Our Sea Story

A Memoir of Our Navy Years

Written by

Kathy and Charlie Wright

Reston, VA

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FOR OUR CHILDREN AND GRANDCHILDREN

YOU HAVE GIVEN US SO MUCH JOY

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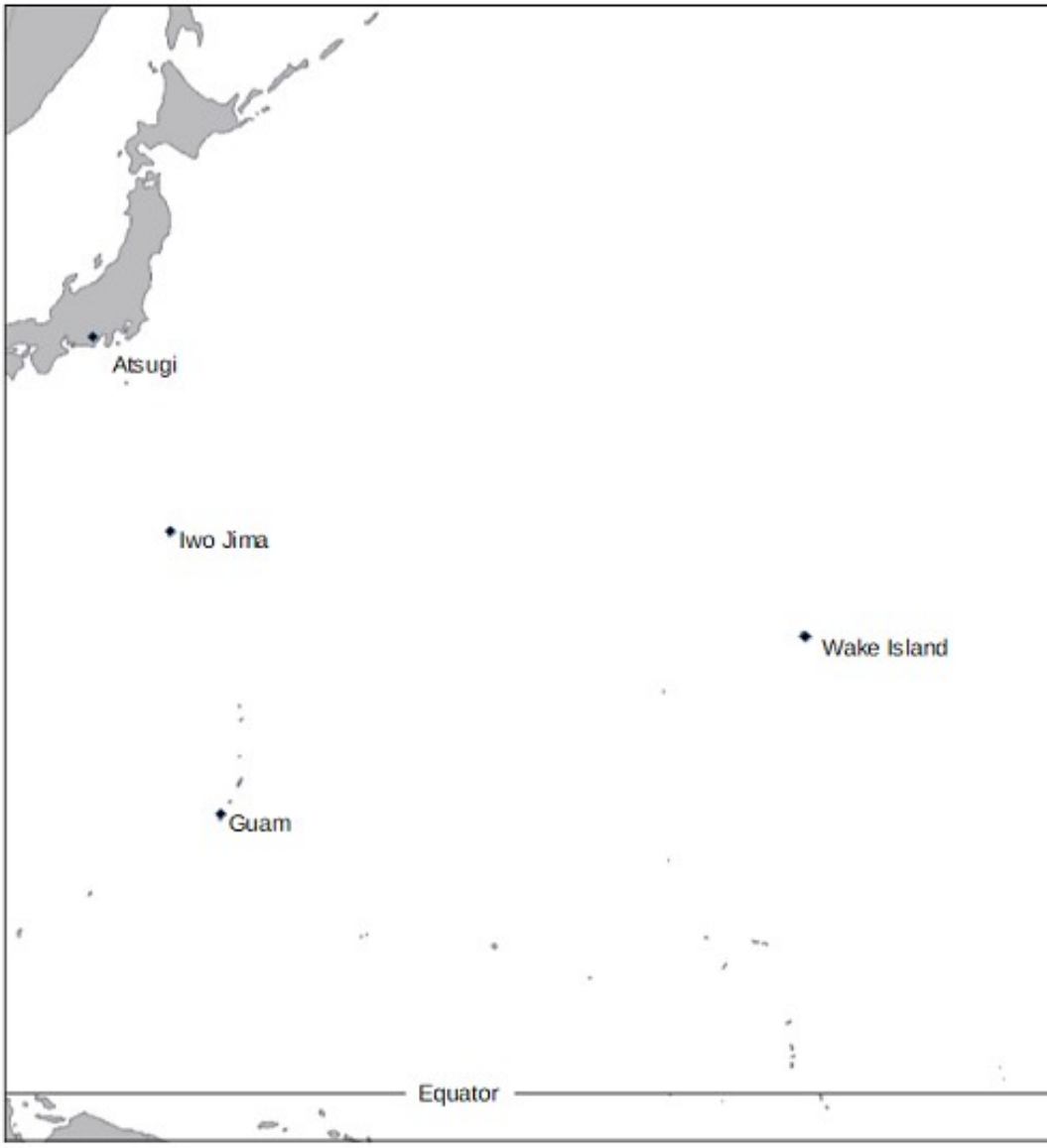

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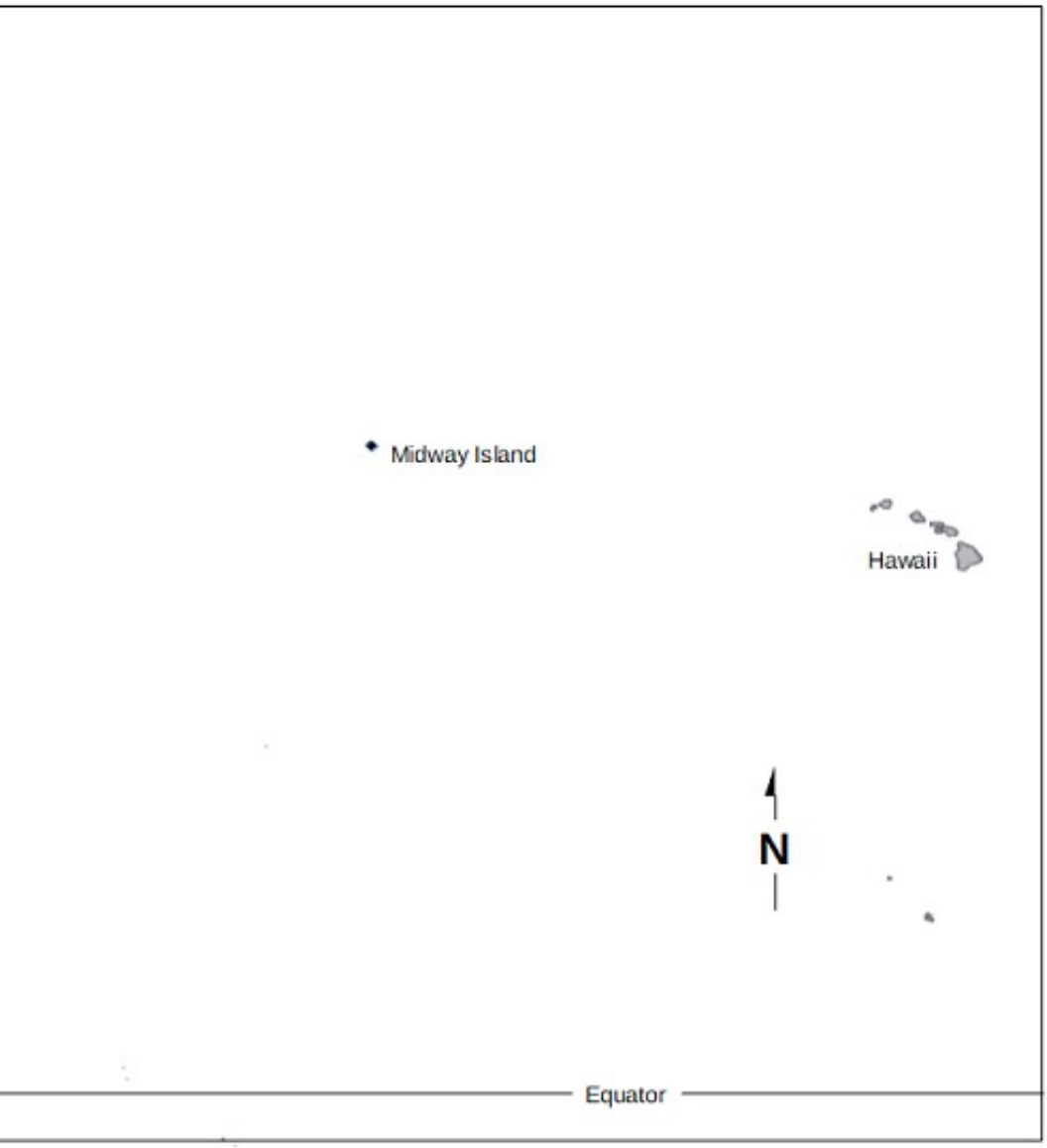

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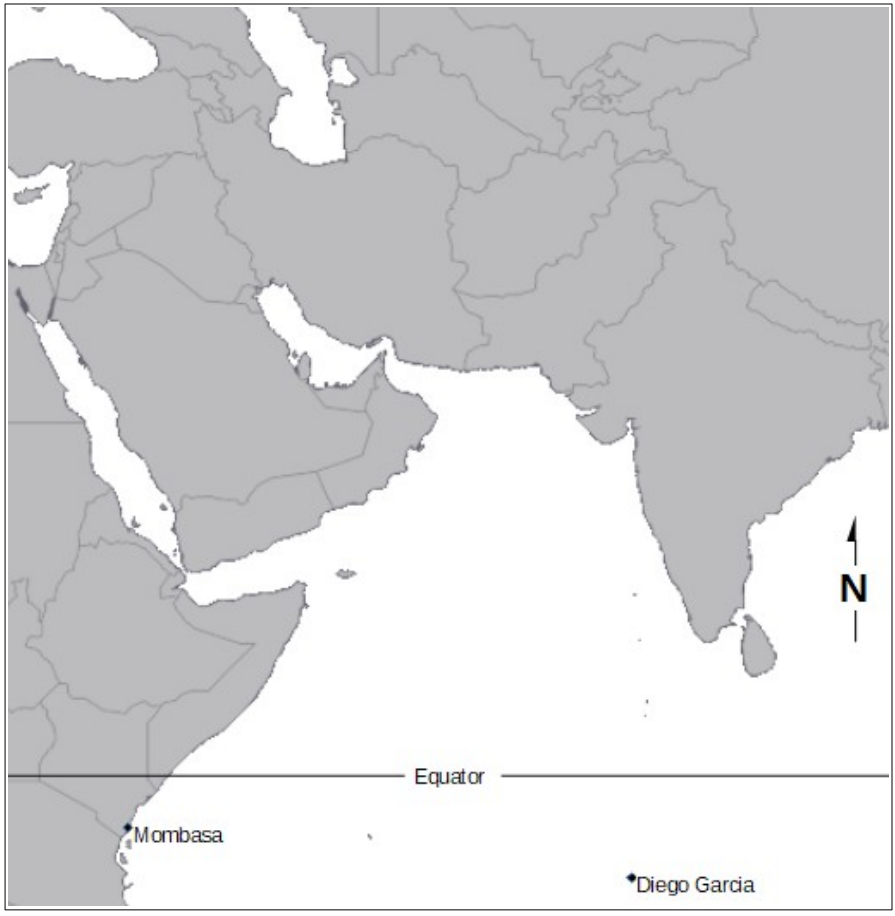


Indian Ocean

Western Pacific and Philippine Sea

FORWARD

In the mid-1980's – at the virtual dawn of the age of Personal Computers – Charlie's father, Jack Wright, wrote his autobiography – *That Jack the House Built* – a 600+ page self-published book chock full of family history. Jack had it printed and provided copies to each of his children. When Charlie read that autobiography more than 30 years ago, he thought: 'You should write your own autobiography some day. Your kids will love it as much as you loved your Dad's.' Recently, an old navy friend sent him a copy of a memoir he had written of his 30+ years in the Navy. Once again, Charlie was inspired to tell some of his own stories. This book is the result.

Initially, he thought he would just record a few stories of his years in the US Navy. It would be just a loose collection of stories from what he considered a 'very interesting' portion of his life – the kind of stories he might tell at a family gathering or cocktail party. As he wrote, more stories and memories of that period of his life came to mind. Moreover, he quickly realized that focusing only on himself would be both incomplete and terribly selfish. Kathy's memories were equally interesting, as were shared memories of their early life together. They too should be included. Clearly, a different approach was needed. We talked and decided to widen the scope to include Kathy and to change the style to become more autobiographical, including more details, and more than merely the odd story.

Not intended as a complete autobiography of our lives, this memoir is limited to the years 1971 through 1977 – the years of Charlie's active duty in the US Navy and the first years of our marriage. Charlie says these are the years during which his youthful invincibility had not yet come face-to-face with his

humanity. They also were the years when we fully became a couple and began to raise a family – the years during which we both encountered so many of the experiences that made us who we are today. Charlie insists that he never would have been successful without Kathy's unbelievable love, devotion, and support, and that any discussion of his life would be totally incomplete without acknowledging Kathy's contribution. He has said: 'Kathy did not join the Navy as I did. But she certainly was along for the ride – like it or not. I sometimes wonder what would have become of me had it not been for her. I certainly would not have become the person I am today.'

Many of the stories that Charlie tells here are what are referred to in the Navy as *Sea Stories*. What is a *Sea Story*? To paraphrase the Internet's Urban Dictionary: A *Sea Story is a nautical version of an urban legend, similar to a fairy tale*. A *Sea Story* invariably is introduced with the phrase 'This is no bull…' Since Charlie was a Naval Aviator, many of the stories here are aviation-related. Aviation stories often begin with: 'There I was, at 30,000 feet, …' and are accompanied by hand gestures simulating the position and attitude of one or more aircraft about which the story revolves. But naval aviators are seamen at heart, so the stories told here remain *Sea Stories*. A *Sea Story* is generally based in fact – on an actual event – but is often exaggerated in its telling as needed to enhance the drama, depending on the audience and the needs of the situation. We promise that the *Sea Stories* related here are accurate and free of exaggeration. Charlie takes full responsibility for any grammatical errors and all errors in fact.

The overall flow of this work is generally chronological, though occasionally stories are collected together to provide a more cohesive discussion of certain periods. In organizing and recounting the stories, we occasionally include a narrative of events that involved people other than ourselves. We include

such stories either because we find them particularly interesting, or as a way of providing additional context to our own stories.

Stories are told in a conversational style and mostly presented as ‘first person’ narratives, with each of us telling our own stories. However, stories describing us as a family are told in the third person. Small icons are included to help clarify who is narrating each section.

In the finest tradition of Charlie’s father, Jack Wright, specific places and dates are included when we can confirm them and had supporting documentation available. Charlie’s official US Navy service records provided much documentation, as did his official flight log. The excellent book *US Navy Squadron Histories – N. 305, World Watchers, A Pictorial History of Electronic Countermeasure Squadron ONE (EMCONRON-1) Fleet Air Reconnaissance Squadron ONE (VQ-1), Angelo Romano, Ginter Books* also was helpful.

We both truly enjoyed the early years recounted here and look back on them fondly. Despite what some of the stories related here may imply, Charlie insists that it was a ‘safe’ time in our lives with few worries. He has said: ‘I had a secure job that I very much enjoyed, with a good income and benefits, and a loving and supportive wife. The Navy provided housing and medical care for us and our growing family. The travel and adventures were simply an unbelievable bonus.’ It was an especially fulfilling period of our lives during which we not only made many enduring memories, but also matured greatly as individuals and parents.

This, then, is *Our Sea Story*. We hope you will enjoy reading it as much as we enjoyed retelling it.

Kathy and Charlie

PRELUDE

CHARLIE

When I entered college at the University of Maryland in the Fall of 1966, I was a typical young, single, 18-year old boy. Life was simple. The future was vague and distant. Certainly, military service was far from my mind. Though the war in Vietnam was ongoing, I thought little about it. Surely, I thought, having started in the '50s, it would be over by the time I graduated four years into the future – a virtual life-time for an 18-year old. In 1966, military service was voluntary. But in December of 1969, then President Nixon signed an executive order to re-institute the draft, meaning compulsory military service would be likely. All able-bodied men between the ages of 19 and 26 who had not yet been considered were eligible, and could be called up to serve for two years.

Still, not everyone had to serve. In any given year, the draft would induct only as many soldiers as the US Army needed. For fairness, a lottery based on birth date was instituted. Once each year, during a formal drawing ceremony, the Selective Service Commission would allocate the days of the year at random. The first date picked would be assigned the number 1, the second date the number 2, and so on. Men were drafted each month in the order that their birthdays were drawn from the lottery until the US Army had met its need for soldiers that month. If your birth day had not been called for service by the end of the first year in which you were eligible then you were absolved from the requirement to serve. Eligibility for the lottery, and therefore military service, could be deferred while one was attending college. But, upon graduation, the deferment ended and you became eligible for the next annual lottery.

I was to graduate in January 1971 and would participate in the drawing to be held in 1970. I could not ignore the facts. I would be assigned a lottery number soon and would likely be called to serve. The only question was: In which branch of the military? I knew that I did NOT want to become an Army infantry soldier. That was simply far too dangerous considering other alternatives. I knew that if I was going to serve I wanted to be an officer rather than enlisted. Regarding Vietnam, the Navy sounded MUCH safer than the Army. My dad had served in the Navy during World War II. But aviation appealed to me. After all, I was studying Aerospace Engineering. My older brother, George, who had recently graduated from the US Naval Academy, was still completing his advanced training to be a fighter pilot. In addition to that, both of my parents had decided to get their licenses as private pilots so that they could better relate to what George was experiencing. Aviation seemed the natural choice. I considered the US Air Force. But if you were going to fly, I reasoned, then flying fighter jets from an aircraft carrier really was the only way to go. Sadly, my vision was not good enough for me to qualify as a Navy pilot. But it was sufficiently good that I could serve as a Naval Flight Officer (NFO.) That clinched it. If I were to serve, I would apply to the Navy's Aviation Officer Candidate School (AOCS) with a request for training as an NFO.

