in the process of changing my diaper, and he warned the senator's wife that I often would let out a stream when uncovered. She ignored the warning and said to show her anyway. As Dad uncovered me, sure enough I let out a powerful stream all over the senator's wife's mink coat! The senator himself was nearly rolling on the floor laughing. So that was my first unveiling and statement to the world.

The next story occurred while Dad was in Europe flying combat in WW II. He named one of his airplanes "Thumper". The story there was that I would lie in my crib and when I wanted out, I would "thump" my legs against the end of the crib. I was loud enough that everyone in the house would know it was me, that I was awake and ready to wreak havoc on the world.

I was a very mischievous child with more energy than any kid should have. I remember that I would get up early, climb out of my crib, and run around the house. I do remember one morning that I had taken a raw egg out of the refrigerator, put it in a tin measuring cup, and walked into Mom's room jiggling the egg in the cup to wake her up so she would fix me breakfast. I have also been told that I would pull kitchen drawers out in sequence so I could climb up on the counter, open the cupboards, sometimes taking a box of cereal, or the box of oatmeal, and pour the contents all over the floor. Yes, I was quite a rascal. Mom and I

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were living with Aunt Mary and Cousin Joy, while our Dads were overseas. As I got a little older, I was told that I would tease Joy unmercifully. Joy was 6 weeks older than me. In the house we were living in, there was a path from the living room to the kitchen, to the dining room, then back into the living room. Joy had a small doll carriage that she put her dolls in. I would grab the doll carriage and run with it around and around that circular path with Joy crying and trying to catch me to get her dolls back. I must have been just a little bit faster than she was since she never caught me. I still like to tease, but on a much more sedate level.



Mom, Me, Dad, and Joy at 221 S. Highland St, in DuBois

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When Dad got back from Europe, he was stationed at Luke AFB, near Phoenix, AZ. Now you need to know that fighter pilots have to make split second decisions in order to stay alive in combat situations, sometimes maneuvering sharply without thought to get away from danger. Dad tells of a time when he was diving on a target, when one of the top cover pilots broadcast on the radio, "Sandy, break left!" Dad immediately rolled and pulled 3-4 g's without even thinking. As he rolled back he saw a German Me-262 jet flash by him which had tried to shoot him down with his 20mm cannon in his plane. That pilot would have been successful if Dad had not reacted instantly. These hair trigger reflexes stayed with him for a number of years after he got home. So back to the story: we were at the Luke AFB Officers Club, out at the pool on a hot summer day, and I was riding my little tricycle around the pool. On some kind of whim, I rode that trike right into the deep end of the pool. Dad happened to see me hit the water, dove in and pulled me out, probably wondering what had been going through my mind. No one really knows, I was probably wondering if my trike would float. Well then Dad retrieved my tricycle from the bottom of the pool and we went home. He put the trike on the floor near the back door. A while later he passed the back door and saw a small pool of water on the floor. He cornered me and accused me of wetting my pants on the floor instead of using the bathroom. I said that I had not and pleaded my case to the best of my ability. That didn't work,

and I got a spanking – swift justice from a great fighter pilot! A little later both Dad and Mom realized that the water had come from my tricycle, having been immersed in the swimming pool. Dad came to me and apologized, but my back side still stung. My mischievous reputation had caught up with me.

One summer Grandma Hepler came to visit us in Aurora, Colorado, as Dad had been assigned to Buckley Air Base, outside Aurora, a suburb of Denver. And yes, I was still a slave to my wild young habits. We were eating one night, and Mom served peas for the vegetable. Now back then, I didn't have the option of putting my own food on my plate – anybody remember those days? Well I didn't like peas, and I was refusing to eat them. Everyone else had finished and I was told that I had to sit there until all my peas were gone! So I sat there and played with the peas on my plate, and they were darn cold and even harder to eat than before. After sitting there alone for about 20 minutes, Grandma came over, having pity on me, picked up my plate and surreptitiously scraped the peas off in the trash. Very stupid me suddenly yelled out so the entire house could hear: "Grandma! I was gonna eat them peas anyway!" Grandma was so embarrassed by being caught, and I hadn't helped her or myself at all. I must have been an obstinate little kid.

In Denver, I was allowed to start kindergarten as soon as I turned five. Since I have a December birthday, I started in January,

halfway through the year. I would then be allowed to enter first grade in August of the same year, being five, but turning six during the year. Well it so happened that my Dad went into the Air Force Reserves, and we moved that summer to Salt Lake City up on Foothill Drive into a duplex. Utah law wouldn't put me in first grade, because my birthday was after the cutoff date, even though I had graduated from kindergarten already. So I got to go a full year in kindergarten, having that privilege for a year and a half. No wonder I am so decently socialized, but that put me a year behind a lot of my friends who were going to first grade. Not too many years back, I drove along Foothill Drive on my way to work at Evans & Sutherland, and our first place in Salt Lake was not there anymore. Anyway, I had to ride the UTA bus to school and back. One day coming home from school, the bus stopped a whole block before getting to my house, so I planned to stay on until it stopped right at my house. Well, the bus didn't stop and kept on going. Silly me just stayed on the bus until it finished its route in the downtown bus station. The driver didn't know what to do with me, and heck, I was only five years old and didn't know our address or phone. Finally a manager was able to find and notify my very worried parents, and I got picked up and was very relieved to get home. That wasn't the only time I stayed on a bus too long, but that story comes later whenever I get to 9th grade in Virginia..

We lived in several homes in Salt Lake; the next one was on 520 L Street, near the avenues. Oh two quick little stories before we get to L Street, and I was probably 3 or 4 years old. I have been told that I was in church with my folks when both of these happened. One Sunday in Sacrament meeting, I was sitting on a hard pew bench, and I just up and hollered, "Ouch! My fanny hurts!" I guess that got a laugh from the congregation. The other time Dad was giving a talk in Sacrament meeting. Right in the middle of his talk, I loudly spoke up, "That's my Daddy!" That reminds me of a Jeremy story (my second son), but that is much later in life. I seemed to get all the attention I ever wanted. So back to L Street. I have seen home movies that showed Santa Claus at church on a weekday at Primary at Christmas time. He was chatting up the kids, including me, handing out some small presents and candy. I got some from him and was pretty happy. I was later told – much later- that Santa was played by Dad, and I never recognized him. I guess my attention has always been drawn to presents and candy without even paying any attention to who was giving them out.

Dad finally bought a house in west Salt Lake on 831 N 13th West. I was in 2nd grade by then, and my teacher was a young Mrs. Newey. Isn't it odd that sometimes we can remember certain people and certain events that we can recall from memory? I remember that we lined up in two rows whenever that class had

someplace to go. I remember once that I was in the front of my line, and a girl I liked was at the head of her line, and I held her hand as we traveled to the place Mrs. Newey had us going. I had a bike that I would ride to school. There was this one bully, probably in 3rd grade, who would ride up to kids and tell them to stop their bikes, and they would. I didn't know what he did that for, perhaps to feel powerful that he could do that. One day I was riding home from school on my bike, and he rode up beside me and told me to stop. I didn't, just pedaled faster. He stuck out his left foot and pushed on my bike to make me fall over. I must have been a little incensed, but with my good reflexes, I maintained my balance, stuck out my right foot and pushed his bike. He crashed and I just kept going on. Later that evening, Dad got a call about that kid being pushed over on his bike by me and getting some gravel pushed under the skin of one hand. Dad talked with me, and I gave him the whole story. I never heard anything more about that, nor did the bully ever mess with me again. I think I lucked out with that one.

While we were living in that house, the basement clothes dryer had a vent that came up above ground level, then straight out the side of the house. It ended in simply a 4 inch diameter hole, with no other cover or flexible vents like everyone has today. It was a new home when we moved in, so Dad hadn't gotten around to finishing that off. One day in the winter I was playing in the

snow. I just wondered if I could hit the hole with a snow ball. That was a pretty tough target from 10-15 feet away. I made a snowball, threw it, and yes, you guessed it – it went straight into the hole. I was really surprised, and then thought about how much trouble I would get in (after the fact). Mom saw me do that and asked me why I had done that. I didn't really know and just sort of shrugged my shoulders. For some reason, she let it go. I bet I could never have hit that target again.

At that time I was in the cub scouts in a church pack. After Christmas, Dad or Mom would drive around the neighborhood with a bunch of us cub scouts and we would pick up the Christmas trees that people would drag out to the curb. Then we would bring them home, set them up in the back yard, have the cubs come over one evening, and we would have a wonderful bonfire! Toasted marshmallows never tasted so good. And it is still hard to imagine how fast those old dried up trees would catch fire and burn.

Dad had a truck for his business which was a little bigger than a pickup truck, as he owned a company which would spray mastic (a type of very durable and thick paint) on new homes, and he needed to carry around the 50 gallon barrels of paint and the big spray pumps. Mom was driving the truck around with about five of us cubs in the back with no tailgate, so we could pick up trees. As we drove past our house, Mom seemed to be slowing down to

stop. Well, thinking I was hot stuff, I jumped off the back before she stopped, but after I had successfully landed and turned around, I found she was speeding back up again. I didn't want to get left behind, so I quickly ran up to the truck and grabbed on to the back. I just couldn't get back on the truck bed and my feet were skidding along the road on some loose gravel. I finally let go, fell down, and rolled three or four times. Mom saw me through her rear view mirror, panicked, stopped the truck, and ran back for me. I was great, but she made me sit up front in the truck with her after that.

One day Mom was driving in downtown Salt Lake with Susie and me in the back seat. We were engaging in sibling rivalry by having an argument something like "don't touch me"; "I will if I want to!" Mom saw that there were 13 cars a little way in front of us, but the light had turned green and she was expecting everyone to move. So she turned around to get us to stop. Well, it seems there was an old car in the front of the line that had stalled. Mom hit the car in front of us, causing a chain reaction almost all the way up the line, except for the old car in front. Susie and I were thrown to the floor of the back seat and we were crying, but not hurt. We got out of the car and could see antifreeze puddling on the road from our fairly new green Hudson Hornet, which was a nice car. Dad always liked nice cars. The police came, things settled down, and I can't remember

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anything after that – I think we were later warned to not fight in the car, and I think we learned our lesson – although I'm sure that we neglected it once in a while. Kids, huh!



Hudson Hornet

Another thing I remember in the west Salt Lake home was our neighbor's dog. She was a "gold" colored Cocker spaniel named Goldie. She was very friendly and I played with her a lot. I would sneak table scraps to give her. I really liked her. It was almost as fun as having a dog of our own. For a couple of days I didn't see her around. I asked Dad, and he said that Goldie had been hit by a car and killed. I was very sad. That night while I was saying my prayers, I was crying a little bit, and I told Heavenly Father that I would never forget Goldie. Here it is 69 years later, and she still comes to mind once in a while.

One last thing that happened at that home is that was where I lived when I was baptized. At that time, many of our churches did not have a baptismal font. We were scheduled to go to the Tabernacle on Temple Square for a baptismal service. There were

probably 15 or so of us 8 year old boys in our group in the locker room, and we were noisy and pretty irreverent. We had white jump suits to put on, and we would jump off the benches pretending like we were all Superman. Church has come a long way since then, as I don't remember being taught why baptism was important. It just seemed the thing to do, and we did pretty much what our parents told us to do. The following day was Sunday and Dad confirmed me a member of the church and endowed me with the Holy Ghost.

Not too long after that, Dad got involved with some crooked businessmen (Uncle Frank Bowers had previously warned Dad not to mess with those shady characters), and one day the other businessmen simply voted him off the board of directors thus taking his business away from him. With that, we headed to Boulder City, Nevada when I was 9 or 10.

I really enjoyed Boulder City. Lake Mead was close and we periodically went swimming there; Hoover Dam was really awesome and scary for a young kid; the schools were decent, and I made some good friends, even though we lived in three rental houses while we were there. I came into third grade in the middle of the year, and things were going well from my perspective. As kids, we liked to get on our bikes and ride out to the dump to look for unusual and exciting things. I don't remember if we ever found anything that we really liked, but the adventure of just

being there was satisfying enough. Riding back from the dump was fun because it was downhill, and we sped along right nicely. We'd also like to go out into the desert and look for lizards, sun glazed pieces of glass, and pretend we were scouts of some sort. Dad took us out shooting a couple of times, using his German Lugar, P-38, and a .25 Beretta.

We had a dog for a while, and he was named Snookie. He was part Border Collie and part Australian Sheep Dog. He was just the right size for a 10 year old boy. He and I would go outside to the sidewalk where I would tell him to stay while I walked away. He did too. Then when I was 50-100 away, I would yell "Yo ho, Snookie" and whip my arm over my head and point up the street. Snookie would then sprint to get up by my side.

Another thing that Snookie liked was soft ice cream. Whenever we went to Dairy Queen, Dad would buy Snookie a nickel cone (yes, 5 cents - the wonderful days of past pricing). It took Snookie less than a minute to lick it all down, including crunching the cone! It was really fun to watch him eat it. One night we were going out for ice cream. I think that after we had our ice cream, Dad parked in a small park beside the desert (the desert was everywhere around the edges of town. We all got out of the car including Snookie. Before we knew it, the dog spied a wild rabbit and went sprinting after it. Now this was a pretty fast and smart rabbit. It turned out that the rabbit headed straight

toward a cactus and turned just before it got there. Snookie couldn't turn that fast and ended up with snout full of cactus needles. That must have really hurt. I think the vet was able to get all the needles out, but I think the dog learned his lesson about rabbits. Sometime before we moved, Dad told me that Snookie had run away. I'm not really sure about that, because it was not like Snookie to do anything like that. I think that Dad was protecting us from something else that would have made us sadder.

In 4th grade in Boulder City, the music teacher at school had all the kids try out some musical instruments to see what we might want to play. I tried a trumpet, but not knowing how to make my lips buzz, I failed miserably with that. I finally figured that I would like to play the clarinet. My folks rented a clarinet (just to see if I would continue with it), and then they paid for music lessons for a while. That was my cultural start to play a musical instrument and to discipline myself by playing in a coordinated group. I took lessons for a while, but when I started to skip some practicing, my Mom decided that the lessons were a waste of money, but I still stayed in the band and kept up with it. I played in a band clear up through my junior year in high school (including marching band), when I dropped band to make room for a gym class because I was trying to get into the Air force Academy and I knew the physical requirements were tough. I

needed gym to help my strength and endurance. I still have a clarinet down in the warehouse, but it would take a couple hundred dollars to refurbish it since all the pads are dry and it would take a lot of work to get it playable again. Besides I would probably not play it enough to make any of that worthwhile.

Church was alive and well in Boulder City, and Mom played the Hammond organ in rotation with another organist. Our youth group went on a trip to visit the pre-dedication Open House of the Los Angeles Temple, and take a tour through it. I don't remember much of the trip, but I know that experience gave me a favorable impression of that temple, such that I wanted to be married there at that temple. That impression faded over the years as I gained maturity in the church, realizing that it didn't matter which temple I was married in, but I remember thinking about it for many years. I never did get back to that temple.

While in Boulder City, our church leadership planned to build a new chapel to better house our ward. We actually had only one ward there and had pretty much free use of the building with no scheduling conflicts. I remember hammering nails into the framing of the walls of the new building, and later working on the roof as a 12 year old.

Just a couple more things I want to share before moving on to California. We were in Boulder City while atomic testing was

going on at Frenchman's Flats about 200 miles away – that was underground testing. One day Dad came home with goggles used for watching the test up closer. They were very dark (like welding helmets), and one could hardly see the sun through them in the daytime. Dad got us all up about 4:30 in the morning and drove us out to near Henderson, where the road to Vegas goes through a small pass and opens up the view to Las Vegas and beyond. The test was supposed to happen at 5:00 AM. We stood around waiting for the test, and it was just a little chilly. Suddenly the entire sky lit up like it was noonday, then quickly faded to a beautiful purple, and back to darkness. That was quite a thrill to witness an atomic explosion in person, even from 200 miles away.

Another experience was that Dad had joined the local chapter of the Civil Air Patrol (CAP) which participated in emergencies, search and rescue and a few other things. One day a fisherman out on Lake Mead didn't get back into the harbor before a storm hit. He was declared missing, and the CAP was given some areas of the lake to search with their L-4 Piper Grasshopper light airplane. This was a copy of the Piper Cub, but in olive drab colors and two seats, one front for the pilot and one in back for the observer. I had also joined the junior chapter of the CAP, so I was involved in marching and getting lectures on the Air Force. Well, Dad went out and found the boat, but no fisherman. Early

one morning, he took me up in the L-4 and showed me the boat. It was swamped with the motor dragging the aft down into the water, leaving just the nose afloat. It was just a simple open top boat, probably 16-18 feet long. The water was clear enough and there were no waves to disturb the surface so I could see the entire boat. Once he pointed it out, it was easy to see, but I didn't see it until he showed me.



L4 Grasshopper

Another time Dad had some use of a Howard biplane, open cockpit with a big radial engine that had to be hand started with the prop. Dad put me in the front seat and explained how to turn the magneto on and off, how to hold the brakes, and how I needed to push the throttle up a little bit after it started, to let it warm up. Fortunately the plane was chocked well. He went out front, called "Switch Off" which I repeated back to him, and he pulled the prop over a few time to prime it. Then he called "Switch On", which I repeated after I turned the magneto to on. He pulled the prop and it started right up. I then pushed the

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throttle a little bit forward, not knowing it was already going faster than it was supposed to. Dad hustled quickly around to the cockpit, leaned in and pulled the throttle back – that’s when I knew I had the throttle too far forward. It was kind of a thrill at 12 years old, to sit in the pilot’s cockpit, the only one in the plane, and have the engine running. Dad put Susie and I in the back cockpit, fastened our seat belt over both of us (Susie was probably 9 at the time), taxied out and took off, giving us both a ride at the same time in an open cockpit plane. The real thrill was when he did a roll, and while we were upside down our seat slid one notch up, and we thought we were going to fall out of the plane! That was very scary. Dad didn’t know until after we had gotten back and parked. He just smiled at us – guess there was nothing he could have done about it anyway, and everything had turned out OK.



Howard Biplane

Dad was non-union, and was doing small building construction, sandblasting, and painting. The union didn’t like that and finally ran us out of town. Union folk sent him some pictures of Susie

and me taken through a rifle telescope with the cross hairs centered on our heads. That was a plenty sufficient reason for a good dad to get his family out of town.

We headed for California and ended up in Manhattan Beach, right next to Redondo Beach and a little south of Santa Monica. Oh, just one small funny thing – I had a friend, Phil Bright, who was a grade ahead of me. When school started I went into 6th grade and Phil went to 7th grade over at the high school. After the first day, Phil came over and told me that he had a secret he wanted to share. He carefully told me that $x=12$. In later years when I understood a little more about math, I had a good laugh over that.

PS: I should have mentioned earlier that Dad hung plastic model airplanes over my crib when I was a baby. As my skills improved, Dad got me small balsa kits where balsa blocks had to be carved and sanded, then glued together to make shelf models. From there he got me some stick models that needed to be covered with Japanese tissue paper and dope, and were powered with rubber band motors.

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Balsa Stick Model

Yes, he always steered me towards airplanes. He took me to Nellis AFB once in a while where I could see the F-86's flying, and I even got to see an early model of the F-100 jet, the type I flew in Vietnam quite a few years later. One day I was at the church in Boulder City, and I saw a formation of F-86's flying over about 1500 feet, and I thought to myself while watching those beautiful jets, that one day I wanted to be doing that.



F-86 Formation

03 My Life Adventures as a Young Pre-Teen and Teenager (11-14 years old)



We moved to Manhattan Beach, California when I was about 11, and lived in three different homes. I only remember one address, 1515 Gould Lane, just down the street from Mira Coasta High School. I attended Foster A. Begg Intermediate School. I played clarinet, first chair, in the band, and I enjoyed the school, the kids, and the sports activities. I ran for class vice president one year with Kenny Turner running as president. Of course I lost, but it was fun to put up posters and engage with some of the student body. The school ran a sports program which was just intra-school, and after normal school hours. I participated in softball, basketball, and touch football, and received letters in each one. I wasn't able to buy a letter jacket, but I still have the patches. (I'm surprised that I still have them, but I have always collected all sorts of stuff, and I'm glad that I could put my

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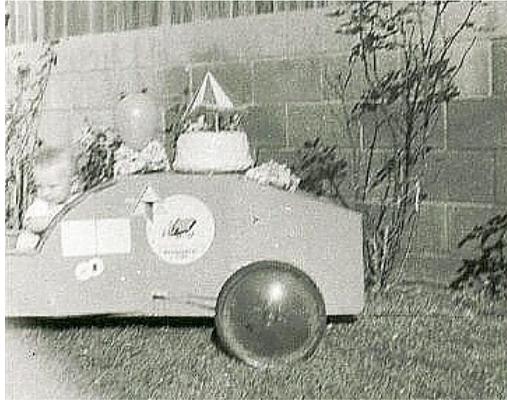
hands on these quickly – sewn on the back of my Air Force Academy red bathrobe.) We put all sorts of patches on our bathrobes to decorate them – gave us some individuality amid all the uniformity in the military.



My Sports Letters from Foster A. Begg Middle School



Dad, Me, Mom, Susie - Manhattan Beach



Alan on 1st Birthday with My First Soap Box Derby Racer
At Gould Lane, Manhattan Beach

The next year I designed a much sleeker car, did most of the work myself and got it right up to the maximum weight of 250 pounds with me in it. I broke in the wheels much better by jacking the car off the ground and spinning the wheels for hours on end to get all the bearings smooth. I Got everything put together with a new set of wheels for this year, and I sanded it down as best I could by hand (sure wish I had an electric sander back then), and painted it black. It wasn't as smooth and shiny as I had hoped, but I figured it would do the job. When we went to the races, we had to weigh in with me in the car. It seems that I had gained a little bit of weight (I was a growing boy), and I was slightly over the 250 pounds maximum. I was able to take enough stuff out of my pockets to barely make weight. I then saw other kids who had several pieces of extra wood that they could

add or remove to just hit the weight limit. Just as in the Cub Scout Pinewood Derby, extra weight in the right places to get up to maximum, made the car faster. I managed to make two heats, but still got beat out that year. However in the North American Aviation race (Dad worked for them)

, I decided that I just had to try something else. I had seen some kids sit straight up in their cars, and then bend forward as the gate came down. They were doing OK, so I decided to try that. I did that on my first heat, and voila! I won my first heat. I did that on the second heat and won that one too. I was getting excited. On the third heat, I was just a little too excited, and I bent forward when the flag came down, but the gate release was slower than the flag. My car bounced against the gate and rebounded just as the gate came down, I ended up getting beat by the other two cars as my car started rolling forward about a half second after theirs started down. I had beaten myself! Oh well, it was fun, I learned much building my cars, and I got to spend time with Dad, which I appreciated. We were not around for the races the next year.

We then moved into another house – 1515 Gould Lane, a block south of Mira Costa High School. Gould Lane has now been renamed, and I'm not sure what the new name became. I did locate the high school on an Internet map, and it was listed as being on Artesia Blvd. That was where I met two other boys who

became good friends: Terry Mish and Burt Quackenbush. We palled around together. We would walk west on Gould Lane picking up soda pop bottles on the side of the road (4 lane highway), and take them to the big grocery store on Sepulveda Blvd. We would turn them in and grab some treats for ourselves. It was something to do as well as put some change in our pockets. Some 20 years later, Burt Quackenbush looked me up in Fairborn, Ohio, and we had lunch together. Our careers had widely diverged – he was selling tools from his Snap-On truck, and I had just graduated from graduate school at Wright-Patterson AFB with a Masters in Aeronautical Engineering. It was fun to see him again.

That house was where I got much deeper into flying model airplanes. The high school had some very large grass athletic fields which were also really great for control line flying on the weekends. I heard the models flying one Saturday, and I walked over to watch. I became good friends with one of the fliers who was also the local hobby shop owner: Jack O'Bleness (years after we moved, Jack and I were still sending Christmas cards to one another, until he moved and never sent me his address). When they flew at other locations, he would pick me up in a little Nash Rambler, put me in the back seat carefully holding a large handful of airplanes, and we would meet the other guys to do some flying. That's when I got interested in upgrading to the .35

engine size models, especially the Fox .35. My smaller planes had a wingspan of around 18-20", but these bigger ones had wingspans of 32-44" and flew on longer 60 foot lines. Once in a while somebody would crash, and instead of them just throwing away a crashed plane, they would hand it off to me. I learned a lot by repairing the old birds. I finally saved enough money to buy a Fox .35 (which I still have today – and it still runs) and a kit for a Fire Cat, which a lot of those guys flew (a popular model of the day). I also had to buy a set of steel lines, a control handle, fuel, and props. I could already fly the smaller planes, but it was a big step up, and no one used wheels. All their planes were hand launched. I finally got up the nerve to fly mine, and things went well. I flew with them the whole first summer (and second summer as well), and even went up with them when they put five planes in the air in one circle. The taller fliers could easily get their hand over my head to pass me, but I had to run in a small circle around the other four to keep from getting our lines tangled, which would occasionally cause a crash. I ended up with some flying wings as well, and I picked up another Fox .35. It was a great combination to keep me busy and out of trouble.

I had to use a school bus to get to school, and most of you who have had to do that, know exactly how noisy and crowded they get. One Valentine's day as I got on the bus, I handed the bus driver, Larry, a Valentine. After the next stop to pick up kids, he

walked back towards me and said: "Are you the one who handed me a Valentine?" I nodded my head wondering where this was going, because he barely knew me from Adam. He then said, "I'm honored to know you." I just about fell off my seat! But I did feel good about that. One other day, one of the kids on the bus was messing with me. Larry stopped the bus and threw the kid off the bus and made him walk the rest of the way to school. I thought that was interesting, because that kid wasn't doing much of anything that all of us did one time or another, and he wasn't hurting me either. I guess Larry had a point to make. When I stayed after school, I had to walk home, but that was only about 20 minutes and walking was good for me anyway.

On Gould Lane, we had a pet duck for a while. We had a tub of water for it on one side of the house, and my job was to keep it filled with water as well as feed the duck daily from a bag of corn kernels that we had. I found out that ducks are really messy animals. If I remember correctly, it didn't stay around too long. Dad also liked to make home-made root beer. He made the fizzy part by using a recipe with yeast. After pouring the concoction into dark colored bottles, he used a bottle capper, then put the bottles into a water filled metal tub, probably 20-30 gallon, and let them "cure". He submerged them in water because once in a while, the pressure building up in the bottle would break the bottle, and being in water kept all the glass in the container

instead of flying around. The Root beer tasted pretty good, but we kids didn't get much of it because it was for parties that Dad and Mom put on. It did have a slight yeast taste though. In my adult years, we made root beer using dry ice for the fizzy part, and it was very good, but used a lot of sugar. It worked great for Halloween parties as the carbon dioxide would bubble the brew and come up over the sides and flow towards the floor. The only downside was that the fizziness disappeared within an hour or two, and unless you didn't keep putting dry ice in it, it would go flat. Still it was lots of fun, especially for folks who had never seen root beer made. I figured home made root beer is mostly a western custom.

We moved to another house, about 8 blocks closer to school 1160 5th St (address provided to me by Susie). I was working on some model stuff in the living room one day on a low table, and I was using a soldering iron. I put it down on the table and went to grab something that I needed. Alan, about 15 months old, came ambling by, reached over and picked up the hot end of the soldering iron. He couldn't feel the heat fast enough (I think we have all done something like that, experiencing the delay between touching something hot and not feeling it instantly). He finally let go and started screaming. He had burned his hand pretty good. Of course I was in hot water for setting up that accident.

At church I was ordained a Deacon just following my 12th birthday, and I helped to pass the sacrament on Sundays, which is the same as communion for those reading this who are not familiar with our church terms. I was also in the Boy Scout troop and we went on camping trips and did other activities. One evening, we all got together as a troop and our leaders took us to the Los Angeles Coliseum to see all the Mouseketeers put on a show. Of course all of us Scouts were half in love with Annette Funicello. We were way up in the "cheap seats" and really couldn't see any of them very well. A couple of our scouts made the long, jostling trip to get a closer look. When they got back, they said that they were not impressed. The rest of us were heartbroken. We got home well after midnight, and I went to bed. Our Deacons Quorum had our special meeting at 7:30 each Sunday morning (long before the block schedule was introduced), and our leadership would make assignments for one of the Deacons to call and remind us every Sunday morning. When I got the call, I was still very tired and told them that that I wasn't coming; that I felt a little sick. A little while later, I got another call that told me that the entire quorum was coming to my house for their meeting so that I wouldn't miss a meeting. I was kind of shocked! I managed to put on my suit jacket over my pajamas, and sat through that meeting at my house. I knew that I was wrong, but the temptation to play hooky was just too much for my tired body. That was a special meeting to me, to know

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that they thought so much about me to come to the house so that I would not be left out. I never missed another Deacon's Quorum meeting in California. I don't think that I will ever forget that and the impact it had on me.



Annette Funicello, Disney Mouseketeer

I guess I have been sort of an imp most of my life, so this next little bit won't surprise you. For one scout meeting at the church, I brought one of my flying wing models with me with Dad's McCoy .29 Red Head. The other scouts were asking me all sorts of questions about it. I put a little prime into the engine and cranked it over. It started right up inside the church in the scout room. Fortunately, a prime itself doesn't last long, and it only ran for about 3 seconds. Our scout leaders didn't seem worried about the noise, and they may even have been a little impressed with it, so I didn't get into trouble. That was the first and last time that I ran a nitro model engine in any church! (I have flown

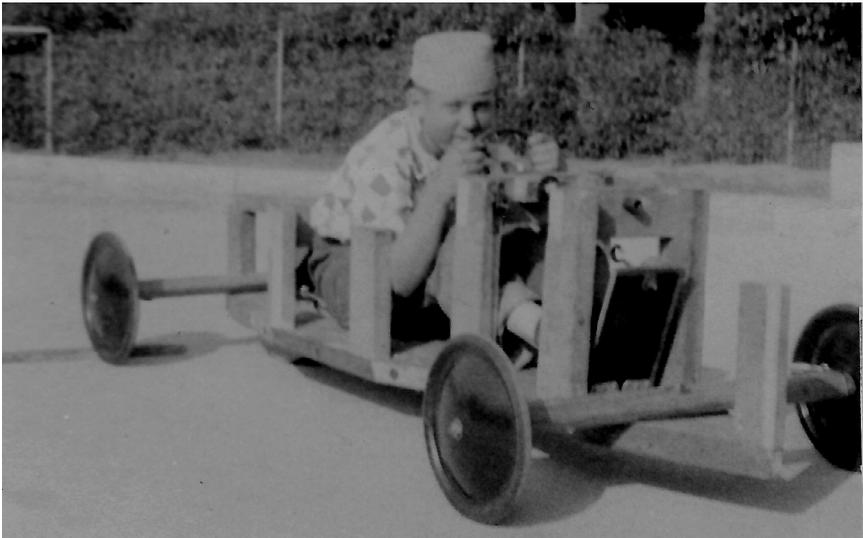
some very small electric models in a church gym though. They make hardly any noise, and the gym is a cultural hall isn't it?).

One day, Mom got sick with some severe headaches, and the next morning Dad took her to the hospital. She was there a couple of days, then Dad came home one afternoon and said, "Oh you poor, poor kids. Your Mom has just died." I couldn't believe it. It was all so sudden. For a couple of weeks I kept thinking that she would just come walking through the door. She had contracted spinal meningitis. That happened to be very contagious and she was placed in a sealed coffin – the seal was a sheet of clear plastic sealed all around the edges between the top and the bed of the coffin. We had a funeral for her in our church in Redondo Beach. Even after seeing her at the funeral, I hadn't processed that fact, nor had I emotionally engaged. It was more like a dream that made me think that everything would later be OK.

After the funeral, Dad arranged with Uncle Bill and Aunt Mary to take us into their home for an indefinite period of time while he got things rearranged so that he could bring us back to live with him and take care of us. Dad packed us up and we flew to DuBois, PA to live with the Ways for a while. Grandma Hepler took Alan to live in her house a couple of blocks away up the street, but he did spend a lot of time with us. Bill and Mary were so good to us, and our cousins Joy and Steve fully accepted us, even though it cramped their family style somewhat. They had always been

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loving and caring with us, and this just cemented the relationship forever. The sentiment of the times was that when a child lost a parent, don't talk about it so our sorrow would not be held in front of us on a daily basis. They distracted us the best they could, and it was very loving at that time. The process of today is to talk the child through all the sorrow and grieving so the child will be allowed to process all of it, and finally deal with the loss and move on. That is probably why I still get so emotional when I talk or think about Mom today. I also feel that has brought my emotions closer to the surface when I talk about anything personal even today.



My First Soap Box Derby Racer - Not Quite Finished

04 My Adventures in DuBois as a 14 Year Old - 1957-58



We moved in with Aunt Mary and Uncle Bill on 16 South Stockdale Street in October of 1957 . I was given a bedroom to myself on the second floor (actually all the bedrooms were on the second floor), Susie moved into Joy's room, and Steve slept in a small room on the other side of Bill and Mary's room. My room had a small walk-in closet that also had a window looking out the front of the house, as it was built into a gable over the front door. As I remember, Bill's mother, Maisy, was living with them. One day prior to 1957 during a visit to Dubois, I approached Aunt Mary's house, and I noticed that Maisy was peering out that closet window, since that was the room she was using. That reminded me of some old mystery movie, being watched as I came over. It felt a little eerie.

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Aunt Mary's house at 16 South Stockdale St. with the walk-in closet just above the front door. I had the room just to the right of the window.

The first order of business was to get registered in school. I was assigned a home room in 8th grade in the very old middle school which was across the street from the YMCA near downtown. It had two floors, old desks, very prim and proper teachers and wooden floors. Most of the kids had lived in DuBois for most of their lives, making me the "new" kid. Since I was from all the way across the country (California), there was a little extra interest in this new addition. The one teacher I can really remember was Mr. Okonsky, the history teacher, and he was teaching American history. He was fairly strict and no one ever messed with him. Evidently he somehow fathomed that I was a

Mormon, and when some reports on pioneers were assigned, I got to report on the Mormon pioneers, which in itself was a little bit scary. At that time, Mormon teenagers were not as well instructed in church history as they are today. I managed to make it through OK though.

Another teacher was my health teacher, who was a man. In his class I had to memorize all 206 bones in the human body. I had one very interesting experience in his class. As a kid I loved matches. In previous summers, Cousin Dave Hepler and I would sit on Grandma's front porch with stick matches, a large, empty thread spool, and a rubber band. We would insert a match into the spool, notch it in the rubber band, strike the match, and shoot it into the front yard. Well I had the habit of carrying a small box of wooden matches in my pocket all the time. One day in class, one of the girls snagged a splinter in her finger. The teacher was getting ready to take out the splinter and he pulled a needle from his desk, but had no way to sterilize it. He asked if anyone had any matches. Without thinking about consequences, I quickly stuck my hand up in the air. He took my matches, sterilized the needle, got the splinter out, and gave the matches back to me. Then the class started into the subject of the day. At the end of the class as the bell rang, he called to me to come over to him. I was wondering what the heck was going on. He looked me straight in the eye and asked, "Do you smoke?" Startled, I

said no. "Then why do you have matches with you?" I thought for half a second, then a thought came into my mind as the spirit touched me, and I replied, "A good boy scout is always prepared." He looked at me a little funny for a moment while he analyzed my statement, then said OK, and let me go. That was one of few Cousin spiritual experiences for me in my life. I still remember that to this day.

One class I was assigned to was wood shop. I had never had a shop class before. Coming into that class in the middle of the semester, everyone else was well along with their projects. I was given a list of wood projects, and I chose a small wood tray. I was told to make full size drawings of the top view, side and end views, and an oblique view. Having built many model planes by this time in my life, that wasn't hard except for the oblique view. It was supposed to be drawn at a 30 degree angle, but never having done that before I got a little confused and it ended up at a 60 degree angle. So I had to start that one over which I finally got correct. Then I picked out the wood to use for the project and pressed on. The other boys in the class were pretty impressed that I done the drawings so quickly and was now in the sawing, sanding, and assembly work. That felt pretty good to me. I got it assembled and started hand sanding. I didn't like that part, but the semester finished, and I was given credit for my progress since I hadn't been there all semester. In the middle of the

semester the shop teacher gave us all a test involving angles, intertwined gears, and other mechanical and wood shop methods. It was designed to make us think, figure things out on our own, and otherwise show the teacher what we had learned as well as how mechanically inclined we were. I got a B on the test. At the end of the semester, he gave us the same test. Since he had gone over the first test with us, I remembered a lot, and was able to get through pretty fast. This teacher graded on the curve, and I ended up 1 point higher than Ernie Ghetto, who was at the top of the class. I got the only A, and Ernie was expecting it would be his. He was disappointed.

A couple of days after I entered school, one of the kids (Joe) in home room came up to me. He was one of the shadier kids, and offered to sell me a cigarette lighter for 50 cents. I said no thank you, and he looked disappointed. The kids around me just laughed. Sometime later, probably February of 1958, Joe was out at night around 2 AM, standing at the corner of an intersection smoking, when a car skidded on ice, hit and killed him. All of us were pretty shocked. The shop teacher gave us all a class long lecture about smoking and being that type of kid who would lounge around on the streets late at night, seemingly up to no good. A lot of us went to his viewing because he had been a member of our 8th grade class. That was a sad day for all of us to see the finality of his life.

Then there was band. When I first walked in (class was across the street upstairs in the YMCA building), I was added into the 3rd clarinet section as the last chair. A couple of days later, the teacher was having each clarinetist individually play a part she thought we were having trouble with. Most of the other 3rd clarinetists could hardly get a sound out of their instrument. When she got to me, she was surprised that I could play the part, get sound out, and not sound half bad. I was immediately moved up to first chair 3rd clarinet, where I stayed. I was starting to get noticed, I guess. I also joined the marching band and marched in a couple of parades. Cousin Joy was the drum major, and Uncle Bill took lots of 16 mm movies of the marching band and both of us. Most of those have been transferred to video and are stored in Aunt Mary's house.

Also in band, I met three boys who became my best friends in Dubois: Ernie Ghetto, David Laman, and Jim Varner. Ernie and Dave played the trombone and Jim played the drums, and they were also in marching band. I think they included me in their group because I was from way out of town, and they wanted to add that mystique to their gathering. Dave also earned a HAM license and did Morse code from his basement bedroom. His call sign was K3NTJ, with the "N" indicating him as a novice, and was later dropped when he upgraded his license to K3HTJ. Ernie was a slick go getter, always looking for an angle. His dad was a

doctor, so Ernie had resources. I saw him a couple of times years later – once when I visited DuBois while in high school, and the other time he had some kind of function in DC and wanted me to set him up with a girl and go to a party. Being as I was a quiet, shy teenager, I just couldn't help him. Jim had a brain. He and I used to play chess, and I was never able to beat him. He went on to a PhD in Ceramic engineering, a professor at Alfred University in Alfred, NY, and became noted in his field, occasionally traveling to Germany for consulting. He still lives in Hornell, NY, close to the university. We sent Christmas card to one another for many years, and he and his wife came out to visit us on a vacation around 2007, and we took them up to the cabin where we invited them to stay for a week and do their hiking in the Rockies which they wanted to do. After that our contact has drifted off.

Our math teacher resembled a wicked witch who never put up with anything. She would remind you of a very strict 1890's teacher who didn't spare the rod. I saw her use a ruler to rap the knuckles of several kids on different occasions. Fortunately that was sufficient to keep me in line, and I never crossed that path with her.

One thing that I wasn't familiar with, was a tradition that the local American Legion had of presenting an award to one boy and one girl in the 8th grade at the end of the school year as best

students of the class. The other kids just called it the most popular boy and girl of the year. Every kid in 8th grade was given a ballot with some names on it, and they voted for the one whom they thought should get this award (that's why it was called the most popular boy and girl in the class). We had a big assembly at the end of the year, and when they called the names, they named Delores Tokash and Dick Sanders (me). I nearly fell on the floor. I had no idea what this was about, but I think the mystique of being from California carried on through that year letting everyone know who I was. I didn't recognize the name Delores Tokash until someone mentioned that she was called Dutchie, whom I did know. I got to kiss her once when I was at a party where we played Post Office (DuBois was a fun time). She was a pretty girl. I kept that award in my mementos until I left for college. When I graduated from college, I found that most of my stuff had been discarded or taken over by my brothers and sisters. There wasn't much for me to recover.

Joy had a very nice Olympia manual typewriter. She also had a touch typing course in a book. She was nice enough to let me use her typewriter and go through her book. I taught myself touch typing that year, which has helped me throughout my entire life. Just for fun, I took a semester typing class as a high school senior and learned the ways to type business letters, which has also been a good help. There was a typing contest which I

entered, and got a recognition pin for typing 57 words a minute with no mistakes. A lot of the girls in that class were just a little jealous of me because I could already type well.

Another thing that was very educational was the weekly Saturday night dances at the YMCA. A lot of us boys and most of the girls would go separately, and then sometimes get up the courage to ask a girl to dance. I was fairly socially awkward, but many of the girls were cute as well as friendly. The first time I went, I probably didn't dance very much, being pretty shy to ask someone to dance. It felt awkward and intimidating to walk to a group of girls all by myself and zero in on one to ask. But that improved my social ability, and the girls all liked to dance and socialize. At the end of the first dance I asked one girl if I could walk her home and she accepted. That was something new for me. Those dances were fun and socializing like that was new for me because DuBois was a small town of about 12,000 people and most of them knew at least half of the others. It was there that I met Dianne Sheesley, and in April 1958 asked her to go steady. Yeah, that was big step up for me. She lived on the other side of town, so it was about a 20 minute walk to go visit. One day I asked her to a movie and Uncle Bill offered to drive me over to pick her up, then meet us after the movie. He taught me something useful in dating. He told me to go to the theater first and get the tickets, then after I picked up a date, we could just

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walk right in not having to wait in the ticket line. He said that would really impress my date. Yep, it worked well. When school was over and I had to leave town to join Dad, we did a friendly break up. I saw her once many years later around 2002, when I was doing a huge computer installation in the Akron Summit County Public Library in Eastern Ohio. I had the weekend off, so I drove to Dubois for a visit, went to church with Mary and Bill, and Diane was there. Uncle Bill remembered her well, and took me over to say hi. Her husband had died and she was single again, still living in DuBois. We gave each other a hug and talked a bit. Her folks had been members of the country club, and she had invited me to a Spring Dance at the Country Club in 1958. It was a nice time 44 years later..

I remember the winter we lived in DuBois. It was all about snowball fights. One group would get on the far side of the street from Aunt Mary's and my group would be on the sidewalk on Mary's side of the street. We all had a grand time. I remember two specific things. I figured out how to throw a very high looping snowball, and when they were watching it to make sure it wouldn't hit them, I would throw a hard direct snowball that they didn't see coming. It worked out great! When they figured that out, it nearly lost its strategic effect, but once they didn't look at the high looping one, and the high one hit one of them smack dab on their head! The other thing that happened once –

nearly a 1 in a million chance, one of their snowballs and one of mine collided, smashing the snow together and fluttering into the street. We were all pretty much amazed at that.

Back then, there was a tannery on the north side of town which had dammed up a small lake to support the tannery. When it froze over in the winter time, we kids would go ice skating. I wasn't much of an ice skater, but it was fun to head over and try to skate with the others, and yes, the cute girls like to skate too. In the spring, summer, and fall, we would go fishing over there as well. I never caught anything, but again the socializing was fun. I remember borrowing a lure from Cousin Steve and tying it onto my leader. With Steve watching I gave it a big cast and the lure went flying way out over the lake. Steve said, "My, that was a great cast." I had to tell him that the lure had come off the leader and all he saw was the lure alone, and now it was lost in the water. We got a chuckle out of that.

One more thing and I will stop these Dubois stories and move on. Each year the school had a science fair. I had gone out flying with Bill Divins one or two times, to watch him fly radio control planes. These were the initial entry into RC, using mostly free flight stable planes, which the flyer would interrupt with an occasional deflection of the rudder to change direction. That's the only control they had: no elevator, ailerons or throttle. The radios were not very reliable either. Anyway, since Dad was

driving a pink Cadillac convertible, I decided I wanted to build an RC car. I constructed a balsa top with tail fins, and painted it pink. Then I worked on a small piece of plywood to add wheels, a drive motor, and RC steering. Bill Divins provided an older transmitter, receiver, and steering servo. The art teacher at school helped me to fashion a display base with a backdrop to show off the car with brief instructions on how it worked. It did work, and I entered it in the science fair. Lo and behold, I took first place, received a monetary prize, and it was displayed in a store window downtown. The school folks wanted me to take it to the Penn State Science Fair, so I did. For some reason, the receiver stopped working and Bill Divins was out of town, and couldn't help. Uncle Bill provided another radio system which I tried to install in the car, but I couldn't understand the schematics sufficiently to wire everything up. Bill took me to an electronics store and we talked to the technician who hooked everything up for us. However, he didn't do it right, leaving one of the batteries directly connected all the time, and by the time I got to Penn State, the battery was dead, and the car wouldn't work. I was disappointed, but I did learn that I needed the experience and understanding to fix things myself, not relying on others unless absolutely necessary.

Then came the time when Dad got married to Jean Lee MacRae, and we moved to New Hartford, New York, just outside Utica.

05 More Memories from DuBois



Every time I have traveled to Dubois as an adult, I had looked for Tannery Dam as I came into the city from the west, but I couldn't find it. I thought that it had been dismantled and used for other things. In talking to my two cousins, they told me that it was still there holding Lake Juniata behind it. I then looked it up on a map and found out that it was a couple blocks off PA 219 to the left on 1st Street up towards the country club, just before one turns right onto Liberty Blvd to go into the downtown area. In fact in 2019, DuBois got a \$499,000 grant to renovate and upgrade the Tannery Dam area. So I am happy that I now have the current information on that historic dam.

Another thing that I remember is that I had my model airplane stuff down in the basement pottery where I could do little damage to anything important. One day I got home from school to discover that my mischievous cousin Steve, had put some

model fuel in my very small Cox PeeWee .020, hooked up the glow plug battery, and holding the engine in his hand, flipped over the prop. True to design, the little engine started up and startled Steve at which time he let go of the engine and it fell to the floor breaking the prop. He had very dutifully put everything back where he had found it, hoping that I would never know what had happened. I do believe Mary had gotten wind of the noise and wormed the truth out of Steve, and passed the information on to me. I was initially a little shocked that little 8 year-old Steve even knew how to do anything like that. But I finally got a chuckle out of it, having only to buy a new prop.

I guess Steve had watched me do that process more than a few times, and quickly learned how. I also remember “designing” a small flying wing for that motor that was only a flat piece of balsa wood, probably 1/8” thick, 4” wide, and about 14” in span, added an elevator, and mounted the .020 on it. I then had Steve help me launch it in the back yard so I could fly it around as a control line model. The first two or three launch attempts failed, as the narrow wing flipped up and down in a full stall and hit the grass. Only once did we get it going straight and probably flew 8-10 fast laps before running out of gas. I think I retired it having had some success, deciding it was better to quit while I was ahead. I also learned that it had little stability in the pitch axis with that narrow of a wing.

At Christmas 1957, Santa brought Joy a wonderful new toy – a battery powered, hand held transistor radio. You need to remember that back in 1957, the transistor itself was still pretty new and that most electronics were still using vacuum tubes. Joy's radio was not just "a" transistor radio; it was a NINE transistor radio. There were a few other similar radios on the market, but most of them were only 7 transistor radios. If you know me, you know that I love new gadgets, and I was simply drooling over that radio. However I had learned a little bit since the days of my stealing Joy's doll buggy and running around the house with her chasing me. I was able to simply drool without being naughty. Santa had brought me a model airplane kit (1/2 A Half Fast flying wing) and three Cox RR1 engines, and I was able to successfully distract myself from the radio. Besides that, Bill had a very old short wave radio receiver down in the pottery and I happily played with that. It wasn't initially functional, so I carefully removed the vacuum tubes, took them to the drugstore (every drugstore back then had a vacuum tube testing machine) and tested each one of them. A couple of them were bad, and I was able to purchase new ones. Reception on the radio was never very good, but I could pick up some Morse code and even a HAM voice once in a while. I think my main problem was the absence of a workable antenna.

One place that we loved to go to was the Dinner Bell – a small eatery a little ways out in the country. We didn't go for the food though. They had the yummiest ice cream that I have ever had! The flavors were all good, but the distinguishing feature was that the ice cream had tiny ice crystals in it which seemed to just tingle and tickle our tongues. Not too many years ago when I was in Dubois, I asked if it were still there, but alas, it was no longer. One other thing that Uncle Bill would let us do was to take a roll of adding machine paper, which he furnished from his store, and go riding around in the car with Bill driving. We all rolled down our windows, stuck our hands and the paper tape out the window and did one of two things: we could unroll the paper slowly letting a couple inches out at a time where it would flap around and tear itself into little bits, or we could stick a finger through the middle of the roll, let go of the outside, and it would unroll itself in one long streamer until it was all gone. I'm not sure why that was so much fun, but we loved it. Today when thinking about that, I cringe at how much trash we left alongside the roads as we were doing that. But the "old days" were never saddled with "political correctness". It was just a part of growing up.

One day Susie, Joy and I were looking out the kitchen window watching Steve light baby finger firecrackers while standing on the outside porch which was about 12 feet above the back yard.

He would toss them into the back yard, and we would watch the smoke follow the tiny firecracker until it exploded in the air. One time we saw a match going into the back yard, then heard the firecracker explode on the porch. Steve had gotten very excited and had thrown the match and held the firecracker! Fortunately these were very small firecrackers, but it did burn a couple of his fingers. We were laughing our heads off, as kids do without realizing that Steve had gotten hurt. Mary put some salve on his fingers and wrapped them in gauze; they healed well in a couple of days.