When the lottery was conducted, my birth date was assigned the number 53. During the Vietnam years, the highest number actually drafted was 195. But number 53 would certainly be reached. I would definitely be called to active duty, most likely sometime early in 1971. So, during the summer of 1970, I submitted my application to AOCS and was accepted.

In early January of 1971, immediately following my rather low-key graduation from the University of Maryland, the Selective Service Commission began calling the first few lottery

numbers for active service. I had to act and made the short drive to Andrews AFB (now Joint Base Andrews) to visit the Naval Detachment there. Remarkably, the exact date is lost to history. There I took some aptitude tests, underwent a basic physical exam, and formally enlisted in the Navy. I was told that I did not have to report for duty until June 08, 1971, because that was the earliest date for which there was an opening for new trainees in the Navy's Aviation Officer Candidate School in Pensacola, FL. (While aviation training continues in Pensacola, the Officer Candidate portion of the AOCS in Pensacola was closed at the end of 2007 when basic officer training was moved to Newport, RI.)

Charlie – June 1971

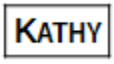
Enlistment

My first *Sea Story* relates to the enlistment process. During the physical exam, my blood pressure was, apparently higher than allowed for a prospective aviator. This could ruin my entire plan. I suspect it was just the result of the excitement of going through a process that was going to fundamentally change my life. Whatever the reason, after several measurements and a number of whispered conversations among those conducting the process, I was told of the problem. The consensus was that I should step into the next room and lie down on a bed for a while to 'settle me down.' Then they would try again. I did as I was told, resting in a dark room for about 20 minutes, all the while meditating on relaxing thoughts. Either resting worked its magic, or the medic taking the subsequent measurement decided that my blood pressure was close enough. I was given a thumbs-up. I immediately signed the necessary papers. I was in the Navy!

A few days after the enlistment, I received a formal notice from the Selective Service Commission ordering me to report to the Army's Ft. Holabird in Baltimore (Closed in 1973 and converted to an industrial area) for my physical exam preparatory to being inducted into the Army. Phone calls to the Selective Service explaining that I already had enlisted in the Navy introduced me to my first experience with government bureaucracy. I was told that my Navy enlistment would be allowed to override this call by the Army. Whew! But it was too late to avoid the Army physical exam. I explained that the Navy already completed my physical exam and that a second exam by the Army was unnecessary. Arguing was pointless. Logic and reason had no place here. The Army exam had been scheduled and that was that. I had to complete it. Welcome to the military. I drove to Baltimore and completed the physical exam, complete with all the drama recounted by Arlo Guthrie in

his song *Alice's Restaurant*, which was popular on the radio at the time. The Army, by the way, had no concerns about my blood pressure.

I spent the remaining months before reporting for duty in June living a carefree life. I was working as an assistant in the microbiology lab of the National Soft Drink Association at 16th and K Streets in Washington DC. The lab supported bottling companies all over the country by testing their products. By day, I filled Petri dishes with samples, put them in ovens to grow, examined other dishes for undesirable growth, and cleaned lab equipment. I would conduct very unscientific taste tests by distributing products around the office and recording the reactions of the administrative and secretarial staff. I enjoyed tasting the various chocolate and vanilla puddings that were sometimes provided by member companies as they expanded their product lines, trying various recipes. There were field trips to the local Rock Creek Ginger Ale Company to assist them in improving the efficiency of their bottling line. At night, I went out with friends to the various clubs in DC. Certainly, I made at least one trip to the mountains of West Virginia to go caving – a leisure activity in which I had indulged since my late high-school years. Caving requires an entire memoir all its own. So I will say no more about it here.



When Charlie graduated in January, 1971, his parents hosted a dinner at a local Italian restaurant. Though we had been dating for some time, it was the first opportunity I'd had to visit with his entire family. I was surprised when his parents included my parents at the dinner along with me. It would be the first of many such events.

Kathy – May 1971

While Charlie lived the bachelor life waiting to enter the Navy, I was finishing my last semester in Baltimore. The nursing school buildings were located in a rather run-down section of the city, not conductive to either night-life or leisure activities. Socializing outside of the dorm was at a minimum. Classes were challenging and my in-service hours at the hospital were difficult. Working with real patients who had real health problems, some quite serious, was stressful to say the least. I spent most of my leisure time studying. By the end of each week, I was exhausted. For relief, I would almost always head home on Friday afternoons, reluctantly returning to Baltimore on Sunday evenings. The dormitory provided no place to park a car and, in any event, I had nowhere to go during the week. So I didn't drive. Instead, Charlie became my chauffeur. He occasionally surprised me with a visit mid-week, brightening some otherwise tedious days. Weekends at home

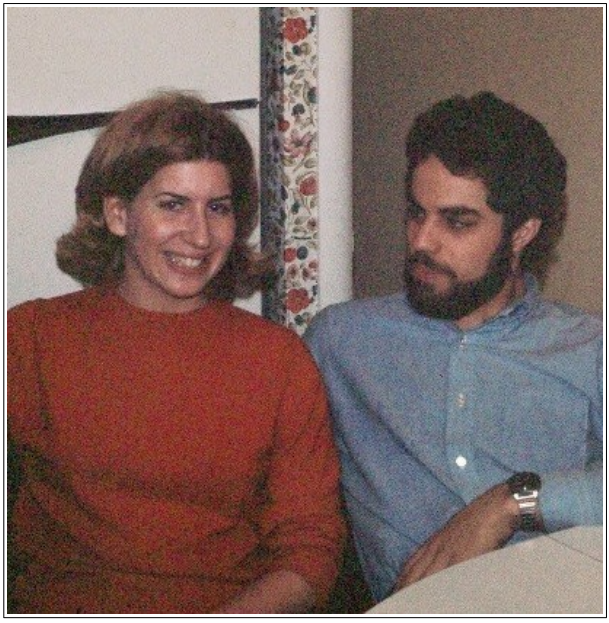
allowed me to be close to my friends and family. I wasn't working then, so had little pocket money. My parents gave me only about $5 per week for meals! The home-cooked meals were a wonderful change of pace from cafeteria food, not to mention cheaper. Every little bit helped. Plus the weekends allowed for more time with Charlie.

Locked In

One Sunday, Charlie had driven me off to school. It was still early, so rather than just drop me and return home immediately, he decided to stay for a while. At the time, males were not allowed in the female dorms, so we walked a couple of blocks to the law school library where we could spend more time together. There was no one in the faculty lounge, and it was a private room, so we went in and sat down. At some point, I remember hearing an announcement over the public address system – hard to hear because there were no speakers in the lounge. Apparently, the library was closing. So what, we both figured. What could happen if we stayed? We would soon find out.

Eventually, we decided Charlie had to leave. He had to drive home and go to work the next day, and I had a morning class. As we attempted to exit, we found the doors chained shut. That was a surprise. Checking alternate exits, we found the same. The doors were not merely locked, they were chained. It was literally impossible to get out. At one point, Charlie found an unchained door that opened into a blind alley. We started out, but Charlie stopped. Before we let the door close behind us, he told me to wait as he proceeded around the corner to check. That was a very good idea. After turning the corner, Charlie discovered that the alley itself was enclosed within an iron fence with its own locked door. Had we exited the building, we'd have been stuck in an exterior alley behind the building. We went back inside. Now what?

Before trying to use a phone to call (who?) for help, we decided to walk around the library to see if we could find a night watchman. After some time we surprised a woman who was shelving books. Startled, she asked: 'How did you get in here?' After explaining what had happened, she walked us down, unchained the doors, and let us out. We walked back to my dorm through the empty streets laughing about our adventure, grateful that we were not locked in an alley.



The happy couple – May 1971

By then, we had been dating for almost two years, having met at a party during the summer before my junior year, when each of us had been abandoned by our respective dates. But we'd had little serious discussion about the future. Meanwhile, my graduation was approaching relentlessly, as was Charlie's departure. At some point it became clear that decisive action was required. Neither of us clearly remember the details and even harder to believe that neither of us remembers the date, but in time we agreed to marry.

Our future was uncertain. Neither of us really had a clue what we were in for in the Navy. We had no detailed plans with regard to timing. But we were committed and we were happy. We have discussed it numerous times over the years and we both agree: Of the numerous important decisions we've made in our lives, either singly or together, this one was both easy and free of hesitation for both of us. We broke the news of our engagement to our families in late May just before Charlie left for Pensacola.

Graduation from the School of Nursing included a number of ceremonies, both in Baltimore and in College Park. First was my 'Pinning ceremony' at the University of Maryland Chapel in College Park. There I received my nursing pin (a lapel medal similar in concept to the aviator wings Charlie would eventually receive from the Navy) and my nurse's cap. Along with the cap, which I wore while working, I would wear the pin on my nurse's uniform.

Nursing Pin

As a historical note, readers should be aware that, in 1971, nurses still were expected to wear uniforms while at work – typically plain white dresses. Uniforms almost always included a cap. While the uniforms themselves were nondescript, the prototypical nurses cap could, at the discretion of the nurse, be replaced with a unique design. Somewhat like school rings, each nursing school almost always designed nursing caps unique for the school. Caps served as a visible indication of the school from which you had received your degree. The caps from the University of Maryland School of Nursing were designed by Florence Nightingale. Over the years, the expectation of wearing a cap while at work was discontinued. Eventually, even uniforms fell into disuse in favor of wearing scrubs.

Kathy's Pinning ceremony at UMD chapel – May 1971

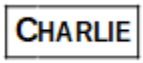
Shortly after the pinning was the formal graduation ceremony at the Baltimore Civic Center. Many of my relatives attended. That was Charlie's introduction to my extended family.

Separate from the graduation ceremony at the Civic Center, Charlie and I attended a formal reception and dinner for graduates of the School of Nursing at a banquet hall in what is, in 2021, Martin's Caterers near I-70 on the west side of the Baltimore Beltway. It was a wonderful evening. Somewhere in the sequence of celebrations, Charlie took me to dinner at the former Peter Pan Inn in Urbana, MD. It was super-popular in the early '70s as a sort of curiosity-shop restaurant filled with quaint stuff. (Originally opened in 1936, it closed in 1986, was reopened a few years later under a new name, but closed again in 2011. It now operates as a Sports Bar under another name.)

The food was unexceptional but, as with many such places, the decor and staff was the draw.

Shortly after all the excitement of graduation, Charlie departed for Pensacola and I went to work.

BEGINNINGS



My Navy days began on June 07, 1971 as I boarded a plane at Dulles Airport for the short flight to Pensacola, FL. Kathy was there to see me off, along with my parents and most of my family. As the plane lifted off, I realized that I was leaving the only home I had ever known. Return visits would be just that – visits. Home would be somewhere else now, though I really had no idea where it might be or what that might even mean. I carried little with me beyond a couple of changes of clothes. I knew that, for the immediate future, I would be wearing some kind of uniform or another.

I arrived in Pensacola and took a cab to the San Carlos Hotel. That was, perhaps the first taxi ride in my life. In 1971, the San Carlos was already more than 60 years old and decaying (it closed in the 1982 and was eventually demolished in 1993.) I remember little about that evening in the hotel except that I thought to myself 'this is your last night as a civilian.' I treated myself to a steak dinner. The next morning, I packed my small bag, checked out, and walked to the street to await the arrival of the Navy bus that would take me to the Naval Air Station and my new life.

The Navy sent an old bus – like a school bus, but painted navy-gray with 'US Navy' stenciled on the sides. It wound its way through the city, from hotel to hotel, picking up a handful of young men like me at each stop. By the time it arrived, mid-morning, at the barracks that would be my home for the next 10 weeks, there were about 30 of us. Some were clean-cut. Some wore the beards and long hair that was so common among 20-

something boys at the time. All of us were nervous. I had previously worn fairly long, bushy, curly hair and a beard myself. But I chose to shave the beard and cut my hair before I arrived. No sense, I thought, drawing attention to myself as I entered boot-camp. Let the drill instructors focus their attention on others.

At about 9:30 am, the bus pulled up and parked directly across the street from a barracks. Some of those on the bus immediately walked across the street and were greeted with hand shakes, congratulations, and friendly smiles and were led inside. Almost immediately upon entering the building, screaming and yelling could be heard. As I remember it, we were to report by 10am. I elected to savor my last few minutes as a civilian. With ominous muffled screaming and yelling continuing to emanate from within the building, I waited until 09:55 am before I crossed the street.

“Welcome aboard! What’s your name sailor? Great to meet you!”

There were smiles and hand shakes all around as I was slapped on the back and ushered inside. Then my own personalized screaming and yelling began. All conversation, both question and response, was screamed at maximum volume. I already knew that the only correct first word out of my mouth for every response was ‘Sir.’ So I avoided a lot of wrath by getting that much correct. One of the first questions was ‘What’s your Service Number?’

The Service Number is the number that would be stamped on my dog tags. In 1971, each service assigned a unique number to each enlisted serviceman. Mine was B294330. For a short period, my number was changed to 781485 before all services would eventually transition to using your Social Security number.

I was smart enough to have memorized it that day. I responded ‘B two nine four three three O’ which contained three mistakes. ‘Bee! Bee!’ came the screamed retort. ‘Are you a bee? Are you trying to scare me?’ ‘Bravo’ I quickly responded. ‘Bravo two nine four three three oh.’ That was better, but still wrong, of course. Without a pause, I was told ‘Bravo two niner four three three zero’ was the only correct response. Aside from that, and because I had waited to be one of the last to enter, I managed to get through the check-in process relatively unscathed. Almost immediately, my hair was shaved to a nearly bare skull. Those who had retained long hair and beards had the pleasure of enduring significant additional shouting and verbal abuse: ‘Commie! Hippie! Maggot!’ I was issued clothes and boots and ordered to change. I did so quickly. My civilian clothes were bagged up and taken away to be stored somewhere. I was marched to a room with several bunk beds and assigned to my bunk. Four or six to a room as I recall. I was now a member of AOCS Class 23-71, the 23rd class of 1971.

Each class was assigned its own Drill Instructor (DI) who would be our constant companion from that moment on, from morning formation to the end of the work day. DIs were senior USMC Gunnery Sergeants, specially trained in personnel development. Their job was to remold our ragged group – former civilians – into military men. They had to erase any previous sense of individual authority and replace it with an understanding and acceptance of the military Chain of Command where everyone had a rank, knew where they stood in the scheme of things, and followed orders. As we were officer candidates, a crucial part of our DI’s job was to teach us to be leaders.

The days of this 4-week boot-camp are, thankfully, a blur. Our uniforms were old one-piece olive-colored flight suits which

were washed infrequently. Given the lack of air conditioning, and our near-continuous exercising in the daily 80-to-90 degree temperatures of Pensacola in June, these flight suits quickly took on the odor from which they gained their moniker: ‘poopy suits.’

We were awakened at 5am every day by screaming, yelling, pounding on doors, and trash cans being kicked and thrown down the hall. Morning calisthenics were conducted outside and included additional yelling and screaming. There were daily room inspection wherein beds were overturned and had to be remade when they were improperly made up (always.) This was followed by marching drills which were, of course, a daily staple.

We were constantly drilled to pay ‘*attention to detail*.’ Details were important, especially for potential aviators, where overlooking even a small thing could lead to catastrophic consequences. Many of the *Sea Stories* told herein will highlight this fact. To emphasize this admonition, there were dozens of silly requirements that had to be met to pass morning room and uniform inspection. Items in your locker had to be positioned meticulously, in precise sequence. Shoes and belt buckles had to be properly shined. Posture when standing at attention and saluting had to be perfect. Even the slightest defect was immediately brought to your attention, followed by a command to ‘drop and give me 20.’ Push-ups. As punishment for your negligence and incentive to not repeat the mistake again. All of this was intended to teach us to pay *attention to detail*. Always and in everything. It would save our lives we were told, and it was true.

After morning breakfast, our class was marched all over the Air Station, from one building to the next. A comprehensive medical evaluation, immunizations for various diseases, aptitude tests, psychological screening tests, and others were

administered, all interspersed with additional calisthenics, lunch, more marching, more tests, dinner, and what seemed to be an unending succession of additional forms to be completed. Lights out at 10pm. Repeat again the next day. And the next. And the next.

At night, you were occasionally awakened to stand 'Fire Watch.' That was not as absurd as it might have seemed, since the tinder-dry, all wood barracks was probably 50+ years old and would have burned up in little more time than it would have taken to evacuate it. During the hour or two you had to spend on fire watch, you had plenty of time to memorize the Eleven General Orders of a Sentry (all long since forgotten.) These were only one of half a dozen other silly things you had to memorize verbatim to avoid doing 20, 30, or 50 push-ups if you responded incorrectly when challenged randomly throughout the day by one of your numerous upperclassmen. *Attention to detail*.

Exercise was a constant. When we weren't marching from one place to another, we were jogging or running. Outfitted in athletic shorts, T-shirts, and sneakers, we jogged several miles each day. One 90+ degree day, we were jogging in the sand along the beach when the DI ordered us to turn and jog directly into the surf. We, of course, turned and did as we were directed. As the water got deeper and the waves broke over us, our formation disintegrated and the under currents swept us off our feet. We stopped trying to jog. Some began swimming into Pensacola Bay. The rest simply lounged in the surf. Shortly, a shouted order directed us to make our way back to the beach, and reform into ranks at the surf line.

Several minutes later we had reassembled. The explanation for this apparently unwarranted and seemingly vindictive command became obvious to most of us almost immediately. It was an extremely hot day with no breeze. We

had been jogging in the sun for an hour. Many of us were beginning to show signs of heat stress. But after only a few minutes floating in the surf and standing in the ankle-deep water while receiving a lecture on some forgettable subject we realized that the water had cooled us down instantly. Perhaps these awful Drill Instructors were smarter than we had thought.

As time passed, people would occasionally disappear. There one minute, gone the next. Never to be seen or heard from again. These recruits had been dropped from the program for one reason or another. Medically unfit, psychologically unfit, who knows? Others had quit. Broken under the unrelenting hazing and their inability to adapt themselves to an environment in which they had to accept that they held absolutely no power or control. They didn't seem to understand, as most of us did, that it was temporary. Adapt to it, don't fight it. Just tolerate the absurdity of it all for a few short weeks and it would end. Have patience. But some couldn't adapt.

Quitting, a formal request to leave the program, initiated a process referred to as Drop On Request – DOR. But to DOR was fraught with danger. Technically, you were an 'unrated' E1 – the lowest rank in the Navy with no assigned specialty. Your enlistment was designed to train you to become a Naval Aviator and culminate in a commission as an officer. But if you requested to DOR, then the Navy could, at its convenience, simply transfer you to the regular enlisted boot camp and make you serve as a sailor for the remainder of your 4-year enlistment. Or, it was rumored, you could be transferred to the Army. In fact, I'm not aware that either of those ever happened. It was simply too much trouble. Generally, a DOR simply resulted in your being discharged from the Navy and your mandatory military commitment was considered complete. But one never knew. With the war still on, few wanted to take the chance.

Following four weeks of boot-camp were twelve weeks of Officer Candidate School. For this, you moved from the spartan, un-airconditioned wooden barracks of boot-camp into the sparkling clean, air-conditioned comfort of the 2-story, brick AOCS barracks.

Charlie in front of AOCS barracks – July 1971

Here, we were four to a room, each in a single bed. We switched from 'poopy suits' to real uniforms which had to be wrinkle-free and spotless all the time – something especially difficult for 100% cotton in the Florida heat and humidity. You wore a different uniform every day and sent your old uniforms to the laundry to be washed. They returned with enough starch in them to stand up straight all on their own. Of course, there were hours spent spit-shining our shoes to a glossy black shine and polishing our brass belt buckles. Daily life began with room

inspection every morning, followed by personnel inspection at morning formation on the lawn outside of the barracks before marching to the chow hall for breakfast. The entire building emptied in a matter of minutes as every class (half a dozen or so) rushed outside to form up as individual classes in rows and ranks of perfectly straight lines.

Serious infractions ('serious' being a relative term) resulted in being placed 'on report.' A small slip of paper called a 'report chit' was filled out, including typically an obscure three-letter code signifying the infraction. For example, repeated unsatisfactory room or uniform inspections resulted in being put on report for Improper Military Bearing (IMB.) Failure to Execute a Command correctly while marching would result in an FEC report chit. When presented with a report chit or, as was usually the case, when directed to write yourself up on one, you were required to report to the DI's office for adjudication during his office hours. As with everything, *attention to detail* was central.

Reporting to the office was a heavily choreographed process with more than a few obscure procedural rules, each of which had to be executed correctly in order to avoid further adverse consequences. Step into the center of the office doorway. Come to attention. Pound your open right palm heavily on the door jamb three times – referred to as 'pounding the pine.' Salute. Sound off: 'Sir! Candidate Wright reporting *on report* as ordered!' When you were given approval to enter, march briskly to the front-center of the DI's desk and come to attention, salute again, and hand the DI your report chit.

A discussion would ensue during which you were lavishly reprimanded for your utter stupidity and negligence. When asked to explain the reason for your infraction, the only acceptable response was 'Sir! No excuse.' If you could not

answer a question, the only acceptable answer was ‘Sir! I do not know the answer, but I WILL find out!’

Once it had been determined that you had been placed on report for obviously justifiable reasons – it was ALWAYS both obvious AND justifiable – you were assigned a certain number of demerit points. The DI kept detailed records of demerits awarded to each candidate. While seemingly silly, accumulation of too many demerits could be cause for being ejected from the entire program. No one, no matter how good, was ever allowed to graduate without at least *some* demerits.

Demerits

One day, while I was marching our class back to the barracks from lunch (each of the class members took turns as the class leader for marching,) our DI walked out to meet us as we passed. He had, apparently, been reviewing the demerit log and realized that I had not yet accumulated any. This oversight had to be corrected. I honestly don’t remember how our conversation went as the class marched along. He asked me several bizarre questions. Somehow I managed an appropriate answer to each of them.

Increasingly frustrated, he finally ordered ‘Mr. Wright, put yourself on report!’ My response, of course, was ‘Aye aye Sir!’ followed by a crisp salute. After a short pause and even with a little hesitation, I asked ‘Sir! What should I write for the report code?’ His response: ‘Write PMO.’ Another short pause and then, because I had to know, I asked: ‘Sir! What does PMO mean?’ With a smile, he turned and said: ‘Pissed Me Off.’ Again, I responded: ‘Aye aye Sir!’ and we marched off. Later that day, I reported, as ordered, to his office with my PMO report chit, correctly executed the reporting process, and was duly assigned my 10 demerits.

The 12 weeks at AOCS were filled mostly with classroom instruction. We learned basic navy things: Naval History, Seamanship, Navigation, and the like. We also began our aviation training, studying aerodynamics and basic aircraft mechanical systems. There was still plenty of physical training too. There were swimming tests (tread water and drown-proofing for 10 minutes in full flight gear and boots, followed by a 1-mile swim – you could take your boots off for the swim), physical fitness tests comprising push-ups, sit-ups, pull-ups, long-distance running, obstacle course, and etc. There was training where you were hung from a parachute and dropped from a tower into the water of Pensacola Bay and had to release your chute while being dragged by the wind and climb into a life raft. You had to demonstrate your ability to escape when strapped into a simulated airplane cockpit which slid down rails into a swimming pool and turned upside down. This contraption, known as the Dilbert Dunker was later replaced by a much-more-difficult-to-escape-from HELO Dunker – a large cylinder with doors, windows, and seats for half a dozen others which, like the Dilbert Dunker, was dropped into the pool and rolled inverted.

There was ejection seat training where you were strapped into an actual ejection seat and pulled the ejection handle. The seat was blasted 15 or 20 feet up a set of rails and then slowly lowered back to the ground. In my ejection test, I mistakenly leaned forward rather than back into the seat. The blast caused me to essentially double over and knocked the wind out of me. As I was being lowered back down, I struggled to regain my breath. Gasping for air, I gave a thumbs-up, but was unable to speak. The instructors were worried that I had been hurt. After a few seconds, I recovered and they moved on to the next student. The doubled-over ejection strained my lower back though. I was sore for days. To this day, I blame my occasional lower back pain on this incident. *Attention to detail*.

There were repeated psychological screening tests. I guess the Navy wanted to be sure they identified and ruled out candidates with psychological and behavioral traits that would make them unsuitable as pilots and leaders. We AOCS candidates were a captive audience for the Flight Surgeons in training a Pensacola who used us as guinea pigs (willing or otherwise) for their research papers. 'Do you ever have the urge to just scream?' 'Do you ever have the urge to hit someone?' 'Would you rather throw up on a bus, or punch your mother in the face?' Those questions and dozens like them were asked repeatedly, on one test after another. I have no doubt that my answers to those questions (No, No, and Throw Up) were carefully studied, cataloged, added to my 'permanent record,' and were used to decide whether I was suitable for continuing in the program.

Shocking Experiments

One psychological experiment that I was randomly selected for was particularly memorable. Its purpose was to measure the effectiveness of various methods of getting a pilot's attention. The goal was to design systems to effectively alert a pilot even when flying under enemy fire in combat when their attention might be focused on other things. The experiment consisted of sitting in front of a screen with a simulated instrument panel. There were lots of buttons, knobs, switches, and levers as well as a joystick and foot pedals. The subject had to obey a complex set of rules and use the joystick to keep a cursor centered over a moving dot while monitoring other lights and gauges. If a gauge exceeded a specific value, you had to flick a switch. If a warning light came on, you had to press a button. After a bit of practice, the rules changed to become more complex. The experiment lasted for an hour or two every day for several days, each day more complex and challenging than the last. If the warning light lit red, you did one

thing. Blue required a different response. Or two different switches had to be flicked in a specific sequence. Left ear audio required pressing a floor switch with your left foot. Right ear mandated a response by the right foot. Failure to respond appropriately or within an increasingly shorter period might cause still other lights to light up, requiring alternative responses. Or would cause colors to change, or audible or vibrating alarms to sound. Placement and colors of the warning lights was adjusted, buzzing and other audio warnings were replaced by high-pitched or low-pitched tones, warbling sounds, etc. The idea was to measure the effectiveness of various colors, sounds, and placements in inducing the most correct and most responsive actions by the pilot.

The memorable part was on the final day when a band was placed around my wrist. Failure to respond quickly enough would result in a mild electric shock in the wrist band. To my knowledge, electric shock warning systems still have not made their way into production airplanes. But I will tell you that the shock was quite effective in getting my attention.

Perhaps most memorable from this period was Sunday Mass. Those who were so inclined were allowed to march themselves (in formation, of course) to a Sunday service of their choice. Everyone seemed to be inclined. Why the sudden interest in faith and worship? Because, among other things, it was the single, dependable two-hour period in an entire week when you were left on your own. You didn't have to worry that someone was going to chew you out for some absurd infraction, make you dirty your uniform and your precious shoe shine and belt buckle with push-ups on the grass. You could actually let your guard down and really relax. The services also were a time when those few who had family in the area could meet, if only surreptitiously and briefly. To this day, nearly 50 years later, just hearing the Navy Hymn, which was always sung at the end

of every service, instantly takes me back to those days in Pensacola.

On October 01, 1971, at the completion of the program, the surviving members of AOCS Class 23-71 were all commissioned as Ensigns in the US Navy at an elaborate ceremony on the parade field. The entire student body (the Regiment) comprising 12 classes of between 20 and 30 candidates each formed up as individual units and marched en-mass in a parade from the barracks. Each class was led by their class leader. The entire regiment was led by the Regimental Commander. Based on some elaborate formula combining demerits, academic, athletic, and military performance, I had the great honor to be designated as the Regimental Commander during our class' week as the senior class. I led the entire Regiment onto the parade field for the commissioning ceremony.

Pat, George, Charlie, and his parents at his commissioning – October 1971

My parents attended the parade. My older brother George, a retired Navy Lieutenant, was on stage to officially commission me as an Ensign. It was an emotional moment and a huge relief after 16 weeks of often arduous training. Kathy was unable to attend the commissioning, but she remained busy back in Silver Spring.

Following our commissioning, continuing a long-standing navy tradition, and in a final public gesture denoting our change in status, one-by-one each new Ensign approached our Drill Instructor who snapped to attention and saluted, reversing the hierarchy that had ruled our lives so harshly for the past 16 weeks. We returned his salute – typically the first salute of our careers as Navy officers – and then handed the DI a silver dollar to thank him for his guidance.

KATHY

Wedding Planning

While Charlie was starting his navy career in Pensacola, I was living at home in White Oak with my family. In May 1971 I completed my studies at the University of Maryland School of Nursing. Charlie attended the graduation ceremony in Baltimore – one of the last times we were together before he departed for Pensacola on June 07. Meanwhile, I had a lot to keep me busy.

I had applied for a job as a Staff Nurse at the Veteran's Administration Hospital in Washington, DC and was accepted. The VA in Washington was, at that time, a fairly easy 10-mile commute from my home. Not only did the VA offer a secure US Government job with great pay and benefits, the VA would most likely have facilities wherever Charlie might be stationed, giving me convenient work opportunities wherever we went. Charlie was starting his career and I was starting mine. Remarkably,

my annual starting salary ($10,500) exceeded Charlie's ($10,000) for the first and only time! It was an exciting time.

But first things first. Critical to my career was taking (and passing!) the Maryland Board of Nursing exam that would give me a license to practice as a Registered Nurse. These exams, typically offered once each month, are nerve wracking. You've studied for years. You passed all of your college exams, graduated, and were awarded your degree. You know what you need to know. But now you have to prove it again.

The State Boards are hours-long multiple-choice tests, similar to the Scholastic Aptitude Test that most High School students take before applying to college, with dozens of questions covering all nursing-related subjects. The test is bad enough. The weeks-long wait for your score is worse. If you pass, you're good to go. If not, you have to wait at least 45 days before you are allowed another attempt, study some more, and try again. Not to mention that your job security becomes a bit more tenuous.

As I awaited my score, I began work provisionally. My duties would be limited at first, until my license was granted. But I'd be working, and gaining experience. My first assignment was on a Medical/Surgical floor. It was a much different environment from what I had experienced while in school. Mostly I worked day shift, which had a fairly large staff, with doctors always coming and going. Evenings and nights, though, were a completely different story. At night, there was typically, only one RN and a pair of aids present to care for 50 or so patients. Most patients were suffering from chronic illness or recovering alcoholics. I saw my first case of someone suffering from Delirium Tremens (the DTs) due to alcohol withdrawal. Many patients were in open wards with only a few shared double-rooms. Almost no one had a private room. Just

distributing medications and recording vital signs took most of an 8-hour shift.

Charlie and I exchanged letters frequently, usually multiple letters each week. A brief aside might be instructive here.

Long distance communication in the early '70s was very limited – almost primitive by current standards. Those limitations seem strange now, when everyone has their own cell phone and can be reached almost instantly anywhere in the world at any time, and email and texting allow near-instantaneous transmission of documents and pictures.

At that time, though, contacting Charlie by phone was problematic. The barracks where he was living had only a single bank of pay phones in the lobby, shared among the hundreds of students. Pay phones themselves eventually disappeared altogether as cell phones proliferated and there was no longer a need for them. Charlie could call me when he was allowed access to the phone on Saturday morning, but I could not easily call him because the phones simply were not answered for incoming calls. There were, of course, emergency numbers if needed. But day-to-day casual contact was simply not an option.

Moreover, phone calls from State-to-State were expensive. So-called 'long distance' phone calls typically cost 50 cents to a dollar per minute – enough to fill your car's gas tank for the cost of a 10-minute call. (Later, on Guam, we would consider that cheap. A phone call from Guam would cost as much as three dollars per minute!) When calling from a pay phone, the caller needed a pocket full of quarters to feed into the phone periodically (whenever the long-distance operator broke in to explain that more money was needed.) Alternatively, the caller could ask the operator to 'reverse the charges' by asking the operator who placed the call to get the called party's

agreement that they would pay for the call before it would be connected. An operator was always required, as direct State-to-State dialing from pay phone was not possible.

Cell phones would change all of that, eliminating the operator along with the concept of 'long distance' entirely, and lowering the cost. But in 1971, long-distance telephone calls were cumbersome and generally reserved for urgent situations.

Most long-distance communication was by US mail. Because he was in 'boot camp,' mail-call for Charlie was delivered only on Saturday morning. So, even though we wrote letters frequently, the letters often would arrive in batches of two, three, or more at one time, so they had to be read in sequence to avoid confusion, and a question asked in one letter might not be answered until two or three responses later.

Letters were always welcome whenever they came. Letters which included pictures were even better. Despite the difficulties, we also were able to talk on the phone occasionally. We typically spoke once each week on Saturdays when Charlie was allowed access to the phone.

In July, I received the news that I had passed my State Nursing Board exam and was granted my nursing License. I was relieved and elated. I could now work officially as an RN. (Two of my nursing school friends had joined me at the VA. One of them failed her first attempt at the State Board exam and was laid off. She eventually passed and was quite successful. But it was a devastating blow to her at the time.)

When I wasn't at work, my mother and I were planning the wedding. To his great pleasure, Charlie's limited availability effectively left EVERYTHING to me and my mother. This was when I came to realize an important truth about weddings that most brides discover: Your wedding is really your mother's wedding. Even so it was tremendous fun. I still remember the

thrill of picking out a wedding dress at Jelleff's Department Store in Silver Spring (closed in 1973.)

Shopping malls were still quite new in 1971. Tyson's Corner Mall had only first opened in 1968. For a traditional shopping experience, one still went to a more traditional department store downtown. Jelleff's was a clothing store specializing in women's clothing. I have fond memories as a young girl taking the street car with my mother and grandmother to go shopping at the stores in Washington DC. Shopping there for my wedding dress was particularly memorable. Dresses for the Bride's Maids were an adventure in themselves. Details are vague, but I do remember selecting a color and material for the dresses. Charlie's mother made the dresses for his sisters. Such was quite common at the time.