When the winter of 1957-58 came on hard, Tannery Dam froze over, and we decided to try some ice skating. Mary had a pair of skates that would fit Joy, but there were none for me. Joy got the bright idea of calling her friend Barbara Mix (Mixie), to see if she had a pair we could borrow. She did, so Mary drove up and got them. When she got back, I tried them on and they fit. When Joy showed me her skates, they were black leather skates. And I with my complete lack of etiquette spoke out wondering why Joy's were black when girls always wore white skates. So Aunt Mary had the opportunity to teach me to hold my tongue and always be and say nice things so as not to hurt anyone's feelings. That still sticks with me to this day. We did go skating and had some fun, even though my ankles were pretty weak for single blade skates. Dad once told me a story about his lack of etiquette. While

on his 2 1/2 year church mission to Norway he learned to ski and skate very well. After he got home, he invited a girl to go ice skating once, and they went with several friends and their dates to Liberty Park, a big park with one corner on 7th East and 900 South in Salt Lake city. When they got there, Dad put on his skates and just took off, not realizing that he should have helped his date put her skates on first, then put on his own skates. One of Dad's friends took pity on him, and laced up Dad's date's skates for her. Of course, Dad got a lesson from his buddy after the skating party, which I don't think he ever forgot.

Another thing we did while visiting DuBois in the summers was go out rat shooting with .22 rifles. Uncle Bill and Dad would take Dave, Joy, Steve and me (he even took Susie one time) to the DuBois dump at night. We would take some bright flashlights and shine them around. The rats only came out at night and you couldn't find them in the daytime. When we caught a rat in the lights, then we would shoot at it. One time I figured that I would be very smart and tape the flashlight on the front of the rifle stock, so I could search and fire easily. It worked great until I reached for the bolt action to eject the spent shell and load another one. I had to raise the rifle barrel so I could reach the bolt. Every time I did that, the light would come off the rat and shine up into the sky, and I would get a lot of complaints from the other shooters. We did have fun anyway, but that is another

of the “old days” things that would never be correct or even safe today.

After Cousin Joy and Steve read my last set of stories, they both emailed me and let me know of the feelings on their side as we drove away with Dad to New Hartford, New York. Here is what Joy wrote and Steve also echoed her comments.

“There is something that you may not know though. There was great sadness and tears (and deafening quietness!) in the Way house after you, Susie and Alan got in your dad’s car and drove away. We didn’t really know what to do! Mom finally said something like, well, we all better find something to do. They are with their father - they need to be with their father. New York State isn’t far away - we’ll be able to visit them.

“Even though the reason you all were with us was extremely sad and difficult - we all had such a fun, happy time together - the house was filled with much laughter. We all loved you and missed all of you.”



In the back - Cousin Dave Hepler; 2nd row - Me, Susie, Cousin Joy Way; front - Cousin Steve Way in Grandma Hepler's backyard (picture furnished by Susie)

06 On to New Hartford, New York with Stepmother Jean



As we bid good bye to Dubois for a season, we got into the car and Dad drove up to New Hartford, New York, which is a Utica suburb. Dad had gotten a job with General Electric. We moved into a two story rented house that seemed to be pretty nice. The upstairs had two bedrooms and a bathroom, but was obviously formerly an attic. Susie had one bedroom (fully finished) and I had the other room which was pretty much unfinished, containing wall studs around the outside and unfinished rough wood floors. That didn't bother me though, as I had no problem setting up an HO scale electric train and stapling the tracks to the floor. In fact I kinda liked it for the things I could do without damaging anything important.

Alan and Stephen were in a bedroom on the main floor, as were Dad and Jean in the master bedroom on the same floor. The kitchen was nice, as was the rather small living room, and the garage was a 2-car garage with a semi-workshop room built on the back. The place Susie and I really liked was the full basement which had one small portion walled off as kind of a wet bar area, with the entire rest of the basement in linoleum and wonderful for skating around. The basement also had a full size jukebox that played 45 rpm records. We loved to skate for hours while playing the jukebox.

There was a very nice large swimming hole with a raft in the middle which we could swim to, climb up on and enjoy the sunshine, and it also had a diving area with one meter and three meter diving boards and a five meter platform. Wow! That looked like a long way to the water from five meters up. I suppose the area was a very large pond with some sandy beaches on some sides, and just dirt and trees on the rest of the perimeter, but we really liked it, although it had an entrance fee for the day. It was indeed a commercial enterprise and well kept up.

I started 9th grade, and my home room teacher called the role the first time, calling me by my first name, Milton, instead of by my nickname, Dick, which was short for Richard. I had picked up the nickname from birth, as Milton was my Dad's first name,

and my folks wanted a good way to tell us apart. This got me into big trouble one day in December of 1958. A girl at school, Carol Lord, called me up on my birthday, and asked to speak to Milt. Jean answered and at first she started getting mad at Dad because she thought it was a girl calling for him. She was a very jealous person. However, I wasn't home at the time, so Jean asked if there was a message for Milt. Carol told her to tell me happy birthday, at which time Jean figured out that she had been calling for me and not Dad. My birthday is in December and Dad's birthday was in March. I think both Dad and I were in some trouble over that call, but it finally passed on. By the way, I didn't have any attraction for Carol and didn't pay her much attention, but those things happen.

During a swimming gym class, the teacher wanted everyone to do a dive from the diving board. He was looking for a couple of divers to add to the swimming team. I had always liked the diving board, could get some spring off the board, but really couldn't do anything more than go head first into the water. When the teacher saw that I could get a good spring off the board, he approached me and invited me to join the swimming team. I figured it might be a good idea, so I did. There were already two other divers on the team, and one of those was Kip, and he could dive really well. While working on the team, I learned quite a bit, especially about the approach to the end of

the board as well as not hurrying the bounce. There were some good tricks and techniques in always using a standard approach to the end of the board, always using the same number of steps, getting some height before coming down with two feet right on the end of the board while bending my knees, then waiting until the board started to come back up to extend my knees to get sufficient height to make a decent dive. Many of the dives I learned well right from the start, but I always had a problem with getting a smooth twist when the dive required more than half a twist. Some of those dives looked pretty humorous.

One type of dive that none of the others were using is called the reverse dive. This is where you go up in the air and arch backward with your head toward the board. I guess no one was doing this because it was kind of scary. None of us were using that type of dive because it was that scary and wasn't a required mandatory dive for competitions. One day I decided to give one of those a try. Now there are three types of positions for diving. One is called the layout where you never bent your back; another is the pike position where you bent at the waist, and nearly touched your toes while maneuvering, then straightening out to go smoothly into the water, and the last position is the tuck where you got your knees up into your chest to summersault around then straightened out to go into the water. Of course the tuck position was the easiest one to do, but it also had the lowest

degree of difficulty so the scoring was lower. The judges' scores were added, and then multiplied by the degree of difficulty for a score for each dive. Well I certainly didn't want to hit the board with my head in going backward, so I first tried this dive in tuck position and kept more forward velocity going off the end of the board. This kept me away from the board, but cut down on the height achieved. Anyway, I was successful and pretty happy. The other divers were a little shocked and chagrined. They decided that they couldn't let this new kid be the only one who could do a reverse dive, so they each managed to learn that too. Fairly quickly we all learned to do that in a layout position and added it to our diving patterns. I never did beat Kip, but I kept pushing him.

It was a little exciting being on the swimming team, but I did have to walk home since practice was after school. The worst part of that was that my hair was wet and this was wintertime. I didn't mind the walk, and I never caught a cold doing that. Dad and Jean finally came to one of our swim meets, but that was the only time they came to watch. The diving competition was somewhere in the middle of the meet, so anyone coming to watch the diving had to wait through much of the swimming events in a warm, humid swimming pool area. They also left right after the diving was complete.

I also liked basketball, so I went out for that sport when the season started. I found that the positions were different than what I thought they were. When playing scrimmages, the coach would send us out to a certain position. When he sent me out to a guard position, I would go to a forward position. I sure didn't know much. I could never shoot very well either, so I didn't last long. I had played one season of basketball in DuBois with no problem, except with my shooting. So I got cut from basketball in the 9th grade. No great loss I guess, but the swimming helped me a lot my first year in college.

I have always liked science and was doing well with that. Either the math club or one of the math teachers would post a few math story problems on the bulletin board each Monday, collect answers a few days later and report the results on Friday. I enjoyed these brain teasers and got on the "win" list quite a few times. I do remember one of the questions: How far does a record player needle travel on a $33 \frac{1}{3}$ RPM record? That one kinda stumped me as I was trying to figure out the radius of each turn of the record, then count how many grooves the record had. The answer was pretty simple though, since the record does most of the traveling, and the needle only moves from the edge of the record to the center – a distance of about 4 inches. See, many questions were trick questions and one had to go to the simplest answers and not get wrapped up in unnecessary complexities.

We all do that sometimes in life. It was a fun competition though.

I also entered their science fair using my radio controlled car again. When the judges came around, they were expecting us to know a lot more than an 8th grader. One of the judges asked me whether the transmitter was inductance tuned or capacitance tuned. I wasn't prepared to be asked any technical questions about the electronics, and I didn't have the answer for him. I figured it out that night and it really wasn't a difficult question at all, mainly because I regularly tuned the transmitter before going flying. To tune the transmitter, one turned it on, put a plastic screwdriver into a cardboard tube from the front of the radio and twisted it until a light on the transmitter got as bright as it could go. Since the cardboard tube had a thin wire around it with many turns, I was changing the inductance. A normal AM radio back then, had a large variable capacitor that turned when you dialed in a station with the big knob on the front of the radio. Heck, I knew all that because I played with a lot of older radio receivers. I was prepared to explain how the car worked and how you selected left turn or right turn, but I hadn't thought about anything farther than that. The judges weren't impressed and they moved on.

I also signed up for band and continued playing the clarinet. I ended up in the middle of the 2nd clarinets. For some reason I

don't remember much about the band there. It was a good size band and still remained a good cultural experience for me. On another subject, one of the companies in the area was offering an extracurricular class in electronics, which is another thing in which I was interested. They were going to take only so many students, so they interviewed us all individually because more signed up than they had space for. My interests were in making electronics work, but I found out that they were more interested in teaching the design and how to calculate current flow, etc. I didn't make the cut, but that was all right, and I still can't calculate current flow and voltage drops within a circuit, although I can read schematics and I have built a few electronic items, including a Heathkit television, which all ended up working.

I did have one big teenage "adventure". I palled around with a group of about 8 guys at various times in our neighborhood. One day, one of the guys said, "I know of a great place where we can go have fun for a little while." We, not knowing what it was, followed along. He took us into the woods behind my house and led us on a path that opened on a small clearing in which there stood a farmer's barn, with the house about 100 yards further on. Our leader said that we can climb up onto the small lean-to roof at the back of the barn, get into the barn, and play around the stacked hay bales. Some of us were not too sure about this, but

our leader said craftily, "The farmer will never know, he lives too far away to hear us." So we all climbed in, rearranged some hay bales to create hiding places, and romped around, climbing, jumping, shouting, and just having a good time. After a while, I just happened to look out a crack in the side of the barn, and the farmer, his wife, and a son were all standing there looking at the barn. I hurriedly yelled, "The farmer is coming!" I went to the back of the barn, climbed out the window, slid down the lean-to roof, and started running as fast as I could, hoping the rest of the group were all right behind me. I got home and went about my business. A day later I learned that one of the boys was running down the trail, was curious, and he stopped and went back a little ways to see if the farmer was really coming. He got caught! I later surmised that the farmer had marched that boy to his home, had a good chat with the father, and that the boy gave all our names to them. He ratted us all out! Dad came to talk to me after the farmer talked to him, asking me what had happened. He must have remembered a lot of his own childhood which was filled with many experiences (which he related to me once in a while) much greater than my escapade, had a little pity on me, perhaps even smiled to himself, and simply told me to respect others' property. I never did go back there. Another life lesson learned.

There is another lesson I learned the hard way - I know we all experience this method of learning throughout our lives. One week Dad and Jean went out of town for a couple of days. We kids were on our own, and of course we were up to it - we thought. They specifically told me not to let any of my friends into the house. So now you see what is coming. On one afternoon I let four of my friends into the house and we were sitting in the living room. One of my friends had a basketball, and he tossed it to one of the other boys who muffed the catch, letting the ball slide onto an end table beside the couch. The ball hit a large decorative crystal bowl, knocked it to the floor, at which time it shattered into a bunch of pieces. My friends all scattered from the house while I picked up the pieces and cleaned up everything up really well, hoping that no one would notice. When Dad and Jean got home, it only took a day until Jean noticed, and asked me what had happened. I dutifully told her the story of my disobedience and the results and was grounded for two weeks. At least I was too old to get spanked anymore. I have gradually learned obedience throughout my life, sometimes testing the situation to see what would happen, and each time someone noticed.

I have to comment on the educational system. Those in charge were on the ball, required hard work, expected us to learn a lot, and be able to pass frequent quizzes. The exams at the end of the

first semester were taken in a separate room, were all printed in a test booklet, and we started the test on time, having to put our pencils down when time was called. They were absolutely serious, which was very good for us students being made to work hard. Gym classes were also good work outs. Near the end of the semester we were all given a rigorous physical fitness test. In one of the tests we had a starting position like beginning a race on the track where we had to put our hands on the floor, one knee up to our chest with the other leg stretched out, then upon the start command, we switched feet back and forth as fast as we could. This was a timed test. Half of us took the test with the other half counting the reps. When it was my turn, I was going as fast as I could go. At the end my counter said that he counted 191 reps. The coaches didn't believe him, and I hadn't been counting myself. The coach said that even seniors only got to about 161, and I was only a freshman. So they made me take the test over again even though I was still tired. I did 141 reps the second time. I do believe that I hadn't done 191, but it should have been more than the second time. Ah, the trials of life

About the end of February, I think that either Dad lost his job or decided to quit because of office politics, or that Jean wanted to be closer to her folks in the D.C. area. I remember hearing him say to Jean after he got home from work one day, that his boss was really nasty to him that day. Anyway we moved to

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Alexandria, Va. Dad dropped the three of us kids in DuBois, and Jean had a son from a previous marriage who was five at that time, 10 years younger than me. Being an only child before her marriage to Dad (she had divorced her marine husband for abuse), he was a little brat – however in later life he turned out really well, graduating from the Military Academy at West Point, and spending a successful career in the Army. He has also been faithful in the church, having spent time on the High Council and also as a bishop. He and his wife served a full-time Senior Couples Mission for the church, being assigned to Fort Bragg as service representatives after Stephen retired. They live close to Fort Bragg.

Anyway, Dad and Jean took Stephen to the D.C. area with them to look for a house and a job and dropped us off back in DuBois for a time. We have always loved being in DuBois, so we didn't mind at all. One more point – Jean wasn't a member of the church when they got married, and it took quite a while before she decided to join the church and get baptized. Dad had me baptize Stephen and a couple more of my siblings when it was their turn, and before I left for college.

07 Transition to Alexandria, Virginia 1959



As mentioned at the end of the previous story, we left New Hartford, and Dad dropped us three kids back at Dubois, until he and Jean found a house to rent in the D.C. area. We kids didn't mind that, since we loved DuBois and our family there. Dad must have told Mary and Bill that we would only be there a couple of weeks, because we were not entered into the schools again. However, we were there for an entire month, just having a little vacation from school in the middle of the semester. That didn't affect Susie very much, but when we finally got to Alexandria, Virginia, and I got enrolled at Hammond High School, I found myself way behind. I was taking Latin and Algebra which were the subjects I was farthest behind. I struggled a lot with Latin, but I worked very hard, and managed to pass the semester with a D in that class. In Algebra, the teacher assigned another student to tutor me for a little bit to get me caught up. That other student was a pretty and very smart black girl. In my world travels at that

point in my life I had never interacted with any African-Americans. It worked out very well though, and with some natural talent and some smarts in math, I caught up to the class in about three tutoring sessions. I was thankful for the help as well as my introduction to race relations which helped me to adopt a good attitude with other races throughout my life. I do believe that this black student was the only black student in the entire high school, and was a token for school integration.

We had moved into a small house on Taft Avenue, which happened to be a block off, and parallel to the main street that the busses traveled on. When coming home after the first day of school, I got off the bus, but I really didn't know where Taft Avenue was. I walked back and forth for a couple of blocks, thinking that Taft came out to the main street. I finally went into a corner grocery and called home (thankfully I had both the address and the phone number). Jean told me what street to take to get to Taft Avenue, and I managed to get home OK after that. What an auspicious start on my first day of school in Virginia. However, I now knew where a good corner store was close to our house, and several times I would get off the bus a block or two early, stop by the store, and satisfy my sweet tooth with a half pint of ice cream that I devoured on my walk home.

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Taft Avenue with Susie in front, Dad and Jean second row, and me in the back, 15 years old

Church was about a mile and a half away, and Dad didn't go often, because Jean wasn't a member and she wanted him to stay home with her. Sometimes we could get Dad to take us and come back to pick us up, just not very often. I do remember starting early morning seminary (a 4-year class for high school students where we studied the New Testament, Old Testament, Book of Mormon, and Doctrine and covenants with Church History, using one of those scriptures each year for the four-year

curriculum). I would get up at 5:00 AM, get ready for school, and walk the mile and a half to get to church. After a couple of months, the instructor started picking me up and giving me a ride, which was nice. After the class, I would catch a ride with four students who went to Annandale High School, and could drive right past Hammond to drop me off. That was the only way I could get to school on time. I can't say that I learned a lot that early in the morning, but that was a pattern that pretty much set me up for the rest of my life in being faithful in my religion – The Church of Jesus Christ of Latter-Day Saints. A short aside, when we lived in DuBois, church was in Punxsutawney (you know the Groundhog city), which was 23 miles away. Another family in DuBois would pick up Susie and me each Sunday and take us with them.

I was getting all set up to play that summer to have a good time, when Dad and Jean required me to find work at a summer job. Heck, I wanted to play, not work, but elder wisdom prevailed. I was finding it difficult to find a job for a 15 year old, but I finally found one in a High's Dairy Products Store as a clerk, stock boy, and chief gofer. This was down on King Street – the main drag – in Alexandria. Something I wasn't expecting was that Dad and Jean required me to give them a portion of my pay to help with family expenses, as I was now working. After taxes, tithing, and other stuff, that didn't leave much left over, but it was supposed

to teach me that I had an obligation all of my life to support myself and others I was responsible for. I think I got to keep enough that summer for some treats and to buy a digital volt meter for my hobbies.

Once I got past the remaining semester in 9th grade, I started enjoying myself, except for Latin. I ended up taking four years of Latin, thinking that it was a great preparation for college entrance as well as knowing that Latin had a lot of words that have been kept or adopted into the English language, especially mottos for colleges and other groups. In fact my Air Force Academy Class of 66 has the motto: "Ad Astra Per Aspera" – Aspire to the Stars, or more colloquially "Reach for the Stars". Even with its advantages throughout life, it was still very difficult for me, probably because of the one month in the beginning that was lost in our move.

I had a great time in the band, both with the concert band and the marching band. We played some class VI music like Scheherazade – by Rimsky-Korsakov and Dance of the Sugar Plum Fairies, which are two of the pieces I can remember. So there was some classical culture as well as Sousa marches, and another one I remember is the January February March – a play on words, but we still liked it. I also participated in the marching band. We marched in a few parades, but our primary marching function was at football game half-times. We would perform

different formations and have fun doing it, but that also required a lot of practice, hard work, and concentration – which is always helpful in learning life lessons. I remember forming an “H” for Hammond High School at the end of one half time performance. When we were done, our director, Mr. Smith, who was up in the broadcast studio playfully said: “OK band, let’s get the “H” off the field. I don’t know how many spectators got it, but we all did and laughed as we marched off the field. Mr. Smith was a cool guy and we liked him. I sat in the first chair, second clarinet section. My very good buddy, Dan Katz, was first chair, first clarinet section. He took music lessons all the time, and played really well. I did challenge the girl just ahead of me, who was the last chair in the first clarinet section, but she still beat me out. I suppose that I was lucky to be first chair, in the second clarinet section. Music has always been in my life, but after high school, the clarinet hit the shelf and pretty much stayed there.

I also joined the chess club and became the vice-president in my senior year. Dan Katz was the president. We would have chess meets with other high schools, and occasionally I would win a match. I have always taken too much time to figure out my moves. My sister Susie wanted to play me once, and at my 4th move, I announced checkmate! She was kind of flabbergasted that she lost so quickly; she never played me again. I was also elected as senior representative for my homeroom, and an

alternate for Boys State. In addition I was selected into the National Honor Society for high school students in my senior year.

Our senior class trip was to New York City which I had never been to. We saw the famous flamboyant piano player, Liberace, who put on a dinner show that we attended. That was pretty exciting. We also went to a Broadway play, "Take Her, She's Mine" with Art Carney. He was fabulous, as that play is a one man play, with the play being an entire soliloquy. I was amazed at the traffic in New York, both pedestrian and car. We were walking at 11:30 at night and the sidewalk was as crowded as rush hour. I don't think that city ever really stops (except perhaps for very nasty snow storms). I took an overcoat, borrowed from Dad, and my girlfriend, Nancy, asked to borrow it. I later found out why – she wrote me a poem that in one verse she said that she borrowed it because her dress was too short and she needed my coat to cover it. I had left my transistor radio in the pocket, but she never noticed. Here is the line:

You lent me your coat coming home from New York—
With transistor though I didn't know it.
If you want the truth, my skirt was too short.
And I needed your coat not to show it.

From "To Dick— Not an Ode, Just an Attempt—, by Nancy Neuendorffer, 1962

Funny how I can remember that one verse of that poem. I have not read the poem, nor have even seen it for a great long time. (Note: I just found it in my one of my scrapbooks and had to correct the quote to the right words) Her name is Nancy Neuendorffer. I went to the Senior Prom with her, and really liked her. I guess she really liked me as well. Shortly after graduation, I rented a bicycle built for two; we wore white shirts, blue shorts, and white sailor caps, and rode down King Street, turned right on S. Washington St, where we pedaled until it turned into Mt. Vernon Parkway where there were nice grass and trees along the sides, and we sat under the trees with the Potomac River in the background and just spent some time talking and laughing, then pedaled home. It was a nice day and a very nice outing. One evening she invited me to attend an outdoor Shakespeare play on the grounds of the Washington National Monument, with her parents. It was difficult to hear the actors, much less understand Shakespeare, but it was a very scenic and historic outing in the capital, plus I was with my girlfriend.



Our Memorable Two on a Bicycle Outing

When I was looking for a date to the senior prom, I asked three different girls, and they all turned me down. Not knowing really what to do, I went through my junior year book and checked out everyone I sort of knew. Nancy's name popped out, and although I pretty much just knew who she was, I called her up and asked her. She didn't have a date yet which surprised me, and she accepted which also surprised me. She knew probably as little about me as I knew about her. She decided we ought to get to know each other before the prom. Since she played bridge with a couple of other kids, I decided to learn how to play, and we had three or four bridge parties on the weekends. At one of those parties, I fixed up the decks of cards so that everyone would have a full suite of one card – all spades, all hearts, etc. One of the

girls cut the deck and I picked up the cards and put them back together so they really didn't get cut. One girl was watching me and saw what I did – she was wise to my antics. The first time it was her turn to bid, she called 7 no trump, which is the highest bid anyone can make. That was really a mistake, because the person to her left would be the first one to play, and that person would simply run her whole hand. But everybody caught on pretty quickly, and we all folded and shuffled the cards properly. These girls were smart!

The senior prom was held at a country club and was really great. We had a nice dance where Nancy taught me how to do the twist – yeah I was pretty backward with a lot of stuff. She also got me to try the Hula Hoop, but I just couldn't keep it going. After the dance, we all changed into swimming attire and romped in the pool for a while. When it got late, we got in Dad's black Lincoln Town Car, a very impressive car in those days, and we drove around awhile. By that time we had moved to King Street, just 6 houses away from the National Masonic Memorial, and there was an alley behind the house that went down to the edge of the Masonic grounds. King Street was a very busy street in that part of town, and no one had a front drive in entrance to their homes. Besides, the house we were in was about 20 feet higher than the road, and an alleyway was really the only way to access the house and the garage. Anyway, we decided to drive to the end of the

alley and watch the sun come up over the Masonic Memorial. I had my yearbook with me because Nancy hadn't signed it yet, so she put her thoughts in my yearbook while we talked and listened to the radio as we waited for the sun to come up. Around three or four in the morning, a policeman pulled up behind us and wanted to know what we were doing – after all the whole area had plenty of crime going on, and this was a dead end alley with a big black car just sitting there. We explained that it was our prom night and we were going to watch the sun rise. He seemed to believe us, and departed the scene. We watched the sun come up – which was really beautiful, and then I took her home, came home myself and hit my bed for a little sleep. It was a very nice night.



Nancy's High School Senior Photo in My Yearbook

We continued to date that summer until Dad suggested that I go to DuBois to visit Grandma Hepler and the Ways. Nancy had a job that summer to be a nanny up at Martha's Vineyard in Nantucket Sound, and she would be gone for that by the time I got back from DuBois. The morning I left for DuBois, about 5:00 AM so as to miss most of the rush hour traffic, since I had to go through D.C. to head north to DuBois, I stopped by Nancy's house to say goodbye because we would not see each other for at least a year. She was up and waiting for me. We talked for a few minutes, kissed, and then she gave me her high school ring. I was quite

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shocked, not knowing what it meant. She could read my face very well, and indeed I was very naive, and she quickly told me that I didn't need to give her my ring, that this was just for friendship. I have learned in later life, that it was much more than friendship, and that I had just missed an opportunity for a closer and more lasting relationship. This was my first opportunity for a serious relationship, but I was too immature to even know that. Then I took off for DuBois not to see her again until the following summer of 1963.



Hammond High School Ring, Class of 1962

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Nancy at her Nanny Job at Martha's Vinyard

08 More Adventures in Alexandria, Virginia 1959-1962



Hammond High School was a fantastic school built in 1957, a two story brick building with a large quadrangle inside the rectangular building. It had a very nice gym, a large football field, a large parking lot in the back, and felt pretty modern. It was named for Francis C. Hammond, a naval hospital corpsman, who was killed in action while assigned to a Marine Corps rifle company in Korea. His valiant actions during a battle in Korea won him the Medal of Honor. Inside the quadrangle was a Navy ship anchor mounted on a concrete display with a couple of concrete benches on each side, and just inside the front entrance was the Navy Seal imbedded in the linoleum, which we always walked around instead of over it, as an honor to him. Alas, it had no swimming pool, so my diving “career” went into hibernation.

Student lockers were on nearly all the walls of the inner corridors with classrooms on both sides of each corridor. I remember that for years, I had this recurring dream of going to my locker and forgetting the combination. I'm not sure why, because the actual event never happened, but the emotions of such an occurrence seemed real in the dreams. My locker was near my homeroom, presided over by my Plain Geometry teacher, Mrs. Merkel, who was an older and somewhat severe woman. She was a no nonsense teacher, but as I remember she was fair and never used her "power" to discipline students. I guess we had sufficient respect for her, that we didn't act up.

It took me awhile to make friends, but I did make some good ones, and most of the students were friendly, as well as smart. In the greater Washington D.C. area, many of them had at least one parent who worked in the government someplace, and were thus exposed to many environments where they were forced to hone their skills to survive with all that went on. I suppose that I was in somewhat the same boat, as we had moved to many places in the U.S. I rode the bus to and from school, and one day I met a foreign student named Suheil Ibrahim. We would sit next to each other on the bus and would talk nearly every day on the way home. I don't think I ever asked him what nationality he was or where he was from. With my somewhat introverted personality, I tended not to pry into peoples' lives very much. I am still pretty

much the same way. I think it was some kind of defense that I developed for protection (probably only perceived) while moving around so much. I also tended not to share many of my experiences for the same reason, which has also carried over to most of my life, however I am getting better. I have always been able to share better through writing than telling verbal stories. But life experiences are to be shared, especially with loved ones, but it has often been difficult for me. One thing is that I have not had a lot of self-confidence, especially verbally, and felt that what I had experienced was not important to others and would simply bore them. I have learned that this is not true. I found that Nancy Neuendorffer would ask me lots of questions to get me to talk about my life, because I didn't voluntarily talk about it. That was new to me and was a learning experience.

In one class, my teacher was a football coach, Coach Jim Mays. In those times, coaches were also put to work teaching one or two classes. I don't know if that is still done today, but it was very common then. I had a report to do for his class, and I was running behind (as usual). I was typing it up the night before and just couldn't finish the typing, so I added the papers that finished it that were in my handwriting. I turned it in on time. At the end of the class, Coach Mays had glanced at it, and he gave it back to me saying, "Either type it all or write it all. I won't accept it half and half." So I had to take it home and finish typing it. I

learned to submit a fully finished work. Many years later (2001), Kay and I were watching the movie “Remember the Titans”, in which Coach Mays was one of the coaches featured, and I started to remember that name. The movie was about T.C. Williams High School, but he was at Hammond HS when I knew him. Looking up the history on the Internet, I found that the School Board moved all the juniors and seniors to the new T.C. Williams High School, and left the freshmen and sophomores at Hammond and George Washington (GW) schools. They later even demoted Hammond to a middle school (darn it). Coach Mays moved with the upper classes to TC Williams.

In biology class, we were instructed by old Miss Gates. I don't think that I will ever forget her. She taught us life lessons as well as biology. She made everyone carry a handkerchief (which I do to this day), and made sure that we all came prepared with pencil and paper. She had the Alphabet around the top of the chalk boards, printed out in both capital and lower case lettering. Our printing had to match the way she had the letters around the room. When I print I still use her printing style – which still aren't as pretty and well-formed as hers. I had a zipper notebook which always had a handkerchief along with paper, pens, and pencils. I went back to see her at school when I was home from the academy after my freshman year. I went into her room (full of students), and she just beamed a big smile at me and

introduced me to her students. She asked me to give them a piece of advice. I showed them that I had a handkerchief in my pocket, and told them to never forget that, nor to vary from her printed letters as I gestured toward the top of the blackboards. She was very happy to have one of her former students remember, return and visit her. I didn't stay but a minute, but I had worn my cadet uniform so I sort of stood out. I was glad that I had made her happy.

Also in my biology class, I noticed a girl by the name of Phyllis Borgeson. She was cute and had caught my eye. I never did get the courage to ask her out. There was another very cute girl, Anne Eliel. I got to dance with her once during one of our gym classes where they decided to teach us some social graces. Again, I was very timid.

While a senior, I had been elected to be our home room senior representative. As one of my responsibilities, I needed to sell Senior Class cards to the kids in my home room. That went pretty well until I approached Barbara Scott. She didn't want to buy one. One of my very good reasons for them to purchase one was that it would get the bearer into the senior prom. If you didn't have one, the senior, or the date would have to pay. She didn't bite on that. I bugged her about it for a week, and she finally succumbed, probably just to get me to go away. The funny thing was that she was one of the girls I asked to go to the senior

prom with me, and she flat turned me down. Must have still had a grudge. A second chance occurrence was that I was in the Bitburg Air Force Base (Germany) Officers Club for breakfast, while on a European field trip between my sophomore and junior year at the academy. I was sitting down eating, and she just happened to walk into the room. I invited her over, and she did sit and talk to me for a little bit. Fortunately for me, her grudge had dimmed somewhat.

When we moved from New Hartford, New York where Jean's sister was living with us, Susan MacRae moved back into her parents' home. She had a very good friend by the name of Pam Smith. Susie introduced me to Pam, and I was sort of smitten right off, especially with her soft, very southern accent. I took her out a few times; it was difficult because we were both freshmen, and transportation was pretty tight. I would call her a couple times a week (I loved hearing her southern accent) and talk for long periods of time. She must have gotten tired of me, because after a while, Jean told me that I needed to lay off. Pam must have told Susie and Susie told Jean that Pam felt like she was being chased. So that small romance faded away. A couple of summers when I was home from the academy, I dated her once each summer, but it didn't go anywhere.

One Saturday, our concert band was going to an area band competition, and Dad had dropped me off at the school. Just

before we were going to get on the bus, Dad drove back up and told me that Grandma Hepler was in the hospital and was not doing well. He wanted to drive up and see her. So I put my clarinet back in the band room and went home with him. A short time later, Jean persuaded him not to go to Dubois, so there I was, clarinet locked up, school bus gone, and I was just sitting there. Well, Dad drove me over to Annandale High School where the competition was, and I went inside. Nothing had started yet, and somehow I made connections with a guy in the Annandale band, who took me to their instrument room, and let me borrow a clarinet that was in there, so I would get to play with the band and not let them down. Not being used to this new clarinet, we were performing our class VI piece in the competition, and my clarinet let out a loud squeak! If you have ever heard a clarinet squeak, you know how loud and shrill it can get. Roy Smith, the band director looked over at me with a frown. I didn't meet his eyes, but I knew he was looking. I tried to chill out and just finish the piece. At least after the final grading, our band received an excellent, so I hadn't totally killed our performance. Another funny thing in that performance was that our first chair oboe player, Sarah Minogue, forgot her music and she had a solo. Mr. Smith later told us about it, and he said that she had her solo memorized, and praised her for her preparation. That was a good showing all around.

Our physics instructor, Mr. Feather, was quite a hoot. One of the class would ask him a question like “Are we going to have a quiz tomorrow or not?” Our instructor would put a big smile on his face and say, “Yes.” This would happen all the time, and technically his answer was correct – yes, were going to have a quiz tomorrow or we would not. This happened time after time, and I don’t think we ever learned what he was trying to teach us: don’t ask ambiguous questions. I guess I still ask those, and all of us know what the question means, so we get the unambiguous answer we are looking for. Just a fact of life.

A school friend of mine asked me if I wanted to go sailing one day, and having never done that, I replied with a yes. We got down to the yacht harbor, got on the sail boat, cast off, and used some paddles to get away from the mooring. This was a small sail boat, maybe 16 foot without any small trolling motor. It also had a center board that had to be slid up out of the water in the harbor, because the water was not deep enough to use it. We raised the sails and managed to get out to the Potomac where we dropped the center board for stability. We sailed for a while, finding the breeze pretty mild for the day, went up river a ways past the tidal basin, and then turned around to come back. About half way back, the breeze just quit, and we were becalmed in the middle of the river adjacent to the Washington National Airport. We started paddling to get back, and noticed that it was late

afternoon and the day was getting darker. We also found that the current was pushing us toward the airport. Very soon we were bumping against the approach lights to the runway, so we started paddling harder. Soon it was pretty dark. All of a sudden we saw a power boat with a searchlight coming our way: it was the harbor patrol. They stopped and asked us why we were on the river without any running lights (we didn't have any). We gave our feeble excuse about being becalmed, and that we were just trying to get back to our mooring post. They could see that we were pretty young, and just decided to let us get back ourselves with a just warning. The water was shallow so we had to pull up the centerboard, and meander back. We finally got the sail boat moored, the sails furled, and on our way home, a little wiser about planning. I found out that my friend didn't know as much about sailing as I thought he did, and that he had borrowed the boat from a friend. The challenges of youth.

One other thing that we kids had to learn was the southern characteristic of respect. Being mainly from the west, we usually said in response to something from Dad or Jean, "Yes Dad" or "OK". Southern folks didn't do that. They always answered "Yes Sir, No Sir, Yes Ma'am" and so forth. Dad and Jean mandated that we do that. It didn't take us long to catch on fast so as not to incur any discipline. We also had to call Jean's folks Nana and Papa, instead of Grandma or Grandpa. Jean's folks were old time,

dyed in the wool Southern Folks! We did as we were told and never sassied back.

Nana and Papa were heading for Myrtle Beach, South Carolina for a vacation and had rented a place for a couple of weeks. They asked Jean if I would go with them to help them drive. That was OK with me. Papa had a very big, black Lincoln Town Car with a lot of gadgets in it. Papa drove us out of the metro area, and after about an hour and a half, he put me in the driver's seat. I was doing just fine until it started getting dark. The car had an automatic light dimmer which would dim the headlights when another car came our way from the opposite direction. I didn't like how close it would let cars get before dimming the lights, so I started dimming the lights manually when I wanted them to dim. Papa didn't take long to correct me telling me to let the automatic system do that. "Yes, Papa." I dutifully said and obeyed. I was just with them to help drive down, so after two days, they decided to send me home and asked me if I wanted to fly or take the bus. Being pretty intimidated, I dutifully said, "The bus." I really didn't mind as I had a book to read, and read it all the way back to D.C., where the bus let off its passengers somewhere around 12th Street and Pennsylvania Avenue. I got off the bus, got my suitcase, and being pretty independent along with not wanting to call Dad and have him drive all the way into D.C. to pick me up, I walked to the city bus station and got a bus

to Alexandria, King Street station. I then called Dad to have him come pick me up. He was pretty upset about me walking around in that part of D.C. and chewed me out a bit, but I made it safely with no problems.

While living on Taft Avenue, the Ways dropped by to visit us, probably on their way home from a trip to Florida, or some other place to the south of us. I had a job mowing our neighbor's lawn and happened to be in the middle of that, when they showed up. Dad and Jean were pretty strict with us, especially as Jean suddenly went from one son, to four kids, with me being a somewhat typical teenager at which she had little experience. So I felt that I needed to keep mowing the neighbor's lawn, instead of coming to visit with Bill, Mary, Joy and Steve. I got to say "Hi" and that was about it. They probably got the impression that I was ignoring them, but I had a job and wasn't supposed to waiver. Now many years later, I finally realize that they came to see all of us, and that I should have stopped what I was doing and joined them for a visit.

After several years of living on Taft Ave, We moved to another house on King Street close to the National Masonic Memorial. It was a very nice house with basement and three floors (of course the third floor was an attic, with one bedroom finished, the other one floored, but pretty bare attic with studs for walls and ceiling. I was OK with that, as it was pretty much what we had moved

from in new Hartford. The only bad part was having to walk through the other bedroom any time I wanted to go in or out of my room. Dad wanted me to put up a drywall ceiling and walls, and I was dragging my feet a because I had never done that before. He bought some drywall and we carried it a sheet at a time up two flights of stairs. As I further delayed, there was a youth group from church scheduled for a moonlight dance cruise on the Potomac, and I wanted to go with my then girlfriend Michelle Whelan, whose dad worked in the Pentagon. Dad finally told me that I couldn't go until I finished my room. I had no choice then, with teenage hormones egging me along. I figured that I could hold up one end of the wall board with some long 2 x 4's on one end, while I climbed a step ladder pushing the other end of the wallboard with my shoulder for the ceiling. I finally got it done, although it didn't look pretty. Later after finishing the ceiling, I also put up the walls and built a pine wood frame around my bed and stained it which set off my bed from the rest of the room. I did enjoy the moonlight cruise and the dancing, especially asking the live band to play Moon River. They made some kind of comment about having played that song too many times already, but I didn't care. I was enjoying the slow dancing with my girlfriend.

My attic bedroom was pretty hot and the house had no air conditioning. Dad gave me a large window fan to install in the

window sill, which was going to help a lot. So one Saturday I started on that chore. Being a stupid teenager in a hot room and an active mind, I had the fan turned on while I was installing it. I was almost done when my left pointer finger got caught by a fan blade and given a real good whack. It knocked my finger a little crooked, which it still is to this day, but it never stopped me from doing anything, while at the same time taught me to be more careful (well, just a little). I still did stupid things. Shortly after that, Alan and I went up to Dubois for a visit. Aunt Mary saw my crooked finger and asked about it. I told her, and that Dad just wanted me to be a tough kid! Mary took me to the doctor, who put a splint on it. Alan came with us, and cracked us all up when he said, "What did you say when the fan hit your finger?" Smart aleck siblings!

Our yard had a very small pool or pond on one side, it was more of a wading pool, perhaps eight feet in diameter, and three feet deep with brick around the inside, and we would fill it once in a while, and then drain it when we were finished. One day we had filled it up without looking in it. There was a broken piece of glass in there, and my little brother Russell (probably about 3) stepped on it, getting a deep bleeding cut on one toe. Dad and Jean were not there, and with no cell phones at the time, we had to do something. I took him and Susie with me to the hospital emergency room to get him some stitches. The nurse there said

that they couldn't do anything without an adult giving permission. I was probably a year shy of that requirement, and they kept trying to get me to say that I was 18, which I didn't want to do. Anyway, we got Russel's toe taken care of somehow.

One thing that I really disliked was that we had two cars, and only Dad and I had driver's licenses. I suspect that Jean didn't want the responsibility of a license, more so that she could get Dad to drive and go with her and stay with her whenever they needed to go someplace. I was given permission to get the car once a month for a date. I thought that was just mean. Dad and Jean hired a maid from SW Washington DC, who would come once a week. My first "trip" in the car as soon as I had my license, was to take her home into Washington D.C. at the afternoon rush hour! The traffic in DC is nearly always a mess! The maid instructed me getting to her house (and yes she was African-American); I got her home safely and headed home. The Ford Taunus had no air conditioning and had a bad carburetor with low idle and stalling. Since traffic was soooo stop and go slow, I was keeping the idle up with my right foot, while holding the brake with my left foot, and it was a stick shift. I was partially successful, and only had it stall about four times. Fortunately it readily started back up. I was really glad to get home safely, even though it took over an hour..

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After moving to King Street, I found myself in the George Washington High School, school district. I certainly didn't want to change high schools, especially to one that was Hammond's rival, so I asked in the school office, if there was a way that I could continue to attend Hammond when I was now in GW's district. They didn't hesitate to say that all I had to do was keep coming to school. I was very happy to hear that. And since the commercial bus came right up King Street while its route carried me past Hammond on Seminary Lane, I was in good shape. At that time all I had to pay for a ride to and from school was ten cents each way. I was nearly in Seventh Heaven. In addition, the church was now just a 5 minute walk up King Street, so that move was very nice for me. Probably the only difficult thing was that the last ten feet of the front lawn sloped pretty steeply down towards King Street. My sister Susie went to GW, which was much closer, and now we attended rival high schools, but we

didn't tease each other very much about that.

Continuing with summer jobs was the only option for me each summer. The following summer, I got a job with a Planters Peanuts and souvenir store almost across the street from the White House. It was a small store shoehorned between two larger buildings, and had a basement where we stored the peanuts as well as other nuts. I learned how to roast peanuts in the shell, cook in oil, both peanuts and other nuts, along with being a cashier, measuring out specific weights of nuts for customers, and doing a little stocking of the souvenir shelves. After about a month, I was given extra responsibility for opening the store by myself, as well as closing by myself, and making daily bank deposits. For security, the boss showed me how to put the deposit bag inside a large paper peanuts bag, and fill the rest with peanuts in the shell. I also had a bank key to open the larger deposit box on the exterior of the bank. When I got to the bank, I would open the deposit bay, and put the whole bag of both peanuts and money inside. I was thinking that the clerks who accepted those deposits got a kick out of eating all the extra peanuts.



The Planters Peanuts Store on 15th Street

I usually rode an early bus into DC since the store opened at 9:00 AM, and when I did the opening, the boss usually liked it open and ready for business a few minutes early. One day, Dad offered to take me in with him, but he left a little late. I didn't get to the store until about ten minutes after 9:00, and the business had a machine that would record when the door was unlocked. I hurried and pulled out the life size Mr. Peanut to just outside the door, and ran back in, turned the lights on, and got everything ready for the day. My boss of course knew exactly when I opened the door and chewed me out a little bit. He had a boss who also knew what time the store actually opened. After that, I always took the bus. Another day, I accidentally ran the peanut roaster too

long before I checked the roasting peanuts, and they were getting too brown. I hurriedly turned off the gas, and dumped the peanuts into the bin below the roaster. I told my boss about it and he ran right to the basement, shoveled all the peanuts back into the roaster, and let it run without heat, to cool the peanuts faster. If left in the bin with all their attendant heat, they would continue to roast and burn. He also told me to mix those peanuts with normally roasted peanuts, so there would be a mix of the regular with the overly brown nuts. I did learn a lot of things that store managers did to cover themselves. When school started, I had to quit, but that wasn't unpleasant for me. I liked school.

The next summer before senior year, I got a job in another High's Dairy Products store about 4-5 miles up King Street. This one was much nicer than the first one I worked in. I made ice cream cones for customers, did some hand packed ice cream containers, was cashier, refilled the rows of milk products from inside the refrigeration unit, swept floors, and did other sundry jobs. One day on the way to work, I left early (I was now permitted to drive the Taunus to work and back every day) so I could check out a tennis court where Dan Katz and I wanted to play, then continue to work. With traffic I was running a little bit late, but went to check it out anyway. As I was going down the street to the court, cars in front of me were putting on their brakes, yet continuing down the street. I pretty much ignored

what was going on, turned into the tennis court parking lot, checked it out, then came back on the same street. I was in a hurry and was going a little faster than the speed limit. All of a sudden a policeman stepped out from behind a car and flagged me down. He told me that I was doing 31 in a 25 mph zone, and to pull forward and park in front of the last car in the line. I had been caught in a radar speed trap which I had passed on the way to the tennis court, then turned around and came right back through it without recognizing it. I had never seen one before, so I didn't know what it was. The policeman finally got back to me and wrote me a ticket for doing 36 mph. Now I know the first time, he said 31 mph, but I wasn't going to try and correct him. I knew that wouldn't go over well. So I got my ticket and ended up late to work, where I had to report to the boss why I was late. Dad had to go with me to see the judge since I was pretty young, which was embarrassing as well, but that was my first ticket. That hasn't stopped me from speeding once in a while, but in the rest of my life, I have gotten one other ticket and one warning ticket, although I have come close a few times. There, now I have just jinxed myself. I worked at this job even after school started back up until about the middle of October, when I finally quit to concentrate better on school work.

My best friend was Dan Katz, who played in the band and was in the chess club with me. I got him to build a small control line

plane and we used to fly together. We had a small group once, and we all wanted to fly in a combat contest. This was where we tied a length of string to the tail and had a 15 foot crepe paper streamer tied to the end of the string. Then two flyers would go up at a time and try to cut the other's streamer off with the prop of his plane. It was pretty tricky. Dan was the only one who got his streamer cut off, but the plane doing the cut, actually dug a small groove into the back of Dan's plane, right where the string tied onto the plane. He wasn't too happy, but we all did have fun.

One winter night at the King Street house, the temperature inside started to get cold. Dad walked down into the basement about 2 AM, and stepped into 2-3 inches of hot water. The boiler had sprung a big leak. As we were going off to school that morning, Dad asked us to find a friend at school, and see if we could stay the night with them. Dan offered his home and coordinated with his parents, so I spent the night at Dan's house. Some 30 years later, I visited Dan in D.C. while I was on a business trip, and he invited me to stay over at his house once again. He was a successful lawyer, and we swam in his pool, and played some tennis with two others. We stayed close for a long time, but family and other interests caused our relationship to fade. I did see him again at a class reunion in 1997.

As my senior year began, I sent off college applications to BYU, University of Virginia, MIT, and the Air Force Academy. The

Academy had some physical qualifications I had to meet, so they requested dental x-rays, a questionnaire to fill out, and scheduled me for a PT test at Bolling AFB, just across the Potomac River from Alexandria. In addition they wanted my SAT scores, high school grade reports, a list of all my extracurricular activities, and they also scheduled another academic test. Dad asked Frank Bowers, my uncle and Dad's brother-in-law, for help in getting political assistance, since Uncle Frank had lived in Utah all his life, and had some good political connections. Uncle Frank came through with Senator Wallace F. Bennett, putting me on his list of top ten candidates for the Air Force Academy. Senator Bennett said that he was not going to choose any one of the ten, but would let the Air Force select the one they wanted after reviewing all the entrance requirements and the tests which they required. I got a request from the Academy that said my four wisdom teeth were all impacted and had to be removed to make me eligible. On one of my questionnaires, there was a question about having any broken bones. Dad told me to answer that one as a no, but I had broken my left arm at 12 years of age in Boulder City, Nevada when I fell out of a tree trying to get Susie's kite down. I just didn't feel right lying about that question, so I put down yes without telling Dad. I got another request for an x-ray of my left wrist. Dad was wondering why that came in, and that was when I told him that I had reported a broken arm. He was pretty upset about that, however my wrist

was just fine, and I was guessing that either someone made a mistake, or did that on purpose to get me past that question.

Getting wisdom teeth out was quite a process. I was awake the whole time; the dentist had to cut into the gums and use a small hammer and chisel (all proper dental equipment) to break up those teeth and get the pieces out. He had numbed me very well, so it didn't hurt until the Novocain wore off. Both cheeks were very swollen, I could hardly move my jaw muscles due to stiffness and pain, and I had to stay home from school. But that too did pass, although my spherical trigonometry class had a quiz every day, and our grades were based on all our quizzes. We couldn't make up any quizzes missed, so that grade slipped to a "B". On 21 April 1962, I received my appointment to the U.S. Air Force Academy, Class of 1966, with a training report date of 25 June. That was a start to another great adventure.

I mentioned earlier that I had dropped band my senior year so I could take gym classes to enhance my physicality (physical ability – strength and endurance were highly recommended for Basic Cadet training). I also went out for spring track, as well as running nearly every day around our neighborhood after graduation, and doing pushups, sit ups, and pull ups. I was in pretty good shape when I left on the plane for Colorado, but I found out I could have used a whole lot more fitness after I got there. They ran us hard, sometimes carrying eight-pound M-1

rifles.

We had an assembly at school not too long before graduation where outstanding students were recognized. I ended up in the top 25 student academically (not withstanding my “D” in Latin in 9th grade), included in the group of the National Honor Society, and four of us were called up to the stage to be recognized for academy appointments: Richard Sonsteli for West Point, Marshall Clegg and George Philip for the Naval Academy, and me for the Air Force Academy. That was pretty cool at the time, especially that our class got appointments to all three academies. Hammond academics, athletics, and social/cultural activities were all excellent preparation for life. Many thanks go to our excellent teachers. (I researched in February of 2022, and found that all of us graduated.)