In late September, I flew to Pensacola to visit Charlie for the first time since he had left in June. The occasion was to attend the Regimental Ball just prior to his commissioning. This would be the first time I had flown! I was petrified. I squeezed the arms of my airline seat so hard that I'm sure I left hand prints. In my nervousness, I talked the ear off of the poor businessman who was my seat-mate. I'm sure I told him my entire life's story, including my reason for going to Pensacola. He was gracious, and listened without complaint. When we arrived, he gave me his business card and told me to have my fiance call him if he ever he got out of the Navy and needed a job.

I didn't save the man's business card and sometimes wonder how different our lives might have been had we contacted him when Charlie left the Navy.

Not only was this the first time I flew, it was the first time I had been away from home on my own. Charlie reserved a room for me in a downtown hotel and rented a car. Surprisingly, even renting a car was complicated. Officially, one had to be 25

years old to rent a car, and neither of us was. But the rental companies had a special exception policy in Pensacola. Officer candidates such as Charlie could rent as long as they were over 21. We could get around conveniently.

The Regimental Ball was a lavish cocktail party conducted periodically at the AOCS. The men wore their full dress uniforms (complete with swords if they had them) and women wore formal gowns. In all the excitement of flying, visiting a new city, and reuniting with Charlie after those months, I don't remember much about the weekend. Nor does Charlie. I had earned no vacation time at work and Charlie was not yet authorized leave. So after an all-too-short weekend, I boarded a plane for the much-more-relaxing flight home.

CHARLIE

Following commissioning, I moved from the barracks to the Bachelor Officer Quarters (BOQ.) At that time in Pensacola, the BOQ was a 3-story building that looked like a Holiday Inn both inside and out. Like the so-called garden apartments of the time, all access was from walkways that lined the exterior of the building. Each apartment was like a motel room with a fairly large sitting area partitioned off from a bedroom/bathroom. Kitchen facilities were sparse, with no oven or stove, but room for a small refrigerator and coffee maker. It was a huge step up from the barracks.

I began a new set of studies at VT-10, the training squadron for Basic Navigation Training. I studied celestial navigation techniques using a sextant as well as with electronic equipment such as TACAN, VOR, LORAN, and the relatively new inertial navigation systems of the time. The world was still 20 year away from GPS. I also studied more sophisticated electronic systems such as radar and jamming systems. Also, at long last, I would fly. VT-10 included six flights in the T-29, and six flights in the TF-9J. The T-29, a twin-engine, propeller-

driven airplane with room inside for perhaps half a dozen trainees, provided practice in basic airmanship. We learned how to request and copy flight clearances, coordinate with the pilot, and follow directions provided by air traffic control. We also learned the basics of navigation – heading, speed, time, and distance. Directing the plane from point A to point B without getting lost. During flights of four to six hours, each trainee was in control for about an hour.

Training missions had to be planned in meticulous detail. Your plans indicated precisely where you expected to be at all times. You provided the pilot with a heading to fly and provided him with an Estimated Time of Arrival (ETA) at the next turn point. In flight, you monitored your progress continuously and were required to formally check your position by 'taking a fix' every six minutes. Using whatever navigation aids were available, you fixed your actual position on your chart. If you found that you were not where you had intended to be, you computed the necessary changes in heading required to return to your planned track and relayed the change to the pilot. If you were ahead of or behind schedule, you provided speed adjustments to the pilot.

Flights in the T-29 taught me my earliest lesson: As the navigator, I was in control. I had a great deal of freedom and discretion despite all the rules, regulations, and procedures. But I had to be prepared for the unexpected and keep my head about me. This lesson was brought home to me vividly on one of my first flights.

Changes Happen

Shortly after I was given control of the aircraft, the air traffic controller radioed with a change to our approved flight plan. Rather than continue to our next pre-planned turn point, we were cleared to turn early, bypass that point, and proceed directly to the next point along our route. I had not expected

that. Nor was I prepared for such a change. Making even such a seemingly simple change, threw off all the remaining expected speeds, headings, and ETAs. I was momentarily stunned. The instructor immediately asked me what I was going to do. 'Compute the new heading' I told him as I set my protractor onto the chart. 'How long will that take?' he asked. 'Have you acknowledged the new clearance to air traffic control? The pilot hears the radio too. He heard the controller issue the clearance. He's sitting up there wondering what to do? And the controller is expecting you to make the heading change too. Perhaps there is oncoming traffic he's trying to get you out of the way of. When do you expect to tell the pilot his new heading?'

This wasn't harassment. Those were all legitimate questions. As quickly as he asked the questions, the instructor gave me the answer: Look at your chart. Tell the pilot to turn and give him your best mental estimate of the new heading. Call air traffic control and acknowledge the clearance. Take a fix. Then, and only then, take whatever time you need to compute a more precise heading. If you conclude that you need to make another heading adjustment, call the pilot with the adjusted heading when you have it.

I did as he suggested, giving the pilot a new heading to fly and calling the Air Traffic Controller to acknowledge our new clearance. A minute or so later, I provided a minor heading adjustment for the pilot. My spontaneous heading command had been off by only one degree from the desired final heading. I was back in control.

Later, after I had handed navigation control off to the next student, the instructor returned for a more relaxed conversation. I had handled the situation well, he said. But he wanted to make sure that I learned the most important lesson: When you are flying, the aircraft never stops moving. If you don't keep

your mind ahead of the aircraft at all times, it will rapidly get away from you. Once you get behind its very hard to recover. You can get lost and into big trouble very quickly. Flying at 180 knots, every minute you spend thinking puts you three miles away from where you were when you started. In a jet, you are flying twice as fast, or more. You can't afford to be off course by three miles or you will never find your target.

I thanked him. In retrospect, his recommendations were obvious. I never forgot that lesson. I have applied it to life in general many times since. Like an airplane, fast or slow, life never stops moving. When you encounter the unexpected, you often must make decisions quickly and without all the information you might want. If your initial decisions are not optimal, make adjustments quickly and as often as necessary. Only later, after the dust has settled, can you spend the time needed to do your long term analysis.

The TF-9J was a short fat single-engine Korean War era attack jet. Flights in the TF-9J, which seated only the pilot and the navigator, provided the same kind of training as the T-29, but in the cramped cockpit of a fighter jet, moving twice as fast as the T-29 and for flights that lasted little more than an hour. Aside from adapting to faster flight, the most important thing I learned from my flights in the TF-9J was that I got airsick quite easily. Otherwise, flying in jets sure was fun.

Around Christmas time of 1971, I took some much needed leave and flew back to Silver Spring for my first visit home since I had left in June. While there, Kathy and I went shopping for our wedding rings. Having not participated in any of the wedding planning so far, this step certainly brought home to me that we were on our way. We also had a diamond of her grandmother's resized so that it fit Kathy. It's a beautiful ring, and I was glad that she now had something to wear to show off her engagement.

Also while I was home, I bought my first new car: A 1971 Chevy Impala for which I paid $2,700. It was, as most American cars were in the ‘70s, immense. I used it to take Kathy and her brother Jim, along with a friend of Jim’s and two of my younger sisters on a day-trip to West Virginia for what was my last caving adventure. After a wonderful holiday, I drove back to Pensacola to finish my time at VT-10.

Using the same kind of obscure formula that had resulted in me being designated Regimental Commander of AOCS, VT-10 combined a slew of grades, evaluations, and other metrics to announce that I had placed first in my Basic Navigation class and that I would be declared a Distinguished Naval Graduate (DNG.) Aside from providing me with a fancy certificate announcing the designation, I had no idea what being a DNG meant, although it almost certainly played at least some part in the Navy agreeing to my request to move on to training in jets.

At this point, I had accumulated only 10 flights comprising 34 hours of flight time. I received orders to report to VT-86 at Naval Air Station Glynco in Georgia to attend the Basic Jet Navigation (BJN) course. On February 01, 1972, I packed all my worldly goods into my car, and made the 400-mile, 6-hour drive from Pensacola.

After returning from my trip to Pensacola, and after the holidays, it seemed as though the wedding date was approaching quickly. Charlie and I had finalized the wedding party while he was home. Now, as I worked with my mother on the details of the wedding and reception, I was introduced to the complications of family. I was familiar with my own extended family. I knew who got along with whom, who the eccentrics were, who were the socializers, and who were the recluses. But I didn’t know Charlie’s family at all, let alone his relatives. So

my mom and I were happy to take suggestions from Charlie's mom.

My mom and I also planned the reception. We quickly decided that the Bethesda Naval Hospital (now the Walter Reed National Military Medical Center) Officers Club was the perfect choice. It was close by. Plus, it was a one-stop-shop. They would provide catering, a wedding cake, flowers, music, and handle all the other details. One hitch, though, was that in order to lock-in the date, we needed to reserve the room in August. But in August, Charlie wasn't yet an officer, so he did not have the authority to make the reservation. Luckily, my older brother, Bill, was still in the Air Force. So Bill coordinated from his home in Ohio to reserve the space for us.

Subsequently, the Bethesda Officers Club became my family's venue-of-choice for large events, holding the wedding receptions for both of my brothers there. Charlie and I used it again, years later, to host a 50th wedding anniversary party for my parents. Sadly, the club closed in the mid 90s, unable to sustain itself and compete as development in the DC suburbs exploded and more luxurious reception venues became more widely available.

CHARLIE

NAS Glynco was a small, rather obscure air station (Closed in 1974) located at the extreme south-eastern tip of coastal Georgia, just across the State line and almost within sight of Jacksonville, FL. VT-86 provided advanced training for Navy and Marine Corps NFOs slated for eventual assignment in all of the front-line jet aircraft being flown by the Navy at the time. My thoughts were that I'd request to be assigned as a Bombardier Navigator (B/N) in the A-6 Intruder, the Navy's premier bomber at the time. A position as a Radar Intercept Officer (RIO) in the F-4 Phantom was a close second. The F-14 Tomcat fighter was too new to even consider.

VT-86 flew T-39 Sabreliner jets for my training. Similar to commercial Lear Jet business aircraft, the T-39 is a small, twin engine jet with room inside for the pilot and two or three students. Over the course of four weeks and only 11 flights, I would learn jet navigation (similar to what was taught in Pensacola in the T-29, but at twice the speed,) radar navigation, air intercept, and high-speed low-level visual navigation. There was, of course, classroom training where we were taught the fundamentals. The flights re-enforced the classroom lessons and provided more actual experience. Most importantly, upon completion, I would be presented with my Wings as a Naval Aviator.

NAS Glynco was situated adjacent to Brunswick Georgia. It was a tiny little town. There was literally nothing to do other than complete your training and move on. So that's what I did. Besides, the wedding was scheduled for March 18 – less than a month away now. I didn't want any delay in completion of my work in Glynco to impact the wedding. Three stories will sum up my time at NAS Glynco.

Just Kick It

Early flights were intended merely to provide more experience navigating, learning to work as a team with the pilot, and generally flying. On one of the first introductory flights, while I was sitting up front in the right seat, air traffic control asked us to 'squawk ident.' This was a request to have me press a button that would cause our aircraft's transponder send a special signal that would make our blip on his radar screen blink brightly for a few seconds, allowing him to be certain that he knew which dot represented us. Then he requested that we do it again. Finally, he informed us that our transponder was, apparently, not working because he never received the signal. Not cause for alarm, that simply meant that he now was required to provide extra spacing between us and other aircraft.

The pilot suggested that we do what has become almost second-nature in today's world – reboot. I cycled the power switch for our transponder. No luck. It still wasn't working. Then the pilot surprised me. He asked me to unstrap, walk to the back of the aircraft, and give the transponder box a good swift kick. I laughed. He looked over at me, jerked his thumb pointing to the back, and repeated his request. He was serious. So I complied. It seemed silly, but if that's what he wanted…

I made my way back, located the box and kicked it. In fact, just for good measure, I kicked it twice. As I returned to my seat, strapped in, and plugged my headset back into the intercom system, I heard the air traffic controller telling us that our transponder was now working. The lesson: If something isn't working, just kick it. That lesson served me well over the years and I used it many times with great success during my post-Navy career as a computer engineer.

Don't Fly Into Hail

The second, more interesting story, occurred during a cross-country flight. Such flights were really little more than boondoggles from the east coast to the west coast, then back, stopping along the way for fuel as needed. But it provided valuable experience in log-distance navigation. The flight was quite enjoyable and uneventful in both directions until we passed over Atlanta on the final leg of our return trip. It was late afternoon and a storm front had formed, moving north across the entire State of Georgia. As we descended toward Brunswick, we entered a layer of clouds. The pilot told me to fire up the radar to get a better picture of where the storms were. Moments later, WOW! A solid line of bright storm clouds stretching across the screen from left to right. The radar did not provide any information about the height of the clouds. But there was no way around this. We'd have to fly through it.

Air traffic control also was uncertain of the height of the storms, so we simply asked that they do their best to guide us around the worst parts. They agreed and gave us a heading to fly. Almost immediately, our ride got bumpier. Then, as though a switch had been thrown, the turbulence became severe. In retrospect, it was perhaps the most severe turbulence I experienced in my entire life. It was a good thing we were strapped into our seats. The pointers on the instruments were swinging wildly and the pilot was struggling to control the aircraft. Then, as though yet another switch had been flicked, a deafening roar began as we flew directly into a dense cell of hail. Large hail. The pilot immediately reduced power and extended the speed brake to slow the aircraft as the turbulence continued. I admit that I was terrified. I sat helpless watching what looked like baseball-sized hail explode onto the wind screen inches in front of me as we flew into it at almost 200 knots. The pilot turned sharply and called air traffic control to tell them that their heading guidance had placed us in the center of a storm and that he would be making his own decisions about heading.

Then, as quickly as it had begun, it stopped. The hail was gone and the turbulence subsided. The instruments settled down. Radar showed that we had passed through the storm front. It was all behind us now. Though it had seemed like an eternity, the entire episode probably lasted fewer than 30 seconds. Not even enough time for us to declare an emergency, which I had been about to do.

The pilot and I exchanged glances, exhaled, and proceeded to find our way to NAS Glynco where we both intended to head straight for the officers club bar. We thought no more of it until we were taxiing the aircraft to our parking spot on the ramp adjacent to the squadron hanger. As we got closer, the line chief who was directing us to our spot momentarily

stopped directing, stood still, eyes wide, mouth open. Again, the pilot and I exchanged glances. What's wrong with this guy? The answer became apparent as we shut down the engines and climbed out of the aircraft.

By now, it seemed that half of the maintenance crew that had been working in the hanger was gathering around our plane. We turned to look. The hail had stripped all of the paint from the leading edges of our wings and the engine cowling. The fiberglass radar dome was shredded in places. The thin ends of the speed brake appeared to have been filed off. The first two rows of turbine blades on both engines were nicked. This plane was a mess! In fact, this turns out to have been the only time in my career when I had to write up an incident damage report. The aircraft had sustained what was formally defined as 'substantial damage' and the incident was classified as a 'Class C' event (Class A is a total loss, class E is no damage.) I had barely 60 hours of flying under my belt.

Low Level Fun

The last T-39 story I want to relay was as exciting as the hail storm, but in a totally fun way. I was undergoing a check-flight on which I would be declared qualified in low-level visual navigation. In combat, you often fly fast and low – only a hundred feet above ground and at over 300 knots so as not to be seen or heard until you can drop your bombs and race back to safety. For even more stealth, you turn your radar off as well. The final 30 miles or so is flown entirely visually, relying on river bends, smoke stacks, buildings, or other landmarks to guide you. You are moving fast, covering a mile every 10 seconds. Also, since you are as low as possible, your vision is limited to only two or three miles ahead. You want your bombs to hit the target, so you must be precisely on course. In actual combat you are probably one of perhaps half a dozen other aircraft assigned to the same target or another target close by. So your

timing must be equally precise. To prevent collision with other aircraft, you are expected to arrive exactly over your target within 30 seconds of your assigned time. Variable winds can easily push you off course or cause you to arrive either early or late. So you must constantly work to stay on course and on time. Under these conditions, the pilot is fully occupied just flying the aircraft. He doesn't have time to look for the next smokestack, or even check his clock for time. It's my job to give him adjustments to heading and speed to reach the target on time.

My flight arrived at what is called the 'entry point.' That is the spot where we turned the radar off, pushed the throttles forward even farther, and literally dropped to tree-top level. The next ten minutes were intense. But I was ready. I had spent hours the previous evening memorizing every aspect of my planned route. I knew all of the times, headings, and landmarks. There was a stiff breeze that morning that required almost immediate adjustment both to course and speed, all of which had to be computed in my head in real time. There simply wasn't time to use a calculator.