I have mentioned earlier our senior class trip to New York City, getting prepared and set up for the Senior Prom, and a few other things. Graduation was scheduled for our school auditorium, and each of us got a specific amount of tickets for family. The auditorium was packed, and I do need to say that both Dad and Jean attended my graduation. It felt nearly unreal to cross the stage and receive my high school diploma after working so hard and so long to achieve that document. I had always considered myself going to college and chose my class schedule to pack in the most college bound courses that I could. Even going back

today, I think the only change I would make is taking French or Spanish instead of four years of Latin. But all my plans worked out anyway. Oh, I was accepted at University of Virginia, selected as alternate at MIT, and accepted at BYU, but I had to turn all those down after receiving my Academy appointment. That worked out even better since my folks with seven children, didn't have the finances to get me through college, and the service academies were all full scholarships as well as receiving half the pay of a second lieutenant. I couldn't fault that.

The Senior Prom was one, if not the best highlight of my high school years. Our class rented a whole country club for the evening. Everyone was in formal dress and looked dashing; the food was great; the music and dancing was great; the pool and the swimming was great, and the night was just magical. After swimming, most of us changed into more casual clothes and drove over to Hammond, meeting in the parking lot in the back of the school. We all participated in painting a big " '62" on the asphalt, hoping it would be there for a long time. Alas, when I went to the 35th reunion in 1997, everything had been resurfaced without preserving our '62. I guess we all have to put up with progress. I was thinking of suggesting that we go over and repaint the " '62", but since it hadn't been a high school since 1971, the administration would only be irritated, and none of the students would even know what it represented. Such is life.

Graduation came and went, kids started heading out for their last vacations before starting college, and I had to start preparing to leave for the academy, which I knew would not be any type of vacation at all - yet it was still another big adventure. June 25th would come very fast, so I made my final preparations while continuing my exercise program, especially running. Basic Cadet Summer would be eight weeks of very intensive training including physical training. I didn't need to take very much with me, just one suitcase would do it. I described my very short vacation to DuBois in Chapter 7, with my good bye to Nancy, who was still very much on my mind. Dad bought me a plane ticket, Dad and Jean saw me off at the airport, the first kid to leave the nest, and off I flew to Colorado Springs to start my "military education" for the next four years.

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10 First Year At the United States Air Force Academy 1962-63



As I left Washington National Airport to head for Denver then Colorado Springs, I didn't have much of an idea of what I was getting into, especially the discipline. I had already been in the Junior Civil Air Patrol for a while in Boulder City, Nevada, so I had an introduction to formations and marching. That was a help. But I also had little experience in the big bad real world. I was able to make my connection in Denver to a puddle jumper airline which flew DC-3's, (a version of the military C-47 that was still around from World War II). That was quite an experience right there because the airplane was a tail dragger (that means two main gear and a tail wheel) and the cabin felt well sloped down from front to rear. The afternoon was quite bumpy to Colorado Springs, but by closing my eyes and leaning back, I was able to get through that all right.

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Commercial DC-3 You can see how the floor is slanted up toward the cockpit

When we landed at Peterson Field, which is a joint military/civil airport, I knew that I was to report to the Academy around 9:00 AM the next day, but wasn't sure how to get out there and where to stay for the night and find transportation to the Academy. When I walked out of the terminal, I saw a Greyhound type bus that had an Air Force Academy graphic on the side. So I figured I would be brave and go check the bus. I talked to a sergeant who told me that they were picking up candidates for the prep school, which I knew nothing about. He must have taken pity on me as I looked like a lost little puppy, and he invited me to board and go to the prep school where they would put me up for the night, feed me, and get me to the Academy arrival area the next morning. I lucked out with that and was grateful that I was taken care of and didn't have such a struggle to find my way. The prep school is mostly a place where many enlisted men who have

submitted applications to the Academy and were not selected for the current year, receive admission for ten months of schooling to prepare them better for the admissions requirements, and a majority of them are selected for admission the following year. A few civilians are also selected for the prep school when they are not selected for the Academy proper the first time.

The next morning I debussed at the cadet arrival area and started learning one lesson for the next 24 years of my life: stand in line and wait! That is very typical of military life, and it also prepared me for civilian life as well, as I have often stood in line to wait for things - the most recent was my first dose of the Covid-19 vaccine. We went through a screening line where sergeants checked us in, gave us our individualized paperwork, and also filled out other paperwork for us. I was asked for my draft number. For some reason I had never thought about it, and Dad probably didn't mention it at all to me, when I turned 19 in my senior year in high school. I told the sergeant I didn't have one, he just glanced up at me then said, "Well we have you now anyway.", and pressed on with his job. There were 880 of us in the entering class of 1966, and this was the summer of 1962. After leaving the processing line, we went to our assigned group area, of which there were 24. I was assigned to "A" or Alpha Squadron, which ended up being fortuitous for me, as when academics started after this Basic Cadet Training, my portion of

Alpha Squadron was allocated to First Squadron which was a very good squadron. I stayed with that squadron for the next four years.

When we had all of our assigned new basic cadets in our group, our sergeants led us to the supply line where we received our military clothing – from socks, underwear, etc. to fatigues and khaki uniforms, including shoes, boots and all we needed to start. They took us to our assigned area and let us put our issue clothing in our assigned rooms, then took us to the barber shop where we all received very short crew cuts. Throughout the coming year, we would all get a crew cut once a week. Yes, they pretty much took away our individual identities, removed all our God-given rights and privileges, and left us at rock bottom to mold us into disciplined cadets and to prepare us for full military service for our careers.

Our real trainers would be senior cadets for the remainder of the summer, but the sergeants would do their best to get us settled, a little accustomed to marching and forming in ranks for about three days until we were subjected to the most intense drill type instructors (seniors). The sergeants taught us to shout on the day we were turned over to the seniors: “Big Blue, Big Blue, we are ready for you.” When the seniors descended upon us, we all realized that we had no idea what being ready was! It felt like the most intense hazing of my life. There were only a few of my

classmates who quit (SIE – self initiated elimination) during the summer. It was tough and very rigorous.

We were given a small red hardbound booklet, which was for our fourth class knowledge in which we were given assignments to memorize. The red color was for our class color. Each class had a specific color: gold, blue, gray, and of course red. Our class was known as “Red Tags” and the last class that had that color had graduated the month before. We were in the 8th class scheduled to graduate. The Air Force Academy was still pretty new, and all of us were still forming traditions for the institution.

During Basic Cadet Summer we were introduced to many events new to us. One was the M-1 rifle which weighed eight pounds and which we carried while marching in parades. During that summer, we also had to run in formation holding that rifle in front of us. That definitely was not easy. Often, one of our classmates could not keep up, falling out of formation, and a senior cadet would attach himself, and harass the basic cadet, trying to get him to keep up. We learned to stand at attention with chins pulled back as far as we could get them, shoulders back, arms straight down, and stomach pulled in with chest puffed out. That definitely wasn't comfortable. We often heard the phrase, “Puff out that puny chest, Smack! (Smack was a derogatory name for basic cadets in summer training). We also had to keep our eyes straight ahead. When we were caught

looking at something different, we were said to be “gazing” and the punishment was usually 20 pushups right there on the spot. Continuing on with the rifles, they had no firing pins in them, but were used for dress formations, Saturday parades, and to teach us the manual of arms which was how to carry them, change shoulders, present arms, present for inspection, put them down vertically beside a leg, go to parade rest, and do many of those functions while marching as well as stopped. After a while much of that became automatic with our muscle memory. We also learned how to disassemble, clean and reassemble our rifles. Each of us had a rifle rack just inside the door to our dorm rooms. During that summer we also went to the rifle range (after we had several hours of training for safety, marksmanship, and specific range safety procedures for the rifle range). The day we were taken the first time to the range, we fired at our own target 50 yards away for a qualification score. A perfect score was 100. Having never fired a large rifle before, I was flinching a lot, and only scored 54, which was not a passing grade. That was the last time I didn’t pass a gunnery test. During my service I fired expert with the Smith and Wesson .38 Combat Special, a .45 caliber pistol, and an M-16 rifle.

In addition to the firing range, we had the dreaded obstacle course. Most of you have seen obstacle courses in the movies. Yep, those movies were pretty accurate, and the courses were

pretty tough. We had one short, skinny kid, Chris Kopf, who had great balance and strong muscles. Most of us were running course times between 6 ½ and 7 ½ minutes. When we had competitions with other squadrons (and the entire summer was competition), this kid ran the course in about 4 minutes and 20 seconds, which was a course record. This really helped our squadron competition scores. He was awesome. If our seniors made us run it more than two times with minimal rest, we really got exhausted – even one time was pretty tiring.

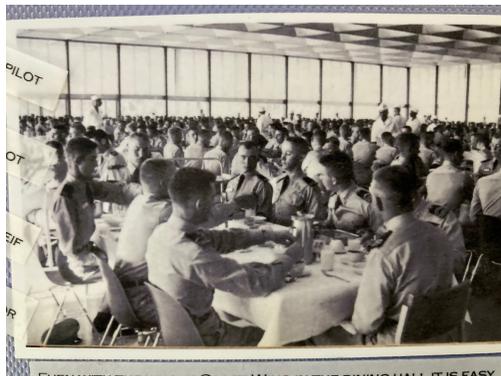
Then there were mealtimes! We had to both sit and eat at attention, couldn't look around the table, could only answer when spoken to, plus we had to eat quickly or we would be leaving some food behind. They were feeding us 4000 calories a day (that's everyone, all year round). They had to because we were spending that much energy every day. There were ten at a table, usually with one or two upperclassmen, one of whom was the table commandant. We had to announce each plate as we passed it up the table: "Corn for Cadet Captain Herman, sir! The food was delivered from a cart at the foot of the table, and the drinks were situated there also. The three basic cadets at their end of the table (we were also called 'Doolies'), had to pour the beverages for everyone and pass them up the table. The seniors got the food first, before any of us. There was also a form we had to fill out for each meal: the Form 0-96. The Doolie filling it out

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had to ask the senior cadet what he wanted us to put on the form. Most of the time it was: “good, good, fast, friendly, courteous”. This described the food quality, presentation, speed of the server, and attitude of the server who delivered the food, and we checked the appropriate boxes on the form. Feeding 2500 cadets during the academic year, was a big chore for the kitchen, the chefs, and all the servers. With ten cadets to a table, that was about 250 tables in a total of 40 minutes.



Mitchell Hall - The Cadet dining Hall



Cadets in the dining Hall – 4th Classmen are sitting at attention

Also during that summer, a bus load of cadets at a time were driven to Lowry AFB and given a ride in the back seat of a T-33 jet trainer. Those trainers were pretty old by the time we were given the orientation rides. It was still pretty exciting though, and we had to go through orientation training which included the procedures, things we could and could not touch, and the basic outline of the mission. I got my ride one afternoon which was pretty warm. We took off and it was a pretty nice ride. We flew up by the Academy and a few other places. The pilot gave me the controls and told me to turn pretty tight to a specific heading. I didn't use sufficient back pressure, and we were descending about 4000 feet per minute. He took over and started pulling about two g's which pressed me well into the seat. He did some steep bank turns (a 60 degree bank turn required two g's for level flight). After a couple of those, I started to feel really woozey. Fortunately they had made sure that each of us had a "barf bag" and knew how to use it. They told us that if we threw up all over the cockpit, we would have to clean it up ourselves. That was pretty good motivation. I turned green, and then used mine. After we landed, I felt pretty poor the rest of the afternoon. But that was a great day for all of us.



T-33 Jet Trainer

Our squadron leaders were pretty good motivators. Since we were “A” Squadron, they bought a small alligator (less than 12 inches long, and kept him in a metal tub with an island in the middle of it, and water around the edges. His name was Albert. When we did poorly in any sports competition, each one of us had to go to his “home”, stand at attention in front of him, salute him, and say’ “Sorry Albert, we will do much better next time.” The firsties (which is what a senior was often called) had also taught us a slogan: “When I say Albert, he go chomp. When I say “bug”, he go chomp, chomp!” That was also humorous to us and helped to get us through some of the very tough parts of summer training. During the last part of summer training, Albert died. I had a pet alligator about four years after that, and he wouldn’t eat, and one day I found him dead as well. I think it was probably the same way Albert died. We held a funeral for him

presided over by the firsties – it was a sad occasion.

During Basic Cadet Summer, each squadron competed against all the others for the prize of being designated ‘Honor Squadron’ at the end of the summer. The competitions included sports, marching, rifle handling in formation, and other things as well that I can’t quite remember. We were all well-motivated to do the best we could. Everything worked out well for us, as A Squadron received the designation as Honor Squadron at the end of the summer.



Our Honor Squadron Patch

Every day we would have mail call – the cadet post office was on the ground floor of the second quadrangle. The firsties would have us go down the stairwell in single file (we always had to walk at attention keeping our eyes straight ahead and turn

square corners). When we got to the post office, we could “fall out” somewhat, and go check our assigned mail boxes. Sometimes we would get a package, and have to go to the window to pick it. If any of the packages contained goodies, they were confiscated and put into a pile, where at the end of the summer we had a “boodle” party where everything would be shared with everyone else in our squadron. There was quite a large pile by then. Once in a great while the firsties would not catch one of us with a package. I got by a couple times with a package of a single row of Fig Newtons. I had asked my sister Susie to send me the single rows because they were easier to conceal. There was really no place in our rooms that we could conceal the contraband, because of regular inspections. I finally came up with a safety pin attaching to the row of cookies, and pinned to the back of the sliding curtains that covered the one large window in each room. The curtains were heavy, dark gray and pleated. They also slid to each side from the middle. They were open most of the day, and the cookies could not be detected unless a firstie actually looked behind each set of curtains. The ones I could hide there were never discovered, so once in a great while the two of us in the room could have a treat after lights out at night.



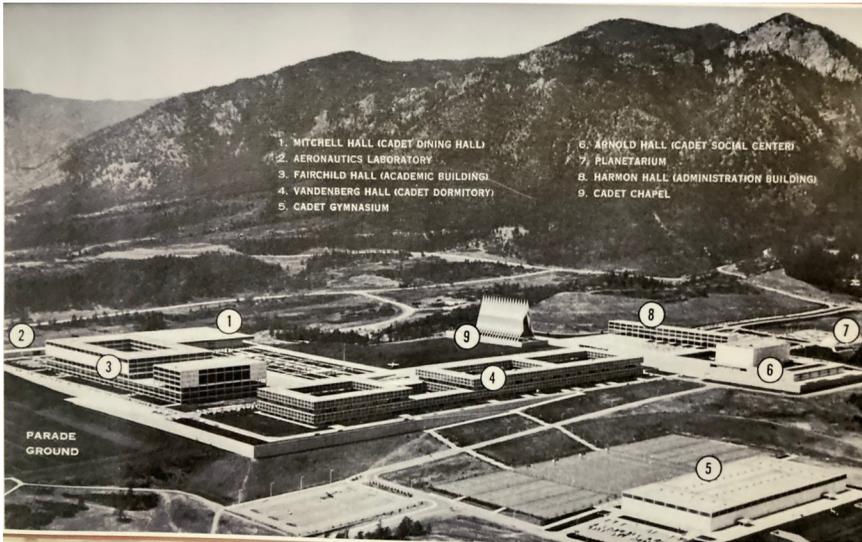
Our First Squadron Patch and Motto. We also had a nickname – Friendly first

When summer training was over, the rest of the upper classes came back to school. We got different room assignments and roommates in our new First Squadron area, and those were changed each semester. Before classes started, we declared our major, got academic assignments, and our books issued. We were paid half the pay of a second lieutenant, which at that time amounted to \$122.15 a month, but we only received a \$10 monthly allowance. The rest paid for our meals, books, haircuts, uniforms and various sundries such as shoe polish, laundry, etc. Any remainder was placed in an account in our names and would be spent as required items came up. Fortunately, during my four years at the academy, 2nd Lieutenants received a couple of pay raises, which went into our accounts, and each year as we went to the next grade level, we would get an increase in our monthly

allowance.

There were many social activities as well as lectures and military training, some counted for academic grades, but we also had lectures on Saturdays in Arnold Hall, the social building, which had a very large theater, several nice ballrooms, and areas where the cadets could meet their visitors (if they ever had any). We enjoyed stage shows, for example one I saw was "Stop the World, I Want to Get Off", and another one was a "Pink Panther" stage play. There also commercial movies that showed on Saturday nights. Just a short walk from Arnold Hall was the planetarium where we could go watch astronomy presentations. On a patio outside of one of the ballrooms, was a Pegasus statue with wings. That was very pretty and I got one my classmates to take my picture next to it. Arnold Hall was a full story above our assembly area which was called the Terrazzo, that had room for all 24 squadrons (about 110 cadets each) to assemble for each meal and other functions. Arnold Hall had a viewing area where anyone who desired to visit the academy, whether tourists or family members, could watch the Cadet Wing assemble and march off to meals. There were also some full size aircraft that were no longer flyable that were displayed along the edge of the Terrazzo.

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Layout of the US Air Force Academy in 1966

One evening after taps, a small group of our classmates managed to sneak out to the F-106 Delta Dart and paint it red, to show our class enthusiasm and class spirit. The powers that be really didn't like that, and in a week or so, a bunch of my classmates were out there on a Saturday with rags and paint thinner, removing the red paint. An aircraft, on display or not, requires expensive paint to keep it in good condition, so that was quite a bummer for us.



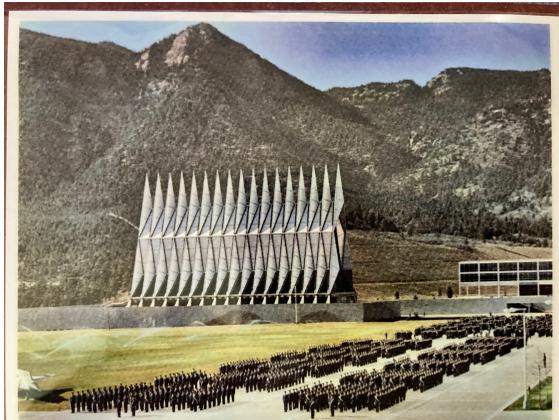
F-106 Delta Dart Air to Air Interceptor

We were always expected to be on time for our classes and daily formations. Each academic class had a cadet charged to make sure that everyone got there in time. One day, I was just a little bit late getting to a class. As I walked in, everyone was still in the process of getting to their seats, but I looked up at the clock (they were all set up to read the exact time, including the second hands) and saw that it was 15 seconds past start time. The class monitor had to report me as late, and I received 5 demerits for that. I had to spend a couple of Saturdays confined to my room. If a cadet piled up a certain amount of demerits, or committed a big rules violation, he was assigned to march "tours". These were walking back and forth as an individual, carrying his rifle, four hours at a time, outside. Fortunately, I never had to do that.

When going to classes, we had to double time (fast jog) with our books under one arm all the way to the academic building, Fairchild Hall, where we could then pick up our walking at attention and turning square corners for our freshman year. One

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day I was jogging to class along one side of a building, and another cadet was doing the same the same thing from a different direction, both of us heading to the same corner. We couldn't see each other; a couple of upperclassmen saw our impending collision but just couldn't warn us in time. We ran smack into each other, scattering our books all over. We had to hustle to pick everything up and head out again. One of the upperclassmen had the gall to tell us to stop "falling out", which was breaking our posture from attention to scrambling to get our books. The upperclassmen felt that they were totally obligated to keep us in strict military discipline. Once in a while one of them would show a little softer heart.



Cadet Wing in Formation on the Terrazzo Ready to March to a Meal in Mitchell Hall. I am in the Group on the bottom Right.

Twenty Four Squadrons in place



My Freshman Yearbook Picture

11 Remainder of Freshman Year and First Half of Summer 1963



During my freshman or Doolie year, Nancy and I continued to correspond, letting each other know what was happening during our college year. Getting her letters were always helpful to my morale during this very stressful year as the upperclassmen continued to increase our sense of discipline. We planned to get together again in the coming summer and continue to date. I did get one letter from her telling me that she had a friend who was wining and dining her, by the name of Berry. She told me that they went places together and enjoyed each others' company, and that he made her laugh a lot. I didn't have time to worry about that because I was so busy, but that lingered in my subconscious. I was also meeting some girls, even in our male only school, but that was bound to happen as our squadron was authorized to have functions, and there were also dances in

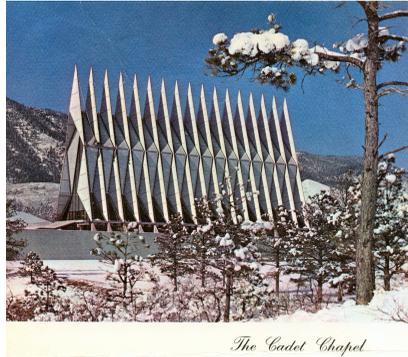
Arnold Hall, the cadet social center, and often blind dates were arranged.

During the past summer, the Academy had a program where officers who lived on base with their families would sponsor a cadet, inviting him to their home for dinner to give us a social experience and a small vision of how officer life was like in the military. My roommate Cadet Dolby, was having his parents come on the week these sponsorships were initially occurring, and he invited me to go out with him and his parents. That took me out of the ongoing assignment for sponsorship from a base officer's family. I only went with him to keep him from thinking I was standoffish, to support him since he was having a difficult time with our basic training, and his motivation was waning. Cadet Dolby did not last out the summer and quit the program. Fortunately, one of the officers on base, Captain Smith, happened to be the bishop of our church in Colorado Springs, and his ward had responsibility for the LDS cadets at the academy. He had a list of all of us, and when he found that I didn't have a sponsor, he picked me up as my sponsor. I enjoyed quite a few associations with them throughout my four years at the Academy. They had a cute three year old daughter who attached herself to me, and always would jump up and sit on my lap during some of my visits with them. I did feel loved by them which really helped my morale. This was a great example of

ministering way back in 1962.

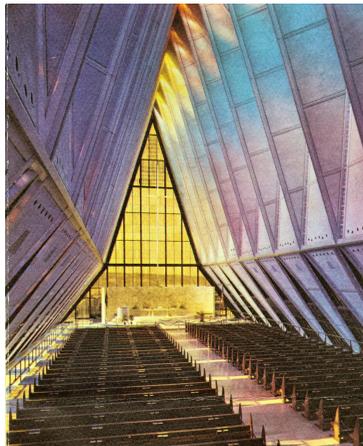
While we are speaking of church, all the cadets were under the policy of mandatory attendance at the services on Sunday mornings at the cadet chapel. The chapel had Protestant services in the upper chapel, which I was assigned to; they had Catholic services in the same chapel area at a different time; and they had a separate Jewish chapel area lower in the building. We formed up on the Terrazzo just like at mealtimes, and marched off as separate squadrons to church. This wasn't something that everyone liked, but forced chapel attendance was looked upon as necessary by those in authority to the concept of building a "whole" man in the military officer corps. One thing I would like to mention, is that the inside of the chapel was so beautiful, that I found it hard to listen to the sermons or find the spirit. I was constantly looking around at all the stained windows in all seventeen of the spires, especially on the days when sunlight was shining through. The cadet choir really sounded good as well, as the acoustics were very well designed. Not long after academics started, we were invited to a separate LDS meeting in another meeting room, where we could hold our own services, then continue to the dining hall for breakfast. There were about 35 of us, and it was good to meet together. We met after Protestant services while the Catholics were meeting, then went to breakfast together. The upper class LDS cadets still had to

maintain discipline with us, but they were not quite as strict with us, which we enjoyed very much.



The Cadet Chapel

The Cadet Chapel



Inside the Chapel - the Catholic and Protestant Area

At the end of the first semester, there were two lists that we could achieve: one was the Dean's list for academic achievement which let us sew a silver wreath on our blues at the bottom of our right sleeve. I got on that list for my first semester, but that was

the last time as academics got tougher the longer we were there. My semester grade point average started at 3.81 (out of 4.0) and through my four years dropped to a low 2.21, but ended up overall at a 2.48 which was in the middle of my graduating class. The Commandant's list was for military bearing and achievement, and I got on that the first semester of my senior year. That consisted of sewing on a silver star at the same place as the Dean's list. I was on that list for only one semester. There was a lot of competition plus academics along with all the other military training and events which filled up our lives.



The Combined Insignia of Both the
Dean's and Commandant's List

My first semester, I joined the ski club, which had many outings each winter. We could check out skis, poles, boots, and parkas, and get on one of the scheduled Academy buses which would go

to the ski areas west of Denver: Arapaho, Loveland, Winter Park and Breckenridge. We got discounted lift passes and had about 6 hours to ski before we had to be back on the buses to come back to school. They also gave us box lunches which were pretty good. I didn't know how to ski, but I read some books and magazines, and my first couple of trips were snowplow only, an hour to get down the slope back to the lifts, pick only the green marked slopes, eat a lot of snow, sometimes fall into powder which was very difficult to get back up and going – mostly take off skis and crawl out, and being very tired by the time we bused back to the academy. But I finally learned to parallel ski and it became much more fun. I skied for all four years, bought my own pair of skis and boots, and in my senior year bought a ski rack to go on the trunk of my TR4 sports car.



My Ski Club Patch, Still on My Academy Bathrobe

During the winter, I was recruited to go out for the freshman swimming team to be a diver. Here's where my freshman high school diving came back to help. Three of us started, and we had a great diving coach. He could do just about everything, including 3 meter board, 5 meter platform, and ten meter platform. As freshmen, we only used the one meter board which was just fine with me. One of the three of us quit after a while, so I got to remain. I developed a 2 1/2 somersault front dive, a 1 1/2 somersault inward dive, and where I had always preferred a layout position for the front dive and the reverse dive, the coach made me learn the pike position for those. The reverse dive in pike position was really scary at first, and when I went off the board, and brought up my legs in front of me for the first time, I panicked and twisted and kicked myself around to get out of that position. The other guys were laughing at me because it looked so funny, but I wasn't laughing. I finally got it down and used that dive the rest of the season. We competed in meets with freshmen teams at other colleges in the area: Colorado, Colorado State, Denver U, but I don't remember the others. At one meet, the coach put me in a relay race after the diving competition, but I was never a fast swimmer and didn't do well. We were either so far ahead or so far behind that it didn't matter, but I guess he wanted to see if I had further potential. I didn't. The next year would mean going to the 3 meter high dive board, and I didn't have the confidence, drive, or desire to do that.

Those on the collegiate sports teams were assigned to the training tables in the dining hall. These were a little more relaxed than the squadron tables, and the teams sat together. We were often given different foods than the other cadets to meet the nutritional needs of the sports programs. I did enjoy these tables, but some discipline still had to be maintained, although we often did get to sit “at ease” which made eating much more enjoyable.

The cadets also had a model airplane club which I joined. I didn't have a lot of time to spend in the club room, mostly on Saturday afternoons after all the marching, parades, training, and inspections were done. The club room was about 30 by 50 feet, with a counter going nearly all around the room. There were cabinets below the counter where we could store our planes and equipment, just leaving it there all the time, not worried because of the honor code. Breaking the honor code was means for expulsion from the academy. We had to supply our own tools, adhesives, balsa wood, paint, models, etc. The outer wall was windows, and we could look out toward the athletic building; the inner wall opposite to the windows also had floor to ceiling windows that looked out on the hallway. The ends of the room were solid walls. There were construction tables in the center of the room as well to use for larger projects. My first year, I didn't have any airplane stuff, but I did buy some balsa and plywood

and constructed an RC car with a small .049 Cox engine that had a throttle and steering. One day I was running the car down on the multiple tennis courts (the nets were not up yet), and I got close to the walkway that cadets used to get to the gym. One of the cadets thought that he was being funny when he stopped the car with his hands, and turned it on its side, where all it could do was sit there. The sides were flat and the top was slightly curved down until it got to the front where it curved sharply around to the bottom. I wish I had a picture of it. It was yellow and had a pylon on the rear that supported the engine which was pointed towards the back. It was just high enough to clear the prop from the ground. I had a clear canopy towards the front with a plastic pilot/driver inside. It worked very well. During the years I was at the school, I brought some stuff from home and had several airplanes, mostly control line, but I did build a smaller radio control model. When I graduated and headed home, I didn't have room to haul very much at all, and ended up leaving almost all my stuff sitting there for others to take over. But that was OK. I would build more later.

We had lots of room inspections, uniform inspections, and marching competitions along with rifle drill competitions as well. Each morning except Sundays (after the academic year started) we had to have our rooms made up for inspection each morning. These were called AMI – A.M. Inspections. Our beds

were made a specific way, nice and tight, with our second blanket tucked over the pillow and under the mattress. The sink had to be clean and nothing out of place with no dust around. These were the easy inspections. The tough ones were the SAMI – Saturday Morning Inspections. Our dresser drawers had to be pulled out, each drawer a different length out, our clothes folded – the underwear had to be folded to a specific size (we quickly learned to cut a piece of cardboard to the specific size, and insert that in the top piece of underwear, both tops and bottoms. We left that piece of underwear untouched for four years. Our closets had to be opened, we had to have wooden hangers, and the hangers all had to be spaced equally apart, and our boots and shoes spit shined and lined up on the closet floor. The second blanket on our bed had to be folded at the foot of the bed, and the sheet turned down exactly eight inches, and the pillow fluffed smooth and placed just right. On either side of the sink, we each had a laundry bin that we could keep closed, but those were sometimes looked at as well. More than one cadet was given demerits when his laundry bin was opened and his laundry bag was checked to find clean clothes not folded and put away properly. Each of us also had a desk between the foot of the bed and the outer wall. Our desk drawers had to be opened just right, and all our books on the bookshelf had to be nicely arranged. As far as cleaning the sink and the mirrors, we each took turns alternating weeks as the responsible cadet for the condition of

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the sink and mirrors. The one whose turn it was, would put a name tag, behind the sink faucet. We also had to have dusted very well all of the level surfaces in the room. The inspecting cadets and the officer in charge, either a captain or major assigned to our squadron, wore white gloves and would wipe a finger over various spots to check for dirt. One thing that I had always heard in the movies and from Dad, was that their beds had to be tight enough to bounce a quarter off of it. That was not true. I checked it out, and I could never get a quarter to bounce, but the inspectors didn't ever try that either. They were aware that it wouldn't bounce.



Me in my room on a Saturday morning set up for inspection. You can see how the bed is made with turned down sheet and exact hospital corners. Also my dresser drawers are pulled out as required. The edge of the sink is on the right, and I am sitting by my desk. This looks like my senior year as I can barely make out the insignia on my shoulder boards indicating a cadet officer.

Near the end of our freshman year, there was one week scheduled and designated as “Hell Week” where we would be tried to our utmost! At the end of that week, we would be “recognized” as accepted cadets to the cadet wing and all the running, walking at attention, eating meals at attention, and constant spouting off required knowledge was dropped. We would then be acceptable to all the upperclassmen, and all the basic cadet “hazing” I suppose you could call it, was a thing of the past. We had made the grade, and it was none too soon for any of us.

Attrition of cadets happened all the time. My roommate for basic cadet summer quit. My first roommate during the first academic semester washed out (which was an easy way for a cadet to leave instead of just quitting, which was admitting one’s inability to succeed in the training – they simply failed academics and were washed out), and my senior year roommate was caught in an honor scandal and dismissed. He was Paul Wargo, a halfback on the varsity football team.

There was a group, mostly athletes, who formed a cheating ring for academic tests. Everyone had a tremendous amount of pressure on grades and short preparation times. Athletic practice would severely cut into those times. Once the authorities discovered it, the OSI (Office of Special Investigations) was called in and ferreted out all those in the ring. One day my roommate was there, the next day he was just gone. We didn't know what was happening until it was all over. We lost 215 cadets that year – 211 were cheating, and four others knew about it but didn't report it. The honor code reads: "We will not lie, cheat or steal, nor tolerate among us those who do." If you knew and tolerated it, you were dismissed as well. It was a very strict code; we all knew it; and we were dedicated to obey it.

There was a cadet honor committee who held trial over other cadets who were brought before it, and were judged according to evidence. There was a cadet from each squadron, and 12 were selected for each case. Dismissal from the academy, required a unanimous decision. Voting was secret, with each member of the board writing either guilty or not guilty on a slip of paper, folding it, and turning it in. The board chair would count the votes and announce the verdict. It was all conducted in the presence of the cadet charged. The military has a demanding job, and honesty is required. The honor committee was not used for the cheating scandal however since the ring was extensive and

needed well-trained investigators and interrogators as well as speed to quickly take care of the problem.

Finally the spring semester was over and June week occurred, as it does every year, which includes parades, balls, and finally graduation and swearing in for the seniors as 2nd Lieutenants into the regular Air Force. Right after June week, each class has training trips, and for us, it was our turn to travel on a Zone of the Interior, or ZI field trip around the US to different military installations. My first destination was Hamilton AFB, Vallejo, California. This base was an Air Defense Command (ADC) base which housed a wing of F-101 Voodoo interceptor aircraft. We received an orientation to ADC which included its mission, types of aircraft, and how they practiced air intercepts. The F-101 was a two seat fighter with a pilot in the front and an RIO (radar intercept officer) in the back seat. The RIO controlled the intercept radar, identified the bogey (unknown aircraft), then determined if it was a friendly or a bandit (enemy aircraft). He basically directed the pilot on an intercept, determining range, speed, and intercept vector to the bandit. The pilot would fly the aircraft using information from his RIO, select the weapons, and then actually fire the weapons when he got into range. We also got training on parachutes, helmets, oxygen mask and equipment, so we would be prepared for a flight in the F-101. Each of us got a flight while sitting in the back seat (the rear

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cockpit had no flight controls). The pilot took us up to about 40,000 feet, lowered the nose and went up to Mach 1.2, supersonic flight. He did that over the ocean to keep our shock wave from disturbing anyone on the ground. Also doing that from high altitude let the shock wave nearly dissipate before reaching the ground. It was quite a ride, especially being in an operational front line fighter. That was my first time going faster than the speed of sound, although going through the sound barrier was so smooth that I didn't feel anything different. I had to look at the Mach meter to determine when that happened.



F-101 Voodoo Jet Interceptor



F-101 in Flight

Our next port of call was San Francisco, where we got on a Navy carrier, the Enterprise, if I remember correctly, to spend a week at sea in the North Pacific. Many times I had heard the phrase

“getting your sea legs”, not really understanding what that meant. Our departure from San Francisco Harbor, going under the Golden Gate Bridge, was nice and smooth. As we got out to sea, we discovered that the North Pacific had pretty rough waters. As the ship swayed from side to side with large swells in the water, we notice that as we walked along the deck, our walking curved left and right, depending upon which way the carrier swayed. After about a day, we could finally walk a straight line – that was getting our “sea legs”. We were bunked 2 or 3 high along a bulkhead – each bunk could be swung up out of the way when it wasn’t being used. Our bunks however, were right under the steam catapult. It wasn’t bad during the day, but when they were night flying, it was difficult to sleep in the noise. I didn’t envy the fighter pilots one bit. When they took off or landed at night, they had no reference to a horizon and had just their instruments to keep the wings level and tell whether they were climbing or descending. During landings, the only outside reference happened to be the lights on the ship and what is called “the ball”. This was a visual approach aid that due to the angling of the structure, the pilot would see a pinkish light, then a red light if he were going low. This allowed him to make altitude changes during his approach to stay on an appropriate glide slope. If he were too low and kept going, he had a high chance of hitting the stern of the ship, which would totally ruin his day, as well as his life.



Aircraft Carrier Sailing Out of San Francisco Bay
The Golden Gate Bridge is in the Background

Since Navy ships at sea were running 24 hours a day, there were at least three shifts. That necessitated a mess hall be open all the time. Anytime we were hungry, we could find one open and get something to eat. We also noticed that all the food had a slightly greasy or oily taste that came from stray chemicals in the air. Even at that, it was still good food. We spent some time on the bridge and in the CIC as well (combat information center). During the week we were at sea getting familiarized with the Navy way of doing things, we were transferred by helicopter to one of the destroyers in the carrier group (a carrier never goes out by itself). The carrier was still pretty stable in the rough seas, however when I got on a destroyer, I felt like the ship was a cork bouncing around in a washing machine. It wasn't too bad if we were above deck looking out a window, such as on the bridge. When were below deck, I could see movement, then a second or two later I could feel that movement – which was highly

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disorienting. Several of us, including me, got pretty seasick.

After 24 hours the helicopter was supposed to pick us up and take us back to the carrier, then drop off another group on the destroyer. When it was our turn to get picked up, the sea was too rough to use a helicopter. The destroyer came alongside the carrier on the calmer downwind side, established a cable between the two ships, and pulled us across one at a time on a Boson's chair about 40 feet above the waves. I was very happy to get off the destroyer and back on the relatively stable carrier.

When we got back to San Francisco and got off the ship, it was funny to see us walk on the dock, now walking in curves as our muscles were used to walking in a straight line as the ship swayed left and right. It took us about an hour to get our "land legs" back. Now I totally knew what "sea and land legs" were.



Destroyer in rough Seas



Boson Chair Transfer Between Ships

After this, we went to Lompoc, California, famous for all its flower gardens, to visit the western missile range at Vandenberg AFB. We got tours of an Atlas ballistic missile silo, shown some training movies of the different ballistic missiles (ICBM's), and got some briefings on how the missiles were integrated into the offensive force of the US. We also were treated to a dance where local girls were invited to come and mingle with the cadets. The one I met and danced with gave me her address, and we later wrote a couple of letters back and forth until I lost interest.

Then we were flown to Nellis AFB to experience Tactical Air Command (TAC). We got an introduction to the Red Flag training areas along with some lectures on types of aircraft used and the mission that went with them. One exciting part was when they took us to a weapons range out in the hot, dry desert. We were sitting in the sun in a set of bleachers when suddenly an F-104

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Starfighter came right over us about 100 feet off the ground at Mach 1. That rattled our teeth, but we cheered because it was cool! Then some other fighters came through the range dropping napalm canisters, firing some rockets, guns and dropping some 500 pound bombs. We were far enough away from the targets to be entirely safe, but they were still loud. They also had an F-86 make a dive and go through Mach 1 at a higher altitude, but we were able to hear and feel the double shock wave that came off different parts of the plane. It was a good day. Then we were off to Ft. Benning, Georgia and a visit to the Army.



F-104 Starfighter on a Low Supersonic Pass

At Fort Benning, the weather was hot and humid, unlike the North Pacific which was cold. That was quite a change. The sergeants got us doing parachute landing falls; double timing, along with lectures at each display station. Part of Fort Benning is a paratrooper school. We also got demonstrations and training

videos of Special Forces and artillery firing. They took us to a gunnery range where they had a 105 mm howitzer that was set up to use 50 caliber training rounds that approximated the ballistics of the much more expensive 105 mm rounds. That let each of us man a gun with a 3-man team. One cadet worked the gun elevation wheel, another worked the azimuth wheel, and the third used the range finder and estimated winds to correct the elevation and azimuth to the target downrange that we were to fire at. They also put us through some small arms training and let us fire both the M-16 and the .45 caliber pistol that the Army used. Of course they showed us how to disassemble and clean both weapons, which we had to do after firing them. After all, this was the Army. I don't remember going to a Military Air Command (MAC) base, probably because they flew us around from place to place in a C-124 Globe Master, which had the nicknames of Old Shaky and Aluminum Overcast. They were large, noisy, and slow, but they got us there. We also went to a Strategic Air Command (SAC) base where we got tours of strategic bomber aircraft such as the B-52 Stratofortress and the B-47 Stratojet. They also briefed us on the SIOP (strategic integrated operations plan), and gave us a tour of the SAC command center that controls all of our strategic bombers, KC-135 refueling aircraft, and ICBM missiles.

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C-124 Old Shaky



B-47 Stratojet

After our whirlwind trip around the US, I was able to catch a ride on a KC-135 which was headed to Dover, Delaware, where Dad and Jean picked me up and drove me home for the 30 days which I had free for the rest of the summer. And I was going to enjoy a nice time with Nancy, who was then at the top of my mind.

12 Summer 1963 and Air Force Academy Sophomore Year 1963-1964



Home for the summer at last and a visit with Nancy. That summer was a memorable one, at least the things that I can remember. I called up Nancy and she invited me over to her house for an afternoon. I was naive and wanted to impress her, so I wore my blues (cadet uniform) for the visit. I was warmly welcomed, and my uniform wouldn't have made any difference. We talked for a while after a warm hug and a kiss. Oh I had missed that! I had brought my camera with me (35mm) and I took a picture of her wearing my cadet hat while we kissed once. That photo came out great, and when I returned to school in the fall, I displayed that on the top of my bookcase. That photo helped to keep me motivated for the next year, which was just as busy as the first year with all the continued military training, athletics, and academics. I had written a poem for her, and I

remember just one line which read “Keep laughing when you’re with Barry” (that was the boy she told me about). That line seemed to make her sad, and she didn’t want to read the poem past that line. She had me read it to her. Perhaps that was one of the reasons I drifted away late the following academic year. The rest of that poem has been lost to the years.

Dan Katz and I planned to double date to Rehoboth Beach about a week later. I arranged with Dan that I would drive down and he would drive back (wasn’t I sneaky?). About halfway to the beach I started hearing a noise that sounded like a low helicopter flying over, and I tried to look out the top of the front windshield as I mentioned the noise, when suddenly I realized that the car had a flat tire and it was thumping loudly, but it had started out with low volume, and increasing as the tire got flatter. I pulled over, changed the tire, and we went on our way too excited about going to the beach to care about a short delay.

The weather was great with lots of sunshine and plenty of beach to go around. We splashed in the waves for a while, and then went to lie on our towels to dry out. Everyone wanted to bury me in the sand, and I was up for it, so there is a picture of me totally buried with only my head sticking out. Also someplace is a picture of Nancy sunbathing, but she pulled up a towel supposedly to hide her white legs – none of us had a tan, so that was plausible. After we got dressed, I held a little ceremony. I had

filled a small bottle with sand from the beach we visited earlier that summer close to Lompoc, California, and I poured it out into the Atlantic Ocean – Pacific to Atlantic. Nancy wanted to see some cadet pushups, after having heard me talk about them, so she ordered” me to do ten pushups, which I did on the sand, then she sat on me and wanted to see ten more, which I did as well. Then she got a wild idea by watching me follow her orders, and ordered me to go out in the water and do ten more pushups. I considered that for about two seconds, and even though I was dressed in dry clothes, I walked out into the ocean and did ten more pushups, getting soaking wet! She didn’t think I would do it, but it felt just like a “double dare you” and a little fun as well, so I did. I think she was a little shocked that I did that, but she came right out into the ocean and got herself soaked as well. Yes, it was fun and a little wildly daring. We managed to get into dry clothes for the trip home – for some reason, I had some dry clothes in the trunk of the car. It got dark on our drive back home, and we held hands all the way.



Milt Buried in the Sand at Rehoboth Beach

It's possible that if you asked her today, she would remember it a little bit differently, but I think that if you could have asked each of us the very next day, you would find differences too. People have different memories because they have their own perspective of the same event.

That summer seemed really short to me – I only had 30 days of vacation, and Dad wanted me to take Alan up to DuBois to visit the Heplers and the Ways, which I did. I really can't remember if Susie came up with us as well – the time just shot by. Nancy and I had several more dates before I had to leave for Colorado again, but all those memories have just drifted together with only the ones I have described as distinctive memories. They have faded in "The Mists of My Mind", which was a poem that I wrote in 1997, many, many years later. I may share that poem with you when I get to 1997 later this year. As you can tell, I was quite smitten with Nancy.

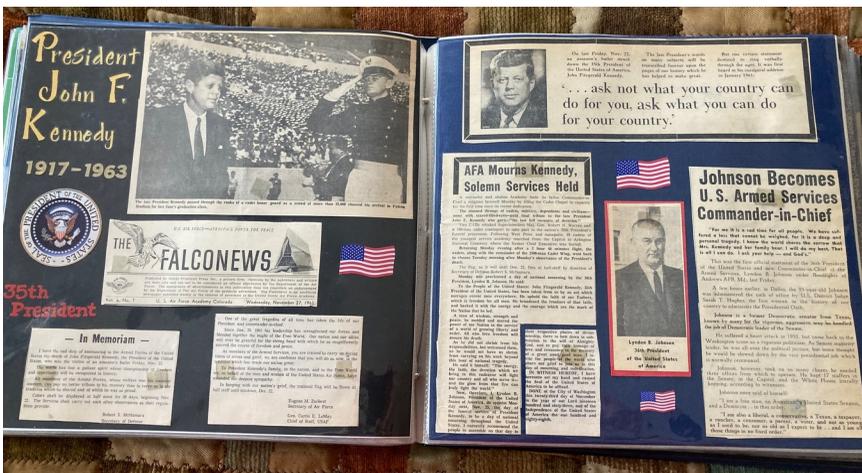
I don't remember how I got back to the Academy for my 2nd year. A significant number of the cadets had dads who were still active duty and had rank, so many times there would be a cargo plane lined up by a dad who had "pull", and we would get the word passed around, and could hop a ride back. Living in the greater Washington, D.C. area was very helpful as well, since a significant number of cadets had dads who were assigned to either Andrews AFB or the Pentagon. I don't imagine that cadets whose families lived in towns or cities well away from Air Force bases had this luxury.

As the academic year started, I received my class schedule and a new room assignment with another roommate in our squadron area, which was on the top floor of the north east corner of

Vandenberg Hall, the name of the dorms. Each squadron had a clerical office manned by a third class (sophomore) cadet, and this position was called the Cadet in Charge of Quarters (CCQ). Each of us would get a day assigned to be the CCQ. We would have to stay in the office all that day, missing any classes or formations. We would answer the phone, take messages, sit in the corner of the hall during meal formations and watch over our squadron's area to ensure security. Each cadet area had two wings of the hallway, and the CCQ of the other squadron on that floor would sit diagonally in that square so between the two of us, we could cover all four hallways. With 30 of us third classman in the squadron, we would pull this duty about once a month.

I was on CCQ duty on the 22nd of November 1963, on which occurred an event that I will always remember in my mind – where I was and what I was doing. That was the day President John F. Kennedy was assassinated. I had the radio on in the CCQ office that afternoon when everyone else was in class. I was totally shocked as the events of that day were reported a little bit at a time as reports and conditions were incrementally released as they became available. At first, the reports were unbelievable! It took a while to process the information. It didn't take long before the entire school was a buzz of discussion. I have two pages in my scrapbook of newspaper clippings. I had really liked what this president did for our country, standing up for freedom,

and especially against the Russians as later depicted in the movie, "Seven Days in May". He had his detractors and a few scandals as well, and I realize no one on earth is perfect. He stood up for what was right and led our country at a perilous time. Our academic classes were cancelled for the following Monday, and the Academy's top officers plus 89 cadets for an honor guard were flown to Washington to march in President Kennedy's funeral procession to Arlington National Cemetery, along with many other military honor guards including cadets from both West Point and Annapolis. That was a sad week for all of us. Many of you reading this were not born yet, but our nation was in shock, and we mourned our president's death by an assassin's bullet in Dallas, Texas.

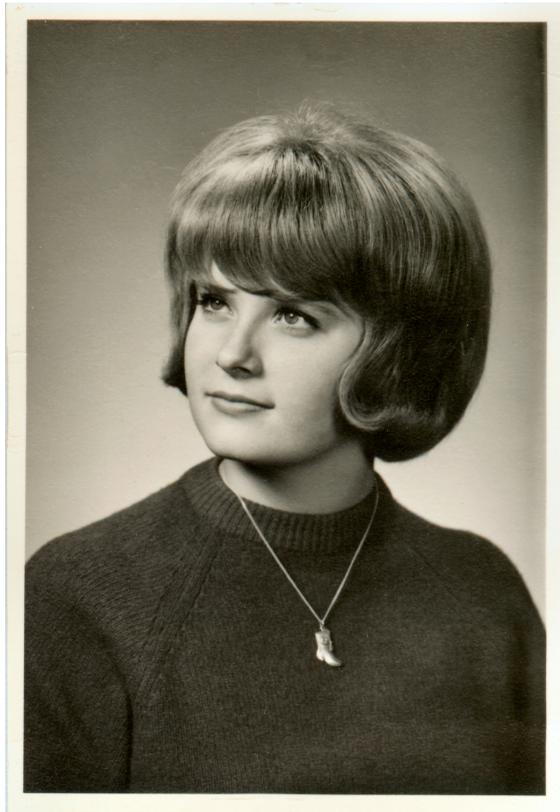


Newspaper Clippings of President Kennedy's Assassination
In my Scrapbook

In the fall of 1963, I met a girl at a church dance in Colorado Springs, a girl who lived in Aurora (Denver suburb). Her name is Diane Wood. A little while after the dance, her mother, Claire Wood invited me to stay a weekend at their home. As a sophomore (Third Class cadet), I did get a weekend privilege once a semester, so I decided to go. I didn't have any other place to go, so to avoid losing that weekend privilege, I visited them. Her dad was a doctor, and Claire was a housewife. I got along very well with them and enjoyed that weekend. Diane was pretty and jovial as well. Her mom seemed to really like me, and wanted to get me and Diane together. After a couple of months or so, although I liked being there, Clair finally saw that Diane and I were not going to be a match, but she still invited me to their home once in a while. She had something else in mind: a niece who lived in Salt Lake City. Meeting her niece was going to be a significant event in my life a couple of years after graduation, which I will expand upon when I get to that point in my personal history. I mention this because meeting Diane, then her family, put into play a path that would significantly change my life. I did invite Diane to one of our squadron parties where our entire squadron went to a small academy resort on the Academy grounds and we did some skiing, some dancing, and then some cadet entertainment skits in the lodge. We rode an Academy bus both to the site then back to the Academy that night. I held hands

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with Diane on the way back. So there was at least some attraction there, but distance again played a part, as only senior cadets (First Classmen) were allowed to have cars, and transportation was beg and borrow with the "Firsties" to get anyplace off Academy grounds.