Here's what went through my head: Next landmark is a river bend. OK, there it is. It's a little too far off to the left. Give the pilot a minor heading adjustment to correct your course. Check your watch. Ten seconds early. Better reduce speed a by 20 knots. Next landmark is a road intersection. I can't see it! Trees are obscuring the roads. I hadn't expected that. Still can't see the intersection. Ten seconds have passed. It's too late. Forget about it. If I get stuck looking for that intersection, I'll get behind and never catch up. What's next? A smokestack. Whew! There it is. Another heading adjustment, but timing looks good. On and on. How is it possible for time to move so slowly and so quickly at the same time?

I was on course and on time, but still became more and more concerned as we continued. The pilot was slowly descending even closer to the trees. The landmarks were getting harder and harder to pick out. By the time we made our final turn, I could see barely more than 10 or 15 seconds ahead. At the final landmark, we had been right on time and on course. Even though I couldn't see the target, I informed the pilot that it was directly ahead – 10 seconds. Moments later, the pilot pulled up hard and rolled inverted just as we passed directly over the target (only 3 seconds early) then rolled upright and pulled up into a steep climb.

In retrospect, it was clear that the pilot knew we were in the right place. These pilots had probably flown these routes dozens of times. They almost certainly knew every landmark by heart. But I didn't know that at the time.

I had successfully completed my training. It was finally time for the Navy to award me my NFO wings and move me on to the next phase of my training. So I was not a little surprised when I was called into the administration office the next Monday morning. A group of my instructors was gathered around. I had done well, they said. But there was a problem. I got airsick. In fact, I had gotten sick at least three times in the short time I had been there. That was not good, they said. The Navy could not risk me getting sick in combat. What, they asked, did I think?

I was stunned. Here I was, days away from earning my wings, having demonstrated my abilities with distinction. I was being told that, perhaps, I wasn't cut out for this line of work. I became angry. Nonsense, I said! Airsickness was NOT an issue. Look at my record. My airsickness occurred only on Monday, after my not having flown for two days. By Tuesday, I was acclimated again and had no problems. Plus, I had NEVER gotten sick when I was in command – only when I was

sitting in the back waiting for my turn in the front. Fly me frequently, I said. Put me in control. Give me a job to do, and I'll perform with excellence, and without getting sick.

I'm not sure what the group had expected. But my instant and vigorous response had satisfied them. The next day, March 10, 1972, I received my wings as expected at a low-key ceremony in the Commanding Officer's office. I was now officially a 'nugget' NFO, having completed 21 flights and logging a 'whopping' 67.1 flight hours.

NFO Wings

The term 'nugget' refers to the gold colored wings I could now wear with my uniform. A brand new pair of wings was still shiny, like a gold nugget. In the Navy, at least, those who had just earned their wings, both NFOs and pilots, were referred to as 'nuggets.'

I filed out my request for advanced training, listing my first three choices. The Navy, for their part, continued their now well-established pattern. Grades and evaluations were blended together in some magic way to produce class rankings which would determine who would be assigned to the available positions. I don't remember what my class standing was, but I had done well. I was confident that I would receive orders for training as a Bombardier/Navigator in the A-6.

Then I learned another huge lesson. Regardless of your abilities, if the Navy is not in need of your particular skills, your wishes are of no importance. The '*needs of the Navy*' would prevail. As it happened, the Navy simply did not need more A-6 navigators that week. I would receive orders to report to VAQ-130 in Alameda, CA to be trained as a navigator for the A-3 Skywarrior. I was discouraged. My dreams of flying the A-6 had

been dashed. I had never even heard of the A-3. But I was told that following that training, I would be ordered to VQ-2 in Rota, Spain. That, at least, sounded interesting. I called home to tell everyone the news. We would be going to Spain!

Then, a glitch. For some reason, my written orders were being delayed. Days passed. I wasn't certain that I'd be able to get home in time for the wedding. Apparently my father found this delay unacceptable. He was a senior executive in the Navy Department at the time, and he called some contact at the Navy's Bureau of Personnel to complain. Issue the orders already, he insisted. This was all unbeknownst to me. But the Navy complied and issued my orders, which I picked up on Thursday afternoon and checked out of VT-86. I returned to the BOQ, and packed up my car. In the dark early hours of Thursday morning, March 16, two days before our planned wedding, I headed home for the wedding.

While Charlie was finishing up his basic training in Georgia, I was finishing up the wedding planning. My family and I were surprised when his uncle, Fr. Daniel, who was to marry us, called and invited himself over for a visit. The purpose was, ostensibly, to discuss and select the readings to be read at our wedding Mass. My mother and I were caught off guard. We had assumed that the order of the Mass was fixed. Only since the Pope's 1968 encyclical *Humanae Vitae*, and the numerous changes instituted at that time, were the participants given authority to select readings. We were not yet accustomed to the fact that we had any input into the liturgy. So Fr. Daniel provided some suggestions, which we happily accepted, being a bit embarrassed that we hadn't been prepared with our own suggestions.

He also asked about me and my family, so that he would have some background to draw into the sermon he was

preparing. I also suspected that he was subtly trying to probe to make sure that we were observant Catholics and that we had properly completed the Church's *Pre-Cana* process – a series of discussions between the engaged couple and a priest designed to assure they were going into marriage fully prepared. Charlie and I had skirted that process. My parents had been 'founding members' of our parish and had been close personal friends with our pastor for years. When we discussed the wedding with our pastor, and explained that Charlie was away in Florida in training and had no ability to return for the normal conferences, he quickly gave us a dispensation, telling us that he was sure we were spiritually ready for marriage. He was correct, both of us were ready. But the conversation with Fr. Daniel was a bit uncomfortable. Eventually, apparently convinced that all was in order, he left satisfied.

No sooner had I recovered from the unexpected visit from Fr. Daniel, than Charlie called one day from Georgia. He would be accepting his wings the next day. I was happy to hear that and congratulated him. The reason for his call was not, however, to seek congratulations. Instead, he stunned me by asking if he should go through with it. Once he accepted his wings, he said, he was committed to six years in the Navy. But if he declined, he could drop out of the program (DOR) and would be discharged from the Navy with no further obligation. I had never even considered such an option. If he left the Navy, what would we do? He wouldn't even have a job. **Of course he should accept his wings**, I told him. He agreed and said he had only called to make sure I was committed too. Here was an opportunity, he had said – the **last** opportunity – to opt out without consequences. He wanted me to know that I had an equal say in our future.

A few days later, Charlie arrived home just in time for the rehearsal. He brought with him a very big surprise wedding

present courtesy of the US Navy: We would not be going to Spain as he had been told just a week earlier. Instead, we would be going to Guam. **Guam!?** Where in the world is Guam? What had happened? Charlie told me that Guam was a tropical island in the middle of the western Pacific Ocean. It would be even more of an adventure than Spain. Nothing had 'happened' he said. It simply turned out, at the last minute, that the Navy needed A-3 navigators more in Guam that week than they needed them in Spain.

What had 'happened' was the *'needs of the Navy.'* Just as Charlie's preference for training in A-6s was overruled to assign him to A-3s, the verbal orders he had been given to Spain were changed to Guam due to the '*needs of the Navy*.' It would not be the last time those often seemingly arbitrary needs would impact our lives. But our lives were just beginning and we did the only thing we could – roll with the punches.

TOGETHER

Charlie arrived home just in time to attend the rehearsal on Friday evening, after which both of our families enjoyed a rehearsal dinner at his family home. His mother had prepared an exceptional meal for the 20 or so attendees.

We were married at Saint John the Baptist Church in Silver Spring on the beautiful early spring morning of Saturday, March 18, 1972. Charlie's brother John, was Best Man. Kathy's long-time friend Nancy Bienia was Maid of Honor. Charlie's older brother George, who had commissioned him only a few months earlier, was a groomsman. Five of his six sisters also participated, as did three of his high-school friends. Two of Kathy's cousins served as Bride's Maids, and her brothers Bill and Jim served as a Groomsmen. Including the two of us, there were 16 in wedding party. Charlie's Uncle, Fr. Daniel Kirk, who had taught him Science and Religion at St. Anselm's Abbey School, officiated while wearing tennis shoes (spray-painted black!) underneath his robes. We would see those painted tennis shoes again and again at other functions with Fr. Daniel. They were his trademark.

The wedding came off without a hitch. Kathy remembers her ride to the church with her father. It was her first experience in a limousine and the beginning of what she recalls as a 'wonderful, fairy-tale wedding.' The service seemed to go by in a flash. That was good, because Fr. Daniel's sermon was terribly abstract; focusing on the biblical origin of the readings and their relationship to each other through the Old and New Testaments rather than on the significance of this event in our

lives. The next thing we knew, we were walking out of the church to the applause of the guests and climbing into the limousine for the short ride to the reception. Charlie remembers driving to Bethesda in the limousine as people in passing cars tried to peer into the windows to see us. We were movie stars!

Wedding day – March 18, 1972

As with so many events of this day, the reception is mostly a blur. Charlie remembers standing for what he says seemed like forever in the receiving line greeting his friends and

family, so many of whom he hadn't seen for months, and meeting so many of Kathy's friends and relatives for the first time. He would come to know most of them well over the coming years, but at the time, he says it seemed like an endless stream of Aunts and Uncles. Charlie was now seeing the same thing that Kathy had encountered during the wedding planning process: Ours were two large families.

Rather than a sit-down dinner, we opted for a more casual affair with heavy hors d'oeuvres and a buffet. Toasts were given and speeches made. There was dancing and throwing of the bridal bouquet, caught by Kathy's college roommate – the same one who had failed the State Nursing exam on her first attempt. The cake was cut. Photos show that we smashed that cake into each other's faces. We both have memories that the reception seemed to end before it had even started.

Before we knew it, we climbed into Charlie's family car and, to the cheers and well-wishes of our friends and family, drove off into our new life together. To prevent the customary decoration with graffiti and cans tied to the bumper, John had hidden Charlie's Impala (now OUR car) a short two blocks away. We had earlier packed it with enough clothes and other accessories for us to establish a home to the point where the trunk was hard to close. We quickly switched cars and we were off.

The Honeymoon

Though we were ultimately bound for Guam, there were a number of short-term assignments to complete along the way in San Diego and Oakland, California. So our honeymoon was to be a rather loosely organized drive across the US. Charlie had made a cross-country drive some years earlier during a summer camping trip with a friend, and wanted to show Kathy some of the sights he had seen. Following Interstate highways

across the country, we planned to visit other random attractions along the way as the urge struck us.

Not wanting to spend our wedding afternoon on the road, we drove to the Sheraton Hotel at Dulles International Airport where we spent our first night together. Sunday morning brought our first dilemma: Where was the nearest Catholic church? The hotel concierge directed us to St. Joseph's Church in Herndon, only a couple of miles from the airport. The church meant nothing to us at the time and we did not even take note of its name. Eight years later, we would move to Reston and, looking for a church that offered a school-based religious education program for our kids, we settled on a small church in Herndon. It was only as we attended Sunday Mass there that we realized we were back at the same church at which we had attended our first Mass together as a couple. What a coincidence! Not only that, but at church one weekend, Kathy bumped into a friend with whom she had roomed briefly at nursing school in Baltimore. We would later see that same friend at St. John Neumann parish in Reston, to which we had transitioned after our kids finished CCD and left for college. Not long after, Charlie would bump into the sister of a grade-school friend from Silver Spring. Coincidence indeed! It really is a small world.

By mid-morning, we were on our way. It was to be a completely Ad Hoc trip. We had no formal schedule or itinerary. We were equipped with the high-technology of the time – a folding paper map of the US. We had no reservations anywhere. Our plan was simply to head west. We would stop whenever and wherever the notion struck our fancy and stay at whatever hotels or motels we encountered.

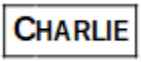
Our first stop was Pittsburgh, PA not because there was anything special we wanted to see there, but because it was a big city, with lots of places to stay and lots of restaurants to

choose from, and it was getting on towards evening. Sights and attractions were one thing. Food was another. This was to be the start of our travels where dining out would produce the memories. Charlie remembers ordering steak for his first meal. Other memories were the result of our hotel choices where, it appears, our life-long penchant for frugality began. While Charlie cruised through each new town looking for the cheapest hotel he could find, Kathy had higher standards. Just on principal, Kathy ruled out hotels with bars on their windows, as well as those costing less than $10 per night. Even so, some of our selections were pretty bad. Kathy remembers not being comfortable walking with bare feet on the carpet of some of our choices. So much for luxury.

Next stop was St. Lewis, MO. There we visited the still fairly new Gateway Arch and Budweiser Brewery. Oklahoma City, Amarillo, Albuquerque, Winslow, and Flagstaff followed. Some we stopped in overnight, others we merely passed through. Those details are long lost. We visited Petrified Forest National Park in Arizona where the expanse of trees turned to stone was impressive, but was not the forest of standing trees Kathy had somehow expected.

We took a slight detour from the direct route southwest on I-40 to visit Grand Canyon and Bryce Canyon National Parks. March is early in tourist season in the high plains of southern Utah, or was in 1972. Both were nearly deserted, which was fine with us as we were interested more in enjoying our time together. The temperature was quite mild for early spring which made the visits all the more enjoyable. It seemed almost intimate as we wandered around the deserted overlooks of the Grand Canyon. Down in the shadows of the deep canyons at Bryce, the trails sometime held snow drifts that blocked our paths. Often, we saw no other visitors all day. It was wonderfully private and intimate.

We were quickly on our way again, though, driving straight through Zion National Park without stopping before joining I-15. It was already afternoon, and Charlie was in a hurry to get to Las Vegas where we planned to spend the night. Still, even the short drive through Zion was spectacular and, to this day, we both regret that we did not spend more time there. In Vegas, eschewing the high prices of '*The Strip*' and in keeping with our now well-established pattern, we selected some anonymous hotel a few blocks outside the heart of the city before venturing into town for dinner and an evening wandering the glittering casinos. Charlie suggested that we limit our gambling to slot machines, using whatever change was in our pockets. He claims it was a total of 35 cents. Kathy believes it was more, though certainly not more than dollar or two. An early payout on the nickle slot machines boosted us immediately to $4 or $5. But the slots consumed that almost as soon as it came. We'd have to postpone our millionaire dreams. But we were having the time of our lives. Every day brought new experiences and surprises. It was a very exciting time.



We arrived in San Diego in late March 1972. We were to be there for only about a month, but didn't want to stay in a cramped hotel for that long. So we searched for a furnished apartment. We signed a 6-month lease for Apt 183 in the Dorado Plaza garden apartment complex at 6231 Madeline Street, near La Mesa knowing that we intended to take advantage of a clause in the standard rental contract that would allow members of the military to break a lease without penalty in the event of receiving orders to relocate.

My primary reason for being in San Diego was to complete a short stint with VF-126 in San Diego for Advanced Jet Navigation (AJN) training, also called Instrument School because it relied on gauges on the instrument panel. At the

time, VF-126 was co-located with the Navy's Top Gun school made famous by Tom Cruise in the movie of the same name. In addition to AJN training, I was to complete Survival, Escape, Resistance, and Evasion (SERE) and Deep Water Environmental Survival Training (DWEST,) usually referred to simply as Survival School. As the name implies, this comprised two weeks of classroom and field training to prepare me for flying over the Pacific Ocean and Vietnam. DWEST was fun. More jumping into the water attached to a parachute and using the various gadgets provided in a life raft: fishing hooks and line, flares, signaling mirrors, dye packs, etc.

SERE was less fun. DWEST had been all about water survival. SERE, on the other hand, combined a land-based survival experience with a very realistic simulation of a POW camp. Following a day or two of obligatory classroom lectures, we were taken into the California hills for 48 hours of survival training. In Pensacola, I had experienced a brief overnight in the Florida swamps. SERE was very different. It was hot during the day, and cold at night. We wore nothing but flight suits and boots. We had no food, water, or other equipment. For the survival segment of training, we remained as a group. Instructors were with us and showed us how to use branches and leaves to build shelter. We somehow managed to start a fire. The instructors provided the occasional sip of water but no food. If we were to eat, we had to find our own food. Since the area was in near-continuous use for training, it had been picked practically clean of anything edible. On the first day, someone found and caught a snake, which the instructors showed us how to clean and cook. Most weren't hungry enough yet to be tempted by snake. I was undeterred. If someone was offering meat, I was ready and willing. Yes, this snake did taste a bit like chicken, though the two or three bites I was given were far from satisfying. On the second day, I found a lone, and previously

untouched, yucca plant. Yucca is surprisingly good, especially when you're hungry.

POW

On the third morning, for the Escape and Evasion parts of SERE, our group (perhaps 50 of us) was bused into the hills. After a short briefing, we were told to disperse (each of us was to be on our own) and find our way to an unseen hilltop perhaps a mile or so distant. No maps. Just head west, you'll find the objective … maybe. Should we reach the designated hilltop, we were promised a cool drink and snack. But whether we got there or not, after two or three hours, a siren would sound, and we were to make our way to an assembly area.

The bus abruptly drove off and we all scattered. Now, I was alone. It quickly became apparent that the hills between me and the objective were teeming with simulated North Vietnamese soldiers dressed in the iconic '*black pajama*' type uniforms of the North Vietnamese army, complete with conical-shaped reed hats. They roamed the hills with automatic weapons (loaded with blanks, of course) sometimes chatting among themselves in a realistic Vietnamese and occasionally firing shots.

There was plenty of scrub brush to hide in, but lots of open space too. I quickly made my way to an area of fairly dense brush and stopped to collect my wits. As a young boy, I had spent many hours playing soldier or capture-the-flag, hiding from my friends in the neighborhood. But his was not my neighborhood and those wandering around out there were not my friends. Occasionally, I'd hear gunshots mixed with screaming and yelling, sometimes alarmingly close by, as the soldiers discovered and captured one or another of our group. Simulation or not, I was terrified. Over the period of an hour or two, I doubt that I moved more than one hundred yards. I certainly did not reach the designated hilltop. Finally, mercifully,

the siren sounded. Despite what I knew was coming, I was relieved. At least there would be no terrifying surprise as some soldier discovered me.

I found my way to the assembly point which was easy to find because of all the noise and commotion. There I was 'captured' along with all the rest. I was now a Prisoner of War. I was screamed at, poked at with rifles, pushed and shoved, and loaded onto a flat-bed truck to be taken to POW camp.

By mid afternoon I had been placed into my box. It was tiny, barely large enough for me to fit into – perhaps 48-inches on a side. Made of plywood with a dirt floor, it was equipped on one side with a bamboo gate to allow me to be watched continuously. Inside was a bucket for use when nature called. I was hungry from 48 hours having only a few bites of snake and yucca, and tired and thirsty from having spent a hot day hiding in the brush. Unable to stretch out, I could not find a comfortable position.

During my first hours in the box, I could hear what was going on. Other POWs were being pulled from their boxes. There was lots of screaming and yelling in broken English. We had been told there would be no physical abuse. Clearly, that was a lie. There was obvious hitting and punching. It was clear that those who refused to answer questions were being roughed up, sometimes clearly very violently.

After several hours listening to others, I was hauled out for my first of several interrogations. What's your name? What do you do? My response of 'Name, Rank, and Serial Number' and other niceties of the Geneva Convention were quickly dispensed with. To borrow from The Wizard of Oz, I was definitely not in Kansas. I remember being slapped around, thrown to the ground, and kicked. Remarkably, I remember few additional details. I did tell them I was a navigator. There was little else for me to tell, though, because at this point in my

career, I didn't know anything else to tell. In order to prepare us for what we would face in the event we were actually captured, each of us was water-boarded briefly. I can report that the technique is quite effective. It takes only a few seconds before you believe you are about to drown and agree to answer just about any question they ask.

We had been taught in the classroom that 'resistance is futile' or words to that effect. No matter your individual determination to tell them nothing, the water-boarding test brought home the point. I found out later, during the debriefing, that several macho guys had been taken aside (while still in the POW camp) and counseled that their obstinate and aggressively uncooperative behavior would have resulted in their having been summarily shot in a real POW camp. Aggressive resistance simply made you more trouble than you were worth. It was up to them, of course, whether or not to continue their resistance. But the clear lesson was that it was not worth it. Even if they didn't talk, others would. I didn't need a lot of convincing.

Hot during the day, the California hills cooled rapidly at night. The first night in 'the box' was indeed cold. (We were told afterward that the temperature had dropped to 32 degrees!) To impress upon us that we were POWs and that few rules applied, I was ordered, during one interrogation, to strip down. Boots and flight suit off! Now! After a few solid slaps and a punch to the gut, it became clear that I was expected to comply. As with '*no physical abuse*' during the training, this order to strip down conflicted with what we had been told were the conditions we should expect. Yet another lie. Obviously, I was being taught a new reality: Geneva convention notwithstanding, as a real POW, there would be few rules. Get that into your head now! OK. Point made.

I removed my boots and flight suit. I spent the rest of the night huddled in my box, nearly naked, shivering in the cold while listening to screams and yelling as others were being questioned. I certainly did not sleep at all. Even if I had wanted to sleep, guards made certain to kick and rattle my cage every few minutes to make sure that I could not. I was interrogated again several times during the long night. Even then, though, I realized that, like the DI ordering us to jog into the surf on a hot summer day in Pensacola, there was another reason I was being dragged out of my box every hour or two. During these interrogations, I was given a few sips of water as a reward for having answered questions. I was allowed to stand by a fire to warm myself briefly and brought into a lighted area where I could be assessed physically. As realistic as this POW camp was, at least they wanted to make sure that no one died. Perhaps its for the best that I have little memory of the second day or night of POW camp. I was now approaching 96 hours without food.

On the morning of the fifth day, we all were taken from our boxes and brought together in a large open area. Our flight suits and boots were returned. There were numerous fires around which we could gather to warm ourselves. Even though we knew the end was near, none of us was entirely certain what was happening. There were a few hushed covert conversations. I was ordered to an area where food was being prepared. Giant vats were filled with boiling water. I was instructed to prepare the meal. I was told to pour oatmeal, rice, raisins, nuts, sugar, and I don’t remember what else into the boiling vats, which I then stirred for 15 minutes or so. Then a line was formed, and everyone was given as much as they could eat. It was one of the most delicious breakfasts I can remember. After we had eaten our fill, a bugle sounded and the US National anthem was played over loud speakers as the North Vietnamese flag was lowered and the American flag was

raised. We all saluted. It was over. It was a remarkably emotional moment.

We boarded a bus that took us back to NAS North Island in San Diego. We showered, shaved, and gratefully changed into clean uniforms, sat through a short debriefing, and were dismissed. I had survived SERE school.

KATHY

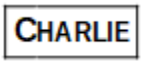
While Charlie was busy with his training, I was enjoying my complete freedom in sunny southern California. Taking a job was out of the question because we were to be in the area for only a few weeks. I already had arranged with the VA Hospital in Washington to transfer to a position with the VA Hospital in San Francisco which was our next stop. So I decided I'd take full advantage of my extended holiday. I certainly was ready for a vacation, having spent the past weeks planning the final details of the wedding while working full-time. So I spent my days savoring my new life. Just driving around the area was fun. I enjoyed acquainting myself with the Navy Exchange and the local shopping malls. We had rented a furnished apartment and had brought clothes with us. But we had little in the way of home accessories. We didn't even have a broom. So I occupied myself with browsing and picking up occasional items.

Surprise Return

One afternoon, while Charlie was away at SERE school, I returned to our apartment from an afternoon out. As I opened the door, I saw that the curtain on the patio door had been pulled back. I knew that I had closed it before I had left. Someone had been in the apartment. Then I heard a noise and saw some movement. I screamed. Whoever it had been WAS STILL THERE! Then SURPRISE! Charlie leaned out from the kitchen, smiling. He had finished training early and asked a friend to drop him off so that he could surprise me. I was

surprised all right, and terrified too. But the terror vanished as quickly as it had come. It was great to have him back. Even so, to this day, I don't like surprises.

The next few weeks were unremarkable as we fell into a routine: Charlie would go to work in the morning and I'd spend the day doing whatever popped into my head. Some days, I'd drop him off on base so I could have the car for the day. We'd go to the movies and occasionally out to dinner. Life was good.



Following DWEST and SERE training, I reported to VF-126 for Advanced Jet Navigation (AJN) training. Located at NAS Miramar (now a Marine Corps Air Station) just north of the city of San Diego, it was a ten-minute drive from our apartment. Surprisingly, I have almost no memory of that training except that it was remarkably short. Comprising almost exclusively classroom training, it included only two flights in the TA-4.

In addition to providing training for navigators like me, VF-126 was the so-called 'aggressor' squadron and provided airplanes to simulate bad guys with which the pilots of Top Gun school would fight. VF-126 pilots loved the assignment. They spent their days flying simulated air combat missions. But they would never actually get shot down and they weren't being graded. It was pure fun for them. On my two flights, I was to act as the intercept officer, providing radar guidance and acting as a 'second set of eyes.' I had practiced the techniques a few times at VT-86 in Georgia.

From my point of view, these flights did little more than provide me with a few more flying hours. However, both of my scheduled flights were cut short when I got airsick from the aerobatic maneuvers. I hadn't flown for almost a month and had lost my adaptation. I'm sure that the pilots I flew with were

disappointed because I had ruined two perfectly good opportunities to have fun. I was disappointed too.

My time in VF-126 ended as quickly as it had begun with those two flights totaling less than four hours. I had now accumulated 23 flights for 70.5 hours as a Naval aviator. But it was time to move on.

On April 21, 1972 we packed our car and began the 500-mile drive north to NAS Alameda in Oakland, CA, just across the bay from San Francisco. Both of us were looking forward to this stop on our journey. We expected to be there for five months, a virtual eternity considering that it seemed as though we had not stopped moving since getting married. Charlie was to begin his final training before we moved to Guam, and Kathy would get back to her career as an RN at the VA hospital in San Francisco. We both looked forward to the excitement of living in the bay area and experiencing San Francisco. As we made our way to I-5 to head north out of San Diego, Kathy pointed out a billboard advertising ‘new homes starting at only $28,000.’ We both laughed. If only we could afford such a home. Maybe one day, we agreed.

The drive north was a continuation of our cross-country trip barely a month earlier. The California coast, with its rolling hills, mountains, and canyons was beautiful in the early spring. We were in no hurry and, this time, decided that we would upgrade our lodging. We spent one night in a pleasant little motel somewhere in the valley east of Los Angeles and headed to Disneyland early the next morning. We whisked through the amusement park, but hit the road again in early afternoon, anxious to get out of the city before finding another hotel north of the city. On arriving in Oakland, we found a motel close to the Air Station that we planned to use as a base of operations for a few days while we looked for an apartment.

Alameda Naval Air Station (Closed in 1997) occupied the north-west end of Alameda Island, a 2-by-5 mile island on the east side of San Francisco Bay just south of the Oakland bridge and just north of the small peninsula on which Oakland International Airport sat. After some searching, we found an apartment building at 2416 8th Avenue in Oakland, only 4 miles from the front gate of the Air Station and a mile from the highway Kathy would take into San Francisco when she started work at the VA hospital. (That double-deck highway collapsed spectacularly in the 1989 Loma Prieta earthquake and had to be completely rebuilt.)

Here, we would establish our first household. One of our first purchases was a TV. We went to the nearest Sears and found a 26" color TV on sale for only $250. TV broadcasts in color were still not universal in 1972, so a color TV was, to us at least, a big deal. As a bonus, the deal included a portable 9" black-and-white TV for only $70 more. We continued to use that little portable TV regularly until 2012 – some 40 years later! Another important purchase was a bike for Charlie. Kathy did not start work right away and did not want to be stuck in the apartment all day without a car while Charlie was at work. Dropping him off every morning and picking him up every afternoon was inconvenient. If Charlie rode to work most days, Kathy could enjoy some freedom to move. She'd need the car anyway when she started working again.

Our apartment was situated half-way up a gradual hill about a mile from the bay. Our second floor location gave us a view of the city and of Alameda Island in the distance. Even so, I never managed to get comfortable walking on its years-old carpet in bare feet. Otherwise it was clean, comfortable, and quiet. We never met any of our neighbors except for one foreign couple across the hall. Charlie had applied for a security

clearance in connection with the work he'd be doing when we got to Guam. This required, among other things, a background security investigation for which neighbors were mailed questionnaires to be completed and returned. Those neighbors, who understood little English, were confused. Why, they wondered, had they received a letter in the mail containing the name and address of the man across the hall?

The woman knocked on our door one day and handed me the envelope explaining that it had been delivered, by mistake, to their apartment. When Charlie got home, he laughed. Here was an opportunity for him to complete his own security investigation. Instead, he took the letter across the hall and explained to the couple that *they* were, in fact, the intended recipient and that *they* should complete the questionnaire. Whatever they wrote, Charlie eventually received his security clearance which he would retain until he retired in 2008.

As for me, I wanted to get back to work. Wanting first to get settled, I had not contacted the VA hospital in San Francisco immediately after our arrival in Alameda. When I finally did call them, I was dismayed to learn that, having heard nothing from me for more than a month, they had given my position to someone else. They assured me that, as soon as another position became available, I would be strongly considered. Disappointed, I completed another application for what I had thought would be a sure job and spent a few more weeks in our apartment with nothing to do. Eventually, the VA did find a position for me and, several weeks later, I began as a Staff Nurse at the VA Hospital in San Francisco.

Surprise Return #2

While waiting for work, I recall one vivid memory similar to the time in San Diego when Charlie surprised me. I was relaxing at home one afternoon when I heard a knock on our apartment door. Charlie had been away and wasn't supposed

to be home until the next day. I certainly didn't know anyone in San Diego, so I ignored the knock. Five minutes later, another knock on the door, followed by someone putting a key in the lock. Clearly, someone was trying to get int the apartment. I rushed to the kitchen and grabbed the biggest knife I could find and hid behind the door. As it opened, I screamed and jumped out with the knife only to see a smiling Charlie. Again he had finished early and decided he'd surprise me with an unannounced return. As with his surprise return in San Diego, he had succeeded. The look on his face proved that I had surprised him too! Apparently, he had learned nothing from his surprise return from SERE training in San Diego. Eventually, he would learn that some kinds of surprise should be avoided. After we both began breathing again, I cooked dinner and revealed another surprise – this one good – **I was pregnant!** Our busy lives got even busier.

Along with the pregnancy came six months of morning-sickness. It was dispiriting. One Saturday morning, we drove into San Francisco to see some sights. Traffic was heavy, but I needed to stop – IMMEDIATELY. I jumped out of the car at a traffic signal to throw up into a trash bin by a bus stop. Not happy that he was blocking traffic, the following cars began to honk loudly. To avoid a traffic jam, Charlie spontaneously drove around the block. As I recovered, several bystanders approached to ask me if I was OK. Just then, Charlie pulled up. I thanked the bystanders for their offers of help, hopped in, and we drove off. Humorous now, I was annoyed then that he had left me, even if only for a minute.

Finally, my job came through, but work in San Francisco was quite an adjustment. I was assigned rotating shifts and often worked nights. With the pregnancy, I mostly remember just being exhausted all of the time. I would work all night, occasionally throwing up into trash bags in the early mornings

due to nausea. In the mornings, I'd drive home with the car windows open so the cool air would keep me from falling asleep, tumble into bed, and sleep all day. I'd get up only when Charlie got home at the end of his day. We'd spend the evening together, and repeat the cycle the next day.

Long Bridges

The almost 20-mile commute to work was simple enough, if a bit long. I'd take the highway to the Oakland Bridge, then a short drive through down-town San Francisco to the hospital. For me, it was tolerable – except for the bridge. For some reason, I dislike long bridges. My worst fear was that I'd break down on the Oakland bridge. Charlie scoffed. The car was only six months old. What could happen? To my great distress, that question was answered only a few weeks later when the car overheated right in the middle of the long suspension bridge at the height of morning rush hour. I walked 50 yards to the closest call-box and pressed the button. Shortly, a tow truck appeared. I had been saved.

Well, not quite. The tow truck driver, contracted by the Highway Department to assure that the bridge remained clear during rush hours, explained that the tow would cost me nothing. That was a relief. But his job was limited to towing me to his garage near the foot of the bridge on the San Francisco side. Now what? The garage was in the middle of a run-down, industrial area of cheap hotels and dive bars. Now I was even more scared than on the bridge. I used their phone to call Charlie. But he was 15 miles away with no way to reach me. He spoke to the guy on the phone about the car. They could replace the water pump, but it would take hours. I did the only thing I could. I called work and told them I would not be able to get there that day, then sat in the garage office to wait while they repaired the car. When the car finally was fixed, I drove straight home and went to bed. Not my best day in the city to date.

Sketchy Patients and Co-Workers

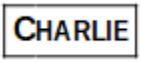
The VA hospital was eye-opening. The patients were mostly recovering drug addicts and alcoholics with other medical issues or those with some terminal illness. I remember one poor patient who was dying of lung cancer. He was in constant pain. His only remaining pleasure in life was smoking. At that time, smoking was still permitted in the hospital. This patient seemed to have a cigarette in his mouth at all times. One of my fears was that he'd fall asleep at night with a lit cigarette and burn the place down. At night, I was constantly trying to hide his cigarettes from him.

The patients were not the only interesting people there. Some of the staff were as 'interesting' as the patients. San Francisco was still the epicenter of the 'flower child' movement from the 1960s. One aide who seemed to be particularly well-liked was a hippie type with long hair down to the middle of his back. He was young, friendly, and quite personable. But I was skeptical. Something seemed just a little off. During the night shift, he would occasionally disappear for long periods. One day, he wasn't at work. I was told that he had been arrested and had been fired. It turns out that, among other things, he had been stealing drugs. One of his jobs had been to return unused medications to the pharmacy. Rather than do that, however, he simply took them home. When the police searched his home they found bottles filled with all kinds of pills, along with stacks of stolen electronics and other things. Friendly, yes. But someone I wanted to socialize with? Not at all. I didn't miss him.