Diane Wood Aurora Colorado

At another dance at the Academy in Harmon Hall, I had a blind date (it is interesting that being a cadet drew many interested

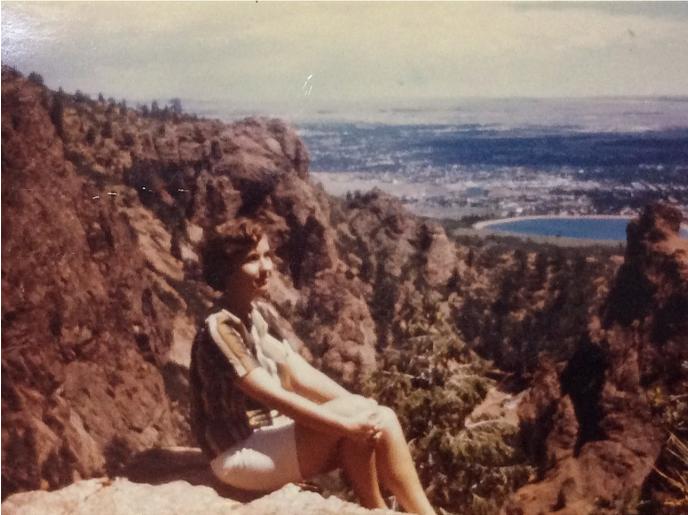
girls to the Academy for blind dates). Her name was Bonnie Alger and her dad was a Master Sergeant, soon to retire. He started a Dunkin' Doughnuts franchise in Colorado Springs after retirement, which seemed to go well. Her mother worked at the Academy in Harmon Hall, the Academy administration building. Bonnie was friendly, and we had a good time at the dance. I got her phone number, called her up, and we started dating. She had a younger sister named Sandy and they also had a small dog, Pal. I was invited over to her house where I met her parents and got along with them well. I could take a bus into Colorado Springs, and Bonnie could pick me up. They had a partially finished basement with a linoleum floor, a little bit of furniture, a TV and a record player. She taught me a few dances, and we also watched TV and listened to music. I went to her church with her once, and it was a lot different than I was used to. She introduced me to her pastor and told me a week or so later, that her pastor liked me.



Bonnie Alger Colorado Springs

I had one incident with her that taught me something valuable. We went on a drive into the foothills around Colorado Springs, stopped, and got out to look at the view. I had made myself a list of things to ask her on 3x5 cards. We sat on a rock and were talking when I reached into my shirt pocket and took out my cards to ask her some questions about her life and her goals. As I asked the first question, she grabbed those cards out of my hands, rifled through them quickly and got very angry with me. She felt like she was being grilled and also didn't like that I had

to refer to cards, instead of bring things up in a normal conversation. That day I learned one thing not to do on a date! We did have some good times together and even talked a little bit about marriage, yet neither of us was anywhere near ready. I told her a little bit about eternal marriage and how I would like to be married in the Los Angeles Temple. One day she asked me what I would do if she wanted to get married in the Salt Lake Temple. I told her that we would flip a coin, and then get married in the Los Angeles Temple. She laughed and hit me in the shoulder. She also asked her pastor about eternal marriage, and he quoted to her Matthew 22:30 "For in the resurrection they neither marry, nor are given in marriage, but are as the angels of God in heaven." At that time in my life, I didn't have the knowledge to give her an answer. The next time I was in the Colorado Springs Ward, I asked our missionaries how I could answer her. They couldn't give me much help either. Now 55 years later, I could do a much better job with that, but we just can't go back for a do over. I just kind of dropped the subject with her since I had no position to teach from. We finally broke up sometime in my junior year. We did part as friends though; I have never liked to have other than amiable separations.



Bonnie Alger in the Foothills Above Colorado Springs

Another thing we started doing with the model airplane club was to fly combat with two control line airplanes in the same circle at the same time. We would tie a 10-15 foot piece of string to the tail, and a 20-25 foot piece from a crepe paper roll to the other end of the string. The purpose was to cut the opponents crepe paper with your prop. We would do this at some of our home football games during half time. We would get two of us up in the air with the cadets cheering and booing at us as we tried to maneuver to get behind each other. The cadets mostly wanted to see a crash, and anytime there was a collision, which could happen at any time, they would give out a very loud cheer and chant "Do it again, do it again!". One time I hit the other airplane knocking him out of the sky, but my plane was still

flying. I had time to do a couple of victory laps before my plane ran out of fuel. I went to grab my plane, and I found that there was not one panel between all the wing ribs that didn't have the covering punctured. I found it hard to believe that it would still fly like that. At another halftime, my opponent hit my fuselage just behind the wing, breaking my plane in half, and knocking me out of the sky. One of our other concerns was the tangling of control lines. We each had two 60 foot braided steel cable of .018" diameter. When we moved our control handle, depending on if we bent our wrist up or down, the cable that got pulled on moved the elevator enabling us to climb or dive. With two of us operating in the same circle, it was easy to get lines tangled. One time my opponent went up over my lines, tangling them, then came in behind me and hit the ground. His plane was stopped and mine was still flying, meaning that I was going to go around and around with his lines wrapping around my body. I started doing loops to keep that from happening while my partner was trying to get our lines untangled by moving his control handle around and around my lines. He managed to complete that while I was still looping, much to my relief. It was a lot of fun though.



Model Planes Flying Combat

One of my classmates, Ivan Munninghoff, had brought a radio control plane with him after our freshman year. He dad was into models and had taught him to fly. He had a new technology which was called a “reed system”. Most of the RC models at that time only had a single channel which moved the rudder left and right, using full deflection at each position. They were tricky to fly. With this new reed system, Ivan had five channels. His transmitter had five levers each of which managed a control – elevator, rudder, ailerons, and throttle plus one more function if needed. The technology behind this was that pushing a lever, caused a tone in the receiver in the plane, where each tone selected from the transmitter would audibly vibrate a metal reed in the receiver which would complete an electrical connection to a control actuator to move one way or the other. Each reed was set up to vibrate at only one tone frequency, so the actuator would move only that control in the proper direction. I asked him if I could fly it one day after he had it up in the air. He took it up even higher, then handed me the transmitter. I flew it around for

a minute or two, and then I decided I wanted to do an aerobatic maneuver – a “Split S”. This is where you roll the plane upside down, and give it up elevator to complete the last half of a loop. In retrospect, I should have told him what I was going to do, because as I rolled it upside down and started to pull through, he panicked, grabbed the transmitter away from me, and recovered the airplane. He never let me fly it again. It was still fun!



Milt Playing Field Hockey

As the academic year dragged on, I got caught up in some intramural activities (which were required sports) and learned to play Squash. It is sort of like racquetball using a racquet, but the ball is very dead and the racquet head is much smaller. I was OK at it and I played that for a couple of years. I also played field hockey, which most of you may think is a girls sport like I did,

until we got going with big, tough guys having an incredible will to win. Field Hockey is a tough game and takes a lot of skill to swiftly move the ball and dribble past people, or even swing hard and get a good connection with the ball as it bounced its way down the rough grass field. Also if you got your stick above your shoulder on either the backswing or follow through, you were called for a high stick and the other team got the ball. Running was a lot like soccer and required some stamina. I played for two years, and the rule was we couldn't play the same sport for more than two years, so for my third year I was tagged as a referee in field hockey. Refereeing was tough for me, but I managed to get through it without making too many players unhappy. I was also eligible to do one year of swimming which was good, since I had done diving in my freshman year. I was only eligible for one year though. Anyone on a varsity team could not play the same sport in intramurals. One year I played Rugby. Now that was an eye opener. Rugby is lot like football without pads, and the clock kept running as the players did with no huddle and constant action. There are short stops for penalties, but not for long. The first time I was running with the ball, I was supposed to pass it off to the guy next to me, but I got confused, holding on to the ball, and I received a very hard tackle. That shook me up for a while because I had never been really tackled before. The only play that bothered me through the whole season was when I got a free kick, like a punt. As soon as the ball left my foot I started running

downfield. My kick was high with a good hang time, and I got to the receiver a half second after the ball did. I tackled him and was really feeling good until the referee blew his whistle and called me off sides. That was a really bad call because I can't be off sides if I kicked the ball. The ref wouldn't even listen to me, so I just had to roll with it. I know that we have all seen bad calls, but that's just a part of life. And all of life is a learning experience.

Each fall we would have 4-6 home football games. The tradition was for the cadet wing to march onto the field – all 2500 of us (except for the players, cheerleaders, and Falcon team).



Cadet Wing on the Football Field

If I remember correctly, once we were formed up on the field, we would salute while the National Anthem was played. Then we would march toward the east side of the stadium and into the

seats. Tradition was that we all remain standing while the football team was on the field. That wasn't always easy, and on some game days the weather was really cold, but we managed. We could sit down at half time, although that wouldn't get us any warmer. One game that I remember was an away game at Oregon. Oregon had a great team. Near the end of the fourth quarter AF was ahead by 3-0 and Oregon was inside our 25 yard line. We managed to hold them and took over the ball around our 5 yard line. After three plays we hadn't moved the ball more than a couple of yards. The coach called in a play where our quarterback would get the ball, drop back over the goal line and put his knee on the ground for a touchback, giving Oregon 2 points. Then we had the opportunity to punt the ball from our 20 yard line. The punter made a beautiful kick which went back to the Oregon 10 yard line. With just a couple of minutes left, Oregon was moving the ball down the field. They got down to about our 5 yard line and on 4th down they decided to go for it. We held them, got the ball, and ran the clock out. AF won 3-2. A bunch of us were listening to the game on a radio and were really sweating the outcome. When the time expired you could hear shouts all over the dorm area! Ah, fond memories.

When football was over for the season, we started skiing again. One funny incident I remember and still get a chuckle over was that I was standing still on my skis a little ways from getting off

the lift at the top of one slope. I was waiting for a few friends to make it to the top. Note: a lot of coeds from the Denver area also liked to ski, so there were always lots of snow bunnies on the slopes. Anyway as I was standing there, a young woman who obviously was not skilled in skiing, came slowly towards me, not knowing quite how to stop. One of her skis went between my skis and she stopped about 12 inches from my nose. I was smiling a great big smile and she was totally embarrassed. She apologized, and slowly backed away until she was clear. I just said "Hi" and let her continue on. I probably could have picked up a skiing partner for the rest of the afternoon, but the smooth talker that I was (NOT), simply enjoyed the experience and went my own way.

During the spring of 1964, the letters between Nancy and me slowed, then gradually stopped – probably mostly on my end. Times were very busy, and I also was spending more time with Bonnie, as well as other distractions. Nancy and I simply drifted apart and didn't see one another again for the next 34 years. One of the courses I took was a mandatory language course. I selected French for my language – more likely from knowing that Nancy had taken French in high school. Another factor was that the coming summer field trip was visiting overseas areas with both American installations and foreign bases. Out of the selections available, I choose Northern Europe, which was also a good

choice for speaking French.

Well the academic year wound down, the freshman class went through “Hell Week” and received their recognition, and June Week with its balls and parties, parades, many visitors, and finally graduation arrived. There were many aircraft fly overs that we loved to see – after all 90%+ of us were hoping to fly jets after graduation as our dream. A U-2 spy plane flew low overhead and pulled its nose up, just climbing out of sight. The Thunderbirds put on their show flying F-100’s at that time, which we were all permitted to watch – all of this was for motivation and morale as well as congratulations for finishing another tough year.



Air Force Thunderbirds Flying F-100's

One more thing I would like to mention for this year, is that in the previous fall semester, I had been asked to produce a monthly newsletter, 1 page, for our LDS cadet group. I typed it up on mimeograph paper (some of you will remember what that was). Whenever I made a mistake, I had to remove the paper (a top sheet and an underneath sheet that was a little similar to a typewriter ribbon), scrape off the mistake with a pocket knife, then reinsert and position the two sheets just right, and type the correction in. And yes, even though I could type, I made plenty of mistakes, and still do as you will see some in these stories that I missed making corrections for. I would type up that mimeo sheet, pass it off to one of the instructors who was also LDS, and he would get the newsletter reproduced and distributed to each of us – about 35 cadets. It was a good thing to do and was a teaching experience for me as well. I had titled it: “Dateline USAFA”.

13 Summer 1964 Northern European Field Trip



On the third summer of each cadet's time at the Academy, we all got to go on an overseas two week field trip. As I recall there were seven destinations to choose from. The one I selected was Northern Europe which included England, France, and Germany. The two week trip was followed by a three week stint at an Air Force base in Germany as an assistant to an officer in various departments at the base. I desired to be assigned to a fighter squadron, but I ended up going to a supply division and was hosted by a first lieutenant. This assignment was called Operation Third Lieutenant, which indicated that we were of higher rank than enlisted personnel, but lower than a 2nd Lieutenant. Third Lieutenant is not an official rank, but denoted our status while on this assignment.

Our first stop was in England where we were scheduled to go on bus tours around the countryside as well as to various bases,

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both US and British. We also visited the British Air Force Academy at RAF Cranwell and socialized with some of the cadets. I traded one of my patches for an insignia that the British RAF cadets wore with a white circle underneath it. Once the cadets graduated, they removed the white circle and wore that emblem as a British Royal Air Force Officer. We also went to a British base, and I remember two British Lightnings (fighter aircraft) taking off. One of them climbed out quickly while the second one had a much more modest rate of climb. They told us that one of the afterburners malfunctioned (it was a 2-engined aircraft) and the second one had insufficient power to climb out steeply.



Royal Air Force Cadet Insignia

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British RAF Lightning

The engines were one on top of the other causing the bulge underneath at the rear



RAF College Cranwell

We stayed in British hotels during the evenings, and found them to be not quite as roomy as ones I had occupied in the US. They fed us a continental breakfast, which was very skimpy from what we were used to: a croissant and a cup of hot chocolate. We were always asking for more, but rarely got anything else leaving us hungry. Also whenever I bought a can of coke, it was not very cold and was only a 250 ml can, about 8 ounces. In fact, we were

always asking for ice in our dinner drinks, and they always looked at us as if we were a little crazy (Americans!). It seems Europeans prefer their beverages near room temperature, except for the hot beverages which would easily burn your tongue if you were not careful.

Dad had given me a 35mm camera, an Argus C3. I didn't have a light meter, so I had to estimate my f stop settings, especially when I changed film speed. There was a fairly wide range for good exposures, so most of my pictures turned out well. Back at that time, the slide was very popular as they could be displayed on a screen for quite a few people to watch. I took both Kodachrome and Ektachrome slides, but I enjoyed the way the Ektachrome picture looked better than Kodachrome. I have a metal box full of my slides some place; I think my daughter collected as much of the family slides, movies, tapes, and other pictures for safekeeping. I don't have any of those available for my stories, except the ones she has sent to me.

We traveled to many cathedrals which were very beautiful, although they felt cool inside and very ornately decorated. We visited one which took 600 years from start to finish. Buildings and other structures in Europe are much older than in the US, and some of them were built well enough to last. We had a visit to the Queen's residence, Buckingham Palace, and were able to watch the changing of the guard. We also went to the Tower of

London where we were able to view the Queen's jewels. We also got to view and talk with some Beefeaters, which is what they call the guards in the Tower of London. Those guards were called Beefeaters, because they had permission to eat as much beef as they wanted from the King's table. The real name is Yeomen, but they have now been called Beefeaters for such a long time, that everyone calls them that. Also the Tower of London was where prisoners were held.



Buckingham Palace: Changing of the Guard



British Crown Jewels



Beefeaters at the tower of London

After Britain, we went to Paris, saw the Eiffel Tower, walked along the Seine, and went out to dinner in a French restaurant where some of us tried to act sophisticated and order in French. I tried to order water, which I thought was simple, but the waiter asked me something that I didn't understand. After a little back and forth, I found out he asked me whether I wanted plain or "fizzy" water. So I didn't feel sophisticated after all. I did walk into a baker shop on one afternoon of free time, and I was able to order two loaves of bread in French, and apparently I got that right, perhaps by standing right in front of the display case that had what I wanted. The French bread was about 20 inches long and really good and perhaps four inches in diameter.

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Loaves of Delicious French Bread Right out of the Oven



The Eiffel Tower in Paris

During our previous year at the Academy, we were required to take a foreign language. I selected French, which was another reason I chose the Northern European Field Trip. Our instructor was a member of the French Air Force, and of course was a native French speaker. We had a great time with him and learned about

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some French culture as well. He had none of the stuffiness that I normally associated with French people. He also had some unusual pronunciations of English words: for example, for Chicago, he said “chick –a-go” with the emphasis on the first syllable. One of my classmates was from Florida, having a very pronounced Southern accent. It was really a hoot listening to him speak French and trying to figure out what French words he was actually trying to say. This drove our instructor nearly to insanity, while listening to the utter destruction of his native language.

We toured Versailles where the armistice to end World War I was signed, and we also got some briefings on the French military (of course they spoke in French and used an interpreter). We were also taken to one of the former King’s palaces, which is kept in excellent condition for tourists. We toured Notre Dame. That place is huge, has a very famous pipe organ, and is the most famous of the Gothic cathedrals of the Middle Ages.



Palace of Versailles



Notre Dame Cathedral



Basilica of Notre Dame

From Paris we traveled to Germany. We enjoyed a trip down the Rhine on a small tour boat, which stopped in several places where we were able to get out and walk around some towns. I went into a music store and bought a Mundharmonika (harmonica) which I still have today. I rarely play it these days, but I used to play it a lot more, but just as a lark generally. I seem to have always liked music. I found that the Germans were not

near as friendly as the British, and the French were a little bit snobbish. I was in the Bitburg Officers Club in Germany having breakfast. The waiter looked a little French to me, so I asked him if he spoke French. His answer was, "I am French!" 'Nuf said.

While in West Germany, a tour of East Germany was scheduled for us. We didn't go any farther than East Berlin, but that was more than sufficient. We traveled on a well-documented US bus, and we all had to wear our blue uniforms. It took us a while to get across to East Germany, first stopping on the West German side of the Brandenburg Gate, we were all counted and checked against a roster. The same thing happened on the East German side. One vital difference we noted rolling into East Berlin was that the streets were nearly empty, and there was very little foot traffic. I had the feeling that in nearly every building we passed, we were being carefully watched by authorities to make sure that we did nothing out of the ordinary. We traveled directly to the Soviet War Memorial which was built to commemorate the 7,000 Red Army soldiers lost during the Battle of Berlin in 1945. It was a solitary place which seemed very quiet and oppressive. We were able to take some pictures there, but not anyplace else. East Berlin was not a comfortable place and we were a little apprehensive at being there, and expressed our relief when we once again were across the Brandenburg Gate into busy and bustling West Berlin. We flew out of West Berlin on a military

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transport, the same way we arrived, since flying in and out was much safer than trying to travel the land route through East Germany to West Berlin.



Brandenburg Gate



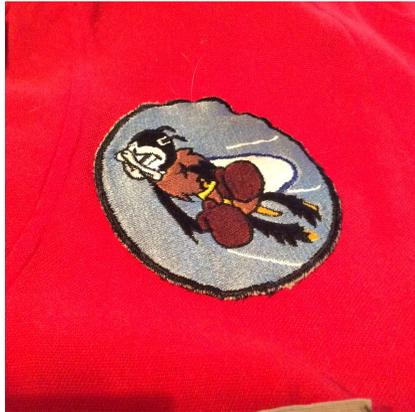
Soviet War Memorial in East Berlin

This completed our tour of Northern Europe, and we split up to go to our assigned US military facilities for “Operation Third Lieutenant”, which gave us an experience of how a regular Air Force officer lived and worked on a foreign installation. While learning a lot about supply, which is where I ended up although some other cadets were assigned to the 36th Fighter Wing which flew F-105 Thunder Chiefs, I did get a good introduction to how a supply officer lives and works in his assignment. The best part of Third Lieutenant was when we were treated to a day trip to Denmark flying in an older C-47 cargo plane to get there. During the flight, I got to fly that C-47 for about 30 minutes in the copilot seat, which was nice, but also helped me know that I didn’t want to pilot any cargo planes in my life. We flew to Tivoli, also known as Tivoli Gardens, which is a famous amusement park in Copenhagen, which is the third oldest amusement park in the world, opening on 15 august 1843. I don’t remember much about walking through the park, but I did sit down for an artist’s rendering of a profile drawing of my face, which I still have. I do remember having an enchanting time, but few specifics. I also remember taking a picture of the famous Little Mermaid statue that sits on a rock in the water at the Langelinie Promenade in Copenhagen. We then flew back to Bitburg that evening.

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F-105 Thunder Chief



Fighter Squadron Emblem in the 36th fighter Wing

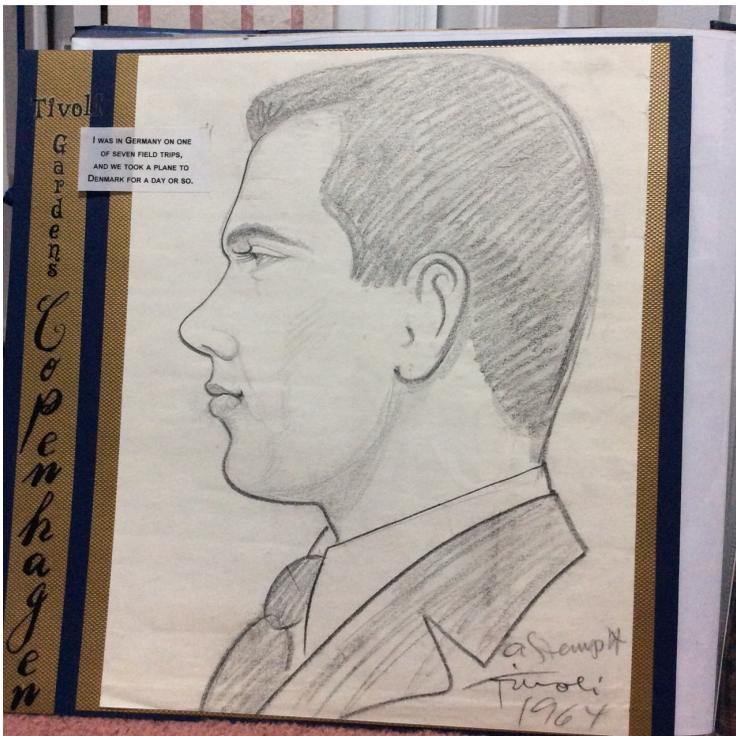


C-47 Ride to Tivoli Gardens in Copenhagen Denmark

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Tivoli Gardens



Pencil Rendition of Me At Tivoli Gardens



Famous Little Mermaid Sculpture in Copenhagen

Shortly after that, our Third Lieutenant stint was over and we flew home for a little bit of summer vacation before we had to return to the Academy for our junior year. I spent that time at home relaxing before our academics would start.

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14 Air Force Academy Junior Year 1964-1965



As I started my junior or 2nd Class year, my cadet rank moved up from a Cadet Tech Sergeant to a Cadet Master Sergeant – three chevrons. That rank advancement moved us from junior NCO to Senior NCO's. Cadet Officer Rank for the senior year started at Lieutenant and went up to Cadet Colonel, four horizontal stripes for the Cadet Wing Commander.



Cadet Master Sergeant for Junior Year - Three Chevrons

I had planned to major in astronautics, and picked up quite a course load. During the first week or two of academics, I struggled mightily with the astronautics math and shifting coordinates from earth centered to orbital coordinates and solar coordinates (based on the sun). I also got a very rough start in a philosophy class, and soon was flailing. I went to my academic advisor to get some counsel, and we switched to an engineering sciences major, which dropped the astronautics course, philosophy, and perhaps one or two others, and added Space Science and Astronomy. That was a much better fit. Even with the switch, my grades fell to a low of 2.18, but that was sufficient

to survive. Many of us joked that it was an honor to be the very bottom cadet of our class in grades, but second to the bottom was about the worst place to be! I had several of my classmates flunk out of the academy during my four years there, but I know that some of them did not like the climate and the discipline required by the school, and that was an easier way to drop out than choosing a self-initiated elimination (SIE – or simply quitting).

There were a couple of classes that totally left me cold: economics and foreign political governments. The institution felt that those subjects were important for an Air Force officer to be familiar with as we went to various assignments around the world. In economics class I had trouble staying awake. We were told that if we were falling asleep, then we should stand up in the back of the class. I did that fairly often, however two times I fell asleep while standing up, and just happened to catch myself losing my balance, then caught myself before I could fall - that was scary! For the final exam in Contemporary Foreign Governments, I stayed up really late studying, and just barely passed the final. In one of those courses I had a final grade of 63 in the course. I found out a day or so later, that 64 was a C, and 62 was an F. That was very close! I felt that someone was looking out for me. That was the only “D” I received in any course. My grade point average at the end of my junior year was 2.18 – not

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very good! I resolved to do a lot better, and I got it up to 2.48 (in a 4.0 system) which was my final grade point average for the four years, and graduated me in the middle of my class. Academics were tough!

We had a couple of good trips in my junior year. One day, we were offered a chance to fly to Washington D.C. and escort winners of state beauty contests. I volunteered to be an escort (we always looked for ways to get off campus and one of our favorite songs was “We Gotta Get Out of This Place” sung by The Animals – that also became a favorite song for many servicemen in Vietnam during the Vietnam war). Happily I was accepted, and a group of us were flown out to Washington D.C. to be proper escorts. I was assigned to Miss Louisiana. I have to say that all of the contestants were beautiful girls. This boondoggle was not quite as much fun as we all thought it would be, but it was a nice 3-day trip away from the Academy. We did have to wear our formal winter mess dress uniforms for the escort, but we didn’t mind. We seemed to have uniforms for every occasion. We had dress blues with jackets; we had summer blues (short sleeve light blue shirt both with and without tie); we had formal blue overcoats as well as dark blue parkas which we could wear with hoods up or hoods down – specified by the uniform of the day (there were sets of uniform lights in each corner of our dormitory quadrangles which were coded to different uniforms);

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we had a nice athletic jacket, we had parade uniforms, fatigues, and both winter and summer mess dress for formal occasions. Usually with fatigues, we had combat boots for most occasions, especially the obstacle course. After the escort was completed, we were flown back to school to get back to the grind and to make up any school assignments which we had missed.



Escorting Miss Louisiana

I really enjoyed my Astronomy course since I have had an interest in space from my science fiction reading from around age 11. I also liked mysteries and read all the Hardy Boys stories. We studied the stars, compositions, and types of suns, and position in the galaxy. One time we had an assignment to go out in the middle of the night and insert photography plates in a special telescope which was calibrated to change angle to

coordinate with earth rotation. This would keep the telescope/camera positioned at one point in the sky during each long exposure. This kept the stars all focused in one place, while catching anything closer to the earth moving, which would appear as a streak in the photograph. I must say it wasn't a lot of fun getting up at 2 or 3 in the morning and going to the telescope mounted at ground level, but it was a little exciting, because cadet rules specified that we had to be in our rooms after taps at 10:30. The only reason to leave our rooms otherwise was to head for the bathroom. Each room had a slot for our nameplates, and a lever that we pushed if we left our room which read "Authorized", meaning that we were in an authorized place during our restricted times. If we selected "Authorized" and intentionally went to an unauthorized location, then we were breaking the honor code and were obligated to report ourselves. We knew we were authorized to operate the telescope, but we were concerned that anyone who caught us outside our rooms may not know or believe what we were doing. We didn't set our status when we went out (two of us were assigned together), and thankfully no one saw us, making us explain our situation. And no, we didn't find any comets either.

I was still flying model airplanes, doing combat for some of our football game halftimes. At some of the halftimes, the Falcon Club would give demonstrations of how our falcons would grab a

target. Our official mascot was a white Gyrfalcon named Mach 1. He was a beautiful bird. At the football games, our falconers would bring two or three falcons out onto the field. Falconers would wear a heavy leather elbow length glove on their left hand to protect them from the very sharp claws. The falcons would have a tight leather cap over their heads covering the eyes. When the falconer was ready, he would take off the bird's cap, lift his arm up and the falcon would take to the sky, flying high above the stadium. The falconer had about a 40 foot light rope with a piece of meat on the end. He would let out about three to four feet of rope and twirl it around for a while until he saw his falcon fix an eye on it and start circling around closer. He would then let go of the rope letting it go high in the air while the falcon would tuck his wings and accelerate towards it, putting his claws out just before arriving at the target, and grab the meat. He would then fly very steeply towards the ground, land, and eat his treat. It was exciting to watch. Once in a while a falcon wouldn't be interested in giving us a demonstration, and he would just fly around, and then finally get a notion to head off in a direction he felt was an interesting way to go. Whenever a falcon would fly off away from the stadium, the entire cadet wing would sing a chorus of "Bye, Bye Birdie". We had to have a sense of humor to stay relatively sane at that institution, especially since it was a male only school at the time. A number of years ago, the school was made coeducational, another dormitory was built, and girls

were admitted to nearly double the size of the cadet wing. When I was there, the wing numbered around 2500 cadets. These days, I believe the cadet population is around 4500.



Mach 1 The Air Force Academy Mascot

There is a tall statue at the Academy with a very large base and an eagle with her fledging at the top. The inscription on the base reads: "Man's Flight Through Life Is Sustained By The Power of His Knowledge". I used to stop in front of that statue often and ponder on the meaning and inspiration of that inscription, gaining some inspiration to keep me working hard. There is a poem written by a Canadian Airman, John Gillespie Magee

Junior, called "High Flight" which we were required to memorize during our freshman year, and we could be asked at any time to repeat it at the request of any upperclassman. That poem was inspiring to us as well.

Oh! I have slipped the surly bonds of Earth
And danced the skies on laughter-silvered wings;
Sunward I've climbed, and joined the tumbling mirth
of sun-split clouds, -and done a hundred things
You have not dreamed of - wheeled and soared and swung
High in the sunlit silence. Hov'ring there,
I've chased the shouting wind along, and flung
My eager craft through footless halls of air...
Up, up the long, delirious, burning blue
I've topped the wind-swept heights with easy grace
Where never lark nor even eagle flew -
And, while with silent lifting mind I've trod
The high untrespassed sanctity of space,
Put out my hand, and touched the face of God

John Gillespie Joined the Royal Air Force of Great Britain, and flew Spitfires during World War II. He was killed on a training mission on December 14, 1941



Eagle Statue at the South End of the Air Gardens

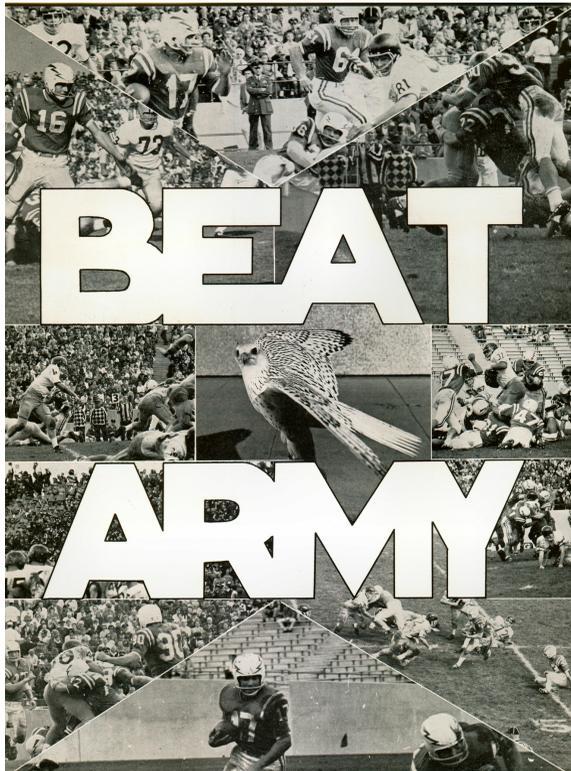
One year the Air Force vs Army football game was held at Soldier's Field in Chicago. The powers on high had decided and planned for the entire cadet wing to travel to Chicago for the game. Getting 2500 cadets to Chicago was going to be a big logistics problem, but that was solved by chartering a passenger train. Now that was an experience! I hadn't realized how slow trains actually were, and the trip was approximately 24 hours in each direction. We were not really crowded, but every seat was occupied, and there wasn't very much to do. For that many

cadets who each burned around 4500 calories a day, to just sit and do much of nothing, being totally bored was an ordeal. Some played cards, some read, others had discussions, and some tried to sleep, but sleeping sitting up was difficult. During the night, some slept in the aisles, while some of us had to be content leaning against the windows. That was one long trip. There was a dance planned, and we found out that there had been an organized recruiting operation getting local girls to sign up for "blind dates" to the dance. I learned that the girls were required to arrange their own way to the hotel, and pay for their own arrangements to get home. We were lined up and were assigned a girl as they arrived in their own line, which felt a little strange, but was the only way to stay organized and accomplish the purpose of socializing. My "date" seemed a little older than me, but she was OK. I just felt a little stiff meeting someone totally unknown to me, but we managed to carry on a somewhat decent conversation and dance for a while. Neither of us had any expectations; we knew we would probably never see one another again, and when it was time for the dance to wind down, she got in a cab and left. That was a very strange experience and also not an exciting date. I have had blind dates both before and since that one in Chicago that have gone very well and were pleasant. I guess we just didn't hit it off. I had somewhat the same experience when I started dating after my first wife, Kay, passed away. Some of those dates were pretty strained and formal, some

were just OK, and a few were very pleasant which led me to my second wife, Kathleen.

For some reason, our rivalry with West Point was much hotter than with Navy. As the game got closer each year, we would put wide masking tape on our room windows (backwards lettering) saying "Beat Army". Four to five times during our night study periods, we would hear a window slide open followed shortly by a loud voice – "Beat Army!" Seconds later many other windows would slide open and a lot of voices would permeate the air to raise our school spirit. Then it would slowly die out. This would start at least a week before the game and increase in frequency and intensity until game day. Even our academic instructors would get into the act. They would give quizzes where all you would have to do is write someplace on the paper the words – "Beat Army" to receive a 100% on the quiz. This always helped the days pass as our morale would certainly increase. I didn't see this in any other sport except football. In thinking back on it, that is a little strange, but perhaps because football was always on a Saturday for us and we all went to the home games (mandatory formation) and other collegiate sports were often played any day of the week. We just had the right conditions to support our football team. I went home for Christmas that year, and Air Force was in a bowl game over Christmas. My sister Stacy made up a poster after the game to tease me — it read: South

Carolina 35- Air Force 0. Nice sister huh? One thing that affected our bowl games was the strictness of our regimen, and Christmas was free time, but the players had to stay and prepare for the game, which cut down their vacations. Their morale just wasn't as high when they missed vacation time.



One Page of Our Monthly Falcon News: West Point was our biggest Rival

One thing about our winters is that we would get some serious winds blowing down from the Rocky Mountains to our west. We

were right at the base of the mountains with the mountains on one side and flat plains on the other. The air, supported by a strong wind and high pressure front from the west coast, gets blown up over the mountains, and when it comes down the eastern side, the winds accelerate from 40-50 miles an hour to sometimes as high as 80 mph. If we had to go outside, we would lean a lot into the winds to keep from being blown over. If we were in our rooms which have big picture windows about 5 by 6 feet, the turbulent wind would oscillate the windows 1/4 to 1/2 inch back and forth scaring us a lot. We would always close the heavy drapes in case the window shattered, to keep glass from scattering all over the room and injuring someone. One night, a couple of the upper windows in the dining hall shattered and we saw large pieces of 1/4 inch glass sticking up from where they hit the grass. This was some serious stuff. I had to write a poem for English class once, and I wrote about the Chinook winds.

CHINOOK

Milt Sanders

There was a hostile Indian Chief,
A fierce fighter was he:
He kept the land in terror
As he rode the wide prairie.

On Pinto pony, swift and strong,
He flew o're the rocky ground.

In meadow land or mountain vale
Villages he tore down.

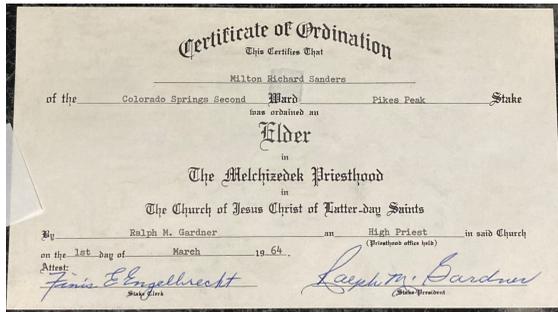
By day or night, winter, spring
He fearlessly rode on;
Settlers cowered much afraid
And stayed awake till dawn.

The Indian Chief is now long dead,
But his spirit roams the hills.
People still do fear with dread
The echo of his weird wails.

(I did warn you that I might add some of my poems in this history)

I forgot to mention for last year, that the Colorado Springs 2nd Ward, Pikes Peak Stake, that we were attached to, kept a good eye on us. A couple of months after I turned 21, I was ordained an Elder in the Melchizedek Priesthood by Ralph M. Gardner, President of the Pikes Peak Stake. He was my line of authority until I was put in a ward bishopric as 1st counselor in Oklahoma 5-6 years later. I am fortunate that I put that certificate in my scrapbook which has preserved it over the years. I guess that is one good reason to keep good journals as we live our lives. I haven't done that, but many memories have been preserved in my scrapbooks, some written stories, and in my mind.

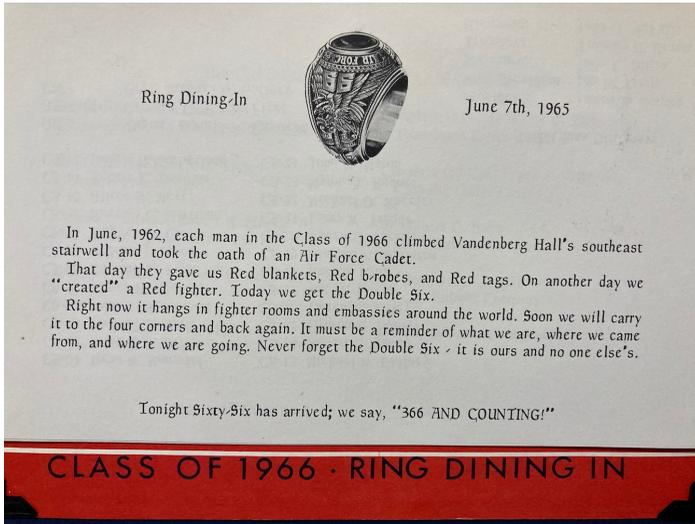
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Certification of Ordination to Elder

As the end of junior year came, my class, the class of 1966, had our ring Dining-in where we received our AFA Class rings. This was a momentous occasion, as this was building up to our senior year. A Dining-in is a formal occasion and requires a high degree of formality and behavior. We wore our formal mess Dress uniform, with the white coat since it was summer season. At that dining in we had four Air Force generals, several colonels, and two representatives of the Balfour Company, the company which made our rings. We were presented our rings, and we were all pretty excited. Wine was served at the end of the meal, and the guys at my table were excited that they didn't have to share the bottle with me, although there was one glass of wine in front of me. The tradition was to immerse our rings in the wine, which we did. Later when no one was looking, I poured my wine into a flower pot just behind my chair. This was our last official function as Cadets 2nd Class. A day later we were official 1st Class Cadets – Seniors.

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Tribute To The Class of 1966 at our ring Dining In



Coveted Class Ring

June week and graduation came and went, then we were instantly seniors almost ready to start our First Class year.

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15 Air Force Academy Senior Year 1965-1966



For our last summer, the senior class was divided into two groups: one group conducted the training of the Basic Cadets for the first half of the summer, then the second group covered the second half. I was in the group for the second half of the summer. The Basic Cadets thought that this was exhausting for them, but we had to be up earlier and ready to go before the Basic Cadets even thought of waking up, then once they were in bed and taps played, we still had to wind down before we got to bed ourselves. We had two rooms assigned to each of us for our own use, one was among the new cadets, and the other was a floor down where we kept our civilian clothes and other sundries out of sight of the noobies. We would trade off with one another so we could get a little R&R (rest and relaxation) during the intensive training, and we definitely didn't want them seeing us going off in our civies to have some fun while they got no respite.

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Dad provided me with a car before I drove back out for my half of summer training. It wasn't elegant, but it was a nice blue Ford Fairlane 500 sedan which did the job. I had my eye on a sports car and was looking around at MGB's, Triumph TR4's, and Datsun 1600's (these later became Nissan). But for now, the Ford did the job and had a full back seat so I could take passengers.



My Ford Fairlane 500

Driving out to Colorado from Virginia was a cross country adventure. I took off on a bright, sunny, summer morning and headed west. I knew it was going to be a long trip, but I felt in pretty good shape. By the time I got to St. Louis, Missouri, it was dark and late, and I was getting pretty tired. On the west side of St. Louis, I saw a huge dirt parking lot that was empty, and probably 1/2 mile off I-70, so I pulled off, parked, took off my shoes, and settled down into the back seat. It wasn't really very comfortable, but I got to sleep finally when I was awakened by a

bad feeling. I looked out the window and saw that I was still very much alone, so tried to go back to sleep. I couldn't get over the bad feeling, so put my shoes back on, started the engine, and drove towards the highway. About half way to the highway, I saw another car pull onto the road and start into the parking lot. As I passed it, it turned around and started following me. I got onto I-70 and kept going. This was about 2:00 in the morning and traffic was light. After I went about five miles, they finally turned off and disappeared. I am thinking that if I had stayed there, I would have been in deep trouble – beat up, robbed, perhaps even killed. I am very grateful for that warning from the spirit. There was another similar experience later that summer that I will get to in a little bit.

I was no longer tired at that moment, and I just kept on driving. By the next afternoon, I was trying very hard to stay awake. All of a sudden my eyes blinked open, and I was half way into the opposite lane of a two lane road, headed toward some cars coming the opposite direction that were already starting to swerve onto the shoulder of the road. I jerked the wheel and got back into my lane. I know someone was watching over me during this trip. I drove into a small town and pulled in by the side of a gas station to try and get a little bit of sleep. It was daytime so I wasn't worried about getting waylaid then. I don't know how much sleep I got, but it wasn't much because I was so keyed up. I

finally got on my way again and pulled into the academy, checked in, got a room assignment, and crashed for a little bit more sleep.

After a good night's rest, then the "fun" began. We took over our Basic Cadets during the "changing of the guard", memorized who they were, and started our own fresh harassment for military discipline. I was put in charge of a table in Mitchell Hall where we ate our meals, and I was also assigned as the coach for our flicker ball team. These new cadets had similar competitions as we did three years earlier. Now I was not much of a coach, nor even had played many sports in high school. I told my group of 20 basics, that when they won a game, I would let them walk back to the dorms in formation. If they lost, then we would double time back in formation (which was the normal), and that included a long ramp that would take us uphill. Most of these guys had played lots of sports in high school and knew the ropes. Also having been together for four weeks already, they were familiar with each other's strengths. One of them took charge of field assignments and substitutions, and they played really well. I think I only had to have them double time back once over the next four weeks.

Having been through this training myself three years ago, I had forgotten little about being a hard nose, and was able to keep them on their toes. Down in my second room, I had a partial wig

that was just a circle I could put on my head, and it was just enough to barely poke out from under my wheel cap that we wore when we had our blues on. It didn't cover any of my normal hair, but looked like a very scruffy head of hair under my hat. One day I put this on after changing into my blues in my regular room, getting ready to go into my secondary room to change clothes and go into Colorado Springs, as it was my turn to go get some R&R. As I walked through the hallway to the stairwell, I heard a few giggles from the basics as I passed by some of them. They shouldn't have seen my hair if they had been keeping their eyes straight ahead as they should, but I didn't stop any of them for a chewing out. It had the effect that I was looking for, giving them a little bit of humor to keep their morale up. When their eyes varied from straight ahead, this was called "gazing" and we usually gave them 20 pushups right then and there. I had some fun with them as well. Makes for a better rounded individual.

One evening, four of us jumped into my car and we drove into Colorado Springs to see a movie. I can't remember which one it was, but it was a way to relax. It was dark when we were driving back, and all of us were pretty tired from the stress of the training we were giving. I knew I was tired, and I thought that I would just drive in the middle of the two lanes on our northbound side of the Interstate, so I would have a little more reaction time if I started to drift. The southbound lane was about

a half mile away from us, so we were all by ourselves with no other traffic either way. A short time later I noticed in the distance that a car was coming southbound, so I just averted my eyes from his headlights and kept on going. The speed limit was 70 mph. I started to get a bad feeling about driving in the middle of our two lanes, such that I moved over to the right lane. Just a little later a car flashed by to my left, also doing about 70 mph. Five seconds later I finally realized that the car had been on our side of the interstate going the wrong way. I woke up pretty quickly, no longer being tired due to a shot of adrenalin. That was the third time that summer that I had been warned and saved by the spirit. I treasure those experiences and can remember them as if it had happened yesterday. Two cars hitting head on with a closure rate of 140 mph, would not have left anyone alive!

Finally basic training was over, and academics started back up. Those were always a grind, but not quite as difficult as it would have been had I not changed my major. I had some good classes that I liked, watched a laser test in our laser facility, kept flying model airplanes, but worked hard as well. At the end of our junior year, my squadron mates had elected me to be their representative on the honor committee, and we heard several cases during our senior year. One of my classmates in my squadron was writing a paper late one night, and he failed to

document some of his sources, yet copied words directly from a reference book. His instructor recognized the direct quotes and reported him. The honor committee met and tried his case. Since he was in my squadron, I was recused, but they only used 12 of the 24 of us at a time anyway. I was able to attend however. Senior Cadet Jerry "Woody" Woods had only the excuse that he had been very tired and had just made a mistake. He received twelve "guilty" votes and was dismissed from the academy. I felt really badly for him. He was a good guy and had a fiancé who lived in Colorado Springs and came to all our squadron parties. She was a very nice girl. One mistake with little excuse, and his three prior years at the academy were wasted. The honor committee required a unanimous guilty vote to dismiss a cadet from the academy, and that's what they voted that night. I was pretty sad for a while.

The Army football game came up again that fall, and there were lots of shouts out the windows of "Let's have a pep rally!" Somehow, the word got out that the Superintendent of the Academy was prepared for a large bonfire at his residence on the academy grounds, and it wasn't long before a large number of cadets were headed for the parking lot where we all parked our cars. In case I didn't mention it, only seniors were allowed to have cars, and there were two large parking lots just east of the gym. In the fall, not every senior had a car, since we were not

allowed to take out any loans for cars until Christmas. I had three other guys following me to grab a ride, and a large part of the cadet wing ended up at the big bonfire enjoying a huge pep rally. That was a lot of fun, as well as exciting, because we were not supposed to be out of our rooms that time of night (it was quickly approaching taps), but since it was preplanned by the higher ups, they provided the excuse and the permission to build team spirit. We were finally sent back to the dorms with lots of smiles and high morale.

Another highlight of the fall semester for us LDS cadets was that Elder Boyd K. Packer, an Apostle of the Church of Jesus Christ of Latter-day Saints, was invited to speak one Sunday in our Protestant services. It felt really great to have an apostle from our church to speak to a large portion of the cadet wing. I don't remember the specifics of his sermon, but my impression remains that he spoke on morality and the moral character we needed to exhibit as officers in the Air Force throughout our careers, and the good influences we could be on others as we served in various places throughout the world. The calling of an apostle is to be a witness of Jesus Christ to all the world. This he did wonderfully on this Sunday. I was proud to be a member of the church he represented. I was hoping that he could meet with our LDS group for a little bit, but he was there, and then gone. I did get to meet him and shake his hand about 20 years later

when I was serving as a bishop in Fairborn, Ohio. It is interesting that Elder Packer trained as a fighter pilot during WW II, and was stationed in the Pacific. (After a little research, I found that Elder Packer was an assistant to the twelve apostles at this time, and was ordained an apostle in 1970).

As December time was approaching for car loans, I had gotten my eye on a white TR4 convertible that one of the officers at church was looking to sell. I was able to get in and drive it around a little, and I was ready to go for it and submit my loan papers. I told Dad about it, and he told me that he had a newer (1965) bright red TR4 lined up for me, to pick up at Christmas when I was home. I had to tell that officer that I wasn't buying his car, but I did get another LDS cadet interested in it, and he bought the white TR4, so I didn't feel too guilty. When I got my loan check, I sent the \$2700 to Dad so he could pick up the car and have it ready for me. I was really excited. Driving home to Virginia, I had a lower class cadet riding with me who I was dropping off in Ohio, not far off of I-70 that we were taking. He had a pair of skis that he was taking home, so we mounted them on the car roof with his ski rack. As we were driving home, I calculated our gas mileage at 12 mpg. That was caused by the extra drag of the skis, and that was terrible mileage. We were splitting the gas, but still As soon as I dropped him off, the mileage went back up, and I only had about eight hours left for

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the trip home. With two of us, we could drive through without stopping.

When I got home, I traded the Ford Fairlane back to Dad and anxiously grabbed onto the red TR4. Pure excitement! Going back to school, I can't remember if I had someone driving with me, but that was probably the case. We made it back with no problems and started our spring semester – the last semester, and there were many events going on.



1965 Triumph TR4 Convertible

That winter I went skiing one day, driving my TR4 instead of going with the Ski Club bus. It seemed more fun to be independent. I had purchased a small ski rack that fastened to my trunk, and would hold two sets of skis. I had also purchased a set of Head skis, poles, and ski boots from another cadet who was finished with them. I was tooling down the Interstate

keeping to the speed limit, then turned off and headed for Loveland Pass ski area. The roads were clear and clean and the sun was up in a bright cloudless sky. I wound up into the mountains, and as I was getting to the top of the pass leading into Loveland, I slowed to 25 mph for the very sharp turn at the top. Halfway through the turn, the road turned to ice, my car stopped turning, and I slid front first towards the edge of the road and the steep downhill slope of the mountain on the other side. All I could think of was that I was going over the edge, and I decided to try and steer my car down the mountain avoiding any big trees. I slid off the edge, the nose of the car dropped and I started to look down the mountainside. My car plopped into a snowbank, and just stopped! I sat there for a minute in a frozen silence. Then I let out a deep breath to think about my situation. The right seat in the car had pivoted forward and hit the front windshield, causing a crack across it. I got out of the car, shut the door, and walked/crawled up the slope to the road. I was just coming up when another car was rounding the curve. They saw me and immediately stopped, amazed that I was coming up the mountain. The only thing I could think of was getting a ride down into the valley, and getting a tow truck to get me out. I turned and saw Loveland at the bottom of the valley very clearly. It felt like my car was on about a 30 degree slope, and there was nothing else I could do about it. I accepted a ride down to the ski area, found a tow truck, rode back up the mountain where the

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tow truck was able to pull my car back up to the road. Once I paid the tow truck driver, I drove down to Loveland, bought a lift ticket, and took a lift to the top to start skiing. I think I was still in sufficient shock to just keep going along my planned agenda for the day. However, I got very cold on my first run down the mountain; finally got things straightened out in my head; and thought "This is stupid!" I put my skis away, and drove back to the academy a little wiser, with a cracked window, and the back bumper bent by the tow out.



Skiing in the Colorado Mountains

Another thing I remember is that when we went out skiing, we could get an old C-Ration pack that had some canned food plus some highly enriched protein and other foods to keep up our energy, We would put the cans in a secure place around the engine manifold and they would warm up while we drove to the ski area. They really tasted good when warm, and we scarfed up the food just before we hit the slopes. We always carried a small can opener which folded up flat, was about two inches high, and would fit on our dog tags. It was nice to feel prepared.



P-38 Can Opener – Still in Use today

The spring of 1966 was filled with many activities and some fun as well. Each of the 24 squadrons of cadets at the academy had an active Air Force unit as a sponsor. Our squadron sponsor, the 94th Fighter-Interceptor Squadron of Air Defense Command, invited our squadron for an official visit. All of us were pretty excited because most of us wanted to fly fighters. While we were visiting, we got briefings on the F-106 Delta Dart interceptor jets they were flying. We were shown through the maintenance units who kept the complex and rather delicate intercept radar running. We were told that the F-106 required a lot of maintenance with an average of 106 man hours required for each hour of flight! A few of us were selected to go up in a T-33 target aircraft which were used to provide intercept training for the F-106 pilots. I was lucky to be one of those. I was outfitted with a flight suit, helmet, oxygen mask, and given some training on how they worked and what not to touch in the aircraft. We went up first as the target and flew to the scheduled training area. The F-106 pilot made some intercepts on us, and one time he transmitted over the radio, “Target, cease chaff, cease chaff”.

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My pilot just chuckled and kept ejecting chaff for a little bit, then finally stopped. Chaff consists of very small strips of radar reflecting material, such as aluminum. The chaff spreads out giving the interceptor a large area of radar reflection where the smaller target cannot be separated out from the chaff. Without a definite target, the intercept is really difficult, sometimes impossible to complete. I caught a glimpse of the F-106 once as he flew by following an intercept. After the F-106 left, my pilot let me fly the jet for a while. I flew by the instruments, knowing what each meant, so I could hold a course and an altitude. My pilot told me then, that if he had known how well I could fly, he would have let me fly during some of the intercepts. That made me feel good. I didn't get sick on this, my second flight in a T-33.



F-106 Delta Dart, Mach 2 Interceptor



94th Fighter Interceptor Squadron Hat in the Ring Patch
That was Eddie Rickenbacker's Squadron in WW I

While at our sponsors, There was a party and dance where some local girls were invited. My classmate Dan Patrick and I got to meet two girls who were good friends. The one I was “taken” with was Sandy Darling, yes that was her real name. I found out later that she was the winner of a local beauty contest. After we got back to school, I started writing to her and we exchanged a few letters. One of the sophomores in my squadron lived in that area, and I arranged to stay with him at his parent's house during spring break. I drove there in my TR4 – yeah, I guess I was a little smitten – and stayed at his house. In exchange for

that opportunity and for the use of their speed boat, I helped sand and repaint his folks' sailboat. I dated Sandy Darling at least twice. I took her out to dinner once – I had planned to take her to a dinner and dancing place, but when we got there, it was closed and out of business, so we went elsewhere for dinner then I took her home. Also I invited her to go water skiing, and we went out to the lake and the boat that I had borrowed. We had a good time, and both of us got to water ski – I also knew that we should have had a spotter for safety, but two's company, three's a crowd. After a while we stopped the boat out in the lake, and sat there soaking up the sun and talking. As we were talking, I spotted a canoe heading our way, and up pops the sophomore cadet from my squadron. For some reason he wanted to keep an eye on us, or he just felt left out. He kind of ruined the rest of that water skiing trip, but I couldn't really say anything because his parents were putting me up, and I was using his parent's speed boat. When my spring break time was almost up, I hit the road to head back to school. Sadly, I never saw her again as life was speeding up towards graduation.

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Sandra Darling



Sandy Darling and Milt During Spring Break 1966



Sandy Darling and My TR4 1966

I had two interesting experiences driving back to school. I had a problem with my TR4 in that one of the front wheels was imbalanced, and I had a severe tire shimmy between 55 and 65 mph. I didn't have time to get it fixed (yeah I was young and didn't know any better), but I figured I could drive either at 55 or go up to 70 and above. I opted for 70-75, which was not very smart but I did it anyway. Shortly after I left Selfridge, I was on a city 8-lane throughway where I was in the left lane doing about 75. About 8 cars ahead of me, a car turned into the very wide median to go back in the opposite direction. I immediately

recognized it as a highway patrol officer. If he hadn't showed himself like that, I probably would have gotten a ticket. Later that night I was on a secondary road, again doing around 75 mph with no one in sight either way. About two miles ahead of me, I saw a flashing red light and started to get really worried. I was thinking that the highway patrol had set up a road block and were simply waiting for me. I stopped for a minute and looked at my map, and saw that there was a way that I could backtrack somewhat and could go around via another route, although it would slow my trip by about two hours. I decided to keep proceeding but slowed down to the speed limit. I figured if they were waiting for me, I deserved it. I was definitely guilty in my mind and decided to face the music. When I got closer to the flashing light, I saw that it was on a one lane road with construction. I stopped for the light, and shortly the light turned green and let me pass. I was very relieved and made the rest of my journey without incident. Someone was still watching out for me, as they had been for most of life up to then. It should have taught me to slow down and drive the speed limit, but at that age, I was not ready to do that, although I was learning.

You have heard me mention "Taps" a couple of times. This was played over the integrated sound system in the dorms as well as outside so we could hear wherever we were. We had "Reveille" to wake up in the mornings, "To the colors" for lowering the flag,

“Call to Quarters” for study time, and “Taps” for lights out. About once a quarter, the cadets who had that day’s assignment in the cadet wing headquarters as “Officer of the Day” would play something other than Taps. The one used most often was “Teach Me Tiger” sung by April Stevens in a very sultry voice. That got lots windows opening and comments shouted outside – but of course we all loved it. A few fun things always helped our morale.

As cadets, we always liked to look good. As spring broke, we started tanning ourselves whenever we had an opportunity. Mostly that was during the weekends. A lot of us would go up on the flat roof of the dorms, six floors off the ground. I remember one black cadet who would come up with us and we would tease him. When he smiled, we could see his bright gleaming smile in the middle of his coal-black face. He was a good guy and all of us liked him. I didn’t see any racism at the academy, we were all in the same situation working hard for an Air Force commission as a Second Lieutenant, and got along pretty well. There were always some (and always will be) who had grating personalities, but we all tried to get along. Often, many cadets who did not want to go to the roof, would go out into the open quadrangles on the ground floor of the dorms, and I could often see many cadets with their blankets strewn over the grass enjoying the rays. I would sometimes go down to the athletic fields on the

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weekends and be by myself, or with just a couple other guys and enjoy the wide open space.



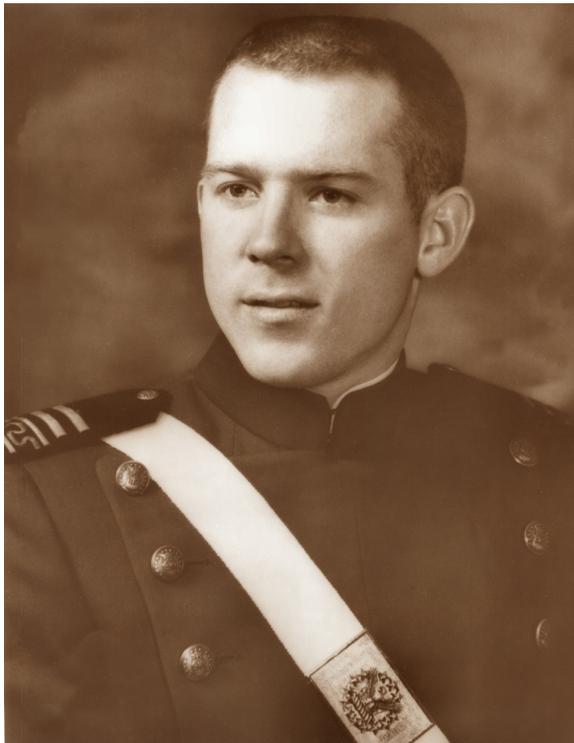
Milt Sunbathing at the Athletic Fields on a Saturday in the Spring of 1966

One hundred days before graduation, we had a 100th Night Dining In. This was another planned event in the short tradition of the Academy – we were in the 8th Graduating Class. Again this was a very formal dinner with high ranking guests, formal mess dress, toasts to the President of the United States and the Air Force Chief of Staff. Our guest speaker was General Emmet “Rosey” O’Donnell Jr. Gen O’Donnell had led the first B-29 attack over Tokyo toward the end of WW II. It was a wonderful

night and a celebration of 100 days left until graduation.

That spring, we had a tragedy. One of our classmates, Pete Johnson, was a member of the parachute club. He was a very “gung ho” cadet and served in responsible positions in the cadet wing chain of command. He had stayed at Fort Benning at the end of our ZI field trip at the end of our second summer and earned his jump wings, which made him a qualified paratrooper. The academy provided jump planes for the club. Each member of the club always packed his own parachute plus his backup chute. One day Pete jumped from the plane and his parachute went into a streamer. He played with it trying to get it to open just a little too long. When he finally went to his backup chute, he was too low to the ground to get it to fully open. He hit the ground and died. A lot of us went to his funeral and were sad to think of a lost future that he was well prepared for success in. I have his picture and obituary in my scrapbook. That helped us to reflect on how frail life could be for any of us. It also helped me to strengthen my belief that I never wanted to parachute from a flyable airplane, which I still hold to this day. I never had to jump, thankfully, but I always knew that could be a possibility in saving my life if I didn't have a flyable airplane, and I was well-trained on how to do it.

16 Air Force Academy Graduation Week 1966



Milt Graduation Photo June Week 1966

June Week! The culmination of four difficult years at the Academy. All of us had looked forward to this week for the last four years, and had experienced some of it as the three classes above us had gone through it each year. Each year as we celebrated June Week, we experienced banquets, award ceremonies, visitors all over campus, dances, parade uniforms, parades, and then the graduation ceremony for each class combined with a parade without any seniors in the parade, then an official swearing-in and the commissioning of the graduates to 2nd Lieutenant in the United States Air Force. Some cadets would go on to graduate schools for special programs; some would get commissioned into the other services, such as the US Army or the US Navy. In fact my brother Stephen graduated from West Point ten years behind me, and got commissioned into the US Air Force. Unable to fly due to a minor heart murmur, he got assigned to a missile squadron out of Cheyenne, Wyoming, and spent the next two years on alert in a missile command bunker where he earned his master's degree in history. Without a flying future, he was able to transfer back into the Army where he stayed until retirement at twenty years of service. I looked up the statistics for the class of 1966 on the Internet: 777 cadets were appointed to start the Class of 1966; 470 graduated of them graduated on 8 June 1966. Of those graduating, 463 were commissioned into the Air Force, one was commissioned into the Army, one graduated posthumously (Pete Johnson), three were

from foreign countries, and two were not commissioned, probably for physical problems making them unfit at that time for service. Our calculated dropout rate was 40% which is pretty high, indicating the difficulty of the program even with intensive screening of all the applicants.

I was really expecting Dad to come to my graduation. However Susie told me this story from Dad and Jean, that they could only afford one plane ticket and Jean wouldn't let Dad come by himself. They then sent Susie out to graduation as their substitute. I didn't mind having Susie come out at all, but I was devastated that my Dad, who had always wanted me to come to the academy, would not come to my graduation. I was not Jean's son, and she wanted little to do with any of Dad's three children by Virginia, our Mom. This dogged the three of us all of our lives, along with our spouses and kids, even through Jean's will after she passed away. I am betting that Jean got a very large earful from my Mom when they met in the spirit world. I always tried to be nice to her, called her at Christmas and on her birthday, and sent cards and gifts to her. I always felt some barrier there, however I felt that barrier reduce somewhat after my first wife passed away of cancer, and I remarried. Jean felt that we had more in common with a second spouse, so we could empathize with her. But enough of this – on to June week.

I probably shouldn't write this, but one reason I wanted my Dad there, was to take me out and get me drunk. I had thought that I wanted that experience so I could empathize with other guys who liked to get drunk every weekend or even more. I thought that experience would help me in my career by knowing what that would feel like. With Dad not there, I was simply not going to do that. As I am now much wiser than a crackerjack cadet, I am pleased that I never had that experience. There are always dangers to doing stuff like that, especially since I have learned that a person who may be apt to become an alcoholic, can get hooked for life on one drink. So that is a piece of wisdom I desire to pass on to others.

I was able to get a local LDS family to house Susie for the week, and I also set her up with our First Squadron Commander, Wes Darrell, also a member of the church, for a date or two. Susie had a good time, but didn't have a camera, and with June week being so busy, I don't have any pictures of my own for this week. There are some generic pictures from the Internet and a couple that I took during previous June weeks that I will include.

I do have a program for June Week 66 which lists all the planned activities. They started on Friday, June 3rd with an athletic awards banquet (by invitation only), followed by an all class dance on Saturday evening. On Sunday there was a baccalaureate service for each denomination (Jewish, Catholic, and Protestant).

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On Monday we had a parade (of course – what is June week without putting all the cadets on display making us work hard – parades were not fun for us). Then there were specific awards ceremonies and receptions for outstanding units and certain cadets and their guests (by invitation only). Monday evening the class of 67 (the year behind us) had their ring presentation banquet and ring dance. On Tuesday there was a graduation parade, pretty much like the Saturday one, except there was an aerial review where many different Air Force operational aircraft did a fly by for all the cadets and visitors at the parade. Then Tuesday evening, the class of 66 had our graduation buffet followed by our graduation ball.

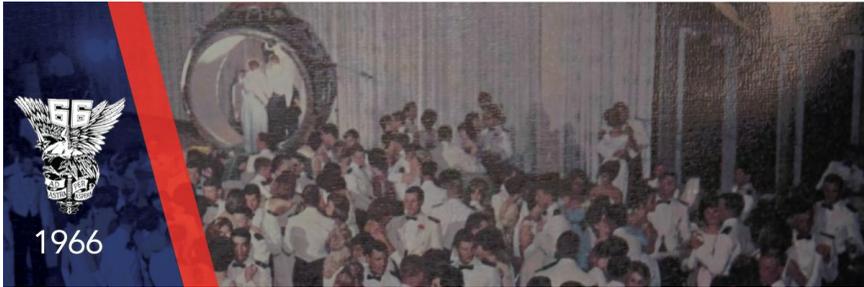
One tradition was to throw graduating senior cadets into one of the pools in the Air Gardens. This had calmed down somewhat by the time I was graduating because a few seniors in the past had been slightly injured as they struggled to keep from being thrown in, but it was still happening. I however was not selected by our underclassmen to get thrown in, for which I was thankful.



Throwing a Graduating Senior into the Air Garden Pools

I will describe my experience with this ball as I remember it quite well. Clair Wood, Diane Wood's mom, who had kept in contact with me all four years, called me up a few weeks earlier and asked me if I had a date for the graduation ball. At this time I was between girlfriends (very poor planning), and I told her I didn't. She wanted to introduce me to a cute blond young woman who she knew from her business. I said all right, and she arranged for me to drive to Denver on a Saturday and have a date with her. We met, and she seemed to be a nice girl, and drove a Corvair. I don't remember where we went on our date, but we

took her Corvair (I don't really remember why, but we did) and she had me drive it. The Corvair has a little different way to get into reverse by going going towards first gear and pushing the shift lever (in the floor) to the left. The main problem is going from neutral to the left and up to first gear, while reverse is to the left and up, but pushing a little harder to the left. I found it too easy to go into reverse at a stop light instead of first (pushing too hard to the left), and had to backtrack quickly into first before I backed into the car behind me as the light turned green. Anyway I finally got the hang of it and drove it around OK after that. I presume we had a descent time, and I asked her to the graduation ball, and arranged to meet her someplace at the Academy amidst the busy activities. When we met for the ball she was dressed up really nicely, but she surprised me by showing up as a brunette. She had changed her hair color, and for some innocuous and unsubstantiated vain reason I was annoyed. But we did dance, and we had our picture taken inside the giant ring prop that was set up at the dance, and we got through the evening without fuss. That picture is long gone, but I wish that I had at least kept it for historical reasons. I never did see her again after that – I was headed out of state for the next 20 some years, and I felt no real attraction for her anyway. So another girl left at the wayside. I seemed to have a preference for blondes, but to my recollection, I never had a blonde girlfriend. Go figure!



Graduation Ball with the Large Class Ring Setting Used for Graduation Ball Pictures

I did make a date with the daughter of one of the church members for an earlier dance, and although I can't remember her name, we had a good time. After the dance I had dropped her off at her home in Colorado Springs, and proceeded back to the Academy. I found myself pretty tired with all the sleep I was losing during June Week, and I had to stop two or three times on the way home, even though I had the top down on my TR-4. Each time I got out of the car, walked around it a few times, did 15 or twenty pushups to get some blood flowing, and got back in the car and continued to the dorms. See I had learned a little bit from my prior "sleep deprivation driving" experiences, and I made it back OK.



Summer Parade Dress Uniform

The final parade on Wednesday June 6th was the actual graduation parade. As seniors, we were seated on folding chairs, all together in front of the reviewing stand (it was nice that we didn't have to march). The parade consisted of the remainder of the cadet wing commanded by the Juniors or Second Class cadets. They marched onto the field and formed up in their 24 squadron normal formations on the parade ground. We had a graduation speaker as all those in the parade formation stayed in formation in parade rest. There was a trick that every cadet had to use, that was taught to us. We had to make sure that our knees were slightly bent when standing at attention or parade rest. Those who forgot and locked their knees eventually blacked out (fainted) and fell down. There was always a couple in every

parade who ended up on the ground. The rest of us simply smiled to ourselves and check our own knees to make sure they were not locked.

Our graduation speaker was Harold Brown, Secretary of the Air Force who also presented our commissions and our diplomas. At the conclusion of the speech, we were called up to the center of the stage one at a time (we had filed up one row at a time to the top of the stairs of the stage), where we received our diplomas, saluted, and then came back to our seats. We were all in alphabetic order, but they didn't give us our actual diploma, it was a blank folder. Making sure that we would've gotten the correct diploma was too much of a logistical dilemma for the higher ups to manage which would make them lose face in the middle of a strict, military presentation. We didn't mind.

Now since our class color was red, each of us had fastened a long red streamer to the inside of our white parade caps. After every one received our diplomas and the rest of the cadet wing had "passed in review" (marched by in front of the commander's podium), we were brought to attention, then we were given the command: "Gentlemen, you are dismissed!" Of course that was the signal for all of us to yell and throw our caps high in the air with our red streamers trailing proudly through the air behind each cap. That was the tradition which we honored gladly. I didn't throw my cap very high, because I didn't want to lose it. I

caught it on the way back down, and kept it. We were quite a sight in our parade uniforms: blue tops that tucked tight at our waists, white inserts around the inside of the collar sticking up about a half inch above the blue, white parade trousers, and gold sashes around our waists. We all dispersed looking for our guests, getting pictures taken, and congratulations all around.



Moment of Triumph at Graduation –
“Gentlemen, You Are Dismissed!”

About an hour or so later, we had a meeting in our normal blues, and we were administered the oath of allegiance, our commissions, and our gold 2nd Lieutenant bars.

Oath of Allegiance

I, Milton Richard Sanders, do solemnly swear, or affirm, that I will support and defend the Constitution of the United States of America against all enemies, foreign and domestic; that I will bear true faith and allegiance to the same; that I take this obligation freely, without any mental reservation or purpose of evasion; and that I will well and faithfully discharge the duties of the office on which I am about to enter. So help me God.

You will notice that the allegiance does not have any expiration date, and I am still committed to that allegiance for all of my life. We had previously had been measured and fitted for our regular Air Force uniforms which were a different hue of blue, and we had purchased “wheel” hats and flight caps, summer light blue uniform shirts, regular uniform blues, and khakis which were still used sometimes for summer uniforms. We had also purchased our 2nd Lieutenant bars and the National Defense Service Medal which was given to everyone serving in the armed forces at that time, among which we were counted as students at the Academy. However our four years at the Academy did not count towards our 20 years of service for either retirement or pay purposes. At that time we went from top dogs at the Academy to the lowest officers in military service. What a big letdown. We knew it was coming, so it wasn't all that bad at the time. Each of us also had to give a dollar to the first individual who saluted us, not counting one another.

Right after the graduation parade while we were still on the parade ground the Air Force Thunderbirds gave all of us their aerial demonstration which is always thrilling as they fly very low right over us doing about a 10 minute show of precision aerobatics ending with the famous bomb burst where four of them come in together and pull straight up, then each rolls to a cardinal compass heading as they loop back around while the 5th airplane comes right up through the middle going vertical right through the bomb burst, rapidly rolling until he goes out of sight. The four planes that split finish their loop at very low altitude and cross one another at nearly the same instant as they roar across the crowd seemingly about to hit one another.



Thunderbirds Bomb Burst



Low Altitude Crisscross at the end of the Bomb Burst

After that event, we gathered in small groups saying good bye to one another, then finished up packing our stuff and getting cleared out of our rooms. I think we stayed that night in our rooms, but headed out the next day for various parts unknown, to take about 30 days of leave before we reported to our next duty assignments. Packing my TR4, which didn't have much room, along with Susie's stuff was a real challenge. I ended up leaving all my model airplanes and associated equipment in the model club room for anyone who wanted it. It was a difficult sacrifice, but I had no choice, so just brushed it off. The challenge now was to drive home with Susie who I don't think had a license at that time, and had no experience driving a stick shift. I gave her a little training, knowing that I couldn't do all the driving myself,

as we wanted to drive straight through to save money as well. Susie did fairly well with the stick shift after a few tries, and I actually did get some sleep while she was driving. I was doing at least 75% of the driving, but her help made it possible for us to get through. We headed first for Pennsylvania to visit the Ways, and got there with only one problem. As we approached St. Louis, I had told Susie to wake me up before we got there because I wanted to take the beltway around and not go through the center of town. I happened to wake up, and just as I opened my eyes, I saw the beltway entrance go by. I told Susie to pull off at the next street we came to, but for some reason she didn't seem to know what to do. As the next street came up, I ended up grabbing the steering wheel and turned us onto that street, and the car stalled because Susie didn't put in the clutch. I kind of snarled at her to "get out". We traded places, and I drove around St Louis saving at least an hour of driving time. Except for that, we got to Dubois safe and sound. Susie told me the other day that she had seen a picture recently of the two of us in Dubois on that trip, and I have seen it also, so I will try looking for it.

We finally drove into D.C. and got home from the West. After a little R&R, I headed back out for a little sightseeing on my way to Vance AFB in Enid, Oklahoma, wondering what the "Garden of Enid" might look like and hold for me over the next year of Air Force Pilot Training.



To all who shall see these presents, greeting:
Know Ye, that requesting special trust and confidence in the patriotism, valor, fidelity
and abilities of **Milton Richard Sanders**, I do
appoint him **Second Lieutenant** in the

**Regular
United States Air Force**

to rank as such from the **eighth** day of **June**, nineteen
hundred and sixty-six. This Officer will therefore carefully and diligently
discharge the duties of the office to which appointed by doing and performing all
manner of things thereunto belonging.

And I do strictly charge and require these Officers and other personnel of lesser
rank to render such obedience as is due an officer of this grade and position. And
this Officer is to observe and follow such orders and directions, from time to time, as
may be given by me, or the future Presidents of the United States of America, or other
Superior Officers, acting in accordance with the laws of the United States of America.

This commission is to continue in force during the pleasure of the President of
the United States of America, for the time being, under the provisions of these Public
Laws relating to Officers of the Armed Forces of the United States of America
and the component thereof in which this appointment is made.

Done at the City of Washington, this **eighth** day of **June**
in the year of our Lord one thousand nine hundred and sixty-six and of the
Independence of the United States of America the one hundred and **ninetieth**.

By the President:

W. Stone

Lieutenant General, USAF
Deputy Chief of Staff, Personnel



Harold Brown

Secretary of the Air Force

FORM 1AF
1 AUG 66

My Commissioning Certificate to a Regular Officer as a 2nd
Lieutenant

17 A Few Last Thoughts of the Air Force Academy and on to Pilot Training



A couple more incidences in college are in order before I totally finish that up. I got interested in computers while at the Academy. The computer department had a Burroughs B5000 medium size mainframe. I signed up for a programing class and got my first look at using flow charts to outline a computing problem, then filling out each portion of the chart with the computations required to accomplish that step. I have always been slanted towards detail when solving problems so this fitted right in with my thought processes. The language we were taught was ALGOL which was a high level computational language at the time, and ran fairly quickly. As the instructor taught the class, he explained basic functions that the language covered, then gave us our first programming problem.

The assignment was to compute square roots of any number given to us. This required us to set up a flow chart to take care of every case that a square root could face. As a number was entered, first we had to test if it was negative or positive. Square roots of negative numbers don't exist, and they are considered "imaginary" numbers and are written with an "i" in front of the number. For example the square root of -16 is "i4". Later on in graduate school we were taught how to work with imaginary numbers because they do have value in mathematics and engineering. Then we had to consider that a negative number such as -4 squared gave the same result as +4 squared. They both come out as +16. ALGOL did not have a function that would calculate square roots of numbers.

We were given some formulas to program that would calculate square roots, and we had to put those formulas in our programming language, then test the results, and separate out the answers to print. Anyway it was an interesting exercise in logic and learning the programming language.

The B5000 read punched cards. We would write each line of our programs on programming pages developed specially for the 80 column punched cards. We could then turn it in and the computer department had trained people who would punch the cards for us. We then turned in our stack of punched cards which the computer operator would run through the card reader into

the computer, which would then examine our program and print out our program with errors detected. We then would go through and correct any errors in the original punched cards as well as our own programming errors. We had 8-10 card punching machines for our use, so we learned the intricacies of card punching as well. This helped me a bunch in grad school years later when I was doing FORTRAN 77 programming.

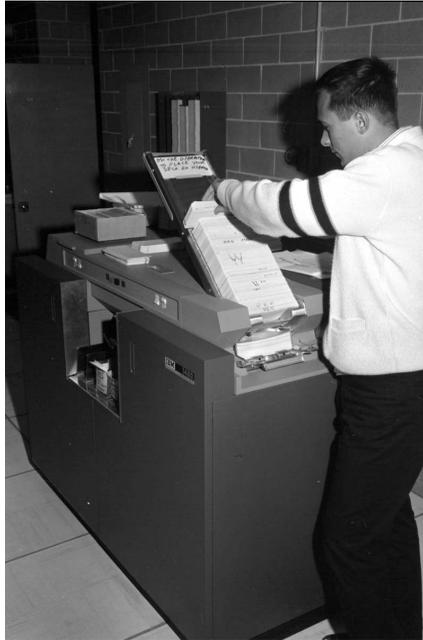


IBM Card Punch Machine

Every time we ran a program, the output would also include a printout of the program. One thing we learned, probably by accident, was that we could insert a card in our stack that would keep the printer from printing out any cards following that card until we inserted another card to resume printing out the

remaining cards in our stack. The room where we turned in our programming sheets, and card stacks to be run, had a multitude of cubby holes with groups of boxes in alphabetical order, where we could pick up our finished runs.

One day I got the bright idea of grabbing someone's card stack, inserting a card for not printing out the several cards behind, which I instructed the computer to print out in the program results in large letters: "Help! I'm trapped inside the computer!" after which I inserted the card telling the computer to print out the remainder of the user's program. Then after the program had been run by the operators, I got to the computer room early the next morning, grabbed the guy's cards and removed my set of cards that I had put into his program. Unfortunately, I didn't hear anything else about it, but I could imagine that poor cadet seeing that "help" quote right in the middle of his computational results, and combing through his printed program as well as his stack of cards to try and figure out how that had happened. One of my kids, Chad, many, many years later was doing similar things in his computer class in 8th grade – so he came by that tendency naturally from his dad.



Operator Feeding Punch Card Program Into the Card Reader

The Academy also had a huge analog computer. The interfaces were much more complex than the digital Burroughs system. We still used a flow chart, but we had to plug wires into a board probably 24 x 36 inches in size to get the computer to understand what we wanted it to do, by routing analog signals (varying voltages) through different parts of the board that had various built-in functions, such as amplifiers, input, and output, etc. This still required a lot of logic, but also some dexterity in routing wires (similar to an old telephone switchboard but with smaller holes and smaller connectors) and keeping track of where each wire went as we had different colors of wires for

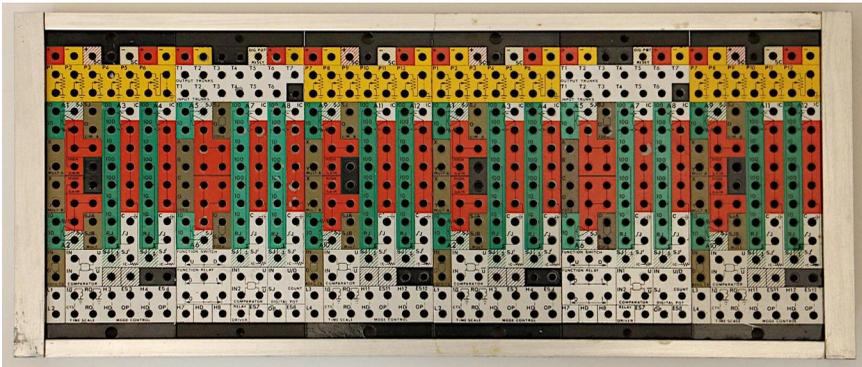
different lengths. Sometimes the programming boards looked a little like a rat's nest. This board would then slide up against a vertical slot which I would lock in with a lever. There were at least six large banks of potentiometers which I would have to manually set (at least the ones being used by my programming board) to provide the coefficients of my programming variables.



Sorry About Batman, But this is an Old Analog Computer

One of our analog programming projects was setting up a basic mass – spring- damper, such as you find in a car, only we used a simple model which would equate to only one shock on one wheel of a car. Then we had to vary our coefficients to demonstrate over-damped, under-damped, and damping within two cycles. The analog computer output was drawn with ink pens on moving graph paper, sort of like an EKG machine does today. It took each of us a while to both set up our program then get our

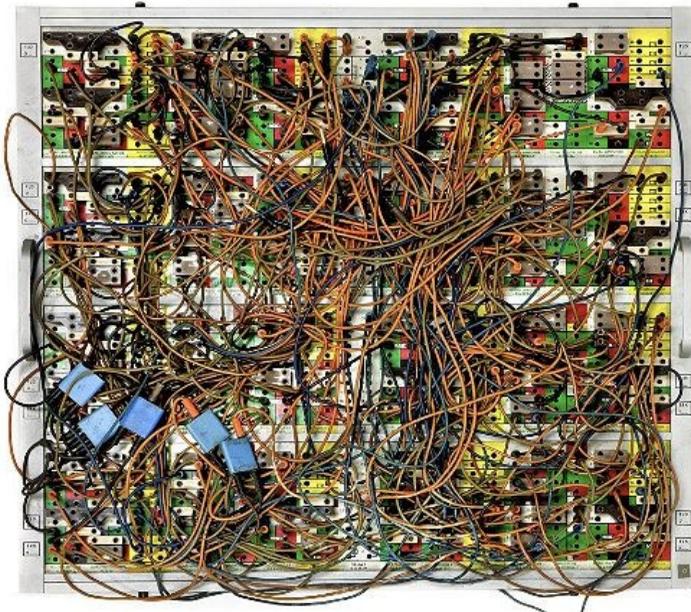
boards patched. Solving this project also helped many years later in grad school when we had to use an analog computer (actually it was a much newer and smaller digital computer that put out analog outputs) to solve aircraft damping stability in the pitch axis.



Blank Analog Computer Patch Board – Colors Identify Different Connections and Functions

In our analog computer class we also had to select a project from a list that our instructor gave us. I chose one that had me trying to set up a mechanical method to measure a person's pulse. A cadet before my time had done the same thing using a small intense light to shine through a person's finger, and picking up the change in intensity caused by the blood pulse. I fashioned a small open top wooden box for a person to lay his arm into, and then I took a speaker from Radio Shack, glued a dowel right in the center, and hinged the speaker to place the dowel on a

person's wrist. As the dowel moved on the wrist, the speaker coil would generate a small voltage. I never did get it to work because a person could not keep his physical wrist movement below the threshold of his pulse movement against the dowel. I still got a decent grade, because the project proved that physical motion of the pulse was very difficult to measure. These days we have machines that do measure pulse via physical means such as the blood pressure cuff. However, this was 56 years ago.



Patch Panel Configured For a Program

One other thing I want to include is a poem I wrote approaching graduation. This shows how many of us felt as we successfully

finished a tough four years of academic, military, and physical training. It also reveals some of our ego in our youth, not really knowing that it took more than four years to develop into manhood. We discovered that through the ensuing years.

TWILIGHT '66

Milt Sanders

The white snow lay on the mountains
As the sparkling flakes floated down
Amidst the Air Garden's silent fountains,
The white blanket smothered the ground.

The mother eagle spread her wings
To stop the drifting snow
From covering up her fledglings
Beneath her, tucked so low.

The mountain tops pierced through the cloud,
Huge jagged holes they made;
From these fell down the snowy shroud
As seen from yonder glade.

In places thin, the stars shone through,
As twilight turned to dark;
The subdued light made shadows blue,
While silence stilled the Lark.

Stood one lone figure in yon field,
Preparing to depart.

The middle essence and the yield
Of shining glass and metal, stark.

It now was time to leave the place
Which prior he had cursed,
The toil and sweat shone in his face,
The little hope that he had nursed.

The product of the Monastery
Developed as to plan:
The twilight of this anniversary
Fell upon the boy turned man.

On my way to pilot training at Vance AFB adjacent to Enid, Oklahoma, I had left Virginia a few days early so I could stop and visit my crazy cousin Joy Way (not really crazy of course, but we teased each other a lot and did some crazy things together). She was teaching school (her first year of teaching) near Dover, Delaware. I had contacted her and made arrangements to visit. I got there shortly after lunch one day, and she introduced me to her two roommates, Jane and Jillann, who were also teaching school that year. I presume they were all teaching their first year at the same school. I don't remember if they were teaching elementary, middle, or high school. Anyway, Jillann was nice

enough to move out of her bedroom to accommodate me staying there for two nights.

The three J's, as I call them (Jane, Jillann, and Joy) were all very nice, and we had a great time eating good food, probably pizza as well, and talking about our youthful adventures. Joy asked me that first afternoon if I would be willing to go down some rapids in the Delaware River on their large, bright yellow 4 or 6-man rubber life raft with them. She made it sound like it was a pretty exciting ride. I thought for a moment, while remembering seeing some of the rafting routes on the Colorado and Green Rivers out west and how rough they were, but then thought that rapids in the east were not near as rough, so I agreed. The next morning, we all got into Jillann's big old (very old) car that Jillann had christened with the name "King", tossed the raft in the trunk, and headed toward a tributary of the Delaware river. The first thing that I noticed was that King needed new shocks very badly. It took about three bounces to dampen out every time we hit a small bump in the road, and also leaned a lot towards the outside of every turn. The ride itself was very exciting!

We stopped at a gas station to fill up the large raft with air, put the raft on top of the car, and each of us had to have an arm out the window to hold it to the car while we gingerly drove the rest of the way to the water. I bet we all looked a little crazy driving down the road like that.



Yellow Life Raft

I had brought my guitar with me just for fun, but was a little worried that it might get wet, yet took it in the raft anyway. We pushed off into the shallow tributary, got into the raft and started slowly drifting down the river. Joy suddenly got excited and shouted, “There’s the rapids!” I looked around, didn’t hear any rushing water or even see any turbulent water. I said, “Where?” Joy pointed just a little ways ahead where I could see just a few faint ripples in the water. I started laughing! I could make higher ripples than that in the bathtub without spilling

water over the edge! They all started laughing with me as they realized that their view of exciting rapids was merely a few ripples in the water. We floated on out to the much wider Delaware River.

I found that paddling a rubber raft with big blunt ends across the water was very slow and laborious. We turned around and went back to the tributary before we lost sight of it, and started to paddle back up the smaller river. It was tough going even though the water moved very slowly. Finally the three-J's got out into the shallow water, grabbed some ropes, and pulled the raft with me in it, back up the river to where King was parked, while I strummed my guitar and sang some songs to them. I wished that I knew some good songs for raft pulling, such as Yo Ho, Heave Ho, or Row Boatmen, Row by the Smothers Brothers, but I didn't. That would have been even funnier.

The next morning, I was helping Jillann make up her bed after washing the sheets, and we were having a good time talking about things. I felt emotionally close to her for some reason, and I felt that she may just like a hug and a short kiss to thank her for giving up her room for two nights for me. However, being the shy guy I was, I didn't want to take a chance on my misreading the situation and being rejected, so I didn't. I guess I will never know, but sometimes we all like to dream a little. [Joy told me a few weeks ago that Jillann thought that Joy's cousin was a very

special young man] That morning I took off in my TR4, heading on to Oklahoma.

As I am thinking about Vance AFB, I remembered that those of us in my class at the Academy, who were qualified and had elected to go to pilot training, had a choice of one of eight training bases to select. We had the priority given to us in the order of our class standing, where I was somewhere in the middle. The most desirable base was Williams AFB near Phoenix, AZ. That choice was long gone by my time to choose. I remember that we were given a sheet naming all the bases and that we were to order our choices from one to eight, and a committee of academy officers would make the assignments. I ended up with Vance AFB, adjacent to what we ended up calling the Garden of Enid.

Enid wasn't a large city, and was about 25 miles west of the Interstate (I-44) that connected Wichita, Kansas and Oklahoma City. The distance to Oklahoma City was 72 miles on secondary roads. As I got near to Enid, I was thinking of getting a motel room for the night, then signing in the next morning. However, I was pretty close to the base, and decided to get a room at the BOQ, and signing in that night.

After I got to my room, I looked over my assignment orders, discovering that I was supposed to sign in that very day and that I needed to attend a meeting the next morning. I was very lucky

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that I had decided to sign in that night, and not be a day late. However as I attended the meeting the next morning, all I had to wear was my blues and everyone else was in their khakis. I stood out like a sore thumb, very unprepared that day. They split our class into two sections, then took us through the in-processing chaos. They put us into two sections so that one section would go to classes in the morning while the other section went to the flight line. We would switch every week alternating the schedules. And off we went to check out the wild blue yonder that we all thought was going to be very exciting.



Vance Air Force Base, Enid, Oklahoma – My Home for The Next
53 Weeks

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18 Air Force Pilot Training, Vance AFB , Oklahoma 1966-67 Part 1



After our initial meeting that first morning, we split into our two groups and went through our orientation of what we would be doing and for how long, issue items that we needed to pick up, and our current schedule for the week. Shortly after the meeting, I went to the BOQ office and arranged for a permanent room, and moved in from the temporary one where I had stayed the previous night. It was an older two-story barracks building that had been modified to provide ten 2-bedroom apartments for bachelor officers. My initial roommate was fairly along and close to finishing his pilot training program. We got along but did not socialize together. He had fairly nice decorations in the apartment which I purchased from him when he graduated. When he did leave for another assignment, I arranged for one of my classmates to move in with me, Roger Prigge. We got along

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well and even played some tennis together.



Our BOQ Bachelor Pad



Roger Prigge – My Roommate and Classmate in Pilot Training

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Milt Ready to Play Some Tennis in Michigan Sweat Shirt
(from a Previous Girl friend - Sandy Darling)

Our first training aircraft was the T-41, the Air Force designation for a military version of the Cessna 172, a tricycle gear civilian type of light airplane with an upgraded engine to 185 horsepower turning a fixed-pitch propeller.



Milt and T-41 Bug Masher

The primary purpose of the T-41 program was to initially test new students' reactions to flying, and to see if they had what it takes to endure a military pilot training program. These were flown from a civilian light plane airfield using contracted civilian instructors. The format was a lot looser than we experienced with military instructors, which took some of the pressure off of us as students. Each instructor had three students to introduce to flying and train our knowledge and reflexes up to the point where we learned procedures well, could take off and land, fly

basic maneuvers (level turns, stalls, and simple semi-aerobatic maneuvers) and to cope with emergencies. The field was about a 20 minute drive to the east of Vance AFB where we had about 14 T-41 aircraft, and a large room with tables surrounded with four chairs. We were each assigned an instructor, and we always sat at the same table. When one of the other students at our table was flying with our instructor, we would study the flight manuals for the T-41 and talk a little bit about our own flight experiences. We called these small planes "Bug Mashers" because they didn't go very fast – we cruised about 85-90 mph, but could get up to about 105 if we were in a hurry. Nothing happened very fast in these planes, but they were very good at smashing bugs on the windshields at lower altitudes. We rarely got above 5000 feet.

One emergency that we practiced a lot was emergency landings in case of engine failure. Our instructor would suddenly say, "OK, you have engine failure, pick out a place to land." We would then have to look out at the fields around us, pick out one that appeared fairly level with sufficient room, check the wind direction, and maneuver around at the specified glide speed to land against the wind. When we got close to landing, the instructor would say, "OK, go around." We would then apply power, stop our descent until we got to climb speed, then climb back up to a decent altitude like 2000 feet. One day while I was

flying with my instructor, he reached over and turned the fuel selector in between two settings (he could select left or right tanks, as well as both). I didn't notice it because I had been looking outside for landmarks. After about 30 seconds, the engine suddenly lost power, although it didn't totally quit. I was told to select a landing spot, but my heart had jumped nearly out of my chest! I started going through my procedures, thinking that we would really have to make an emergency landing. As we got close to the ground and I lowered some flaps, the instructor flipped the fuel select switch, which was between our seats to both, we got power back, and I climbed up to altitude. He did this to see if his student would freeze, not knowing what to do. I managed to pass that test.

For any maneuvering, we had to determine conditions of flight for any maneuver other than 30 degree banked turns, which were totally normal flight. I had to state conditions of flight, and then cage any instruments which needed that protection for exceeding their limits with a maneuver. These included chandelles (a climbing turn going to 60 degrees of bank right at the 90 degree heading change of the turn while reaching a specific airspeed, then continuing the turn while slowly taking out bank to end up at my original altitude and airspeed, and at a heading 180 degrees of my entry. This took a lot of coordination to do it correctly. We also had to cage many instruments while

doing both power on and power off stalls, which initially were pretty scary as you continued to pull the nose up to nearly 60 degrees, at which point the wings stopped flying and the nose rapidly dropped towards the ground, like you were falling out of the sky. I always felt a relief when I got back to level flight at flying airspeed.

Landings are probably the most difficult part of general flying. It is not easy to get an airplane weighing close to 2000 pounds and flying around 60 mph close to touchdown, to the static, non-moving ground, to make a soft landing. The stall speed was around 47 mph, so we needed to stay slightly above that by the time we touched down. The plane had two-position flaps which helped slow down our landing speed, but landing with the flaps retracted, always seemed to be much easier for me. Half-flaps wasn't difficult either, because that increased the lift as well as the drag, and still let me set the plane down acceptably. Full flaps was another story. Full flaps increased the drag quite a bit, making us use a steeper approach with more power on the engine, and rounding out for touchdown was kind of tricky, because we had to leave some power on, and had to make more of a round out to stop our descent just above the runway. I learned how to do it, but I still don't like full flaps for any light planes, including my models. Heavier and faster planes are not that much of a problem, because we always used full flaps

because of our higher landing speeds, and full flaps slowed us down faster. I do use full flaps on heavy RC models even now.

My instructor's call sign was Blue Chip 75, and his students simply added an integer of 1. Mine was Blue Chip 76, which I was only supposed to use while I was solo. Another thing about landing was that we needed to use specific landing patterns that followed ground references and flew at a specific altitude and speed. That kept all the planes in the same path so we knew where to look for other planes and keep our spacing for safety. After six flights with my instructor, about an hour each, my instructor landed, got out of the plane and walked over to a mobile control unit which acted as our tower control where he could listen to my radio calls. He would also know what to do if I started having trouble. After he got out, I taxied back toward the runway with some nervous butterflies in my tummy, and called for takeoff clearance. I got the clearance, rolled out onto the runway and took off. If I remember correctly, I was supposed to do three good landings, then perform a full stop and taxi back to the parking area. I did my first and second landings OK, then suddenly realized that I was using my instructor's call sign. I had never used my own call sign before, and was nervous enough to fall back into habit. After realizing that, I started using my own call sign, imagining that my nice instructor must have grimaced every time he heard me use his. On my third landing, I let the

nose come down a little too soon, causing the nose wheel to bounce, and send me back into the air. Then the plane started to bounce back and forth from the nose to the main wheels in a PIO (pilot induced oscillation). I also noticed that I was heading toward the side of the runway. Fortunately instead of panicking, I added power and got back into the air again and flew around for my last landing, which was OK. My instructor never mentioned my PIO, so either he had not seen it, or had noted my recovery and let it slide. I mentioned to him about using his call sign, and he just smiled and said that he had noticed that also. So I had soloed successfully in my seventh hour of flight training – YAY! I was only given two more flights, both solo, before they moved me out of the T-41. One of my classmates at my table got washed out of the program due to his tendency to freeze up at various times, either forgetting what he was supposed to do, or panicking at the situation. Partway through this program, my instructor asked me if I had flown before, since he thought I was doing well and knew all the knowledge that I was supposed to. I had flown in planes with my dad, but he never gave me any “stick time” at the controls. I had flown models and was pretty smooth on the controls as well because of that experience, so modeling helped me out. One other thing, I studied hard as I was very serious about flying. I would sit in my arm chair nearly every night with my tennis racquet upside down as a control stick, and go through entire flights using my check list, and

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talking myself through the procedures until I learned them by rote, making them second nature. That was very helpful.

In the middle of our T-41 training, one weekend a tornado touched down at the civilian airfield (we were nearly in the middle of “tornado alley”) and severely damaged 9 of our airplanes. Those planes did not fly again. The tornado had ripped the concrete hold-downs right out of the ground and flipped those planes upside down. It took the Air Force nearly a week to transfer enough planes from other pilot training bases to get us back to full operation. We were grounded with no flying for that week. That didn’t seem to stop us from heading to our next airplane on schedule though.



Nine T-41's Destroyed by a Tornado

[Joke caption: They TOLD Us Not To Fly Formation!]

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Roger Prigge My Roommate with His T-41

We also had to joke around many times, which is always a pilot's privilege, as well as showing our sense of humor. And we joked all through pilot training which also helped to keep our morale high and our performance improving.



Paul "Twister" Sawaya - Man Handling a T-41 - This is my Classmate who Washed Out



Roger Prigge Telling Phil Dibb to Get Back In and Land it Right!

Then we went on to our Cessna T-37 “Tweety Bird” training. We called the T-37 the “Tweety Bird” because of the very strong and shrill noise that the twin centrifugal jet engines put out. We said “Tweet” for short, and sometimes called it the “Converter” adding that it converted JP4 jet fuel direct to noise. We were required to wear both ear protectors and ear plugs whenever we went onto the T-37 flight line. We were assigned to “C” Flight where we wore the Caesar flight patch on our flight suits. As you have seen in the pictures, we were issued both orange and green flight suits, I can’t remember exactly why, but I surmise that the Air Force was using up its supply of orange suits and transitioning to all green flight suits.



Our Cesar Flight Patch

Before we progressed to flying the T-37, there was some training that we had to be proficient in even before we were allowed to step into the cockpit. We had to learn about the aircraft systems: instruments, engines, fuel system, electrical system, hydraulic system, landing gear operation, ejection seat, G limitations of the aircraft so we wouldn't break it, oxygen system, radio system, navigation instruments – just a whole lot of things. However before we were to learn to fly any jet, we had to go through an altitude chamber so we could experience what our

own specific indications of oxygen deprivation would feel like (hypoxia), how it felt to eject from the airplane using the ejection seat trainer, and how to handle a parachute, including landing, and dumping the chute after we got on the ground. You can tell that we had a lot of classroom training, individual study, and some field practice.

For parachute training, there were some three foot high platforms with sand and sawdust pits in front of them. Since there are three ways we might hit the ground from a parachute jump (three successful ways, that is), we practiced PLF's (parachute landing falls) sideways, backwards, and frontwards. We spent a couple of afternoons getting sawdust all over and inside our flight suits by jumping off the platforms either sideways, or backwards, and occasionally frontwards (parachutes are somewhat steerable, so we could pretty much avoid landing on our faces). Then since no one controls the wind, we had to practice rolling over on our backs and releasing one side of the parachute harness to dump the chute.



We Were Dragged Behind a Truck to Simulate a
Parachute Blown by the Wind

We also had some actual PLF training, by being dragged up into the air behind a truck using a parachute inflated by the wind to haul us about 300 feet high. The first practice was to get us used to being in the air, and they would slowly back up the truck to let us down and land standing up. The second time they hauled us up, they would release the rope, which simulated a parachute opening shock, then we had to do an actual PLF as we hit the ground. One of our very light classmates (Jimmy Wickiser) was flying like a kite, and they had to back the truck pretty fast to get him back down. Unfortunately Jimmy passed away in 2020 from complications due to Agent Orange, which he was exposed to while flying C-130's in Vietnam.

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Going UP!



Coming Down

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The ejection seat trainer was an actual T-37 seat mounted on a set of 15 foot rails. The aircraft had a 75 mm artillery shell powder charge underneath the seat. The trainer used similar explosive cartridges. We were taught to assume the ejection position (very important for physical safety both in the trainer and in the airplane). We had to have our spinal column straight to take the upward force. We also had to put our head back against the headrest, and have our feet back against the seat. In the trainer, we got into the seat, strapped in properly (seat belt and double strap shoulder harness), raised the ejection handgrips, then squeezed the triggers. The cartridge would go off, sending us up the rails. They told us that however high we went up the rails, was the actual G force that we experienced. Most of us went up to the nine foot level. Some of the smaller guys went up to 10-11 feet. It was fun, but once was enough.