In Alameda, we quickly fell into a routine. We worked during the week and went sight-seeing on weekends. We visited every sight within 100 miles. Fisherman's Wharf in San Francisco, the Golden Gate bridge, the Presidio and Golden

Gate Park (San Francisco's equivalent of New York's Central Park,) Alcatraz Island, Napa valley with its wineries, Mt. Tamalpais, Muir Woods… we visited them all. At times, it seemed like an extended vacation. It was wonderful.

Less glamorous than touring the attractions, perhaps, but still memorable were the days we did nothing special. It was summertime in California and it was hot if not terribly humid. Daytime heat routinely gave way to cool pleasant evenings. But the days could be unbearable. Our apartment was not air-conditioned. But our car was. Frequently, our daily entertainment included driving around the surrounding hills enjoying the mountain views and posh homes in the Oakland hills while cooling off in our car. A short 20 or 30 minute drive out of the city would put us in the midst of beautiful wooded hills with their cool shady breezes. We'd pack a picnic lunch, stop at a road-side stand, buy a bag of fresh cherries, and cruise the rolling countryside simply enjoying the ride.



Firefighting

I spent a few days in early May attending the Navy's shipboard firefighting school on Yerba Buena/Treasure Island right in the middle of San Francisco bay. Everyone in the Navy was required to attend firefighting school before being allowed to serve aboard ship. After classroom lectures, several dozen of us were taken to a simulated ship structure where we would gain practical experience. The multi-story structure had numerous compartments (a navy term for a room aboard ship) on different decks (floors) connected by ladders (stairways) and passageways (hallways) and separated by hatches (doors). Natural gas-fed fires were lit in various places and smoke was piped in. We were given fire hats, coats, and smoke masks, had to assemble and connect hoses, enter the structure, find the fires, and extinguish them. We were being sent in to learn in

two days something that professional firefighters spend weeks learning how to do. But everything was tightly controlled. It was as safe as such an inherently dangerous thing could be.

In one particularly memorable exercise, we were led through a fairly simple set of compartments: In one hatch, through a small room, out another hatch, down a ladder, through another compartment, and back out. Then smoke was piped in, we were given a smoke mask and guided through the same route again. Seemingly easy. But it was pitch black inside and we had to feel our way through. The instructors coached us and we all made it. Then we were told to do it again, without coaching. This time, as a final obstacle, when we entered the last compartment, instructors, without warning, ripped off our smoke masks. We had to make our way through the compartment – perhaps only 20 feet – find the exit hatch and get out. Even though it was broad daylight outside, the final half-open hatch, only a few yards away, was not visible through the smoke. We all exited coughing and choking. Designed more to teach us the basics and to help us learn that it was possible to stay calm under pressure more than how to become professional firefighters, it was a memorable experience.

The A-3 Skywarrior

I spent most of my career flying in the EA-3B Skywarrior. So, before I go into further details of my training, let me introduce the A-3 here. Designed for the Navy in 1949 by the Douglas Aircraft Corporation (which merged to become McDonnell-Douglas in 1967 and disappeared entirely as it was acquired by Boeing in 1997) as a carrier-capable strategic bomber, the A-3 Skywarrior was intended to deliver nuclear bombs. It entered service in 1956. Referred to by the Air Force as the B-66, the Navy's A-3 is a large aircraft. Even today, it is arguably the

largest and heaviest ever to operate regularly from aircraft carriers, earning it its nickname as the ‘Whale.’

It is a very safe aircraft. Powered by two turbojet engines, once airborne, it was capable of flying with only one engine. It features an airliner style yoke for flight control rather than a fighter-plane style joy-stick. Although hydraulically assisted, it is one of the few military jets in which the flight controls were designed to operate fully manually in the event of a hydraulic failure. It features two independent power packs, one driven by each engine, making all of its hydraulic and electrical systems fully redundant. In the event of a failure, each power pack is capable of operating all systems.

It was originally designed for a crew of three, including a pilot, bombardier, and gunner. Although the Air Force version of the A-3 included ejection seats for the crew, the Navy version did not, making it perhaps the only carrier-based jet aircraft ever taken into service that did not feature ejection seats. Instead, when necessary, the crew could bail out by climbing out through a small hatch that opened in the top of the cockpit or, preferably, by diving through the main entry hatch in the aircraft belly, just below the cockpit.

All three crew were seated in the main cockpit with the pilot and bombardier sitting side-by-side in the front. The gunner was seated directly behind the pilot facing rearward and controlled a tail-mounted 50-caliber gun similar to those found on WW-II era bombers. The main fuselage held a fuel tank and the bomb bay. The gunner could climb into the bomb bay during flight if needed.

Weighing some 35,000 pounds empty, it could carry more than 40,000 pounds of fuel and bombs, allowing it to fly more than 2,000 miles (6+ hours) without refueling, giving it a mission range larger than almost any carrier aircraft designed before or since.

The advent of ballistic missiles in the 1960s led the Navy to abandon the A-3's role as a bomber. But it quickly took on other roles. Bomb racks in the bomb bay were stripped out and its interior was converted into a main cabin for other uses. Unlike fighter jets, which generally require crew members to wear oxygen masks at all times, these redesigned A-3s featured fully pressurized cabins, allowing their crews to fly without masks most of the time. An escape door was added on the left-hand side of the aircraft to provide an alternate emergency escape route for anyone in the main cabin.

A few airframes were converted to VIP aircraft (VA-3B) complete with carpeted floors, several plush leather seats, work tables, a stereo system, and minimal kitchen equipment for use in transporting Admirals, Generals, and politicians to and from Navy carriers. The RA-3B was outfitted with a dozen or more cameras for use as photo reconnaissance aircraft, resulting in one of the best tactical photographic aircraft ever developed.

While I was on Guam, RA-3Bs from VQ-1 provided high quality stereo-graphic photos of the entire route of the Alaska oil pipeline allowing its designers to fully understand the topology they would have to design the pipeline to withstand.

The EA-3B model had four seats installed in the main cabin, along with racks of electronics for use in collecting intelligence data. The EA-3B is perhaps most easily recognizable among all of the variants because of the distinctive 'canoe' attached to the bottom of its fuselage. The canoe housed half a dozen specialized antennas used to collect electronic signals of all kinds.

Other variants of the A-3 were developed too, including those supporting electronic warfare (jamming,) aerial refueling, and numerous other one-of-a-kind special purpose roles. Each of these adaptations brought special capabilities, even more

unique because all of them were capable of operating from aircraft carriers.

EA-3B: Note ‘canoe’ on bottom of fuselage

All A-3s are retired now. But they flew with distinction for almost 40 years, serving in more different roles than perhaps any other Navy aircraft.

Déjà Vu

At Alameda, I checked into VAQ-130 on the morning of April 27, 1972. After several weeks of classes studying the technical details of the A-3, its systems and operation, I would make my first flight. As I climbed into the cockpit and encountered the stifling heat of a glass cockpit heated by the summer sun, I experienced a strong feeling of déjà vu. This was not the first time I had climbed in the cockpit of an A-3. Though I didn’t know it at the time, that event had occurred some seven years earlier during a visit to the US Naval Academy one weekend to visit my brother, George. As our family strolled around the grounds, we came upon a pair of airplanes staged as attractions on the plaza outside of the gym. George knew how to open the hatch of one of the planes. He did so, and as any 14 year-old boy would have, I quickly climbed in. The instrument panel had been stripped of nearly all the instruments, but I still remember the moment. Now, here I was being trained in the same kind of aircraft. The cockpit was just as hot in Alameda’s summer sun as it had been in

Annapolis. I would soon learn that, in Guam it would get as hot as 120 degrees. This time, however, all the instruments were in place and I was sitting in the navigator's seat rather than in the pilot's seat.

Get the Keys

Almost every flight brought new experiences. One of the first was a prank. Air crews have a long history of practical jokes as a sort of hazing ritual or initiation rite for new crew members. The maintenance team had installed a car's ignition switch on the panel of one A-3. It was not functional, of course, but it was very professionally placed and looked legitimate. As a nugget navigator or pilot climbed in for his first flight, the instructor pilot or Plane Captain (Plane Captains are enlisted maintenance people responsible for getting airplanes ready to fly, making sure they are properly fueled, and otherwise good to go.) would casually ask the nugget pilot if he had checked out the key? Key? What key? Pointing to the ignition switch, they would then explain that recently someone had been breaking into the planes at night, turning on the radios, and making prank broadcasts. Ignition switches had been installed to prevent that. The entire maintenance staff would be gathered around in the hanger to cheer and jeer when the student went back to get the key. It worked every time.

The primary purpose of my training at VAQ-130 was to teach me the A-3 and how to use its radar for navigation. The squadron had a flight simulator for pilots and navigators were given an opportunity to fly it. I did so once or twice. I was NOT very good at it – not surprising considering that I had received no pilot training whatsoever. The simulator, however, did not provide for training in how to use the radar. Only real flying would suffice for that.

Mostly, I flew up and down the state of California using its hills and mountains to learn how to tweak the radar and use it to

navigate from place to place. The radar sets in the A-3 were approaching 20 years old though, were becoming temperamental, and parts were hard to get. Moreover, priority for replacement parts was assigned to VQ-1 which needed them in Vietnam. Occasionally, one of my training flights had to be canceled because the radar in the aircraft I had been assigned that day was down (inoperative.) On such days, nugget navigators like me were often assigned to fly with nugget pilots as they completed various flights. It was one of these alternate early flights that brought the first emergency declaration of my flying career.

Fire Warning

Shortly after launch (in Naval aviation, takeoffs are typically referred to as launches, even when operating from an airfield) as we were climbing to our assigned altitude, the **fire warning light illuminated for the right-hand engine**. That certainly was not good. We had no Plane Captain flying with us that morning. It was just me and the pilot. The pilot immediately called air traffic control and declared an emergency. As we had been trained, we immediately completed the Fire Warning checklist. All of that took perhaps 10 seconds.

I looked out but saw no smoke or fire. All the engine instruments indicated normal operation. Except for the warning light, there were no indications of anything amiss. The pilot decided NOT to shut down the engine for which the warning was received. It was quite disconcerting. Ten seconds of throwing a few switches hardly seemed satisfying as a means of dispensing with such a potentially serious problem. We exchanged glances. We decided to review the checklist again just to be sure that we hadn't overlooked anything. We hadn't.

Minutes later, the warning light had not lit up again. The pilot told me that, when he had reviewed the maintenance history of this airplane before we boarded, he noted that the

same engine fire warning had been reported on the two previous flights. Investigation following each flight had discovered nothing wrong. The pilot decided, based on the history of repeated but apparently false warnings, that we had experienced another false alarm. He called air traffic control to report that the emergency had been secured and we continued the flight as planned.

Following that incident, I learned to study the maintenance history carefully before each flight. This would not be the last time I would encounter a maintenance issue that could not be easily reproduced on the ground. The need to treat each warning – even those you might believe to be false alarms – with proper respect would be brought home vividly several years later in incidents in the Philippines (Unsafe Landing Gear, page 126) and again in Japan (Smoke in the Cockpit, page 211.) But I'm getting ahead of myself.

Other days, when the navigator training aircraft were either down or otherwise not available, I'd be assigned to fly with nugget pilots executing Field Carrier Landing Practice (FCLP.) For FCLP, pilots repeatedly fly landing approaches to runways as though they were landing on a carrier. A Landing Signal Officer (LSO) would stand off to the left side at the end of the runway, just as is done aboard aircraft carriers. The LSO watches each approach, and provides verbal guidance and coaching to the approaching pilots to let them know if they are too high, too low, too fast, to slow, misaligned, etc. The LSO also grades the pilot – even experienced pilots – on each approach.

The Navy takes carrier landings seriously. Even after pilots are considered fully qualified to land aboard ship, an LSO grades every approach for the rest of their careers. An acceptable grade is 'OK'. Any other comments describe flaws. When he considers an approach dangerous or otherwise unacceptable, the

LSO can press the 'wave off' button, causing bright lights to flash, signaling the pilot to break off the approach, go around, and try again. Multiple bad grades are cause for disciplinary action and can result in being suspended from flying and remedial training. Landing on a carrier is an unforgiving business. A squadron safety officer once said to me, only half jokingly, 'I'll never understand why we spend so much time practicing something you can only screw up once.'

During FCLP, I did little more than sit by the pilot's side in the right-hand seat and repeat the landing checklist with every approach as two or three aircraft flew in circles (ovals actually) around the runway. It seems like it would be boring, but I enjoyed it.

Who's Got the Chit

A humorous thing happened on one of those days as three A-3s were circling Alameda doing FCLP. An F-4 also stationed at Alameda joined us in the landing pattern and landed. For whatever reason, a tire blew when he landed and the F-4 was stuck on the runway. Our A-3s were directed to climb to 10,000 feet and circle overhead until the F-4 could be towed out of the way. Meanwhile, a squadron mate in a second F-4 arrived and declared an emergency. He had experienced a hydraulic failure and needed to land. He was directed to use the second of the two runways at Alameda.

There was a problem, though. While airplanes can carry large loads at takeoff, maximum landing weights are typically much, much lower than maximum takeoff weights because the landing gear and wing structures can't handle the high stresses involved with a potentially hard landing with so much weight. This particular F-4 was too heavy to land. So he too was directed to simply orbit the field while he burned and dumped fuel trying to reduce his total weight.

We all orbited for about 30 minutes. At that point my pilot and I realized that we were now running low on fuel. So low, in fact, that in another 15 minutes we'd be at the point where the rules of the A-3 specified that we were to 'land immediately or bail out.' So we too declared an emergency. We were in no danger except that if we didn't get on the ground within 15 minutes, we'd run out of gas.

But the F-4 was first to declare an emergency. So we were second in line. Shortly thereafter, the other two A-3s in our group also declared low fuel emergencies. Now there were four of us in an emergency state flying round in circles, all of us waiting for the F-4 to get to the point where he could safely land. Even though we A-3s were all light enough to land immediately, the tower would not let us land first because of the possibility that we might blow a tire and block the F-4 from landing when he reached landing weight. He was first in line. We would just have to wait. Things were getting tense.

Then someone got the bright idea for our A-3s to simply fly 20 miles south to NAS Moffett (transferred to NASA control in 1994 and, as of 2014, partially leased to Google (!) for 60 years.) There, we could land and refuel. The idea was that by the time we did that and returned, the F-4 emergency would be resolved and we could finish our landing practice. We all instantly agreed and headed south.

On landing, we all requested to proceed to the 'hot' refueling area. Hot refueling is the practice of refueling an airplane while its engines are running. Refueling is inherently dangerous simply because of the risk that an unintended spark may create a fire. Doing it with engines running is even more risky for obvious reasons. But very few military aircraft (or civil aircraft, for that matter) are capable of starting their engines without the aid of either external electrical connections or the availability of compressed air or both. Normally, those amenities

are provided by small tractor-like vehicles which drive from parking spot to parking spot. Plus, shutting down and restarting engines is time-consuming and increase wear and tear on the engines. So military air fields typically have facilities called fuel pits, especially designed to support hot refueling. The three of us taxied to the fuel pits and got in line to get gas.

As you might (or might not) expect, someone has to pay for the fuel. Squadrons have annual fuel budgets for that. Rather than credit cards, the Navy at that time, relied on a system of paper chits – essentially IOUs. When you take on fuel, you give a chit to the provider promising that your squadron will pay for the fuel provided. Typically, the Plane Captain carries a packet of fuel chits for just this purpose. Since our flight had never planned to leave our airfield, we had neither a Plane Captain with us, nor fuel chits of our own. When the first of our three planes completed fueling, the fuel crew asked for their chit. The pilot told them that the next plane in line had the chits, and taxied away. He quickly called us on the radio to warn us to be ready with an excuse. The second in line used the same excuse saying that the last in line had the chits. I was in the last plane. When we were fueled and the pit crew asked me for the fuel chit I acted surprised and outraged. 'You mean those guys didn't give you a chit for us? Let me call them on the radio and check.' I climbed back inside as if to use the radio, but instead closed the hatch and we taxied off quickly. All three of us had a good laugh.

We took off for the 5 minute flight from NAS Moffett back to NAS Alameda. When we arrived, the F-4 who's emergency had forced us to divert to Moffett while he burned fuel to get down to landing weight was STILL circling the field, still too heavy to land. By then, however, his buddy with the blown tire, who had closed the other runway, had been towed clear and both runways were now open for use. All three of us landed and

taxied back to our hanger. By the time we got there, our maintenance chief had smoothed things over with the Moffett fuel crew who had called our squadron angry that we had stolen several thousand gallons of fuel. He also gave us a pat on the back for clever thinking. As we all headed for our lockers to change out of our flight suits, we got word that the remaining F-4 had landed safely. Just another day at the office.

During August, there was a 2-3 week period when all of the navigation training aircraft were useless because the parts needed to keep their radar units operating had been sent to VQ-1 for use in Vietnam. During that period, when I could not get a flight with a nugget pilot, I'd have no official duties at all. On those days, a student friend and I would often hop into his car and visit the nearby National Parks. Or we would play golf. This particularly annoyed Kathy who, understandably, was beginning to question this life she had gotten herself into. Here she was pregnant, morning sick all the time, and working all day, while her husband was out playing golf and goofing off. Military life takes some getting used to for the entire family.