T-37 Ejection Seat Trainer

Our academics included how to read aviation weather charts where the winds were always in knots. Nautical miles are what were always used in navigation (I'm sure you have read or seen in places that Navy ships always refer to speed in knots) this is because 60 nautical miles are one degree in longitude and latitude at the equator making navigating vessels (air, land or sea) around the globe much easier. We also learned Morse code because all the navigation aids (VOR, TACAN, and ILS) identify themselves by a three letter identifier in Morse code that a pilot has to check to make sure that he is tuned into the correct location. Salt Lake City for example, uses SLC. I had taught myself a little Morse code because I was interested in ham radio in my younger years, but I could always send it much better than I could understand receiving it, however we needed to be able to identify it quickly and without having to stop and think about it, as we would be flying a plane with most of our mental resources and couldn't spend a minute or so trying to figure the letters out. We also studied magnetic north versus true north because on a map, if we plotted it out, we would get a true heading, but when flying, our instruments used magnetic headings. We had to calculate the deviation from our map headings to put magnetic headings on our flight plans. The magnetic deviation also varied from place to place so we had to be careful about our headings on long distance legs. Wind speed and direction also changed from place to place as well as forecast winds to actual winds in-flight.

We also learned to calculate fuel and time required to fly from airport to airport – winds changed our ground speed and hence our flight times, and we calculated fuel flow from charts in our flight manuals using the altitude at which we planned to fly. A pilot also had to calculate fuel required for start, taxi, and take off (STTO) as well as fuel required in a climb to altitude. A lot of people think that flying around the sky is a relaxing experience and pretty much just sight-seeing, but a pilot remains pretty busy, especially if he is the only one in the plane with no co-pilot, navigator, or radio operator. As a fighter pilot later on, we did all of that ourselves.

On top of all the other training, the Air Force wanted us to stay fit and have some self-defense training as well. We had PT a couple times a week during our off-flight line time. We did exercises, did some Judo, and other training stuff. One of my classmates, Lt Phillips, was a large, well-muscled black guy with a very pleasant and unassuming personality. The Air Force told him that he was overweight, but he didn't have an ounce of fat on him! They could see that and didn't hassle him. He definitely was strong.

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Practicing Forward Falls and Rolls in PT
with Lt Phillips in the Foreground

19 Air Force Pilot Training Part 2



As we moved into T-37 training, there were about 26 of us in my section. C Flight had about ten instructors and the flight Commander. I was assigned to Captain Hansen along with two other classmates. Capt. Hansen was a very nice, mild mannered instructor, and as I think back on him, he reminds me of looking like Clark Kent, as he had a similar face structure and wore glasses. Some of the other instructors weren't quite as nice, being very strict.

Our first order of business was getting introduced to the flight manuals and other books that we were expected to study hard, and become very familiar with. The flight manual is the "bible" for each aircraft and contains descriptions for many parts and systems of the aircraft, flight limitations, starting procedures and engine limits during start, takeoff, cruise, and landing procedures to include airspeeds, charts to calculate takeoff

speeds at various temperatures and airport altitudes, fuel flow calculations, and especially emergency procedures. The emergency procedures section has critical Bold Face procedures that we had to memorize and be able to accomplish very quickly without reference to any checklist or other written material. That section also contains procedures that we had to be familiar with, but we could open our checklists and follow the listed procedures in order. We were tested quite often on the bold face procedures as these could lead to injury or death if not executed properly and quickly in an emergency. The first thing to do in any emergency was: 1. Maintain aircraft control; 2. Analyze the situation; and 3. Take proper corrective action. We constructed a phrase that would easily remind us of this. We would say, "Wind the clock". The aircraft clock was a wind up one and it was wound once a day, but this was to remind us that we always had to take the time to fly the airplane and make a proper analysis of the situation before making any corrections. That would sometimes have to be done very quickly but precisely to avoid further problems. Later I will provide a story about a pilot that did not analyze well. He ended up ejecting when he didn't have to, but that will come much later.

Our first T-37 operations began in the flight simulator with practice in finding out where the flight instruments were on the panel and developing a cross check between the instruments, so

we could move our eyes quickly in a pattern around the instruments to maintain proper flight. The simulators did not have any visual cues, but were designed to be instrument trainers to simulate flying in the clouds where we could see nothing outside the cockpit. The simulator had a cover that would come down over our heads so we could see nothing outside the cockpit. We did learn how to start the engines and watch the EGT (temperature gauges) so the engines did not exceed limits on start-up, and settled in at proper idle speeds, fuel flow, oil pressure, etc. for normal operation. We also strapped into the seat, removed pins that safed the ejection system on the ground, and also wore all our flight gear – flight suits, gloves, boots, and helmets with oxygen masks. The simulator replicated the cockpit environment very well. We had a lesson syllabus for each simulator mission that we were expected to study and follow for our training, and we knew what we had to study beforehand so we would get more out of each training session. We practiced flying level at altitude, making level 30 degree banked turns and rolling out on a specific heading; we practiced using navigation instruments to fly a course to a certain point, then when appropriate, we changed to a different course. Each airport and runway had specific instrument approaches to learn that would keep us from any obstacles to flight, get us to a safe lower altitude, and to line up with the runway without being able to see outside, to hopefully break out

of the weather in time to see the runway and land, or we would get to a minimum approach altitude and have to apply power and climb back up for a missed approach. I was sitting out at a mobile unit near the takeoff end of a runway one day to monitor approaches, and the weather was getting pretty bad. The minimum approach altitude for that specific approach was 100 foot altitude. I heard a jet fly by at 100 feet up, but I never could see it. It had to fly to a close divert base and land where the weather was better. The simulator could also simulate emergencies like engine failure, an engine fire light, one or more gear not coming up or down, attitude indicator failure causing us to fly needle, ball, and airspeed, hydraulic failure, and lots of other things that we had to know and practice, and could practice on the ground instead of wasting time and resources in the air. We also had an abbreviated checklist that strapped to our leg so we could make sure we ran through all the checks properly, and could also refer to non-critical in-flight emergencies.

Finally we got to the point where we were given our first ride, our Dollar Ride so to speak. I went up with Capt. Wilson (of course we had already been demonstrated a proper preflight procedure where we walked around the airplane checking various parts and pieces, which is the pilot's responsibility to ensure the best he can that the airplane is ready and safe to fly). I

did the preflight, then we climbed in, strapped into the seat, took off our ear protectors and ear plugs, put on our helmets, plugged into the communications, or com system, plugged into the oxygen system, and flipped on the battery switch. Capt. Wilson started the airplane, made the radio calls, and we taxied out to await takeoff clearance. I was pretty excited to get my first ride in a jet! He took off, raised the gear and the flaps, and started following the approved departure route. After we had leveled out during the departure, he told me to take the stick. That procedure was done with him telling me to take control, I would acknowledge, put my hand on the stick and shake it just a little, then he would let go. Immediately the T-37 started bouncing a little bit up and down, rolling a little bit left and right. He told me to let go of the stick, which I did, and the plane flew very steady all by itself. I had to chuckle a little bit when I realized that I was causing the bouncing by holding the control stick too tight to feel the small pressures needed to keep the plane level and smooth. That was a great lesson to learn that the jet was very responsive to very small control inputs. I learned very quickly to mostly fly with just my thumb and index finger lightly touching the stick, and only put more of my hand around the stick when I needed to maneuver for loops and other aerobatics. I guess we flew around for about 45 minutes where my instructor demonstrated a few maneuvers, then let me try to reproduce what he had done. We came back towards the field where he

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showed me the geographic point where we were to enter the approach to the traffic pattern. Everyone came to this point, carefully looking for other aircraft in front, to the side, above, and below us so we could ensure safe spacing into the traffic pattern. This took getting used to because other planes would be around us three dimensionally, and not just like in cars where we don't have to look above and below.



Pre-flight – “Pull My Head Out of What, Sir?” (Joel Carroll)

Capt. Hansen then showed me the ground points to follow for the traffic pattern, the pitch out, the final turns along with the proper speeds for each part of the pattern, when to lower the gear and flaps, the final approach, the round out, then the touchdown. While keeping back pressure on the stick to keep the nose gear from touching, he then increased power and we took off again. I also had to listen to the radio and learn when to make radio calls, listen for clearance to land, and also listen for other planes making their calls so I would know who was in front of me and how far, as well as who was behind me. I was kind of exhausted when that flight was over, but still had to carry my parachute and other gear into the parachute shop where each of us had an assigned place on the parachute racks which also held our helmets and "G" suits. Then we walked back to the flight room and debriefed our flight. I forgot to mention that after each flight, we had to fill out our flight forms at the airplane indicating our flight time and if anything was wrong with the aircraft that needed fixing. The airplane could be flown with some items not working, but there were critical ones that were always necessary for flight. I haven't mentioned other checks during the flight, but there was the preflight check, before start check, after start and before taxi check, pre-takeoff check, climb check, level off check, pre-descent check, before landing check, after landing check, shutdown check. This is one reason that I studied a lot at night trying to memorize all the procedures and

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checks so that I wouldn't miss any, and also so that I could concentrate on flying and not trying to remember all the procedures that needed to be second nature. If we had to do these types of checks every time we went driving in our cars, I don't think we would drive near as much. These type of checks, and there were many more when you were in combat carrying live ammunition, followed me for the next 20 years.



Milt With Cessna T-37

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After our class, 68A, got going in T-37's we needed a class patch. Both of our sections came up with different patches: I had proposed one that was based on a falcon caricature from the academy, but the other section rejected that and came up with a Cobra, and that one got the most votes. I however, was selected to construct one from a large piece of plywood for our section. It took me a while, but I finally got it done. Others ordered our shoulder patches along with blue baseball caps with a large white 68 A on the front to designate which student class we were in. We proudly wore these during our flight training. Our large plywood "patch" hung in our flight room, and went with us later to T-38's.



Milt Making the Plywood Class 68A Patch



Our Class Shoulder Patch

After our first familiarization ride, we started syllabus instruction on instrument flying, where the instructor would have us perform specific maneuvers with reference only to the instruments, not looking outside. This wasn't very much fun because it was tedious, however even when looking outside the cockpit to fly, we always used many instruments to verify heading, speed, altitude, etc. Therefore becoming proficient at interpreting and flying with instruments was very logical so that

using them would become second nature in all phases of flight. We would develop a cross check of the various instruments, and knowing where to look and how often, would provide us quick reference to any information that we would need. We learned to look at an instrument quickly, then move our eyes to a different instrument while processing the information from the one we just looked at. That was sort of like speed reading. We had two general types of instruments: control instruments and performance instruments. For example, if we saw our airspeed 5 knots slow (performance), we would increase the throttles about 2% rpm (control), then go back to the airspeed indicator (performance) to see if the correction was sufficient. Altitude, airspeed, vertical velocity, and heading indicators were all performance instruments while RPM, pitch, and bank were control instruments. If we wanted to climb at 1000 feet per minute, we would raise the nose one degree while increasing rpm, then refer to the performance indicators to see if our control inputs were sufficient. The cross check went back and forth very quickly, while also scanning other instruments occasionally to confirm everything was working properly – these included fuel, fuel flow, engine temperature, oil pressure, cockpit pressurization, and oxygen system operation as well. The rest of these were not checked as often as the flight instruments, just like while driving a car you will (or should) check the gas gage, temperature, fuel gage, etc. while also closely monitoring

your road position and the traffic around you, occasionally watching traffic flow a ways in front.



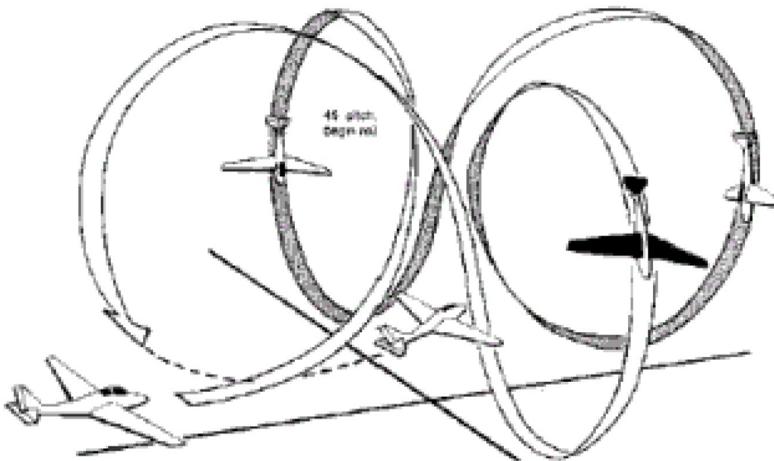
T-37 Cockpit and Instruments. The Student Sat on the Left Side

For coordination practice on instruments we would practice 30 degree bank level turns, and a series of what are called “Vertical S” maneuvers, A, B, C, and D. The Vertical S “A” maneuver is simply climbing for a thousand feet a minute straight ahead, and then smoothly transitioning into a thousand feet a minute descent back to the starting altitude. The “B” maneuver was doing the same thing while maintaining a 30 degree bank; the “C” maneuver was changing the bank to 30 degrees in the opposite direction at the bottom of each ascent/descent of a

thousand feet, and the “D” maneuver was changing the bank to the opposite 30 degrees at the end of each thousand foot altitude change. The difficulty increased from A to D, and sometimes felt like elbows over teakettles trying to change the vertical ascent to a descent while simultaneously changing bank angle and throttle settings to maintain airspeed. These were very critical maneuvers which later supported flying instrument approaches where we had to read the approach plates while flying an instrument approach to an airport, while changing altitudes, headings, making turns and radio calls, performing descent checks, lowering landing gear and flaps, changing speeds, performing before landing checks, then finding the runway as you came out of the clouds at a low altitude close to the runway and transitioning from instruments to looking outside for the runway to make final line up and landing the airplane successfully.

Another maneuver that was sometimes exciting was doing unusual attitude recoveries. The instructor would tell me to close my eyes while he was maneuvering the jet into an attitude that I had to recover from. He knew how to make my body feel one movement but not another. The body will not notice a very slow roll in one direction, so the instructor could roll right very slowly, and then roll quickly back to the left to level flight. He would say, "Recover." My body felt the rolling to the left and I would be primed to roll to the right when we were actually level. He could do the same by accelerating or slowing down, or pulling the nose up or letting it down slowly while rolling slowly. All this taught us to look at the instruments, quickly analyze our attitude and airspeed, then make proper corrections to get back to level flight. For a nose high attitude, like 20 degree nose high and a slight right bank, we would roll to 90 degrees of bank to the nearest horizon, add power if we were slow, let the nose fall to the horizon on the attitude indicator, as we were rolling slowly back to level flight. One trick in instruments is to do everything very smoothly and moderately, else you could cause spatial disorientation. It taught us to believe the instruments and not what our body was telling us. The instructor could easily tell by our initial control inputs if we were doing what our body was telling us versus what the instruments were telling us. Sometimes it was fun, but always challenging.

Then we moved on to what is called “Contact” flying which is acrobatics, unusual attitude recovery, spins and spin recovery, and landings. Initially we spent almost half of each flight learning and practicing landings, with the first half doing loops, Immelmann’s, the Split S, rolls, barrel rolls, and clover leaves. All these maneuvers were designed to help us build familiarity, confidence, and coordination in flying the aircraft. The Cloverleaf was by far the most difficult. It consisted of starting up into a loop, but slowly banking the aircraft so at the top we were heading 90 degrees to our starting heading, then doing four of these modified loops or leaves, so we were ending up at the initial heading, speed and altitude as we started. We rarely did all four leaves because it took a lot of time and fuel, but they really did teach a lot of coordination.



Cloverleaf Aerobatic Maneuver

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After 8-9 flights we were cleared for our first solo flight. Again our instructor would take us up on the mission and make sure that we were doing well with our landings. Then we would land, taxi back to the parking area, and shut down. The instructor got out, and told us to start back up and go finish the mission. All of the students in C Flight would know when each of us was scheduled to solo. We would go out to the parking area and watch the startup and taxi out, then wait for our classmate to successfully land, complete his solo flight, and taxi back to the parking area, where we had a special treat for him.



Solo Student Starting Up #2 Engine

We always started the #2 engine first (right engine), so that if something went wrong with engine start, we always had an

immediate clear egress path to the left. If it so happened that there was an IP in the right seat, he would have to wait for the right engine to wind down – so be it. The following is what happened to the newly soloed student after his first solo flight.



The Award for Successfully Soloing in His First Jet – this is Our Class Commander

Spins: very harrowing maneuver, but necessary to train. A spin is a fully stalled condition where the wing is providing no lift, and the aircraft is in an autorotation. Most jets can be stalled, and most of those will not recover by themselves. The T-41 (in which the spin was a prohibited maneuver) would recover itself from a spin if you simply let go of the controls. The T-37 would not automatically recover, however a pilot normally had to make it

spin to start the maneuver. There are some conditions where a disoriented pilot could accidentally get into a spin, so we had to practice spin recovery. We would fly out to our assigned area (always with an instructor), climb to the top of our area, 20,000 feet, pull back the throttle to 60% RPM, and slowly pull back on the control stick until it was fully back, then put in full rudder to one side or another. The jet would start to roll, then enter a spin in the direction we had applied the rudder. Once in a while, as I pulled the stick all the way back and applied rudder, the nose would pitch up and over inverted before the plane would spin. Looking out the windscreen all I could see was ground which always appeared as a blur as the scenery quickly passed by. Our procedures were to 1. Determine the direction of the spin by looking at the turn and bank indicator (the turn indicator showed the direction of the spin and the yaw indicator went the opposite way of the spin), 2. put in full rudder against the direction of the spin while holding full back stick; 3. check the airspeed to be around 50 knots or below; 4. As the spin started to slow, push the stick all the way forward to break the spin and come off the rudder; 5. Let the airspeed build to a point where I could successfully recover to level flight. We would lose 6000-8000 feet during a spin recovery. One time, I was just about to push the stick all the way forward, when Capt. Hansen blocked the stick just forward of neutral and we lifted up with negative "G" in our shoulder straps. He had seen the airspeed

increasing through 60 knots, and didn't want me to over "G" the jet beyond its negative "G" limits. I got graded down for not recognizing the increasing airspeed. I had a couple of spin missions to get to the proficiency level, giving me 5-6 spins. I didn't really like them because I felt quite out of control of the aircraft



Turn and Bank Indicator next to the Airspeed Indicator

We finally got some navigation missions towards the end of the T-37 program which included an out and back mission on a weekend. I flew with an instructor to Buckley ANG Base just outside of Denver on a Friday, then back to Vance that Saturday. The T-37 had fairly short "legs" and that was about just as far as we could fly without stopping to refuel. It wasn't very exciting, but did take me out of my comfort zone going to an airport I had never seen before. But that was part of the education. We also

started some formation familiarization flying. Each time we went into a bank when I was on the high side as the wingman, I got the feeling that I was simply going to fall into the other jet. That was just a gut feeling because I had never been in that position before, but both airplanes were developing the same lift and neither of us was falling. The first time I got the controls, I found it was very easy to over control, just like as I did on my very first flight. Also it felt like I was staying steady while the lead airplane was bouncing up and down – silly me. I was the one doing the bouncing up and down. It didn't take long to settle down and become much smoother on the controls.

We had several check rides with the Stan/Eval team pilots (Standardization/Evaluation) who were a separate group in the squadron who did all the student check rides. I seemed to do pretty good on those check rides and ended up being the top student in my flight in T-37's. They gave me a plaque for that, and I was pretty happy due to all the studying I had done. Hard work was the reason for that accomplishment.

Pilot training also had some humorous moments. One of my classmates had been saddled by his parents with a first name of James, with his parents having the last name of Bond. I'm sure that he had been kidded about that for most of his life. Accordingly, Caesar Flight assigned him the call sign, 0007. There are three "0"'s because all of us were given 4 digit call

signs to use when we were flying solo, although I can't remember what I had.

One trick that the instructors used to pull on us, was to take control of the jet and run the electric trim as far as they could get it while holding corrective pressure on the control stick to make us think that the jet was still trimmed. Then when they turned control back over to us, the jet would jerk into the trim change that had been made, simulating to us a runaway trim situation, making us go through the procedure for that situation. Lt Phillips (our big strong classmate) was up with his instructor one day when his instructor put in full nose down trim, than gave control back to Lt Phillips. With the strength in his arms, Phillips just kept flying like normal easily holding all the trim pressure without showing that anything was wrong. The instructor, being a little confused that nothing was happening, took control again to try and figure out what was going on. All of a sudden both pilots were thrown up toward the canopy with negative "G" since the instructor hadn't expected the full nose down trim. Phillips turned the tables on his instructor very nicely on that one! We all loved hearing about that incident.

One more experience from the T-37. At each of our meetings at the flight line, we had weather briefings, safety briefings, and the dreaded Stan/Eval session. Each flight had a Stan/Eval officer and in addition to briefing, he also would present an emergency

situation, then call on a student at random to go through emergency procedures, especially the bold face mandatory memorization steps. This was always pressure filled for each of us, because if a student failed the bold face, he could be grounded for the day. One morning he started his briefing by calling my name: "Lt. Sanders". I stood up and said, "Yes Sir!", dreading what was going to come next, especially since he had presented no situation that I could think about beforehand. Capt. Hodgkinson then said, "What is on page 17 of Air Force Manual 51-37!" I was sort of stunned, as this is like asking what is on page 143 of the New Testament. We never memorized page numbers. I thought for a second, remembering that I had been studying that manual the previous night, and suddenly a picture appeared in my mind, like a divine revelation, of a full page of diagrams talking about hypoxia/hyperventilation. I sort of stuttered out, "Sir, I believe that is Hypoxia/Hyperventilation." All the other students had been stunned by this question as well, because it was totally unexpected. Capt. Hodgkinson's face started turning red, because he had not expected a correct answer, and was prepared to chasten every student there for not studying procedures well enough. Some of the IP's had little smiles on their faces, knowing that Capt. Hodgkinson had done this with other classes, chewing them out royally. My classmates were also stunned that I knew the answer, and later asked me if Capt. Hodgkenson had previously set this up with me — which

he hadn't. Anyway, the captain recovered somewhat and went on to explain more about the subject. He never asked me another Stan/Eval question for the rest of T-37 training! For me that was another spiritual experience to add to those previously experienced, which I treasured with the other ones experienced, and the ones yet to come. And thus ended my T-37 training with about 90 hours of T-37 flying time.

20 Air Force Pilot Training Part 3



We moved into the supersonic Northrup T-38 Talon jet trainer, with turbojet engines and afterburners. This was a high performance jet which prepared us to transition to any current operational jet aircraft in the Air Force Inventory. The T-38 was new to the Air Force training program, having been introduced just two years before we got to pilot training. Our plane got a nickname as sometimes “the White Whale” and “White Rocket” because it was painted bright white for visibility and safety and flew very fast, although it wasn’t large at all so I don’t know where the “whale” came from... It was nice and sleek with front/back cockpits, individual canopies, and supersonic airfoil wings which changed the flight and landing characteristics a lot from the T-37. The rear cockpit also had the capability to attach five bungee cords and a canvas “hood” to the underside of the canopy. The hood could be pulled forward to cover the entire outside view to pretty accurately simulate flying under

instrument conditions where the pilot has no reliable view of outside references to fly by. That means that all flying by the pilot in the back is totally on instruments.



Supersonic Northrup T-38 Talon – The White Rocket

We were suddenly back into the books to learn the systems knowledge (which are very different from plane to plane), emergency procedures, flight characteristics, ejection parameters, and a totally new instrument presentation in the cockpit. We had to transition from VOR/DME to a new TACAN system for navigation, and a new navigation display (HSI), Horizon Situation Indicator, which displayed heading, distance, and course information in one instrument.



T-38 Instrument Panel – Attitude Indicator (ADI) top Center, HSI Just Below, Landing Gear Handle on the Left, Altimeter Just to the right of the ADI, and the airspeed/Mach Indicator to the left, and twin Row of Engine Instruments to the Right, Plus Everything Else Important.

As you can see, there was a lot to learn, and we had to quickly develop a familiarity where all the pertinent instruments and switches were located so we could look instantly at the information we had to know and the switches as well. After our first “Dollar Flight”, we spent a lot of time in the instrument

simulator getting to know where everything was, developing a good “cross check” for instrument flight, and learning to navigate using all the proper instruments. We did a lot of concentrated studying nearly every night, and my habit of sitting in my arm chair with my tennis racquet learning procedures continued to be of great benefit. Since the T-38 cruised cross-country at 0.9 Mach, which is about nine nautical miles a minute, or 540 kts ground speed, we had to keep planning 2-3 minutes ahead (18-27 miles) of where we were, we had to keep on our toes always thinking ahead.

We were assigned to “E” Flight in the T-38 training building. I was assigned to Captain Remi Greif as my instructor. Coincidentally he was also my Branch President at church. I think he probably had a say in getting me assigned, as he knew me well from the past five months at church. He wasn't as calm and patient as my T-37 instructor, but he taught me a lot and challenged me as well. It was also nice not to have an instructor who used foul language or smoked at our table. This was way back before any restrictions were instituted against smoking, although smoking has never been allowed in one and two-place jet aircraft. We all had to remove our T-37 C Flight patch from the shoulder of our flight suits and replace it with the E Flight patch. We didn't mind at all, although we had to do it a couple of flight suits at a time, since the parachute shop did all the sewing

on of our patches, so it took 3-4 days to get them back after submission.



E Flight Shoulder Patch

After familiarization with with the aircraft, and demonstrations of the pre-flight of the jet before even climbing in, we got our first ride. Remi took me out to the plane after our mission

briefing. I did the pre-flight, climbed into the front cockpit, got strapped in and all connected up, paged through all the pre-start items on my knee strap checklist, then waved two fingers at the crew chief who had the ground power unit (GPU) connected to the plane which gave us electric power as well as compressed air to start the engine compressor blades turning. I pushed the right engine start switch to position the diverter valve to deliver the GPU air to the right compressor. I watched the rpm start to rise, and when it hit the correct RPM, I moved the throttle to the idle position, and watched the engine temperature rise, stay within limits, and then stabilize into the green. We had practiced this quite a few times in the simulator, but doing this for real was exciting. We got both engines going, checked all the instruments, then called ground control for taxi instructions.

We taxied to the center runway where we always took off with the T-38's, got takeoff clearance, taxied onto the runway, hit the brakes, pushed up the throttles to military power (100% RPM without after burner), clicked off the nosewheel steering, and Captain Greif released the brakes, lit the burners and we were accelerating down the runway. The nose came up to 5 degrees about 10 knots before takeoff speed, the jet rose into the air, Remi pulled up the gear and flaps, leveled off, accelerated to 500 knots at 300 feet off the ground, and pulled up the nose up to 25 degrees where all I could see was blue sky. I felt like I was going

straight up! Since thrust drops with an increase in altitude because of dropping air density, Capt. Greif was lowering the nose slightly to keep the airspeed at 500 knots until the Mach indicator hit 0.9 Mach, then he maintained 0.9 Mach up to 43,00- feet. Here he leveled off, kept the engines in afterburner, lowered the nose slightly, and accelerated to Mach 1.2 – we were supersonic! The only way I could tell was by watching the Mach number on the airspeed indicator. There was no sensation to going through Mach 1. Time to climb to 43,000 feet (8 1/2 miles above the ground) was 3 1/2 minutes, incredible! He came out of afterburner, slowed down and we descended to an assigned area from 10-20,000 feet and Remi let me fly a little bit and make some turns to get the feel of the airplane. We came back to the airfield where he demonstrated a couple of landings, then we had to land because our fuel was down to the point we needed to get back on the ground. I checked off my dollar ride that day and had to prepare for instrument flying.

My next 10-20 flights were all in the back seat doing the same instrument practice that I had done in the T-37 – level turns, Vertical S, unusual attitude recoveries, holding patterns, TACAN and ILS instrument approaches (although the T-37 did not have ILS capabilities), and practice, practice, practice. Since I was in the back seat, I could not get any landing practice, but Remi had me try to make some take offs with the instrument hood up

using the ILS (instrument landing system system) which was supposed to keep us right in the middle of the runway. The T-38 was pretty sensitive, and a few times Remi had to take control of the airplane to keep us in the center of the runway. Normal procedure was to keep the instrument hood back during takeoffs for safety reasons, but finding out how accurate the ILS was, was important in giving us faith in the ILS system. The ILS system was accurate enough so that we could get down to 100 feet and a quarter mile of visibility in the clouds, before we saw the runway for landing. This was much better than a straight TACAN approach which had landing minimums much higher at 900 feet and a mile and a quarter visibility. That difference is very important in getting on the ground in bad weather. One experience I had that was unusual for any instrument flight was that one day I was making a level 360 degree turn at 30,000 feet, and at the end of the turn, the jet hit a little bit of rough, bouncing air for a second. I asked Remi what that was, and he told me that was my jet wash from the start of my turn. An airplane always produces some turbulent air from its passage through the air, and I had just hit the exact start point of my turn, at the altitude that I had started. That's the only time that has happened in my life, so that was exciting, and I got an "excellent" on my turns that day. If you are interested in a T-38 instrument training video, there is a 29 minute video at: "<https://archive.org/details/84344USAirForceTheT38ATalon>".

Initially it shows a T-38 in-flight with the instrument hood forward in the back seat. After that it describes the ADI and HSI (which is a little boring), then goes into a cross country flight with ATC clearance and flying through weather. It also shows an instrument take off from both the instructor and student point of view in the first 11 minutes. That is all that I watched.

After our instrument flying, we moved on to the “Contact” portion of the syllabus. “Contact” means pretty much looking out the window for visual references for contact with the ground, and includes aerobatics for gaining confidence in the airplane’s abilities along with coordinating your handling abilities, and learning and practicing landings: normal, single engine, and no-flap landings. The last two types of landings prepare the pilot for emergencies. Aerobatics can be tricky because the jet covers a lot of ground due to its speed, and each aircraft is assigned a specific area to remain within, which is the pilot’s responsibility, and that includes the student when he is in control. Our assigned aerobatic areas were all from 10-20,00 feet. We practiced loops, Immelmann, Split-S, Clover Leaf, full aft-stick stalls both clean and with gear and flaps extended, level 60 degree bank turns, shutting an engine down, then starting it back up, and unusual attitudes more extreme than those in instrument flight. There was no spin practice for the T-38, since it was very difficult to get into a spin, nor did it come out very well. We did have to

learn the procedures for a spin recovery however. Then came the landing practice, which was not easy trying to get the aircraft lined up and staying lined up while analyzing the winds which push the jet around and move you off where you want to be. Oklahoma winds often blow pretty hard. When you fly down “initial approach”, that is at 2000 feet altitude and 300 knots straight down the runway, I had to keep the jet flying a straight ground track and notice how much I had the nose either to the right or the left of the center line to adjust for winds. When I would pitch out to the right (roll to 60 degrees bank and pull 2 G’s for a level turn and pull the power back to start slowing to 220 knots), if my nose was to the right on initial, I had to loosen my bank to get the proper distance from the runway so I would have sufficient turn radius to make the final turn to line up with the runway. If I had pitched too tight, I would have to initiate a go around and miss making a landing, which is pretty much a downgrade by the instructor, and if I tried to pull in my final turn too tight to try and make it, that would be dangerous and would result in a failure grade. For the wind from the left, I had to pitch tight, which was just fine due to higher airspeed, and somewhat loosen my final turn. Adjusting to the wind for pitchout, was important and some students just couldn’t do it with everything else going on, and they washed out. I was able to make the adjustments, and I really liked to pitch tight, because that felt good to a pilot and showed that knew what he was

doing. As we rolled out from the pitchout, we dropped the gear at 220 knots, followed by the flaps, checked that we had three green lights for the gear, the red light in the gear handle was out, and that the hydraulic pressure was back up. We always had to say to the IP, "Gear down, flaps down, handle, light, light, pressure." Before we started our final turn. We made a radio call to indicate the type of landing we were doing [touch and go, full stop, single engine, or no flap], get clearance, and then reach our final turn airspeed, line up with the runway including wind correction, and aim for our landing spot. We slowed to approach speed after rolling out on final approach, checked our approach angle, then maintained our speed and lined up until we got close to the runway, then pulled the nose up slightly to break our 1500 feet per minute descent in the round out, and wait for the airspeed to drop and settle us to the ground. Once we were solidly on the ground, we pulled the stick all the way back to raise the nose for aerodynamic breaking, until the nose dropped to the runway. We would roll for a little bit then apply brakes to slow down, and turn off the runway for a full stop landing. From pitchout to touchdown, I am estimating a duration of 90 seconds. It all happened quickly.

Once I had satisfactorily finished the pre-solo syllabus rides, I was cleared for my solo. This was a little scary because it was the first time in the T-38 that I didn't have another voice in my head

to give me any directions or corrections. I went out to my plane, fired it up. Took off and flew to the area to practice a few aerobatic maneuvers, made my way back to the field, made a couple of practice low approaches, then a full stop landing. On my practice low approaches and the landing, I had to make the radio call include "initial solo" so the mobile controller would keep a closer eye on me. As a solo student, or even a solo instructor, we could not make touch and go landings alone because a touch and go included all the most dangerous phases of flight in about 15-20 seconds. The landing phase would be normal, but then the throttles had to be increased to military power, the flaps had to be reset from full landing flaps to takeoff flaps, we were not supposed to let the nose wheel touch the ground, and we had to recheck the engine instruments and the flap settings, then ensure our nose attitude was five degrees nose up before lift off, then raise the gear and flaps when airborne and continue our flight.

I had quite a few solo practice flight which I always enjoyed a lot. On two solo flights, some clouds were just starting to rise straight up to about 18,000 feet, before continuing to develop into thunder heads. I had a bright idea and the freedom to play with them for a little bit. I flew straight at them at 10,000 feet and 500 knots (which was also the entry speed and altitude for a loop and Immelmann), pulled 5 G's to go straight up the side of

the forming clouds, roll so my head was towards the clouds so I could look “up” at them, and as the speed slowed near the top, I pulled back on the stick and slowly slid over the tops inverted, then came straight down the other side, rolling 90 degrees to be right side up, and pulling out at 500 knots and back at 10,000 feet. That felt so very cool, that I did that twice on two solo missions. I didn’t take any more time than that, because I really needed to practice my aerobatics for an upcoming contact check ride. I had already passed my instrument check ride before getting into contact flying. At that time, that was the best feeling I had ever had flying. I did have some better times later in my flying career, but I felt free and on top of the world. (500 knots is approximately 600 mph).

I don’t remember either my instrument check ride or my contact check ride, but I passed each of them, so they must have at least been without too much trouble. During my T-38 training, I was sitting at my instructor’s desk one day, when Jim Gaghan, a First Lieutenant (a navigator who got into pilot training – the rest of us were second lieutenants except for our class leader who was a Captain and a navigator as well) walked up to me and said: “Milt, I used to think of you as a pretty neat guy, until I found out you were a Mormon!” Then he turned around and walked away as my jaw hit the floor. I had not been on a mission, going into the Academy right out of high school, and I could think of nothing to

reply to him. I got a wakeup call that I needed to put more effort into my religion such that I could stand at all times and in all places as a witness of Jesus Christ to anyone. I like to think that I could do that now at age 77, but I just couldn't think of anything at that time. I just let that comment slide and continued my life. A lot of my classmates thought that I spent more time at church already than I did on the flight line. Jim went out for a check ride once, forgot his helmet, and sent his check pilot to the wrong tail number. I got a kick out of that. He also graduated at the bottom of our class, and ended up as a copilot on a B-52 bomber crew. I shouldn't have felt any joy at that, but I did, feeling somewhat justified in my own mind.

Following contact flying we started into formation flying. Since we had an introduction to that in T-37's, we were all ready to go for it. I developed a love for formation flying. We did have to adjust to the quick reactions of the T-38, using very small pressures on the control stick, and find the appropriate position (wingtip in the star and level with the lead plane's engine exhaust pipes). Then we had to continually cross check to make sure we stayed in that position while the lead aircraft did gentle turns, steep turns (up to 90 degrees of bank), climbs and dives. Then we learned to separate from the formation with the lead smartly pitching out, followed by us on the wing three seconds later, turning 180 degrees in direction and maintaining 300

knots. The the lead would rock his wings back and forth indicating a rejoin, and start a 30 degree bank level turn, while we turned inside of his path to start getting closer and increasing our speed to 350 knots. We tried to keep the lead right on the horizon, which was just above our canopy rail, as we closed on him, slowing our speed to match his as we slid into fingertip formation. Initially this was somewhat difficult. When we got more proficient, then we practiced joining in the number 3 position, which was on the outside of his turn to get us ready for three and four ship formation. We also practiced the procedure for overshoots which would need to be done if we came in too fast, and had to do a safe maneuver to slide past the lead behind, in idle throttle with our speed brakes out. We also practiced straight ahead rejoins and overshoots, which were more difficult because our perspective was not as good. I finally got cleared to solo, and one day Remi decided to give me a difficult task by doing a complete roll with me on the wing. This was against the rules, since we were limited to 90 degrees of bank. I had no choice but to follow him around. I bounced a little bit because he really surprised me and I had never done that before, but I managed to stay pretty close. I could tell what he was doing because we used our peripheral vision as we flew formation and I could see the sky and the ground on the other side of his jet. He gave me an excellent on that formation ride, but I didn't say anything to anybody because I didn't want either Remi or me to

get into trouble.



T-38 Two-Ship Formation

We also flew a formation called close trail, where the second plane was just behind and slightly low of the lead plane. We were probably 100 feet apart, and I was just about looking up his tailpipe. In this formation we could also do rolls and looping maneuvers, which means that we had to stay in position pulling 4-5 G's, with airspeeds between 200-500 knots, and going to less than 1 G at the top of the loops. I enjoyed this formation as well because I could see things very well right out the front of the cockpit and I could stick in there. One tendency was to bounce up and down a little because it is difficult to maintain a steady pull on the stick at more than 1 G, and the second jet has to react to any maneuver of the lead, and he is always a split second behind because of reaction speed.

Once we were proficient in two-ship formation, we progressed to four-ship formation. This was even more difficult, because in fingertip formation, the lead was in front, #2 was on one side, and #3 and 4 were on the other side. Number 4 had to fly off of both #3 and the lead. In order to do pitch outs and rejoins, the second element (#3 and #4) usually had to slide back, and under the lead and #2 to establish position on the same side and #4 also had to cross under #3 to change sides. This was called echelon. This was essential, because this is the way we had to fly down initial for landing, so each plane could pitch out in order to spread out for landing. Echelon turns were also different in that instead of going up or down as the lead plane banked, all the planes stayed level and just matched bank angles during a turn away. For a turn into the echelon, the wingmen did have to go down for visibility reasons. It looked pretty nice from the #4 position, but #4 was always a little like crack the whip, because he was referencing his flying on all three of the other planes.



Four Ship Fingertip Formation - #2 Is A Little Wide

Four-ship formation also included close trail formation, with rolls, high-G turns, and loops. These were always exciting with many unexpected surprises. I was #4 solo with my IP and another student flying #3 in close trail. I always watched all three planes in front of me so I would know exactly what was going on. If the plane ahead of me started bouncing, I would fly on #2 or lead to maintain a steady position. In this case #3 started bouncing and I stayed steady on #2 but backed off just a little bit. Suddenly #3 broke out of formation with Remi taking over from the unsteady student. He probably had me on his mind as well behind him. He was supposed to make a radio call when breaking out. I didn't know whether I should stay with my element leader or just move up to the #3 position. I made a radio call saying the #3 had broken out and that #4 (me) was following. That let the leader stop maneuvering and start to get us back together. When #3 got it together, he couldn't see me as I was staying out a ways in extended trail off to the side. He asked me where I was, I told him, and he asked me to join up with him. Finally we all got back together into a proper four-ship formation. Communications is the key to keeping things organized – both in formation as in everything else in life including relationships.

While at pilot training, we did get a few days off, at least for holidays. I made two trips to Colorado Springs to see Bonnie

Alger, who I was trying to get back together with. We had one great date where a couple of us rented motorcycles and went riding for an afternoon. But things did not get any better, so that finally went down the drain. One one of those trips as I was driving on State Route 270 in western Oklahoma. The speed limit was 55, and I was keeping to the speed limit while driving my red TR-4. Suddenly I was passed by an Oklahoma State Trooper who was going pretty fast, and he disappeared over a small hill about a half mile in front of me. I didn't think anything about it. When I came over the hill, he was sitting just down the hill with his radar on just waiting for this snazzy sports car to speed up and get caught! Sneaky patrol officer! I just had to smile as I drove by, staying right at the speed limit as I was traveling on a very nice day with the sun out, just enjoying myself. By the time I got to Colorado, I was getting pretty tired with road fatigue, and I noticed that as I was driving and wanted to change lanes on the Interstate, it seemed like the road angled in front of me, crossed to the other lane, then straightened out, but that I had been driving straight ahead. I thought about that for awhile, then I stopped and walked around the car a couple of times and kept going. I did make it OK though. That is just a memory that sort of stuck in my mind.

I was invited to Lynn's wedding, the "tall Blonde" from one of my Academy chapters. I decided to drive back out to Colorado

Springs to attend her wedding and reception. There were quite a few people attending. Her parents must have lived there a long time. After the wedding, I went through the reception line to congratulate her. I started to just give her a hug when she planted a pretty forceful kiss right on my lips. I was kind of shocked. Later I was wondering if I should have been dating her instead of Bonnie. She must have liked me a lot more than I realized; however, she was a friend of Bonnie's so I had never leaned that way. Dating two girls who are friends never goes over well. It was worth the drive to go to her wedding though.



Four Ship in Right Echelon

One day flying four-ship formation, the leader put in us in left echelon, I was flying #3, and the lead signaled for a pitchout to gain spacing for a rejoin. We all pitched out at 3 second intervals.

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After rolling and checking my airspeed at 300 knots, I could see that I was starting to catch #2, who must have been going a lot slower. I started slowing down myself, then thought of #4 behind me. I made a radio call and told #2 to push it up (add power), and let #4 know that I was holding 240 knots. I really didn't know if lead was going slow. Probably #2 was just dawdling along, but again communication makes for better friends and flying safely. I have always loved to see a four-ship formation of white T-38's come down initial for landing, with exact spacing, then smartly pitch out with a fast roll at exactly three second interval spacing. That always showed pride and professionalism. Look sharp, fly sharp. I managed to pass both my two-ship and four-ship formation check rides.



Echelon Turn

We did some navigation missions as well, both day and night. Some of those were solo. I remember my first night solo round-robin nav mission. Round-robin means to take off and land at the same base while flying to specific navigation points on the ground as required by the mission. Flying at night is the same as flying in the daytime, except you can't see anything. That's the way we joked about it. We had a switch that would turn on red lights in the cockpit instruments, instead of the normal white lights that let us see better. The white lights would kill our night vision. However the red lights made it difficult to read the instruments anyway. If we turned up the intensity, we would get a lot reflection off the canopy as well.

For one night flight I intentionally wore my sunglasses inside the building joking when anyone would mention it, that I was transitioning to my night vision early. And no, it didn't really help, just felt cool. As I took off on this night round-robin, we took off as single ships about ten minutes apart for spacing, flew our normal departure route, and headed for our first check point. All the stars were out, and the sky was full of them. When I looked at the ground, there were a lot of single lights on the Oklahoma ground as well, and sometimes the stars could look just like the ground making spatial disorientation a possibility. Without reference or even belief in the instruments, a pilot – especially an inexperienced pilot – may think he is inverted

when the sky and ground lights look very much the same. Each plane has a flashing red light that I could easily see in front of me, and that was comforting as well. Two instructors flew in the first ship to check visibility and other problems, and would be airborne to help any student who may start to experience problems. We all had a good flight while also enjoying the freedom and beauty of the night sky.

Another navigation flight was a weekend cross-country in a flight of two in formation. We were scheduled to fly four stops. I don't remember a lot, but I do remember climbing to 41,000 feet in formation and getting into contrail forming air. I was on the wing, and my IP, Remi, told me to slide back and look at the contrails. That was pretty cool to see the vapor trails that many of us can see in the sky trailing a jet. Remi told me to do a little barrel roll around the lead ship's contrail, which I did. The controls felt pretty mushy. We were cruising at 0.9 Mach which was 540 knots ground speed, but thin air was showing only 240 knots indicated air speed, which is why the controls were mushy.

After our second stop, the formation split up into single ships and we each went our separate ways. Coming home our third stop was at Barksdale AFB in northern Louisiana, which was a Strategic Air Command base operating B-52 bombers and KC-135 tankers. This was significant in that the runways were 300 feet wide and just under 12,000 feet long. Our runways at

Vance were just over 9000 feet. With the extra runway length, we had more takeoff options. We always used afterburner on takeoffs with the T-38, but the flight manual had charts for calculating takeoffs at military – full power without afterburner. Remi told me to calculate a no-afterburner takeoff, which I did. We reviewed that the plane would accelerate slower, and that we should wait longer to retract the gear, and then the flaps after attaining a solid climb rate. Away we went, and we used a lot of that runway, but that showed me that the jet would do that, and that it also saved some fuel in case we wanted to fly a longer distance to the next stop, or have more reserve fuel in case of bad weather.

Our next navigation mission was a solo out and back, landing at another Air Force base we hadn't seen before. This would be a big time confidence builder. E Flight assigned us a base to flight plan to and sent us over to base operations where we had all the flight planning materials plus the ability to file a flight plan with ATC (Air Traffic Control). I was always a little slow in flight planning, because I was meticulous and wanted to make sure that I had everything correct. About a hour later I was just finishing up when an instructor from E Flight announced that the base we were supposed to go to had reported some tornados had touched down in their flight area. He gave us another base to fly to. I had only a little time to totally plan a new route. The IP

came over to help, and within five minutes he had filled everything out with headings, altitudes, fuel flows, time on each leg, etc. I filed the flight plan and headed out trusting in his judgement. I knew that he had made a lot of estimations, but I trusted that he had done this enough times to know what he was doing, so I took off and flew his flight plan. It got me there, and back to Vance that same day, so I passed that solo test. I never did flight plan that fast in my whole flying career, but then I never got lost either, or in any big trouble from flight planning.

We were getting close to choosing our assignments out of pilot training, and the Vietnam war was in full swing. Each training class would receive a block of assignments, and we got to choose in order of our class standing. I was number five in the class at that time, which used our academic scores, our check ride scores, and an instructor evaluation. We had to be endorsed for fighter type aircraft by an instructor in order to choose a fighter assignment. Our block came down and we had nine F-100 assignments, a couple C-141s, some F-4's, a few C-130's, along with a few B-52 assignments – and possibly a few others, I don't remember. I choose an F-100 fighter assignment knowing that was the “pipeline” preparing us for going to Southeast Asia (Vietnam combat).

As young guys, most of us felt “immortal” at the time (we did wise up many years later), and we wanted some combat time

under our belts for experience and better chances for promotion. Also this was the only way that I was going to get to fly a fighter like my Dad. When the class finished, I was number seven in our class ranking of about 45 graduating – I messed up a little bit in my navigation check ride when my check pilot told me to change my route in-flight, and clear that through ATC over the radio. As I said, I was never fast at flight planning, and you had to be fast when you were flying 6-7 miles a minute. I got graded down, as he had to help me a little bit.

We were also offered a chance to take the FAA commercial pilot written test to receive a commercial license. The FAA did not require a check flight because they knew all the military training requirements, and those surpassed what they would have tested in a commercial flight check. This test covered the FAA Rules and Regulations for commercial flights which were a little different from the military. Most of us took that test, and I received a commercial pilot license, multi-engine land (limited to centerline thrust), with an instrument rating. I still have that license, but have never taken the opportunity to use it. It was too good an opportunity to pass up at the time, and I would do it again if I had the opportunity.

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DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

THIS CERTIFIES IV. MILTON RICHARD SANDERS
THAT V. 3739 KANAWHA STREET, N.W.
WASHINGTON, D. C. 20015

DATE OF BIRTH	HEIGHT	WEIGHT	HAIR	EYES	SEX	NATIONALITY
12-15-43	70 IN.	170	BROWN	BLUE	M	USA

X. HAS BEEN FOUND TO BE PROPERLY QUALIFIED TO EXERCISE THE PRIVILEGES OF:

I. COMMERCIAL PILOT III. CERT. NO. 1780134
RATINGS AND LIMITATIONS

XII. AIRPLANE SINGLE ENGINE LAND
AIRPLANE MULTI-ENGINE LAND-LIMITED
TO CENTER THRUST
INSTRUMENT

XIII.

VII. *Milton R. Sanders*
SIGNATURE OF HOLDER

X. *William F. McLean*
VIII. ADMINISTRATOR

DATE OF ISSUE: 08-01-67

AC FORM 8089-2 (4-67)

My Commercial Pilots License

Pilot graduation time was coming up, the month was July, and the weather was great. Family started coming for graduation, and we started preparing for getting our wings (some of us were having wings sewn on our flight suits and jackets even before we received them officially).

One of my classmates, Joel Carroll and his wife Lynn, lived off base in a rented house. Joel's sister Marsha, came out from Omaha to stay with him for a week or two before graduation. Joel's dad was the base commander at Offutt AFB, the large Strategic Air Command (SAC) base which was also the headquarters of SAC, and he couldn't get away for Joel's graduation. Joel was also a classmate from the Academy. Our class had a Saturday afternoon party at Joel's home as graduation approached, and I was out in the back yard playing

croquet with a small group which included Marsha. We kinda hit it off pretty well and we were attracted to one another, and managed to do some activities together after that. A long time custom was for a wife, a parent, or very close girlfriend/fiancé to pin the new pilot's wings on at our graduation ceremony. I approached the subject of having Marsha pin on my wings, but was turned down by the higher ups saying that it was inappropriate, to my dismay. But that is life again.

I don't remember which officer pinned on my wings, but it was either the training squadron commander or the vice-wing commander. Anyway, I finally got my pilot's wings formally, and received my graduation certificate. We had a graduation dinner at the Officers' Club, and of all things to be served, we had fried chicken. It was totally inappropriate to pick up a drumstick in our hands in that situation, but having had much practice at the Academy with fried chicken and eating it with a knife and fork, I simply jumped in and devoured it. One of my classmates told me later that Wayne Brunswick, another of my classmates was flabbergasted that I could just pick up my knife and fork and put down a drumstick in record time. He had never seen that before.



Air Force Photo: Pilot Training

After graduation, we packed up and were able to ship off a trunk of stuff to our next duty station, which for me, was Cannon AFB in Clovis, New Mexico for my F-100 combat crew training. I took some leave and headed home for a week or so, then headed to Omaha to spend a few days with Marsha before driving on to

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Cannon AFB. That was a nice few days, and her family went to the lake where we did some waterskiing. That was fun. I had built a small plastic model of the F-100 and gave it to her. She looked at it first, smiled and laughed saying, "You're going to fly one of these?" I just said yep. She look again at it then more seriously said, "You're going to fly one of these...." finally realizing that I was headed for Vietnam and combat operations. Finally I had to leave, said good-by, and drove off to New Mexico. More about Marsha later.



Marsha and Her Dad at The Lake



Marsha Carroll Getting Back in the Boat

Oh, one other little fact: our class was fond of having parties once a month or so, and these involved drinking (these were hot shot pilots – right?) and staying up late – at least on Friday and Saturday nights. I got the dubious distinction of always being the designated driver since I didn't drink. What they didn't realize was that at 2:00 in the morning, I was pretty tired and wasn't very alert. I was probably just as dangerous as some of them were, but I didn't tell them that. We all survived and had some good times, although the day after a party I probably remembered much more about the party than most of them did.

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The married ones always had their wives to keep them from drinking too much, or knew that they needed to stay fairly sober to get their wives home. What a life, huh?



Marsha – “You’re Going To Fly One of These?”



Marsha – “You’re Going To Fly One of These...”



Now, With Our Graduation and Our Wings, We Could Say That
We Had Done That Ourselves.

We Were Jet Pilots

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21 Survival Training Fairchild AFB Washington 1967

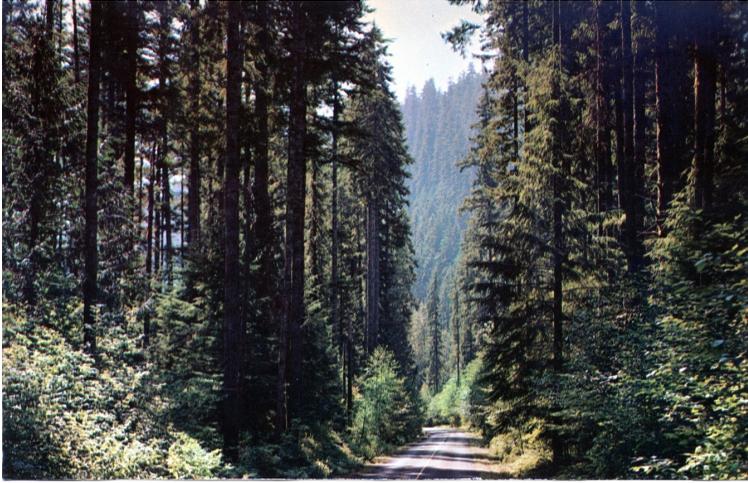


I misspoke in Chapter 20 that I was heading straight for Clovis, New Mexico and Cannon AFB. I had orders to go to Fairchild AFB in the state of Washington first for a three week survival school – two weeks of classroom training, then a week of surviving in the woods. This training was pretty much mandatory for pilots as you can't just pull over and park a plane if something goes wrong. You either have to put it down on some flat ground or bail out if you have that capability. Gaining techniques for surviving for a couple of days or more, depending upon where you are when you bail out, is essential.

As I left Marsha Carroll's house in Omaha, I dropped her off at the airport as she was headed out to Baylor University in Texas. I then continued to Aurora, Colorado to visit Claire Woods, Diane

Wood's mom, who "claimed" that she had adopted me – at least she had taken a shine to me while I was at the Academy. She knew that I was coming, and she had contacted her Niece, Kay Gerber, who lived in Salt Lake City. Since Claire knew that nothing was going to happen between her daughter and me, she was continuing to try to "get" me in the family. I arrived in the afternoon, and Claire had me go to the airport to pick up Kay. I only had a quick description of Kay and was wondering if I would be able to find this person at all. I didn't know that Claire had sent Kay one of my Academy pictures, so I'm thinking that Kay found me before I could locate her. Clair fixed dinner and we ate, having a nice conversation. After dinner and the dishes were cleaned up, Claire cleared out, and Kay and I started to get to know one another. We talked to nearly 1:00 AM and I was falling asleep as Kay was talking to me. Some impression, huh? Anyway, I mentioned that I needed to go to bed, and I leaned over and kissed her – not quite so timid now, I guess.

Kay had purchased a one-way ticket to Denver from Salt Lake, so I took her home in my TR-4, met her family, stayed overnight, and then headed out to survival school. I hadn't felt any fireworks with Kay, so I chalked that up to experience, not expecting anything to come of it. [We were married a little less than two years later].



Pacific Northwest – Survival Country

My trip to Fairchild AFB was beautiful, going up through Idaho and into Washington. We were quartered in the BOQ and met for classes in an older one story building. The curriculum included food gathering – what kind of berries to eat and animals to catch using different kinds of snares. We were taught how to use the different parts of our parachutes to make a small lean-to, a tiny pup tent that we could snuggle into, and how to gather branches we could sleep on, staying off the ground. We also used the parachute harness to make a back pack, and a lot of parachute cord to hang things up, make lanyards to hold things to our belts that we might have with us, including a hunting knife or a pistol. We had some self-defense training as well as exercising to keep (or help get) ourselves in better shape for our field exercise. Since we were all going into a combat zone, we were somewhat

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trained in escape and evasion (E&E), how to put dirt on our faces and hands for camouflage, how to crawl across fields and how to hide in the forest.



Me in Camo

Part of our classroom training involved some stories from WW II and Korea, and other simple survival stories. We were taught how to look for good camp sites if we went down over friendly territory, especially the United States. We needed to look for a place where we could shelter, find wood for a fire, find water nearby, etc. We were told of one story where a pilot had to bail out over the mountains in Colorado. He landed OK, built a shelter

out of his parachute, was near water, and built himself a fire. Before rescue folks found him, he had done all this, then sat down, pulled out his pistol and shot himself in the head. It sounds kind of crazy. He did everything right, but was not mentally prepared to survive.

After our two weeks of classroom training, we were set to do an E&E drill. That evening, we were given some knee guards, and told to crawl through this large field, evading “enemy” instructors, going under wires, and also evading trip wires which would set off a flare. If we set off a flare, we had to stand up and let the instructor punch a card we had been given. If someone got too many punches, he had to go back through the field again. At the end of the field we were all gathered up and taken to a concentration camp simulating a WW II camp. We were searched, hosed off, put into individual 6 x 6' cells with a canvas bag over our head and shoulders, and told to just stand there, and of course it was dark. It was a little difficult to breath inside those bags; some of us would lift them up to breathe. Our cell doors would often quickly open to inspect each of us, and if we had the bag off, we would get a severe chewing out. The pressure of standing, being in the dark, having our heads covered, and not knowing when we would get out, was pretty tough. I pulled my bag up enough to breath, setting the edge of the bag on the brim of my cap. If I heard someone coming close, or even heard the

door start to open, I could nod my head quickly dropping the bag down. We were kept there the rest of the night.

After they pulled us out of the cells, each of us got interrogated, which was quite an experience, and not very nice. A light was shining in our eyes, and the interrogator knew who each of us was, what our assigned units were – which was pretty demoralizing – and asked us all sort of questions. Finally getting out of that (and we were hungry, thirsty, and tired from being up all night), they put us out into the camp itself which had some small barracks buildings, and barbed wire around the outside. We had to form up into ranks for a roll call, and just mill around for a while. One by one we were taken and stuffed into a wooden box where we couldn't quite stand up, nor sit down – just slightly bent over. The sun was out and the temperature in the box was pretty hot. We also didn't know how long we would be in those boxes. This was quite an education in getting captured, and I knew by reading the experiences of others, that this was just a small introduction of what being captured was all about. Finally we were released and taken back to the barracks for a night's rest.

The next day, we picked up our equipment, got on the bus, and headed for the wilds of Washington. For the first couple of days, we all stayed together in a campsite where we fashioned our lean-to's, worked with pieces of old parachutes, built our back

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packs, and even caught a few fish. We were given a few white bunny rabbits, taught how to kill and clean them, then had a marvelous rabbit stew. Our group was given a couple of pounds of beef which we cut into thin strips, and smoked for 24 hours to make jerky. Then we packed up, got out our topographical maps and started ground navigating to specific spots. After a day of that, we were split into two-man teams where we had to navigate as different teams to another specific geographic position, while avoiding “enemy” patrols consisting of instructors looking for us. As my team was trekking along, we spotted an instructor and we tried to hide in some brush. The instructor found my teammate and put a “punch” on his travel card, but seemed to miss me for some reason. I guess that I had found a good spot to hide, but I was still pretty close to my teammate.



Our Survival Class – The Group



Milt Taking a Break After a Couple of Days in the Wilds

As we converged on our final destination, we felt pretty happy, especially as the instructors had a very large pot over a nice fire and were cooking up a stew for us to consume before we headed to the bus and back to our BOQ's. As we were both recuperating from the woods and packing up to leave, I stepped on a scale and found that I had lost ten pounds, but I really felt good, although tired as well. I grabbed a bottle of orange soda, and it was just too sweet to finish it, much less do more than taste a candy bar. It took a couple of days before my body got back to the point where I could enjoy richer foods. I received my survival training

certificate, and drove off for Cannon AFB.



The Survival School Graduate: observe how well this graduate blends into the background to avoid being seen by the enemy. His white tennies enable him to crash through the densest undergrowth with a minimum of noise. The eye and head protectors adequately prevent sunburn and snow blindness. Notice also the captured game cooking on the extremely well improvised equipment. This man is destined to survive!

Once I had checked in at Cannon, I was assigned to quarters in a brand new BOQ facility with two bedrooms in a unit, and shared living room and kitchen. It was really nice. The units were all one level and didn't even have any grass yet. In my quest for a sunbathing spot, I planted a 3 x 8 foot plot with grass seed; however I didn't really expect to get grass thick enough to lie on. It was just something to do. A few months later, the base put sod out right over my growing grass, but I didn't mind. It was just outside our rear glass sliding door, where we had a very small patio for each unit. Before our F-100 training got started, we were sent to Homestead AFB in Florida for Sea Survival School. For some reason we got tossed aboard an old C-47 for the nine hour flight to Florida – talk about flying slow!

Ah, sea survival! Florida was warm, the ocean was nice, and we had some classroom days – starting to sound familiar? We were taught that saltwater fish were very different than freshwater fish. Some saltwater fish were poisonous, and we were told what to look for. They also told us that a lot of ocean fish were easier to catch than those in freshwater lakes and ponds. We got instruction on how to use both one-man and multi-person life rafts, how to inflate them and the procedure to getting in one from the water, which is more difficult than it looks. Sea rafts also had what is called a sea anchor, which is just a small parachute-like piece of cloth on a line that we would toss in the

water. It acted like a drag that would keep us pointed in one direction instead of turning round and round in the water due to wind action. We also learned how to make and use a sun shade and even how to collect fresh water from rain. There are also specific procedures when being picked up by helicopter. It was important to let the line from the helicopter touch down in the water to ground any static electricity before the pilot would touch it to put on the harness. For a six or eight-man raft, we were also instructed on how to fashion a sail so that we could be propelled by the winds.



The Tower

One of our exercises was to climb a 75 foot tower, put on a parachute harness that was attached to a wire stretching out from the tower to a small lake below us. We launched backward

and slid down the wire into the water (quite a thrill to say the least) where we had to release from the harness, inflate our life vest, then go under a full parachute that was spread out on the water using the procedures we had been taught (many times when parachuting over water, the parachute will drop over the pilot, and he has to know how to get out from under it and not drown). Then we recovered to the shore to get ready for our next exercise.



Sliding off the 75 Foot Tower into the Water

The next day we were taken out from shore in a motor boat, quite a ways from land, and dropped off into the water with a one-man life raft. We had to inflate it, climb in, drop our sea anchor, put up our sun shade and experience the ocean alone for

about four hours. I finally got situated in the raft, which was no easy feat. I also had brought with me some fishing line and a hook, and dropped that into the water as well. Voila! I caught a fish! I let it go back into the ocean, but that was a confidence builder. When it was time to get picked up, a helicopter came by, dropped the pickup line into the water, and I exited the raft, put on the harness and was lifted up into the helicopter. It was kind of fun, but also an excellent experience.



Flare Training

The next day we were put into groups of four and dropped off the same way but with a larger raft, and a little closer to shore. Our mission was to get everyone into the raft, get all our equipment set up, then fashion a sail and see if we could be the first ones to get back to shore. We were not quite as successful as other rafts,

but we were by no means the last ones to reach the shore. The first ones back got a prize, but we had to go without.



Raft Familiarization

So we got our qualifications from sea survival and had another long ride back to New Mexico from Florida in another C-47. We were really anxious to get back to a “fast mover” which was slang for jet fighters. We sometimes joked about the cargo planes and pilots as “Trash Haulers”, but then we had to realize that they carried us around as well. So that went both ways.

22 F-100 Combat Crew Training Cannon AFB, New Mexico



Now that survival training was out of the way, it was time for us to get back to work. This is the same old story – hit the books, attend classes, jump in the simulator, blindfold cockpit check, aircraft pre-flight, etc. Wash, rinse, and repeat for each airplane we were taught to fly.

The North American F-100 Super Saber was a war plane which means we now had to learn all the armament systems, dual redundancy systems for survival in combat, different weapons delivery parameters, air-to-air refueling, and the oddities of the old design. The F-100 was the first in the Century Series of aircraft, having been designed for supersonic flight. It was the first jet in the world which had gone supersonic in level flight. It also had some pretty tricky “gotchas” if you didn’t learn and

respect them. It was called an “honest” airplane. If you made a bad mistake, it would kill you. This is backed up with quite a few fatal accident investigations due to pilots’ mistakes.

One of these happened to get caught on video by chance, and has been played to every F-100 pilot and trainee who flew the F-100. It provides a look at what can happen if the pilot is not aware or not careful of the subtleties of this aircraft. Here is a URL of the “Saber Dance” if you would like to watch it: <https://youtu.be/Q2qqKwndFW0> (38 seconds)

Our first flights were in a 2-seat F-100F aircraft with an instructor in the back seat. We flew in this model until we were cleared solo for normal operations and landings, plus learning new operations. We did some familiarization aerobatics – not near as many as in pilot training, and we flew quite a few instrument missions sitting in the back seat with the instrument hood pulled up to block our outside view. The instruments were much older than we had trained with in the T-38, so we had to learn a bunch of new (old) procedures. Once we had our instrument and acrobatics rides, we delved into formation flying.

Formation flying was very important because combat missions were always flown with 2-4 airplanes in a flight for mutual support. One pilot cannot simply watch all the sky around him for enemies, but he can watch half the sky, while his wingman

can watch the other half. Very important for survival. I was told that about 75% of planes that were shot down by enemy aircraft never saw the enemy before the attack was in progress.

One unique characteristic of this jet is called “adverse yaw”. On nearly all airplanes, when the stick or wheel is moved/turned to the right, the airplane rolls right. This also happens in the F-100, but in circumstances of high angle attack (this usually occurs at slow speeds when the nose has to be kept higher than usual to maintain lift – like at takeoff and landing) when the pilot would push the control stick to roll right, the airplane would roll to the left. A quick reaction pilot not familiar with this characteristic would rapidly put more right stick in to correct, but that action would make the situation worse. When you are close to the ground, your chances of survival were not good. I won’t go into the aerodynamics of this, just know that it happens. As F-100 pilots we are taught to use the rudder to make rolling corrections at high angles of attack and stay off of the ailerons. I was caught by this phenomenon twice, but was able to recognize it very quickly before anything happened because of our training.

Each of our instructors was assigned a specific jet and had his name on it. As we were also assigned to instructors, the crew chiefs also put our names on those same jets. Two of us were assigned to the squadron commander, Lt Col Glastner, (every squadron pilot was an instructor), but we rarely flew the same

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plane and with the same instructor – especially because the squadron commander was plenty busy with other things. My jet had the tail number ending in “222”, or Triple Deuce.



Milt Ready to Climb In The F-100D With All His Flight Gear

The majority of our training missions were weapons delivery. This was done with 25 pound "iron" bombs that had a white phosphorous blasting cap in the rear, which let out white smoke when the bomb hit the ground. They were mounted in a pod attached to the center line of the jet, and the pod could carry six of the practice bombs. We practiced skip bombing (100 foot altitude, 400 knots, level flight) which was fun because we were close to the ground and going fast. We also did 15 degree, 20 degree, and 30 degree dive bombing, strafing with four 50 caliber machine guns under the nose, and a couple of times we carried some rockets under the wings. We always flew with 225 gallon drop tanks to give us extra fuel for increased range and flight times. The F-100 was also certified for nuclear delivery, and we had to use a special delivery procedure to make sure that we could escape the bomb effects when it went off. We almost always went to the gunnery range in a flight of four jets because that was the most efficient way to use the range, and the range was almost always scheduled for weapons delivery.

We practiced low level flying to keep us out of enemy radar coverage, and then we would end up entering the range using low level tactics, and drop a practice bomb as if we were in combat. Our initial low level missions were flown with an instructor to get us checked out with the procedures. On one of these missions, my instructor put me in the back seat and had

me pull up the instrument hood. He had me fly the entire low level without looking outside, just by following the headings, altitudes, and times for each leg which I had on my kneeboard. As I came to the end of the route, he told me to pull back the hood, and showed me that we were only about a mile off our destination point. He wanted to show me that we could get close without looking out. If we thought we were lost on a low level route, we should continue to fly the planned times and headings until we found a landmark that we could recognize, and then make small corrections to get us back where we were supposed to be. I thought that was pretty impressive.

Another squadron had an advanced (further along than me) student who needed a wingman to monitor a low level mission. One of our instructors was picked to do that, and he stuck me in the plane with him for a “freebie” ride. We were following the student, and he got so low, that I could see his shadow very close underneath his plane as he flew at 500 mph along the route. He was probably about 50 feet off the ground. I was later taught that when flying at 100 feet off the ground, if you let the nose drop one degree, you had three seconds to pull up before you hit the ground. One day I knew that I was scheduled to fly a low level the next day. I had a dream that night that I flew into a mountain, and I was just floating up in the air watching the plane crash and burn. I thought that was interesting, but as I was busy flying my

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low level the next day, I never had that thought enter my mind. It is odd that I still remember that dream. Perhaps it was a warning to stay alert and take things seriously.

We did have some free time when we were not scheduled to fly or do another activity. I started frequenting the pottery shop which provided activities for the dependents on the base. I made a set of ceramic chess pieces, and a set of hot chocolate mugs. I guess that helped take some of the stress of the training off my mind. I would also jog for exercise, shop in the Base Exchange, and even go to a movie once in a while. My classmates (19 of us) would sometimes schedule a get together. One evening we all gathered in one of the students BOQ rooms, and we each brought some food. I liked to make pizza once in a while, and this time I decided to try putting some hot dog pieces on it along with the other stuff. Don't try it! Everything tasted like hot dogs, and I got kidded about it for a long time.



Our F-100 Class at Cannon AFB

There was a branch of the church in Clovis, which included both civilian folks and some of the military. It wasn't very large but had all the organizations and once in a while the branch organized parties. Our branch president was a major assigned to the headquarters staff. He told me that his secretary was single, and said that she was a little interested in the church. He suggested that I take her on a date. I agreed, and we had a good time. She was pretty, smart, and friendly. The branch put on a Halloween party, and I invited her. I worked up a costume as "Spanky" in "Our Gang". I found some shorts, a big lollipop, had some suspenders, and she dotted my face with some freckles. I can't remember her costume, but just thought that she looked nice in it. We also had a good time that night. I was really starting to like her. I asked her out again, and took her to dinner to a place that also had dancing. We ate and danced a little bit, and then I gave her a poem that I had written for her. I guess that was a mistake. She read that and then looked like she wasn't having as much fun anymore. It finally came out that she had really liked some of the student pilots that dated her, but then they left to go to Vietnam, and she never saw or heard from them again. She was afraid that the same thing would happen to us. She figured that I was getting serious – my dad always told me that I wore my heart on my sleeve. That relationship cooled off and faded out. At the branch, there were two 15 year old girls. They seemed to like the thought of a dashing 20+ year old single

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jet pilot.

They were both after me. One was very cute and was 15 going on 25, and the other was not as pretty, but was vying all the time with the other girl. The cute girl's dad worked at the base as a sergeant, and he was always trying to get his daughter's feet back on the ground. He was having a devil of a time. I am hoping that he was successful.



Halloween in Clovis New Mexico

Not long before Thanksgiving, Kay Gerber invited me to Salt Lake to spend the holiday with her family. There were three enlisted guys at the base who attended church with me, and they were planning to head to Salt Lake for Thanksgiving also. We all got together and headed out on the long drive. We got there OK, and I got dropped off at Kay's home. On Thanksgiving, Kay's mom had invited the aunts, uncles, and cousins over. I was totally not expecting that. The attendance was about 24 people, and I felt way out of place. I did my usual thing – smiled a lot, laughed at jokes, and said only a little. I later heard that they all thought I was pretty smart – so mission accomplished – I hadn't opened my mouth enough to put my foot in it. The Gerbers were a nice family. Kay and I went to a movie. Kay had a white 64 Corvair convertible that she had bought from her earnings as a hairdresser (she had graduated from "beauty school"). She wanted me to drive, and as we started out and turned onto Highland Drive, I noticed that she hadn't buckled her seat belt. I asked her to do that, and she didn't want to. I casually pulled over to the curb and told her that we weren't going anyplace until she had her seat belt fastened. She looked at me hard, decided that I was serious, and finally fastened it. I bet she wasn't happy with me, but at least it was for her safety. Since I had been strapping myself into a jet aircraft so many times, it was just a habit with me, and it was for her safety. I guess it showed her that I had a no nonsense side of me. She always

buckled it after that (at least when she was with me). Kay had four sisters, and she was the oldest, so all of them were still living at home. One morning at breakfast, they all got to giggling all through breakfast. That didn't sit well with me, probably because I had had so much military discipline from the last 5 1/2 years, plus some of the same discipline at home during high school. I was not impressed with these silly girls.

The four of us military guys got back together and headed back to New Mexico, figuring I would never see Kay again. After I got back, I wrote a nice thank you letter to Kay's mom, but nothing to Kay. The following January or February, I got this letter from Kay saying that she figured that I had not written to her because I had been involved in much travel and secret missions that I couldn't talk about. I felt really embarrassed about that, and even got a laugh out of it, but I did finally write her back and apologized. That Christmas, I didn't go home because I had kind of invited myself to Marsha Carroll's home for Christmas. I think Marsha and I had talked about being together for Christmas when she was home from Baylor, so it just sort of happened. I drove to Omaha and spent Christmas with her family. We did have a decent time, but one night right after dinner I helped clear the table and suggested to Marsha that we could do the dishes together, and she begged off. I helped her mother with the dishes, but I wasn't too happy with Marsha's attitude. That was

sort of a red flag to me for a further relationship, but I just put it in the back of my mind.

In the spring, I had a long weekend, and I arranged with Marsha to come visit her at Baylor. I set off in my TR-4, and headed off to Waco, Texas – a 451 mile trip. I sure saw a lot of west Texas. The route went from Clovis to Lubbock, through Abilene to Ft Worth, then South to Waco. Marsha seemed a little cool to me, but we spent a day and a half and had a decent time. Then I made the whole trip back again. That was the last time I saw or talked to Marsha. So goes life, as people change.

We finally got to do some air-to-air training. We had a lead computing sight where we would start tracking another airplane, hold steady for about two seconds, then slowly move the sight pippet (reticule) onto the other airplane, then could pull the trigger. We first had tracking exercises with no ammunition in the guns, and we would go out in a 3- or 4-ship formation. The lead aircraft would do some turns holding 2- 3-G's steady for about 5 seconds, then roll the other way. Getting the lead computing sight onto the "enemy" jet was pretty difficult and took lots of practice. We had 16mm black and white film in our gun cameras, and we started the film by pulling the trigger half way to start the film, then pulled the trigger all the way to simulate firing the guns to be able to watch our gun sight on film.



Single Film Frame Gun Sight on an "Enemy" Jet

Here is a single frame that I got developed from my 16mm gun camera film during a tracking exercise. The small white dots in a partial circle is called the reticule, and the small white dot centered on the right wing root of the F-100 in the picture is called the pipper. It is 2 mils in diameter. I never did get good putting the pipper on a moving target; however we were not used for an air-to-air role in this old aircraft. It would never turn with a MIG, but it was in the training syllabus.

They finally put ammo in the plane, and another instructor would tow a canvas target behind his aircraft while we would take turns rolling in on it one at a time, getting a good sight picture, and firing our guns. We had to qualify in this by getting one hit on the target during several air-to-air missions. It was not easy, but I finally put one in the target. The bullet tips were painted one of four colors on the nose, and each of us in the flight had a different color: green, red, blue, or orange. As the bullet would hit the target, it would leave a slight color smear around the hole it made. That way we could tell which of us had made the hit. On one of these missions, I ran into the adverse yaw problem that I described earlier. I had made a pass on the tow target using minimum afterburner to get a good closure rate going. As I pulled off the pass, I had another turn to fire again on the target, so I pulled the nose up to drop some airspeed so I could drop back behind and roll in again. I had neglected to come out of afterburner to help me slow down, and had to pull the nose up pretty high to get back behind the target. At the top of my pull up at slow speed, I put in left aileron to roll back down on the target, and my plane rolled right instead. I was a little slow to recognize it, so I had made about 90 degrees of roll in the wrong direction. I just centered the ailerons, pulled the throttle out of afterburner and stepped hard on the right rudder peddle to continue the roll to the angle I wanted, then headed toward the

target again. When I got back on the ground, the monitoring instructor in another plane, came over and mentioned it to me: “Got some adverse yaw, didn’t you?” I told him yes, but the lesson was learned and that’s all he said. We were up around 20,000 feet, and had plenty of altitude to recover, and he knew that I had recognized it and made a good correction.



F-100D Instrument Panel

We also used the painted ammunition during strafing passes at the range. The targets were canvas 20 x 20 foot panels. The range had four targets set up, and assigned each flight of four a specific target, so that four flights could come through the range before they had to change the targets. After we got back from a

range mission, we would eventually go score our target by counting the colored holes. All of us managed to pass mandatory strafe qualification because we would regularly be using that in Vietnam.

When I first started using the bombing range, I would usually put my thumb on the bomb button which was on the control stick just to the left and above the gun trigger. We had to make radio calls at different positions in our rectangular bombing pattern, such as “two is downwind”, two is turning base, “two is in hot” – where we would get clearance to drop, then we would acknowledge the clearance with “cleared hot”, and finally “two is off hot”. Now the radio button is on the throttle which I held with my left hand. One day when I was up with an instructor in the back seat, I found myself pressing the bomb button instead of the radio button. I had dropped a bomb on the downwind leg, the base leg, and then turning final. I only had six bombs, so I was only able to get a spot on the three bombs that I dropped on the bomb circle. I realized what was happening, but no one else did. I didn't say a word about it. I then adjusted my procedures so I didn't have my thumb on the bomb button until after I started my dive and acknowledged the cleared hot call. I never told anybody about that, but I had corrected that myself and it never happened again. I was very glad that I had only practice bombs, and that I had learned that early on. My instructor was a little

confused when I had three “no spot” bombs, but he let it pass without any further comments.

Another mission that we had was firing an actual Sidewinder Infrared heat seeking missile. We went to an air-to-air range where there was plenty of space, and we also carried a target missile on the other wing. The procedure was to fire off the target missile, get the tracking sound (a harsh buzzing sound) from our Sidewinder AIM-9 missile, then fire the Sidewinder.

That was pretty exciting to see the Sidewinder corkscrew towards the target missile, then explode and take it out of the sky. The Sidewinder got its name from the corkscrew motion which looked a little like a rattle snake “snaking” across the ground, and was a feature of the missile tracking system as it bracketed itself on the target.



F-100 Shoulder Patch Which We Proudly Wore

As my birthday approached in December of 1968, I was feeling just a little bit lonely, so I bought myself a cake. There was a family in church there that I got acquainted with, and gotten friendly with also. The husband had been military and was then currently ferrying aircraft to Vietnam under contract to the government. The mom had a teenage daughter (one who was not interested in an older guy). I went over to her house on the evening of my birthday with my cake to share some cake with the family. I knocked on the door, and as she answered she saw me with my cake and said: "Oh that is very nice of you to bring me a cake on my birthday." I was dumfounded that we had the same birthday! I told her why I was there and we got a good laugh out of it, as well as shared company and cake on both of our birthdays. Her husband was later listed as missing on a ferry flight and was presumed deceased, which was not a fun time for any of us.

As our training was winding down and we had a graduation date, for some reason I invited Kay Gerber to come to my graduation, which was not a big wingding, but there was a ceremony, along with a dinner and a dance. I told her that I could drive her home from New Mexico and that we would go through Denver as a stop over and stay with her aunt. That was a great idea because the trip to Salt Lake was a long one, and I wanted to see her aunt anyway before I took off for Vietnam. I arranged for her to stay

with a family from church. Unbeknownst to me, she bought a gown for the graduation and brought it with her. I didn't even think to tell her much about graduation, little old naïve me. Her host told her that she didn't need a gown, so she sent it home on a bus without telling me. We had a Young Men/Young Women activity that I took her to at church that was sort of a cookout in the desert not far away. We had a good time, and the woman that has the same birthday as I do mentioned to me in passing, that Kay and I looked like a pretty neat couple. That caught me by surprise, but got me thinking about it. As many of you know, the Lord has a way of giving us a guiding hand in our lives, and I know that when I look back over all of my life, that His hand has been there many, many times. I took Kay to church with me without even thinking about the 15 year old teenagers that had their eyes on me. Kay felt that the very moment she walked into church with me, felt the dislike emanating from those girls, and she later told me that she nearly decided to catch a bus and head home. Ladies sense these things so much better than men do, as I was clueless. I am still pretty much that way at 78 years old.

Graduation came with a small ceremony, dinner, and some dancing. The Thunderbirds were scheduled for a show there, and just happened to coincide with our graduation. They were flying F-100's at the time, and we simply kept our eyes glued on them not even daring to think that we could do the same type of flying

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and the very close formation that they did. The famous Bob Hoover also showed up and gave some pretty wild demonstrations in his yellow P-51 mustang. The graduation was really pretty nice, and we had a good time. Then a day or two later, I packed up my stuff, sent some of it home to DC, and Kay and I piled into my red TR-4 and headed out to Denver, our first stop on the way to Salt Lake City, as I was preparing to head out to Vietnam after visiting my folks in DC.



Milt with F-100D at Cannon AFB



Military Passport Photo – A Mean Looking Dude

23 Jungle Survival Training, Clark AB Philippines 1968



After graduation from Combat Crew Training in the F-100 at Cannon AFB, Clovis, New Mexico and driving Kay to Salt Lake, I stayed with her for about a week. I then flew home to Alexandria, VA to visit with my family before heading off to Vietnam. I probably had about four weeks of leave before I needed to meet my plane, but after a week at home, I was getting antsy to spend more time with Kay Gerber and her family in Salt Lake City. We had hit it off pretty well at my F-100 graduation, and I wanted to see if we were going to get serious. I had about three weeks before I had to catch my transportation at Travis AFB, California, per my travel orders.

I had left my car in Salt Lake with the Gerbers, planning to fly back before heading to Vietnam. When I flew back to Salt Lake, I

didn't tell Kay that I was coming, but I did coordinate with her folks. I landed in Salt Lake, and called Kay, saying, "Hey, I'm at the airport. Can I get a ride to your house?" Kay was so surprised that she was speechless for a few seconds. She was at the beauty shop which her good friend Sherry Hooton owned, so she didn't have any trouble jumping into her car and heading to the airport. I am surprised that she made the trip OK, because she sounded really excited!

We spent the next three weeks together, with her folks putting me up. We tried to go up to the Bowers' cabin (Winnifred Bowers was my Dad's sister), but as we turned onto the dirt road that wound its way back to their cabin, I noticed a drift of snow, which had turned to ice, across the road we needed to take. Thinking that I was hot stuff, I decided to just plow through it, forgetting that my TR-4 was low enough to the ground that I could open my door and touch the road underneath with little effort. I sped up to go through the ice, and got stuck about halfway through. That car was just not going anywhere, even though it sported 15" wheels. It took us about 45 minutes to clear enough ice from underneath, to be able to back out and get free. Another life lesson learned , with plenty more yet to be learned.



Milt and Kay at The Gerber's House Prior to Vietnam Departure
(no ring on her finger yet)

We did start to get serious while we spent time together. In fact we fasted and prayed one day, then drove up into the mountains where we thought we could get some solitude to discuss our feelings. As happens many times when we pray, even with fasting, we get no overpowering feeling of yes or no. That is when the Lord is letting us know that He wants us to make our own decisions based on our own feelings, thoughts, analysis, etc. letting us grow and develop on our own. Kay asked me if I had

gotten an answer, and I told her that I thought He said yes. She felt the same way, and we decided that we should get married, but not until after I returned from Vietnam, using what wisdom we had at that age. We went back and discussed our plans with her parents and they were thrilled with our decision - they sort of really liked me. Kay's sister Linda was feeling under the weather that day and was staying in bed, but we went into her bedroom to give her the news. As we walked in, I said, "Kay and I are going to get married!" Whereupon Kay blurted out, "You haven't asked me yet!" So at that moment, I got down on my knee in Linda's bedroom, and asked Kay to marry me. All she could do was nod her head yes. Lots of class by me, huh?

I hadn't even thought of getting a ring yet. Being the jokester that I was, I did have the ring case that I put my Academy ring in, and I took the top off of a soda pop can (this was back when the pop top would pull loose from the can), removed the tab while keeping the rest of the pop top, and put it in my ring box. I had Linda's boyfriend Tom Jarvis clued in to film my presentation, and took Kay out to the driveway. It must have been on a Sunday because we were dressed up. Tom started filming, and I gave Kay the ring box. She was really excited. When she opened the box and saw the metal ring from the soda can, she just lost it! She was laughing so hard that she could barely stand up. That week we went to a jeweler recommended by her Dad, and bought a set

of rings so Kay could have a proper engagement ring to wear while I was gone to Vietnam. This was 10 days before I left, and we set a wedding date for 10 days after I got back. So we had a little over a year of engagement, but we were separated by 7,758 miles (according to Alexa). The time difference was 14 hours as well.

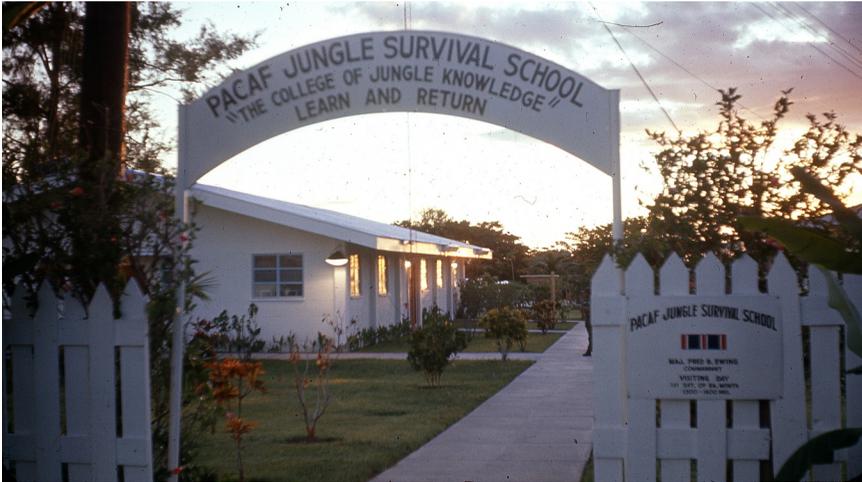
I also wanted to go through the temple before I left for Vietnam and that combat zone, not knowing that I would return alive, as many military servicemen did not. I had the desire, the time and some preparation. One of my dad's older brothers, Lee Sanders, offered to be my escort on that day, so the Gerbers and my Uncle Lee accompanied me to the Salt Lake City temple, which was a wonderful , but also very confusing experience, as I had no idea what would happen, and had not received any preparation or lessons to prepare me. I was still glad that I did that as further preparation for my walk in mortality. Kay and I went to a few more temple sessions for me to get more comfortable with that experience. Kay had served a mission to England earlier, and had been through the temple already, so she was the perfect one to help me understand some of the meanings of the ceremony. One day when we went through another session at the Salt Lake City temple, we were waiting for the room doors to open to let us in. A temple worker walked up and asked us if we would be the witness couple. We didn't really know what to say. We told him

that we were not married yet, and he decided to ask someone else. Actually that wouldn't have mattered, but he could sense that we were not ready yet to do that.

I introduced Kay to my Aunt Winnifred Bowers and her husband Frank. Kay and Winnifred got along really well, and Kay, as a beautician, went to Aunt Winnifred's house and did her hair for her a couple times a month while I was gone to Vietnam. Dad's siblings were very good to us and especially to Kay while I was overseas, and that was heartwarming to me. I had met most of his brothers and sisters when I was a kid living in Salt Lake City, but I really didn't know them very well, yet they opened their arms and hearts to us, treating us very well.

As I was waiting to head to Vietnam, I had my TR4, and Kay had her Corvair. We didn't need two cars, and mine wasn't really a family car. I decided to sell my TR4. I put an ad in the paper trying to sell it, and I had one or two people come around to check it out, but no buyers. I finally had to take it to a dealer. When I pushed the clutch in, there was a little grinding sound that the dealer said was the clutch throw-out bearing starting to wear out. I had paid \$2700 for the car two years earlier, and the dealer would only give me \$1175 for it. I was pressed for time, so I sold it to him. I still owed \$900 on the car, so Kay's Dad, Harold, loaned me the money to pay off the car so I could get a clear title to transfer ownership to the dealer who bought it. I

was able to pay Harold back within a week. I had to dry a tear when I dropped off my beautiful (to me) sports car, and moved on with my life. That was the only sports car I ever owned.



School of Jungle Survival

With all the business done, I flew into San Francisco, caught a bus to Travis AFB, and boarded a commercial plane hired by the government to carry servicemen to Asia. That plane was dead quiet all through the flight and also filled with smoke. Those men were very nervous. Me, I was excited. My first stop was Clark AB in the Philippines, home of the Jungle Survival School. This was my first visit to the Far East. The culture was totally different and foreign to me, but fortunately being housed on the American Air Base was familiar and comfortable. We went through the classroom training with briefings and pictures of

what the different parts of the jungles looked like. We were shown how to obtain water from specific jungle trees, since even though the climate was humid and had lots of rain, a person still needed water to keep from being dehydrated. We were trained on how to spot poisonous spiders and snakes, how to trap small animals including lizards, how to build a fire and cook meals. They showed us how to use bamboo to make a pressure vessel we could cook rice in, rice being easy to obtain. We were also shown how to make a hammock to keep us off the ground, and the necessity of using mosquito netting while we slept.



Berne – Our Negrito Guide

Once the classroom training was over, we were taken out into the jungle for two days and a night to introduce us to the real thing. Some of the employees of the survival school were native jungle

dweller Filipinos who were called Negrito's. These individuals were short – probably between 4 1/2 to 5 feet tall, were very black, and knew the jungle very well. We set up a camp, hung our hammocks and mosquito netting, and watched them make a fire by rubbing a stick held in their hands across another stick and some kindling they prepared. They made it look easy, but I knew it wasn't. They captured a few live things to eat, and cooked a snake and a lizard. We each got to taste a piece of each, and if I hadn't known where it came from, it would have been very good.



Jungle Bed – local wood poles, parachute canopy, and Mosquito Net

The instructor set up an exercise that had each of us going a short way alone into the jungle within a specified area, and finding what we would think of as a good spot to hide. This was to teach us how to better hide if we had to bail out of our plane and escape and evade from the enemy. Then they sent the Negritos out to find us. I was a little antsy about crawling under

bushes, etc. because of spiders and snakes. I found a large tree that had a complex root structure that I could conceal myself in, and they didn't find me; however, I really believe they didn't find me because I was slightly outside the prescribed area we were told to hide in.



Fire Starting With Sticks

That night we were around a good fire listening to stories and techniques of how to survive in the jungle. I happened to be laying down about six feet from the fire. As I was resting there, I felt something tug on my shirt and start to climb over my stomach. I let out a little yell and sat right up, and the critter (probably a lizard curious about what we were doing) hastily scampered back into the jungle. Everybody got a laugh out of that. He had to have been two feet long!



Water Tree

We had some spare time while at Jungle School, and we went into the town that had grown up outside the base gate. There were many things for sale, and most of them were hand made as well as looking very professional. Filipinos were very talented in using native woods, and any metals that they could find. I bought a jungle knife, probably 10 inches long, that was made from a salvaged jeep leaf spring. It had a wooden grip, and slid into a hand-made wood sheath. I still have it down at the hanger with my planes. I also purchased some Monkey Pod wood objects – one of which was a large salad bowl with six small similar bowls

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for individual place settings. I still have a hard time believing how smooth and professional they looked. After 30 years or so, the large bowl started to develop some cracks from not being used or not having the wood properly lubricated. I also bought a few very nice small hand-carved statues that looked professionally made. To get around, we would hire a “Jeepney”. In our case, this was a small surplus jeep used for public transportation for a price. It worked very well for us. We also saw some small 2-wheeled carriages pulled by a Filipino. I was able to mail these mementos to Kay from the Philippines, before I moved on to Vietnam.



Milt – Survival School Graduate – Machete and Backpack

24 Phan Rang AB Vietnam in the F-100 1968-1969 Part 1



After Jungle Survival, I was put on a commercial charter plane and flown to Tan Son Nhut AB just outside Saigon. From there I was flown north on a military transport to Phan Rang AB, about 30 miles south of Cam Ranh Bay AB. Both bases were on the coast of the pretty south China Sea. Phan Rang is also 168 miles north east of Saigon, or approximately 30 minutes at our F-100's normal cruise speed of 300 knots. We occasionally called our air base Phan Rang by the Sea.

When I arrived at Phan Rang, I was picked up by an individual from the 615th TAC Fighter Squadron, taken to the squadron building by the flight line, and signed in. I was introduced to the squadron commander, the operations officer, and a couple other pilots, than I was taken to the squadron "hootch", or quarters

building and assigned a room who already had another pilot assigned, and I got the upper bunk in the room. My roommate was Jim Thames, one of my classmates from the Academy. He was a great guy and we got along well together. He had gotten there about a month before I did, so he already had the “combat” mustache. Once I was “squared away”, I was taken by supply and received my flight suits, boots, and a few other odds and ends. We then went to the squadron building where I was assigned a parachute, a Smith and Wesson .38 combat Masterpiece pistol, which we all carried when flying missions, and a locker. Then began the theater indoctrination, maps, F-100 checklist, knee board, and instruction on where we were located along with restrictions on flight, and other local procedures. I got to listen in on some mission briefings which each flight lead would brief his wingmen just before they got their equipment and headed for the flight line. Planes from our squadron all had a large VZ painted on the tail which gave anyone the information that we were based at Phan Rang AB, RVN (Republic of Vietnam).



My Roommate Jim Thames

I was shortly assigned my own jet, F-100 52-793, and my crew chief painted my name on the canopy rail. Shortly thereafter, I named the plane “Katydid”, which was a mix of my fiancé’s first name, Kay, and because the jet sitting on the ground with the landing gear down, I thought had some similarity with a grasshopper.



My Own Jet – Katydid

As a new pilot in any combat theater, one flies familiarization flights before being fully cleared for unrestricted action. My first few flights in the F-100 in Vietnam were in a 2-seat F-100F model flying with an F-100D single seat model as flight lead. The next few missions were flown as a 3-ship F-100D formation with two well-experienced flight leads. After five supervised missions and clearance from the squadron commander, the new pilot was then able to fly wingman on standard missions.

On my fourth combat flight, I was flying with both the squadron commander and the operations officer – I didn't know if I was really that dangerous, or they both just wanted to fly that day. Half way into the mission, the squadron commander had a problem with his airplane and aborted his part of the mission. Since I had another qualified flight lead and the problem wasn't serious, the remaining two of us continued, with the squadron commander in the faulty plane returning to base.

We dropped our bombs, then were requested by the FAC (forward air controller) to make some strafing passes. Our radios were located in the aircraft nose, not too far from the guns – four 50-caliber machine guns firing from under the engine air intake. Having been told by others that these old airplanes would sometimes lose a radio due to vibration, I normally selected my guns two at a time, instead of all four. This would make less vibration, as well as conserve ammunition for more passes or to

hold some in reserve for emergency situations. Well, either the ops officer, Lt. Col. Sam Dickens, was firing all four guns, or just had a bad radio, because he lost his radio and all normal communications. Here I was, on my fourth mission, forced to become an instant flight lead and take us back to base. At least I figured I could find my way home: just fly south until I picked up the TACAN bearing and DME (distance measuring equipment) for Phan Rang.. The ops officer rejoined on my wing and gave me the radio out signal for both receiving and transmitting. I then notified the FAC, took the mission report, and headed home.

As part of our flight briefing, we covered normal emergencies, so had plans made in the event of incidents such as radio failure, making this no critical emergency. As the ops officer joined on my wing, I noticed that his nose hatch latches were loose and the hatch was hanging partially open. I could think of no way, stressed as I was already, to tell him. I couldn't have him pitch out over the runway, which would be our normal landing procedure, because the changing air flows and g-forces would rip his hatch off, damaging his airplane, and also possibly falling on something at the base. I decided to fly a straight-in approach and have him land on my wing (beside me on the runway). I gave him the signal to land on my wing, but he, thinking that all he had was radio failure, shook his head no. In addition, we had outbound artillery scheduled at various times from different

quadrants of the base. I came in high over the artillery altitude, pushed the nose down to get on a decent approach angle, then signaled the ops officer to take spacing for a straight-in landing by porpoising (pushing the nose up and down) my airplane. Events were happening very quickly, and he couldn't get enough spacing just by slowing down a little. I landed to indicate to him that we were cleared to land, and he made a low speed circling approach putting his plane on the runway without further incident. That was the last "supervised" combat mission that the squadron scheduled for me. I guess they figured that if I could get the ops officer home safely, that I was good enough to hold my own with the other flight leads.

I did learn from that experience. During the debriefing, Sam mentioned a few things that I could have done to alert him to a problem other than his radio. We always checked each other out after bombing runs, by flying under and around the other airplane looking for problems, then trading lead position and letting the second airplane check over the first. I did not do that, not wanting to give a radio-out plane the lead – but that would have taken less than a minute. If I had done that, and given him a "thumbs down", he would have known of another problem and then been more amenable to my suggestion of a wing landing. I also could have given him the lead on final approach and gone around to make my own landing. We learn both from experiences

and from those more experienced than we.



Milt Posing by His F-100, Tail Number 52-793

There are days when a pilot does everything correctly, and still dies. Yet there are days when a pilot does nearly everything wrong, yet lives. This is a story of the second kind. These stories warm my heart because it gives me hope that there are second chances sometimes after making big mistakes – mistakes that should have killed you.

My mind is somewhat hazy on the exact events that happened to this pilot in the squadron, partly because it happened just before I got to Phan Rang AB, but the situation is vivid enough in my mind from the retelling of stories in the lounge that it has had an effect on me. One of the Flight Commanders – we were assigned to one of four flights in the squadron, “A” through “D” – was on

a mission in 1968. He was leading a flight of two F-100's in IV Corps, the far southern section of South Vietnam. They received the target briefing from their FAC and proceeded to stir up the rice paddies and the VC hiding around them.

I can't remember if the Lt. Col. got hit by ground fire, or if his plane developed a malfunction, but he was fairly low to the ground when his engine quit. His first instinct was to try a restart. I probably would have done the same thing, because it is never a good idea to "step over the side" into an area where you have just stirred up everything by bombing the hell out of it. A pilot never wants to leave a good airplane either – there is just something that attaches you to it, emotionally as well as physically – plus we would rather not have to walk home through the jungle. It was always a good feeling to taxi into your parking spot, knowing that a hot shower, the Officer's Club, a decent meal, and a soft bed wasn't too far away.

The Col. however, took too much time waiting for the engine to start. There comes a time when alternative action becomes necessary to survival. He was too low, but survival instinct overcame any further thought. He pulled the ejection handles at an altitude below successful ejection parameters. He cleared the aircraft, but his parachute never opened – there was not enough time nor altitude. But it snagged in the jungle canopy! The jungle in many places has both a primary and secondary foliage cover,

with the primary sometimes as high as 150 feet off the ground. There was enough foliage cushion with the parachute snagging the primary cover, that the Col. was not even hurt - physically that is, he was quite shaken up, but otherwise OK.

Two days later, he was flying again. But whenever I saw him relaxing in the lounge, smoking his cigarettes - he was a smoker before the incident, but now a much heavier chain smoker - I could see his hands shake as he lit his cigarettes, and whenever he took one out of his mouth. I wondered how he could fly the F-100 with hands shaking that badly, because the F-100 had very sensitive controls. I usually flew mine very lightly gripped between my right thumb and middle finger, while keeping my index finger slightly flexed, but forward off the trigger. This gave me a soft, deft touch on the controls, yet I could easily close the rest of my hand over the stick grip when having to pull "g" or make more definitive maneuvers. He was very happy after his last flight, and smiled all the way to the transport which took him to Saigon and his ride home.

There is someone who watches over pilots occasionally, but that is a big job and they don't seem to be 100% effective. The best attitude is to be the best you can and take what comes without complaint, making the most of every situation. That also seems to apply to all of life, come what may.

I have mentioned Adverse Yaw on the F-100 before, but this is my second or third experience which really solidified my belief and reflexes to either prevent or quickly recognize the phenomenon if it came upon me suddenly. It is always there just waiting to bite the unwary pilot.

The North American F-100 Super Sabre Jet has been called an “honest airplane” among other names such as “Hun” and “Super Sabre”, or “F a Hundred” by those from British origins. But the moniker of “honest airplane” means something a little different. In this case, it means that if you don’t know your airplane very well and treat it with utmost respect, the F-100 will kill you if you make a mistake. Don’t misunderstand me, the F-100 was an excellent airplane for its time. It fulfilled many missions very well, and was a very accurate bomber in South Vietnam, even as an older aircraft (the first F-100 models started flying about the time I was in fourth grade). But the pilots had to understand its characteristics and always guard against making a bad mistake with too little altitude and too little airspeed to recover.

One of these bad characteristics is called Adverse Yaw. It has killed its share of unwary pilots. This is my story of adverse yaw, as I can attest to having seen it and survived. The design of airplanes determines the flight qualities of an aircraft. Speed and maneuverability have always been the goal of a good fighter with

armament, endurance, range, survivability, and good handling qualities at low speeds and high angles of attack, such as landing and takeoff, to be considered. According to the laws of physics, you can't have all of them favorable simultaneously. There are always tradeoffs. For speed, the F-100 received swept back wings in its design, partly to compensate for supersonic flight, decreased drag, and lateral stability.

Normally an aircraft will roll in the direction of yaw, yaw being the movement of the nose sideways left or right from flying straight ahead. This is a good thing, and specified in government Mil Spec 8785, Flying Qualities of Military Aircraft. When a pilot "steps" on a rudder, the aircraft will yaw and roll in that direction. Adverse yaw occurs when the aircraft rolls in the direction opposite to control input. In that case, left aileron roll control would create right roll.

In the F-100 (and nearly all aircraft), roll is normally controlled by the ailerons. When the left aileron goes down the right one goes up creating rolling moments to roll to the right. A pilot always checks his controls before flight with "stick left - left aileron up right aileron down", and vice versa. This works very well at low angles of attack like in high speed flight. But the force that keeps a plane in the air, the lift, causes higher pressure under the wing than above it. So when the left aileron goes down it drops into an area of higher pressure and greater drag than the

right aileron going up into an area of lower pressure and lower drag. The highly swept wings of the F-100 contribute to the adverse yaw problem. It is possible at lower airspeeds or in high “g” maneuvers, to push the stick left to roll left, but the airplane rolls right. The yawing moment produced by the down aileron (right one in this case) causes a yaw to the right which is greater than the rolling force to the left. The unwary pilot trying to roll left, finding the aircraft rolling right, tends to put in more left aileron, exacerbating the problem, and soon finds himself upside down. If he is very close to the ground, or doesn’t realize what is happening to him, he soon goes out of control and creates a “smoking black hole” in the earth. I could go on to give more physics, but it suffices us to know that highly swept wings and large aileron deflections at high angle of attack are significant culprits.

I was returning from a particularly good mission, a challenging one that I had met with good accuracy. Feeling a little oats, I pitched out left in 60 degrees of bank over the runway and kept my turn in real tight – always wanted to look good and aggressive when others might be watching from the ground. I smartly snapped the control stick to the right to roll out of my turn – and the plane started rolling left! Here I was, right over the field at 1500 feet, just about over the Officer’s club. But that was pretty far from my mind, as this hot young pilot was able to

instantly recognize what was happening (from previous experience), release back pressure on the stick, hit the right rudder, and roll properly out of the turn to complete my landing pattern. But that incident caught my attention, and caused me to give a little more respect to my airplane.

People get killed in war. That is what war is about down in the trenches. People at home and in Washington, D.C. are many of the ones who wave the flag, who shout about patriotism, who feed the news services great stories of courage, and who play up the righteous ideals of the United States. Although many of the officers and enlisted men have patriotic feelings and have a love of country in their hearts, they are still the ones who put their lives where their feelings are. And Vietnam was a perplexity of emotions, feelings, and very complicated political maneuverings. Vietnam could have been won very quickly, very efficiently if the military had been given responsibility to carry the war to the initiators and reduced North Vietnam's war making capability to rubble. Instead, targets were placed off limits; Hanoi was allowed to emplace some of the world's most deadly SAM (surface to air missiles) defenses prior to the US resuming bombing that target – at a horrible cost of lives and aircraft. US servicemen and their families were the ones who suffered.

I attended a combat crew training course (CCT) at Cannon AFB, Clovis, New Mexico where my class of nineteen learned how to

fly the F-100 Super Sabre jet in combat maneuvers. We became a close group in the six months we trained in aerobatic maneuvers and weapons delivery with bombs, rockets, guns, and simulated nuclear weapons. We flew together, partied together, and attended classes together as we became “real” fighter pilots. Following graduation from this CCT course, we received assignments to four bases in the Republic of Vietnam (RVN): Tuy Hoa, Phan Rang, Ben Hoa, and Phu Cat – the four main bases containing F-100 wings. We left New Mexico with our spirits up, our energy coming out our ears, and a real desire to get into action to do what we had been trained to do: support US ground troops against the enemy.

On our way to Vietnam, we stopped for two weeks in the Philippines to attend Jungle Survival training. Even if we never had to run around in the jungle (after bailing out), we were taught about keeping healthy in the tropics, but odds were that at least several of us would have to eject into a jungle environment. Our survival on the ground depended much on what we knew about the jungle and how well we could keep our wits about us. A couple of our classmates would never have the chance to put this training to the test.

About a month after we started flying combat missions in Vietnam, the first casualty from our class occurred. This pilot was flying out of Tuy Hoa, about 75 miles to the North of Phan

Rang, where I was stationed. The mission was pretty much standard to us now: receive a target briefing while circling the target about 9000 feet above; make our bomb delivery passes as briefed, then accomplish several strafing passes with the guns to finish up the attack. My classmate, Lance, delivered his bombs, then started his first strafing run. He scattered his bullets into the trees, started to pull out, then slowly nosed over and spread his airplane over several acres of sparse jungle as he impacted the ground and exploded. The only explanation that made sense to us, was that he had taken a bullet from ground fire which either incapacitated or killed him before the aircraft hit. There was no way to confirm our thoughts, but that theory fitted the observed events exactly. Lance was healthy, had no observed problems, his aircraft was flying well during the first part of the mission, there were no radio calls about trouble, and the aircraft did not appear to lose control and dive into the ground. The impact was consistent with simply no control inputs being made by the pilot. Also if the pilot had been conscious and had an aircraft problem, he could have ejected. Lance was the first of us to die.

Our second casualty was immediately more explainable. He had been scrambled from the alert pad at Ben Hoa during the night. The target was obscured by weather, so the flight returned to Ben Hoa for recovery. During their absence, a storm had gone

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over the base and doused it well with rain. Upon landing with unexpended ordinance, Huff encountered hydroplaning – much like water skiing – when his tires had hit some standing puddles of water on the dark runway. His plane skidded off the runway, heading for a defensive mine field around the base perimeter. His plane entered the mine field, set off some mines, and exploded in a fiery ball. He was killed instantly.

These two fatalities really caught our attention. In one month, two of our classmates were gone. If we continued at that rate, none of us would be left in twelve months when our assignments would take us home. We licked our wounds and vowed to learn from these men who had given their lives for an unpopular cause. We were also reminded that people die in war, and that even young, cocky, quick-witted and fast reflex fighter pilots were vulnerable.



615th Tactical Fighter Squadron Pilots, Phan Rang AB, 1969

Friendly fire is something that every soldier dreads. This is weapons fire from your own troops aimed at your position. It isn't enough to know that the enemy is trying to kill you, but when your own forces target you by mistake, that can be a real tragedy and unacceptable waste. But it happens.

I was on one of my early missions in the first months of my combat tour. That means that I was still unsure of exactly what was going on at all times. This lack of situational awareness can be deadly in the wrong circumstances, and has killed many pilots as well as bystanders. In WW II, if a new pilot survived his first 10 missions, then he had a much better chance of lasting through the war. The same was true of Vietnam, especially for those who went North. The situation was not quite so critical in the South, because nearly all the ground fire was small arms. A pilot could fly many missions and gain experience as time went on without having as much of a chance of getting shot down. Two of my classmates found out differently, as they were killed the first two months of their tour. But those are other stories.

One of the munitions that we occasionally carried was CBU, cluster bomb units. I was most impressed by CBU-34, which were small baseball size bomblets. A large clamshell bomb case housed a couple hundred of these bomblets, and would open after being released from the airplane. These bomblets had small fins on them (pitchers would love to have baseballs like this)

which spun up the units as they fell through the air. This spinning would both stabilize them and arm the weapon. After impact on the ground, little spring loaded “buttons” would pop out pulling thin wires, spreading to about 10 feet all around the unit. After about a few minutes the entire unit would arm. Anyone disturbing the trip wires would set off the bomblet and be injured or killed. This CBU also had a time that would set the munition off after 15 minutes of arming. It would get you one way or another. Other CBU types were housed in tubes. When the unit was fired, air pressure would push the bomblets out the tube where little parachutes would break the fall of the bomblets. As they hit any obstruction, the bomblets would go off, spreading shrapnel below and to the sides. None of these weapons were well-liked by the enemy, and were very effective against personnel spread out over an area.

I was the wingman in Bobcat 43 flight. We were scheduled to support a “troops-in-contact” mission, where US Army forces were fighting entrenched Vietcong in a sparse jungle area. We got our instructions from the forward air controller (FAC) in contact on FM radio with the ground commander. The day was pretty hazy without good landmarks on the ground, so we had to rely a great deal on our heading indicators. The FAC had the ground troops “pop” colored smoke flares to indicate their position, but I had trouble seeing them in the haze as well as

orienting myself well. I should have been able to just follow the flight lead and match his path across the ground, but he was also difficult to see in the haze. The delivery pattern was from level flight and higher than a normal bomb release, which made it even more difficult to see the target area over the nose.

Bobcat 43 started his run and was cleared “hot” to drop his CBU’s. I didn’t have a good visual on him, but started my run anyway. I have had my days when I certainly wasn’t particular enough to adhere to great judgment, nor to maintain strict procedures. I called in “hot” and was getting close to the target area. I thought I had it pretty well in my sights, and was just preparing to drop by putting my thumb on the release button. I had just started to apply slight pressure to the bomb release, when the FAC called me: “Bobcat 44, Abort! Abort!” I took my finger off the button and flew past the area. It appears that I had flown a heading that was 30 degrees off the specified run-in, and would have dropped at least part of my ordnance across friendly lines!

The FAC had the ground troops re-mark their positions with smoke, and I never saw so much smoke coming out of the jungle – red, yellow, and orange. They wanted to make sure that I knew exactly where they were! I was very thankful (probably not as much as the ground troops were) that the FAC was sharp that day and probably saved some lives.

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That was another of life's lessons that I learned. When someone gives you instructions, they expect them to be followed. When an aircraft controller tells you to fly a heading of 043 degrees at 15,000 feet, there are good reasons for following those directions exactly. He is not talking just to hear himself speak. When the airline pilot illuminates the seat belt light, you better fasten that belt – those who don't may get injured (and some have). Listen to others who have “been there”, and you will be much better off. I have been there, and have lived to fly another day, smarter and wiser than yesterday.



F-100 Returning from the Target

25 Vietnam 1968-1969 Part 2



Milt Decked Out in G Suit, Flight Suit, Parachute, Gloves, Survival Vest and Helmet Ready to Fly One of His 251 Missions

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Other than flying combat missions, we had lots of other activities to fill our free time. Once or twice a week we could go see a movie which was shown in an outdoor theater. These were pretty much first run movies which none of us had seen before, so movie night was fun. As you can see, lots of us could attend, although the view was much better towards the front.



Phan Rang AB Outdoor Theater

Another thing we could do was go to the library. The library had a large collection of reel-to-reel tapes with all sorts of music. Machines were furnished in a room where we could bring blank tapes and copy anything we wanted. Back then reel-to-reel machines were top of the line audio equipment. We could also purchase a lot of electronic equipment in the Base Exchange, however a lot of us waited until we could take some leave and head up to Japan where we could find a really great selection of almost everything we wanted. On one trip to Japan, I bought an

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Akai reel-to-reel recorder that could also play and record on 8-track tapes that were also the rage for in-car music systems. The main problem was timing your recordings so a song wouldn't change tracks in the middle.

On another trip I purchased a Teac high-end recorder, a very nice Sansui amplifier, and a couple of Sansui excellent speakers along with a turntable. It was kind of humorous that the exchange employees wondered why we were buying such high-end equipment, in that we were jet pilots and probably already had lost the high ranges in our hearing from being around jet engines every day. That didn't deter us at all! Having those nice pieces of audio equipment put us with the "In-crowd".



Milt and Jim's Stereo Studio

We bought some nice cameras – I went with a Minolta SRT-101 SLR with some extra lenses while my roommate went with Nikon. I also got a super 8 movie camera and took it along with me in the plane a couple of times to get some action pictures. Both cameras lasted quite a while and produced many family pictures and movies later on in my life.

Once in a while I also took time to go running along the base perimeter road. We were in the tropics and with the heat and humidity we really got some good exercise and conditioning. The base started getting some mortar attacks once in a while, and when the sirens went off at night (yes, always at night), we would all grab our “flack” vests and assemble in a bomb shelter right outside our hootch. The hootch just had thin metal walls, and a mortar could penetrate the walls with shrapnel pretty easily if it hit close to a building. There were supposed to be some plans to raise a sandbag wall around the hootches, but for some reason things were not moving along. Jim and I dug up some energy, and built a three foot sandbag wall on the outside of our room. I guess that was kind of selfish, but we didn't generate any help from the rest of the pilots, so we just put up the one section. A couple of times when the sirens went off at night, I just hopped down on the floor with my pillow and went back to sleep. About a month later, the entire squadron got out one day when sandbags were delivered, and we finally got the

wall done all the way around, which did make us feel safer. One night when we rallied to the shelter, we could hear the mortars going off with a whoomph, and the noise was getting louder as they got closer. It was a little scary to hear the explosions getting louder, but we did know that the shelter was “mortar proof”. The next day, we could see a spot on the road about 30 feet from our shelter where one mortar had gone off.



My Sandbag Wall

Mortars didn't dig holes in the ground, they just shot pieces of shrapnel out to the sides. The year before I got to Phan Rang there had been only three mortar attacks. During the year I was there, we had 13 rocket/mortar attacks. The rockets did destroy

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some F-100's, and those planes were combat loaded with fuel, ammo, and some ordinance. All the planes were in revetments to protect individual planes from damage due to a fire or explosion in the plane to either side, but that didn't always work as designed. At least the fire department got the bombs cooled off with water before they could explode, but that didn't help the rest of the plane.



F-100 After Rocket Attack - The Revetment Saved Other Planes From Damage

We had an LDS servicemen's group of about 35 men, and we met in an assembly room to the side of the base chapel every Sunday. Since this was a war, we didn't have Sunday off, so we could attend only if we were not scheduled for a mission. I did ask my squadron scheduling officer if he could keep me off the Sunday mission schedule, and he did that for a few weeks, but then it got

forgotten, and I didn't ask him again. I lead the music when I was there, but we all did what we could. One week I was asked to give a talk the following week.

Being young (24) and fairly inexperienced at giving talks, I decided to ask the Lord what he would have me talk about. I initially regretted that decision to get on my knees and ask, because I received a very strong feeling to speak on morality. Now I was not wise in the ways of the world, nor of the Spirit, and I wondered why this subject strongly came to my mind. It was not something I wanted to speak on. In fact, I would rather have not spoken on it because of my youth, a young 1st Lieutenant talking to higher ranking officers, as well as enlisted men. All week I struggled with the Lord in prayer to give me another topic to discuss, but the strong feeling would not change. The Spirit kept working on me to prepare a talk on morality. I was obedient, and prepared a 22 minute talk.

When I arrived at church, I found that only two of our group were in the assembly room, and I wondered if everyone had been notified that I was giving a talk, and no one wanted to hear me. But they ushered me into the big chapel where I found that a unit of the Idaho Army National Guard had arrived at the base that week, and more than 200 of them were members and had decided to attend church. These men had recently been activated, and had just arrived in-country prior to deploying to their

forward base. They had been torn from their families and shipped halfway across the world to an unpopular war, and were not in the best of spirits. However, similar circumstances of hardship have always humbled people and caused them to seek comfort from the Lord. It was at that time that I knew why the Spirit had constrained me to speak on morality. These men were far from home, away from their families, and suddenly thrust into situations where their beliefs and covenants could be severely challenged. The Lord wanted them to know that He was aware of their situation, as well as cognizant of their actions. I delivered the message that the Lord wanted them to hear, and in spite of my youth and inexperience, the message was well received.

The Lord works in many ways, and I was humbled and receptive to those promptings of the Spirit. I was also pleased to know the general reasons for the promptings received from the Spirit in this instance. Many times we don't know why we get certain promptings, but this time I was blessed to know why. These early experiences have further prepared me to listen to and discern the feelings sent by the Lord which have helped me in my life.

Another time, I found a model airplane flying wing stashed in a closet in our hootch. It was a control line model and I had flown many of those. I was able to find an engine in the BX, along with

some fuel, props, flying lines and a starting battery. I made some small repairs, but I did notice that the up control line would sometimes catch a little bit when I pull on that lead out wire. I figured that when I had tension on the flying lines, that it would be held straight and not give me a problem. I have learned better since then. Anyway, we went out in front of the hootch where we had sufficient room, I laid out the lines 60 foot lines, and got someone to hold the plane then launch it after I got the engine started. All went well, and the plane launched and went speeding around the circle. I wanted to go a little higher, but I didn't have any up elevator (major mistake to make when flying models –always make sure that everything works as advertised). It would fly level though, so I was able to keep it from crashing. We made the one flight and then put everything away for the next modeler to try his luck at it.

Phan Rang was a fairly large base and it was a little difficult to get around without transportation. Most of the time when we were scheduled for a mission, we could call the squadron and get them to send up a truck to pick us up, but other times were up to us. I decided to buy a motorcycle so I could get around better.



Milt on His Motorcycle Holding the Model Plane

Ready to go anytime, anyplace, and anywhere

We had to have insurance in order to license it on base, and I was able to get our squadron scrounger to go into the town just outside the base and pick up some insurance for me the next time he went out. We also were able to get a ration card for gas, so they didn't make us buy it off base, even if we had the guts to go into town. I was not one who did. I had a good time with my motorcycle for most of my year at Phan Rang, and it did prove pretty handy. There were two incidents though that taught me I didn't need or want a motorcycle after I got back to the USA. The maximum speed limit on base was 35 kmh, or about 21 mph. That should be pretty safe, right? Not always so. I stopped at a

stop sign one day, and started to pull out when a jeep going the other way didn't even see me and turned left right in front of me. I managed to stop without getting hit. We didn't have much traffic either, because most of the vehicles were military, and they were pretty much used for official business. Another time I was asked to take another guy about two miles so he could get something. We got there OK with him riding on the back, but when it was time to come back, I applied the gas, the front wheel came off the ground and nearly tipped us over. That was enough to teach me that I didn't want to drive one back in the states.

One day I had a wild idea that I wanted to try a mustache. So I stopped shaving above my lip. It took a couple of weeks, and I didn't really know how to grow one, but it was fun for a little while. I told Kay in a letter that I was growing one, and she didn't think that she would like it – that it would be a little scratchy. I even wrote a letter to “Dear Abbey” about it. She wrote back and said to Kay: “Just relax a little bit and don't worry about it when he kisses you. You may even like it.” Well, it started getting itchy and hard to manage, and didn't fit well under my oxygen mask, so I gave up on it. I guess I was never meant to have one



The Infamous Mustache

One thing that was pretty nice is that we hired Vietnamese maids who would make our beds, clean our rooms, and wash and fold our clothes for us. They did a very nice job, were efficient, and also were cute as well. I had my maid teach me a couple of Vietnamese phrases, such as “Good Morning”, “Good Afternoon”, and “Good Night”. It took me a little while to learn just that much, but it was fun.

Vietnam is not without weather problems, as most places in the world have, but it is in the tropics, and the tropics have monsoon season as well. One day I was in the mobile control unit not far from the approach end of the runway where I was logging takeoffs and landings as a backup record for operations. We



My Hootch Maid

younger pilots got that responsibility once in a while. It was always interesting to watch F-100's taxi out, get checked over and armed in a parking area just short of the runway, then taxi out onto the runway, run up their engines, then take off one at a time with a 30 second interval. We never took off in formation loaded with bombs – the combat takeoff was always single ship for safety reasons. This particular day we had some weather moving in. I could see it approaching base with heavy rain coming down. The rain was so heavy that it looked like a wall of

water slowly approaching the base. As the water got to a building or some trees, it occluded everything behind it. I had never seen this before, and it was scary. I was about 1000 feet from the approach end and to the side of the runway, and I could see the wall of rain as it crossed the end of the runway while I wasn't getting even a drop on the windows. It finally moved over me and I couldn't see even a hundred feet away. Fortunately it didn't last long and moved on through.



Football in the Rain

We did some athletic sports once in a while – softball and touch football. With 35 pilots in, or attached to, a squadron and 20-24 mission sorties a day, we had some time off. One day a group started to play some football in front of the hootches (all three squadron hootches were in a large “C” orientation together). It started to rain , but that didn't stop them. The rain was warm and was not coming down hard. They just kept on playing.

We also kept a sense of humor to lower the stress of war and also helped the time to pass. I liked Charlie Brown and had a large

Charlie Brown wall calendar hung up. We also wrote lots of letters. Kay wrote me a letter every day – think I received 341 letters from her while I was there. Only one got lost when a mail plane crashed in Alaska. I was not quite as diligent, writing only about 240 letters to her, but it was great getting mail. We had to go to the base post office to pick up our mail, and that was a daily habit for me.

Another practice we did was to draw a picture, break it up into 365 blocks (usually a few less blocks), number each block counting down, and each day color in a block. We called this our “Short Calendar”. When the picture was all filled in, we would be on our way to catch our flight home. When there were very few blocks filled in, we didn’t look at it much, but when the picture began to fill up, we watched it every day as our morale got higher.

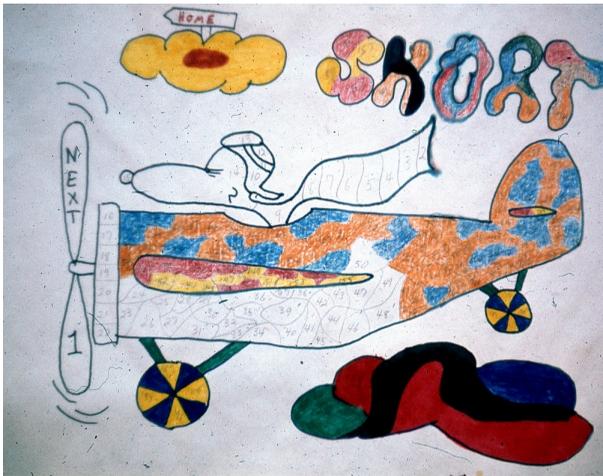
My top bunk bed was actually pretty comfortable, and it was cozy. I had a small bulletin board where I kept pictures from home, a small bookshelf where I kept letters from home and some books as well.

In the picture of me in my bunk you may be able to see the knife in the wood sheath that I got in the Philippines when I was at survival school as well as my letters from Kay. You can see that there are quite a few of them.

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Writing Letters Home



My Short Calendar

As you may know, tropical environments give life to all kinds and types of growth – vegetation as well as insects. Well Vietnam is in a tropical environment, and has its own share of



In My Top Bunk Bed – My Personal Space

life. Since we didn't have our own homes and kitchens, we usually ate our meals at the Officer's Club. These meals were pretty good, and one could easily gain some weight if not careful to burn up as many calories as one would eat. We would go into the building, look at the menu, and if it sounded good for our mood, we would pay our money, go through the meal line, fill our trays (sort of like a cafeteria), and go sit down and eat.

One evening I was really enjoying my meal, chomping through the meat and potatoes, drinking my chocolate milk and having a grand time. I even ate my veggies, which was unusual. When my

plate was clean, it was time for the grand finale, dessert – this time a piece of chocolate pan-cake with vanilla icing. I lifted up my fork and started to stab the cake, when I saw a very large cockroach leg stretched out on the icing! I started thinking: “If the leg is on top, where is the rest of the roach?” Not having an adventurous spirit right then, I decided to substitute wisdom for appetite (I have a very strong sweet tooth), and took my tray to the trash and got rid of the strange piece of cake. I couldn’t even make myself return to the dessert bar to grab another slice.

Needless to say, I looked over my food from that time on whenever I ate at the Officer’s club. I never advertised the fact of the contaminated food, and wondered how scattered the other pieces of that cockroach were in the dessert that night. I figured for every time we found something like that, there were probably fifty or a hundred times that we never knew what contaminants were in our food. Sometimes it is better not to know.

I had two trips to Japan, and one was in January. I never thought about the weather in Japan, and since it was always hot in Vietnam, I just wore my normal summer clothes. That was a mistake, although I can’t say that I had a coat or jacket anyway. It was 36 degrees and I was in my short sleeves. I managed to get to the base exchange and buy a light jacket. I wasn’t warm, but at least I didn’t look stupid in short sleeves and no coat out on the street. This trip I also purchased a guitar since my other one was

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a cheap guitar and I had left it at home anyway. This one was a Hashimoto (would you expect anything else?) and with the exchange rate of Yen to dollars (360 to 1), it only cost me \$50 – a bargain at any time. In fact I still have it now in 2022, 54 years later, and it still sounds great.



Milt with his Japanese Guitar

Another thing that we discovered in Japan was a highly skilled model maker. He would carve airplane models out of wood, glue the parts together, and airbrush the exact colors of our planes, as well as artfully paint our “VZ” on the tails, paint our actual tail numbers, put our names on the cockpit rail, and also brush on our nose art. These were not cheap at the time, but I ordered one, and one of our pilots who went to Japan picked them up about four months later. He did an incredible job, and I still have mine

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sitting here next to my desk as I write this.



My F-100 Model By a Japanese Modeler, with my name on the canopy rail, Katydid on the nose, and tail numbers correct.

Three other young pilots had and played guitars, and we would get together and jam once in a while. There was a birthday party for the wing vice-commander put on by the three F-100 squadrons. One of our singing group took a country song, probably "Castle on the Hill", renamed it to "Trailer on the Hill" and changed the words to fit the situation. Since the commanders were treated well, they were housed in individual trailers that were up the hill from us. We practiced that song for a while, and performed it on the night of the birthday party. It was a hit, and we enjoyed doing it as well. These types of actions helped us to keep our sanity while waging a war.

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While in Vietnam, we had to keep proficiency in several operations, including air-to-air refueling. About every 2-3 months each pilot would be scheduled for a mission in IV Corps, which was pretty far from our base such that it required air-to-air refueling. Our refueling plane was a KC-135 and the refueling system was called a probe-and-drogue system. The tanker would let out a fuel line with a basket on the end. We guided our refueling probe into the basket to connect. The KC-135 flew a “race track” pattern with about 20 mile legs. We would be talking to an air traffic controller who would vector us onto the tanker, then we would change to the tanker frequency for the final rendezvous and join up.

We would get into a pre-refueling position, then one at a time we would be cleared into a pre-contact position about 20 feet below the tanker and 20 feet behind the basket. When we were

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stabilized and had activated our refueling switches, we would be cleared into the contact position and slowly move up to the basket. The difficulty was that the refueling probe was to our right, and we had to use our peripheral vision to guide it into the basket which sometimes would be bouncing around a little bit in air turbulence. Our procedure was to establish a position on the tanker and let the boomer guide us into position with radio calls such as “up 2”, “forward 5”, “right 3”, etc. He would call contact when our probe locked into the basket connection, and then he would tell us “fuel transferring” as we kept our position as smooth and steady as possible. Once we had our scheduled off-load, the boomer would say “off-load complete, break contact, cleared to move to pre-contact position”. Then it was the next jet’s turn.



Refueling Probe Extending Out Below the Right Wing



F-100 Taking On Fuel from the KC-135 Tanker

I felt fortunate that I could take some pictures with my Minolta SLR camera while we were refueling. The weather was usually pretty nice with blue sky, a few clouds, and the ocean underneath us. The refueling let us get much farther south, usually to a geographic formation that we called the Seven Sisters which was a formation of seven prominent hills in a crescent shape. When we flew, especially in combat, we listened to our aircraft very closely. An unusual sound, vibration, or feeling could tell us of an impending failure and let us begin to plan for alternate actions.

On one refueling mission I was Bobcat 42 in a 2-ship formation. We hooked up with the tanker for a target down in IV Corps by the Seven Sisters. Bobcat 41 took on his fuel, and it was my turn to fill up. After confirming "nose cold" (gun switch in the safe position) and being cleared to the pre-contact position, I moved

into the contact position and started taking on JP-4 jet fuel. After receiving my allotted load, I disconnected, moved out to the wing position and returned my refueling switches to off. Bobcat 41 had briefed a very smart, snappy disengagement from the tanker formation using a little afterburner. I joined on lead's wing and nodded my head. He bade farewell to the tanker on the radio and signaled for afterburner. As I push the throttle outboard for afterburner and started to follow his turn away from the tanker, I heard an ominous sound from my engine, a loud rumble. I immediately pulled the throttle to idle and called lead telling him that I had an engine problem. He slowed down and started to drop back to check me out, then said over the radio: "Check your speed brake." I pushed the speed brake switch to retract the speed brake and the rumble went away. Boy was I ever embarrassed! We used the speed brake every time we flew and were fully used to the rumbling sound caused by disturbed air around it. This time I was not expecting that sound, and figured it came from the engine.

We continued the mission without further problem. I have occasionally thought about how familiar sights and sounds in unfamiliar surroundings can be very spooky when they are neither recognized nor expected. One must be alert to all situations during life to keep from being surprised, and to stay calm enough to perform the correct actions.



Two F-100's Joining up on a KC-135 in a Turn

SCRAMBLE!

The Wing kept six aircraft, three flights of two, primed and ready for any critical missions requiring immediate air support. The call signs were "Blade One through Six". There were trailers out near the flight line where we could take naps, as well as a central trailer with 16mm movies, a kitchen, and decent food. Blade One was usually reserved for the most critical of situations, and was usually scrambled first in an emergency. Blade Three and Blade Five flights usually had some scheduled backup missions to get those birds up in the air during any alert tour. These backup missions were not usually exciting, but did help to relieve tension build-up during the alert period.

The alert teams were replaced every twelve hours, or whenever three combat missions had been completed. I have flown three missions while on alert, but that was unusual. We performed a hot preflight of our assigned aircraft, even to starting engines and checking all the aircraft systems, then shutting them down, setting all the switches to the pre-start positions, then simply turning the battery off. In the haste and urgency of a combat scramble, sometimes things don't always go right, and mistakes are made. I can remember four times when I had some problems which were my own doing, and are tough to admit, especially as a fighter pilot, but did affect missions as well as teach me some good lessons.

One afternoon, I was taking a nap on the bed in Blade Three's trailer. When a scramble comes through, the phone right beside the top of the bed rings, one picks it up and hears, "Blade Three Scramble!" There was no loud Klaxon, just a very loud ring. While I was asleep, the phone rang — and I didn't hear it! I remember being shaken awake by a ground crewman sent over by my flight lead (who was already in the cockpit) to find me. I was really groggy crawling into the cockpit, but finally got awake enough to start engines and get going on the mission. For three years after that, every time the phone rang when I was asleep, I would jump 6 inches before I realized I was at home and not on alert in Vietnam. If I was awake and relaxed when the phone

rang, I would still jump, treating the phone as if it were the most important thing in my life. War and critical situations can have after effects in people's lives for a long time.

On another day, I preflighted my plane and went to the alert shack. What is really true in life sometimes, is that when we are looking for specifics and little things, we sometimes don't see the forest. The F-100 has two very large, red-colored plastic covers. One goes over the intake to keep out foreign objects such as birds who like to build nests, and the other fits into the exhaust for the same reason. On this particular day, one of the ground crew had put the intake cover back on after my pre-flight (bad decision on his part). When I was scrambled, I ran for the airplane, vaulted up the ladder, strapped in, and signaled for engine start! The engine would not turn over 5% RPM, so we started looking for something wrong. It was then that the ground crew spotted the intake cover. We removed the cover, the engine started normally, and we continued the scramble. I was very lucky this day, as we normally started the engines from a cartridge of burning gases. My airplane had a defective cartridge start system which had not been repaired for lack of parts, and was using a ground cart for starting. Had I tried to start with a cartridge, I would not have been able to abort the start, the cover would probably have been sucked into the intake and causing some damage, and the engine would probably have

over-tempered, causing additional damage and an aircraft out of service. In addition, the scramble would have been much more than 15 minutes late, and could have exacerbated an emergency situation on the ground where people's lives were in jeopardy –all because of a very obvious error: an overlooked intake cover! But we learn from our mistakes when we survive.

The third problem was embarrassing, and was caused by haste and maybe a little fatigue as well as trying to hurry into combat to assist in an unknown situation. The scramble phone rang to launch Blade One and Two. As Blade Two I ran to my aircraft, vaulted up the ladder, strapped in with the help of the ground crew, and cranked the engine. My flight lead, Blade One, was already copying the scramble information on the radio and had started to taxi. I signaled for the chocks to be pulled and increased engine thrust. The F-100 started to roll forward but didn't respond to my pushing the rudder pedals to steer away from the side of the steel revetment where the airplane was parked. I was a little shocked and hesitated for a second because this had never happened to me – and I was still headed toward the steel wall about 4 feet away. Finally I had the presence of mind to step on the brakes and stop before bending an airplane! The plane was cocked too far toward the wall to simply “engage the nose wheel steering” (which in my haste I had forgotten to do – the stupid and embarrassing part of this experience), so the

ground crew had to push the airplane backwards against idle thrust to straighten it out, whereupon I “subtly” pushed the nose wheel steering button and properly guided my jet out of the revetment to the taxiway. It was nice to have an oxygen mask over my face to hide the redness, but the flight lead was calling on the radio wondering where I was. After the mission, I had to debrief the problem to my lead, but by that time everything else had gone OK, and it simply became another lesson learned: “Haste makes waste”.

The last incident could have been deadly, and did affect the mission. The Wing Command Center scrambled Blade Five on a busy day, while I was assigned as Blade Six. We started engines, copied the mission info, and taxied with good speed to the arming area. Following takeoff clearance, we taxied onto the runway and ran up the engines with lots of adrenaline in our blood. As I ran up the engine, I noticed that the EPR (exhaust pressure ratio) was much lower than it should be as calculated for the ambient temperature. Using a great lapse in judgment, I decided that the mission was more important than the EPR, and that I would check the minimum acceleration speed at 1000 feet to further monitor the engine performance (dumb). I nodded my head at lead to indicate that I was ready for takeoff, and he released brakes and rolled. Forty-five seconds later, which is what we used for a weapons loaded combat takeoff, I released my

brakes and rolled. At 1000 feet I was about 10 knots under the min accel check speed. We had 10,000 feet of runway and the calculated takeoff distance was around 6500 feet that day, so I decided to press on (dumber). I rotated the nose at 155 knots, but noticed that the end of the runway was coming up pretty quickly (dumbest and even more dangerous to abort the takeoff from that position). I managed to stagger into the air and rejoin Blade Five. As soon as I came out of afterburner, I was unable to stay on his wing due to lack of power, and had to ask him to power back slightly. He gave me the lead and looked over my aircraft. The bleed valve flap was fully open, sticking into the breeze, and venting a lot of compressed air out the top of the airplane instead of out the tailpipe as thrust. The bleed valve is supposed to vent extra compressed air while the engine is accelerating to keep the engine from compressor stalling due to imbalanced pressures in the compressor section in front of the combustion chambers. In this case it didn't close when it was supposed to. The "only" danger in this situation was a loss of thrust, so we were able to complete the scramble mission. Loss of thrust can be very dangerous in many circumstances, so I was careful to keep my speed up on all my weapons passes and never get too slow – although the most dangerous phase was the takeoff where I was starting from standstill, and was the heaviest that I was going to be all day.

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In all four of these situations I was lucky not to suffer more than a loss of dignity. In combat, as well as everyday life, we learn from our mistakes or are bound to commit them again, perhaps catastrophically. I am grateful to have survived. Others didn't.



Taxiing Out On a Scramble Mission

One fine morning we got scrambled off the alert pad as Blade 3 and Blade 4 to assist in a “troops-in-contact” situation south of Bien Hoa. We copied our mission contact information (DME and bearing off of Bien Hoa TACAN, contact frequencies, and FAC call sign) while taxiing out; thought about our situation and emergency procedures while the arming crew took the safing pins from our weapons; copied takeoff clearance from ground

control; and pulled onto the runway with clearance to get airborne and head for the critical situation on the ground. We got off the ground with no problems, and were soon in contact with the FAC and received our on-scene mission briefing.

US forces were trying to clear out a particularly thick portion of jungle foliage which was hiding numerous Viet Cong infantry. They were dug in with trenches, foxholes, and tunnels, making the situation particularly dangerous for our troops to route them out. The Army had called for fighter support to help clear out the VC while providing as little exposure as possible to our own troops. Our troops had some mechanized equipment (tanks and armored personnel carriers [APCs]) pulled up next to the jungle foliage. This particular area was sparse to the East, and the foliage began here and got even thicker to the west.

We were carrying four napalm canisters each, which was plenty to start quite a few barbecues, but which was just what the Army wanted to use to neutralize the enemy. Napalm is jellied gasoline with an oxidizer mixed in, so it will burn in the absence of oxygen. This makes it particularly nasty for tunnels, fox holes, and trenches. Once ignited, it will even burn under water, making it impossible to quench the flames if some napalm gets splashed on you. Being jellied, it will stick to items, yet will still “splash” to cover a large area. In addition to burning whatever it sticks to, it also uses up available oxygen in its combustion

process, suffocating people in caves, trenches, and other shelter nearby. With the enemy in shock, wounded, or dead, the US troops would find little resistance left in cleaning up this VC stronghold.

As with any weapon, the Air Force has established minimum safe distances for friendly troops to avoid any damaging effects on our own forces. As I recall, napalm had a minimum safe distance of 300 meters. For this attack, the Army forces refused to move away from the edge of the jungle, which put them within 50 meters of where we would be dropping the napalm. They insisted on being close enough to observe any enemy activity in the thick jungle while these weapons were employed on the VC. We were rather nervous, since our weapons release speed was 400 knots plus; we would be using a curvilinear approach to compound any weapons tracking solutions by the enemy (keeps us from being shot down); and our sights were not computerized. We had "iron sights", adjustable, but still just fixed points in the combining glass. We had to rely on our expertise and corrections for airspeed, dive angle, and surface winds.

The ground commander had ultimate responsibility for the safety of his troops, and he assumed responsibility for any collateral damage to his men and equipment during the weapons delivery. In conjunction with the FAC, we made several "dry" passes over the target area to ensure to both ourselves and the

Commander that we had the target definitely in sight. It also gave the troops an idea of our attack path and in what direction the napalm effects would spread. Then we went in hot for two passes each, dropping our napalm in pairs. Each napalm canister weighed about 850 pounds, so we had to drop equally off each wing to keep our loads symmetrical. The men in the tanks and APCs buttoned up their hatches and watched through their periscopes. I was thinking that with being only 50 meters away from our target, the Army guys could have hung out wires with hot dogs on them, and had a good wienie roast.

We spread the napalm across the area where the ground commander wanted it; no one was injured; and we got the job done. The area was neutralized, the Army cleaned out what was left, and the FAC gave us our bomb damage assessment (BDA) which included about 250 KBA (enemy killed by air). This was just estimated, and probably was high – as enemy killed figures were almost always inflated until the Army could go in and do an actual body count.

This was my first experience where a ground commander had disregarded weapons safety parameters. Hollywood has Captain James Kirk who defies the “Prime Directive” many times, yet always comes out on top. This one time, the commander got what he wanted, including close observation of activity in the jungle during the attack. The situation was also helped by the

reputation of F-100 pilots and our bombing accuracy. If this had been one of my early missions, instead of the some 150 under my belt, my flight lead would have not hesitated to have me hold “high and dry” and not participate. Teamwork, good judgment, and a realistic assessment of capabilities made the success of this mission possible. The same principles apply in nearly every task we tackle in today’s world. My education continued.

Boldness and Brashness are sometimes qualities to admire, and sometimes qualities to be shunned. On certain days they will make a hero, and on others will make you dead. On one mission in I Corps, we were scrambled from the alert shack to support “troops in contact”, which was an active firefight between friendly ground troops and the Viet Cong (VC).

We got airborne and headed for the target area. Following contact with the FAC, we received our target briefing. The FAC was in contact with the ground units over an FM frequency which the ground forces used, and then talked to us over the UHF radio which was our primary radio. We didn’t have an FM radio so all our instructions from the ground had to be relayed to us by the FAC. The FAC was also responsible for our control, so he had a big job.

The ground troops were on a ridge line being pinned down by VC on an adjacent ridge line. The VC were putting up a pretty good

fight, and we were called in to soften up their position to allow the US troops to move forward with a minimum of casualties. We made four passes each to drop our 750 lb. high drag bombs on the target area. Following that, all we had left was 50 caliber machine guns. Now the high drag bombs had fins on the back that deployed as drag brakes to slow them down and let us get separation from the bomb blast and fragments. This allowed us to get closer to the target and drop a little more accurately. This also made us bigger targets for the VC, as we got closer to them. We employed curvilinear approaches to make their targeting problems bigger – by changing heading, altitude, and airspeed continually during bomb delivery, we gave the ground gunners a nearly impossible tracking problem. But as we got closer, they got a little braver in trying to shoot us down.

I made a final strafe pass and pulled off the target into an orbit over the area to get our attack debriefing. A few minutes later the FAC came up on our frequency and relayed a message from one of the US troops watching our attack through binoculars. He said that during my last pass, one VC was standing up firing his AK-47 at me when his head suddenly disappeared from one of my 50 caliber slugs going through it. This was the only time in Vietnam that I knew for sure that I had killed an enemy. Instead of whooping and cheering for doing my job right, I felt subdued. Yes, I had done my job and the enemy was shooting right at me,

but the reality of taking another human life was suddenly brought home, and it was a sobering experience.

Much of Vietnam from a fighter pilot's perspective was very impersonal. We heard stories of enemy cruelty, and lost friends in accidents and combat; but this was a little different. This was personal. I grew up a little more that day.

Compressor Stall

Flying has occasionally been described as hours and hours of boredom interrupted by seconds of stark panic. That is a fairly accurate description of routine flight. Not that combat missions would normally fall into such descriptions, but a lot of our flying after attacking a target, could be described as routine when headed back to base. And there were times when our routine portion of the mission was anything but routine.

A jet engine has several distinct mechanical stages of operation, all of which are necessary to produce thrust for flight. The first portion visible to the eye is the air intake which smoothes and directs the incoming air to the second stage, the compressor section. The compressor section has rotating disks with blades around the circumference. These blades compress the air into a denser mass prior to sending the air into the combustion chamber. The multiple disks are carefully designed to continually increase the air compression as the air goes from

disk to disk with sometimes as many as nine disks depending upon engine design. Once in a while, a disturbance is induced in the airflow which interrupts the smooth processing of the air compression, and a violent engine stall occurs. The pilot will feel a distinct “bang” as if there were an explosion, and suddenly comes wide awake with a start, wondering what hit the plane. In the F-100, the air flows under the cockpit where a compressor stall will bounce the pilot’s feet off the floor. The interrupted air flow will also cause visual effects, especially at night, as the airplane appears to kick fire out of both ends of the aircraft. This is a very disconcerting occurrence to a pilot who starts to imagine that his airplane is starting to come apart.

To continue with the jet engine process, following the compressor section, the air enters the combustion chamber where fuel is sprayed into the air and the mixture is ignited. The burning fuel rushes through the turbine section which provides power to turn the compressor section, then from there out through the tailpipe to provide thrust. The F-100 has an afterburner, as do many other military aircraft, where more fuel is sprayed into the exiting gasses near the tailpipe, vastly increasing the thrust from the engine. Fuel consumption using the afterburner is also significantly increased. The F-100 engine produces approximately 10,000 pounds of thrust at full military power which increases to 17,000 pounds in full afterburner.

Since afterburner is expensive fuel wise (a T-38 at sea level flying Mach 1 will burn its full fuel capacity in 12 minutes), we use afterburner for takeoff and only when absolutely necessary.

I was flying as Bobcat 22 on a fine October day, having a fairly routine mission. Coming off target we copied our BDA (bomb damage assessment) from the FAC and headed for home. As we got about 100 miles from Phan Rang, nice and relaxed and headed for dinner, we started our descent. I pulled my throttle back and promptly had my feet bounced off the floor as the engine compressor stalled, then smoothed out. That caught my attention right away, as no place was really a safe bailout area in that country. My engine was running normally for the moment, so I pushed the throttle up and back again to see if this was a one-time air disturbance or a repeatable malfunction. As the throttle passed the same point as before, I got another compressor stall. That told me that I had an aircraft problem. This time I notified the lead aircraft that I had an engine problem and that I was declaring an emergency. I wasn't too worried because the engine was still running, and we practiced precautionary landing patterns (PLP) to keep us proficient in emergency procedures. The PLP entry point was directly over the runway at 10,000 feet where we made one large turn to put the aircraft on the runway. In this case if the engine quit, we could adjust the size of our turn and still make the runway without

having to eject.

I entered the PLP at the precise altitude and started my landing pattern with the engine set at 85% rpm per the flight manual. The lead aircraft landed first so as to be on the ground and out of the way should I happen to close the runway if something else happened like splatting the plane all over the concrete (nice thought). The PLP also required us to hold a higher airspeed than normal (about 30 knots higher) to keep a safety cushion should we need to pull the nose up and eject. Another factor to consider was the maximum speed for drag chute deployment. If we deployed the drag chute at too high a speed, it would fail or auto-jettison. I forgot about that fact with everything else going on.

I lined up on final approach at the higher airspeed, and touched down at the appointed spot which was about 1/3 down the runway instead of in the first 1000 feet – also for a safety judgment factor. Touching down at 175 knots, I reached up and pulled the drag chute handle as a matter of habit without thinking about the extra speed. Someone was looking out for me because the chute deployed and held, and the rest of the landing was normal, if a little faster than usual. During my debriefing, my Ops Officer, Lt. Col. Dickens chided me for repeating the compressor stall, he thought once was enough; then he also chewed me out for deploying the drag chute at such a high speed.

Gee, didn't he appreciate my being back on the ground with no damage to the airplane? But then I realized that we need to learn from every situation, especially emergency situations. And I reflected on the pilots who had not learned from others' experiences and who were no longer with us. We learn from all our life experiences and are much better off when we take them to heart and don't repeat those which turned out to be bad mistakes. Just as important is remembering the good experiences and using those techniques over and over again to make our lives richer and of benefit to others.

Some events can be embarrassing to a fighter pilot, but in the heat of the moment, I felt lucky to have only injured my pride (and two aircraft tires). Our flight of two aircraft was returning from a routine combat mission – routine meaning that we had been directed toward a target, only seen jungle, and dropped our bombs at a spot directed by a Forward Air Controller without seeing anything unusual, including the enemy.

We pitched out over the runway taking proper spacing for landing, about 6000 feet. My fight lead touched down on the runway slightly to the left of the centerline while I lined up slightly to the right on final approach. I touched down on the runway at about 155 knots, lowered the nose to the runway, and pulled the handle for the drag chute. Normally, I expected to feel a tug as the chute deployed and blossomed as it started to slow

me down. Not feeling the tug, and not hearing the tower call me for a “no chute”, I pressed the mike button and asked the tower for confirmation. They had simultaneously transmitted the “No chute” call to me, so I missed that call. I simply figured that I could stop OK just using the brakes, since we had a decent headwind down the runway. I lightly stepped on the brakes, and my heart jumped in panic when there was no corresponding braking action! My plane felt like a 10 ton accelerating tricycle as it seemed to gain speed – with the sight of the end of the runway coming into view.

My mind raced into hyper-speed as I made a radio call to my flight lead that I had no chute, no brakes, and was taking the arresting barrier. He called back saying that he was moving to the left and stopping short of the barrier. I punched the button to release the spring-loaded tail hook and was happy to see the deployment light come on. But my racing mind wouldn't let me stop there, as I had expected the brakes to work after the chute failure, and my mind wanted a little more security than just depending on the barrier to stop me. I turned off the anti-skid brakes and felt a sigh of relief as the brakes took hold, and I also pulled again on the drag chute release, not willing to let any prospect of stopping go unturned. I was so happy to be slowing down that I neglected to release the brakes before I blew both main tires, just as the tail hook caught the barrier, and the drag

chute popped out, blossomed briefly, then fell to the ground as I stopped. My flight lead later told me that it looked like a three-ring circus to see me in the barrier with both tires blown and the drag chute limp on the runway. I thanked him for the vote of confidence. But I was safe, and happy to be in the land of the living after a few moments of stark panic.

The Flight Safety Officer was a little miffed that I had caused so much work for him, with an apparently good airplane, especially since maintenance could find nothing wrong with the anti-skid system. It took maintenance three days to finally discover a cracked electrical connection in the anti-skid system. I also made it a practice to pull hard on the drag chute handle on all landings after that one. As I look back on this incident, if the drag chute had deployed, I would have been past the barrier before really using my brakes, and could have been in bigger trouble, although at lower speed. Some days the right things happen in the right sequence to protect the unwary.



Tie Tac Presented For A Successful Barrier Engagement

In those days, the companies who manufactured the arresting barriers provided a plaque and a tie tac to all pilots who engaged the barrier. I still have my tie tac and have the plaque on my study wall.