Enjoy the Sauna

Since golf was not productive, I asked to be assigned for additional flights with nugget pilots. That way I could gain additional flight experience as I waited to complete my navigation training. During July and early August, I was assigned almost a dozen and a half such flights – most of them FCLP at NAAF Crows Landing (closed as a Navy field in 2011 and now operated by NASA.) Also referred to as an Outlying Field (OLF,) Crows Landing was little more than a 7,000 foot runway in the valley 50 miles east of San Jose. In 1972, it was barely more than a functional runway in the middle of nowhere. Navy planes could fly there continuously, at all hours of the day

and night, making as much noise as they wanted to, without bothering anyone. And we did.

For a number of technical reasons, the A-3 prohibited use of its cockpit air conditioner during take-off and landing. The A-3, lacking ejection seats, provided an overhead escape hatch in the roof of the cockpit. The hatch was to be locked in the open position during take-off and landing to allow rapid escape in the event of an accident. This provided a welcome breeze. But the cockpit still got quite hot flying for extended periods executing FCLP in the summer sun. So, many flights were scheduled in the cool of the night between midnight and 2am. Even so, it was still hot. Hundred-degree-plus temperatures were common in the valley, even at night.

I remember circling in the landing pattern one midnight, sweating profusely, wishing for a cool breeze. In an attempt to cool myself, I reached my hand out through the hatch into the air stream only to feel what seemed to be a hot hair blow dryer warming my hand. On Guam, I'd learn to become accustomed to exiting the plane at the end of a flight, dripping wet in my flight suit, as though I had just stepped out of a shower.

Launch and Recovery

By August, the pilots were almost ready to graduate even if I wasn't. It was time for their formal qualification as carrier pilots. Let me take a moment to describe aircraft launch and recovery from a carrier.

I can speak only as a passenger, but I must say that catapult launches are a true thrill. The 32-ton A-3 is accelerated from a dead stop to flying speed in about 3 seconds over a distance of only 250 feet – experiencing a force of almost three times that of gravity. (Disclaimer: The preceding is a generalization. The actual acceleration required for a launch depends on the specific aircraft, its take-off weight, the speed of

any wind over the deck, the exact length of the catapult stroke, and a host of other factors. But the numbers provided here are representative.)

Preparation for a launch is a tightly-choreographed affair. Today's aircraft have a T-shaped tow handle built into their nose landing gear. This so-called 'foot' is designed to fit directly into the 'shoe' of the catapult. When the shoe stops at the end of the launch stroke, the foot simply slips out of the shoe and the aircraft flies away. As with most aircraft designed prior to 1970, the A-3 had no 'foot.' Instead, it had two large hooks which were normally retracted into either side of the airplane just beneath the cockpit. During launch, the hooks were extended, an inch-thick steel cable (known as a bridle) was looped around the catapult shoe and attached to the hooks on either side. At the end of the launch stroke, the bridle simply fell away (caught for reuse by a complex apparatus on the carrier's bow) and the airplane flies away.

Once attached, some tension must be maintained on the bridle to prevent it from falling off. So pressure is increased in the catapult to push the shoe forward and keep the bridle taught. Even with brakes applied, this pressure is sufficient to pull the aircraft forward. To prevent that, all aircraft, including the A-3, have a small attachment that can be extended from the rear underbelly. There is a similar attachment built into the deck of the ship. The two attachments are connected by a small link called a '*hold-back*.' The hold-back is a carefully machined steel cylinder about six inches long and an inch in diameter with T-shaped ends. The ends fit precisely into the attachments on the deck of the ship and the aircraft's underbelly, literally chaining the airplane to the deck of the ship. When the bridle is attached and the shoe moved forward to pull it tight, the aircraft is said to be '*in tension*.' Tension is a precarious state. It means that the steam-powered catapult is fully charged and could launch the

aircraft at the push of a button. Tension should, therefore, not be applied unless the pilot and plane are fully ready to fly.

RA-3B on the catapult ready for launch
Note the bridle, hold-back, and jet blast deflector

The complete launch sequence is as follows: The deck crew directs the pilot to taxi the aircraft into position over the shoe of the catapult. The air crew informs the catapult officer of the actual weight of the airplane (obviously different for each airplane depending on the aircraft type, weapons loaded, fuel and cargo on board, etc.) The catapult operator adjusts the steam settings to match the weight. The deck crew attaches the hold-back fitting, prepares the bridle, and raises the jet-blast deflectors (barn-door sized panels just behind the aircraft which hinge up from the deck to prevent the engine's jet blast from blowing the deck crew and any aircraft behind you off the ship!) The catapult officer signals the pilot to prepare for launch. The pilot pushes the throttles fully forward (jet engines require three to ten seconds to go from idle to stable full power – more time than the launch stroke itself) checks the gauges to confirm all is well, moves the flight controls to the full up, down, left, and right (monitored by flight deck crew) to assure there are no obstructions, and releases the brakes. The catapult officer signals the operator to put the aircraft in tension. Half a dozen people do a final scan to assure no one is in the way of the

airplane and that all is ready. If all is well, the pilot salutes the catapult officer who does one last visual check confirming a thumbs up from various deck crew, then touches the deck and points to the bow of the ship as the signal to launch. The catapult operator takes a final visual look and presses the launch button and the catapult launches the aircraft. The jet-blast deflector is lowered, the catapult is retracted and reset, and the entire sequence is repeated for the next aircraft. During periods of high-tempo operation, a well-trained catapult and deck crew can launch one aircraft approximately every three minutes.

What about the hold-back, you may ask, remembering that the hold-back physically chains the aircraft to the flight deck. The answer is that hold-back is literally torn in two. One half remains connected to the deck attachment. The other half remains attached to the aircraft. Both pieces are retrieved later and either saved as souvenirs or thrown overboard. There must be hundreds of thousands of broken hold-back fittings at the bottom of the sea.

I keep a fully intact A-3 hold-back in my den as my personal souvenir. Kathy had it brass-plated for me years ago as a birthday present.

Carrier arrested landings (traps) are as amazing as launches and, like launches, are equally heavily choreographed. Before attempting a landing, and similar to launch, the flight crew must radio the deck crew to tell them what kind of aircraft they are flying and how much it weighs. This allows the deck crew to adjust the arresting gear to properly stop the airplane. Carrier landings are often described as '*controlled crashes*.' In a sense, that's what they are. While landing on a runway, pilots usually raise the airplane's nose slightly in the final seconds to slow their descent and achieve a smooth touch-down. Not so in carrier landings where the proper procedure is to literally fly the

aircraft into the deck of the ship which results in a hard touch down, though with surprisingly little bounce. The intent is to assure that the airplane's hook catches one of the four 2-inch thick wire cables strung across the landing area which bring the plane to an abrupt stop. At the moment of touch down, the pilot immediately pushes the throttles to full power in order to assure that he can begin flying again in the event that the hook fails to catch a wire (referred to as a 'bolter' after the term used to describe a horse that is prone to suddenly bolting.) Remember that a jet engine requires several seconds to reach full power after the throttles are advanced – seconds which could mean the difference between life and death when you need to fly but don't have enough power to do so. Except for the hard touch down, a bolter is almost benign compared to an arrest.

When the hook does catch, the plane is brought from perhaps 120 mph to a complete halt in less than two seconds and under 100 yards – even more quickly than a catapult launch. The landing bounce, even though relatively small, combines with any side-to-side movement, and the rapid deceleration, to produce a rather wild ride. Once it's clear that the aircraft has stopped, one of the deck crew steps in front of the airplane, signals the pilot to pull back the throttles. The pilot applies his brakes and does so. The deck crew signals the arresting gear operator to retract the cable, which has stretched out some 100 yards during the landing. The retracting cable briefly pulls the aircraft backwards before the operator momentarily halts the retraction, the cable goes slack and drops off of the hook, then the cable is fully retracted and reset. The pilot is given the signal to raise the hook, and is directed forward and to the right out of the landing area to allow the next aircraft to land. Sometimes, even when the cable is slack, it get stuck on the hook and fails to drop off. In that case, one lucky deck crew member has the pleasure of running up behind the airplane with a crow bar to dislodge the wire from the hook –

especially dangerous with an A-3 because he must avoid running directly behind the engine. During normal daytime operation, aircraft can be landed as frequently as one arrest every 45 seconds.

Normally, carriers separate launch and recovery operations, first launching an entire group of aircraft to make room on the flight deck, then recovering another group that had been lunched previously. This allows plenty of room on the deck to move aircraft around. During carrier qualification operations (car-quals,) however, the deck is mostly empty, and launch and recovery operations are conducted simultaneously.

Clara

One more story will have to suffice to complete of the narrative of my time at VAQ-130. I was paired with a pilot, and we flew to the ship for his qualification flights. (Navigators are not required to obtain a certification/qualification for carrier operations as is required for pilots.) Over a period of four days and nights, I flew in five day-time and three night-time carrier qualification flights – also called CQ flights. My first carrier landing (referred to as a 'trap') was on August 08, 1972. Immediately following the trap, I experienced my first catapult launch. My first night trap and night launch occurred the next night, on August 09. In all, over the four days, I logged 24 traps (8 at night) and an equal number of day/night '*cat shots*.'

My daylight flights were exciting though mostly uneventful. Once considered qualified for daytime landings, we progressed to night landings. The nighttime flights during this period were exciting too, but in a less desirable way. Specifically, the weather had deteriorated. On the first night, there were widespread low clouds and intermittent rain. The carrier cruised around searching for a clear area, but with only limited success. As a group of three or four of us orbited the ship, landing and launching in sequence, we continuously flew

in and out of a low overcast. The pilots were clearly stressed. Flying at night in the clouds is difficult enough, especially in an aircraft new to you. Trying to land on a carrier under such conditions raised the stress level high even further. To add to the mix, the ship was using this opportunity to train a new group of air traffic controllers. As green as the pilot and I were, it was obvious that the controllers giving us directions were even less experienced.

Progress was slow. Our first successful night arrest offered my pilot and I 10 or 15 minutes of time to relax a bit while waiting on the flight deck to be launched back into the flight pattern again for our next attempt. Unlike daytime landings in clear weather in which the pilot can see the carrier and manages his own route, night operations are always conducted under positive control. You are directed every step of the way until you are immediately behind the carrier when control finally is given to the pilot. At that point, the aircraft is less than one mile (about 20 seconds) from touchdown. That last 20 seconds is always flown entirely visually.

The combination of deteriorating weather and trainee controllers resulted in our being off-center when we arrived at our final approach. We broke out of the clouds just as the controller handed off control to the pilot. I reported that we had the ship in sight. The LSO, who was monitoring this approach (remember, every approach is always monitored,) immediately gave directions for the pilot to correct our line-up. The pilot made some adjustments. But the LSO was not satisfied. With less than 10 seconds to touchdown, the LSO waved us off. The pilot complied, we accelerated and climbed, and were immediately back in the clouds. Another orbit and another off-center hand-off resulted in another difficult approach. This time, the pilot corrected quickly and we were not waved off. But, for whatever reason, the hook failed to catch any of the four

arresting wires. We '*boltered*' back into the clouds for another attempt.

Things were getting dicey now. As a previous story explained, an aircraft's maximum landing weight is limited by the ability of its landing gear to absorb the energy of the landing. Since carrier landings are not really landings at all, but simply controlled flight into the deck, the maximum landing weight for carrier landings is reduced even further. The A-3 is a heavy airplane even when its fuel tanks are empty. As a result, its maximum carrier landing weight was such that the maximum amount of fuel you could carry when landing aboard ship was sufficient to allow for only four attempts. If you could not achieve a successful landing in four attempts, you had initiate aerial refueling, divert to a shore base and land immediately, or bail out.

Our two failed landing attempts had left us with only one or two more shots. But both the ship's air traffic controller and my pilot and I were struggling. Our third orbit was more well-controlled. We were confident that the third time would be the charm. It was not to be. The weather had deteriorated even further. When we finally arrived at the hand-off point, we were still in the clouds. With only 20 seconds remaining, we were blind. We couldn't see the ship at all! I reported that we were '*Clara*' – the code word indicating that we were still in the clouds. As the pilot made his own decision to abort the landing attempt, the LSO directed us to wave off our approach. We now had only one more chance to land successfully.

Then a deep voice came up on the radio: 'Alpha Juliet four two, this is Grey Eagle. Did you just report Clara?' (Our call sign was AJ-42. Grey Eagle was the call sign of the commanding office of the USS Ranger. For the record, the ship's CO almost NEVER speaks on the radio.) I replied: 'Grey Eagle, this is Alpha Juliet four two. That's affirmative.' His

response was immediate: ‘All aircraft in the Grey Eagle flight pattern, this is Grey Eagle. You are all signal *bingo*. CQ is secured.’

With the code-word ‘Clara,’ my report had signaled that we had been in the clouds at the hand-off point. That had caused the ship’s CO to terminate flight operations. We had been making progress, but only very slowly. All the flight crews were tired and stressed. The situation was getting more dangerous by the minute. Canceling operations was a good call.

Now we were all signal ‘*bingo*’ which meant that we were all to proceed immediately to the nearest alternate airfield. The half dozen aircraft flying, my pilot and I among them, instantly headed for ‘the beach’ – in this case NAS Miramar, some 35 miles away where we all enjoyed a few drinks at the officers club bar.

Compressor Stall

Two days later, the weather cleared, and our group completed their qualifications. Most of the remaining flights were at night. After one trap, we taxied forward to be launched again and began the launch sequence. As we were placed in tension, the pilot jammed the throttles forward to apply full power. When he did so, our right-hand engine experienced two compressor stalls.

> *A compressor stall results when the pressure in the combustion chamber gets so high that all of the hot exhaust gasses cannot be forced out of the back of the engine. Momentarily, the air flow through the engine’s compressor stalls, air flow reverses, and some of the combustion gases can shoot out of the front. The stall is accompanied by a loud boom as the excess pressure is released. Engine operation almost always immediately returns to normal. At*

night, a compressor stall is particularly spectacular because a large bright flame shoots out of the front of the engine.

Compressor stalls are rare but not unheard of. Although not desirable, they rarely do any harm. Today's advanced engine controls prevent most of them. But our 1950s era engines were not as sophisticated as today's computer-controlled engines and occasionally encountered them. (This was one of only two or three times in my career that I remember experiencing them.) Official guidance for the A-3 allowed fewer than three consecutive stalls provided that the engine immediately returned to normal operation. The pilot checked our engine instruments, decided that all was well, and saluted the catapult office indicating that we were ready to launch.

The flight deck launch crew was having none of it and immediately signaled that the launch should be suspended. Most of them had never heard or seen a compressor stall before. The huge flame, all the more noticeable at night, had brought all other activities on the flight deck to an immediate halt.

We sat there for some time at full power waiting for the launch. Finally, after being assured over our radio that catapult tension had been suspended, the pilot agreed to throttle back to idle. Now what? The Air Boss called us on the radio asking our intentions. We assured him that all was well and that we were ready to launch. Those compressor stalls were normal, we said. The boss wasn't satisfied until our squadron's maintenance officer arrived to assure him in person. Ultimately, the Boss agreed to proceed and we launched, this time without any pesky compressor stalls.

The next day we all flew back home to Alameda. Everyone had qualified for carrier flight operations. With the CQ flights, I had gained valuable experience. Also, it was a great

deal of fun despite the excitement. But I still had my radar navigator training to complete.

After more weeks of delay, the parts needed to make our airplanes usable again for radar training became available. The broken radars were fixed and I could finish my training. Those dozen flights were unremarkable and almost disappointing compared to the recent CQs. Finally, my training was complete.

On October 06, 1972, I checked out of VAQ-130, headed for the Pacific. VAQ-130 had more than doubled my flight experience adding 47 flights and 118 hours to bring my total to 70 flights and 188.9 hours when I arrived at VQ-1. In addition, I had accumulated 24 carrier landings and 24 catapult shots.

KATHY

In Alameda I was introduced to the extensive social network that the Navy had in place for the wives and families long before the advent of Social Media. The men have a natural social circle at work on a daily basis. But wives and children typically have to find their own friends each time they move to a new place. The Officer's Wives Club provided precisely the opportunity a newcomer like me needed. There I met other women like myself. Some were older and some newly married. Some had young children, others did not. But all were new to the area, most knew little about it, and few knew any others there. The Officer's Wives Club was a great source of socialization. The other wives were an extensive and available peer group who were experiencing the same feelings and issues as I.

It was at one of the weekend Wives Club meetings that I first met Jeanie Putnam. Like me, she was newly married and away from home for the first time. Her husband, Keith, was a couple of weeks ahead of Charlie in training and was headed to Guam too. We bonded immediately, ultimately becoming

lifelong friends. In addition to Guam, where we socialized frequently with the Putnams, the home we subsequently bought years later in Pensacola (see page 233) was literally back-to-back with theirs. We have remained close with them over the subsequent years, attending the weddings of each others' children and even occasionally vacationing together. Charlie too met new friends in Alameda, one of whom he hired years later to work with him as an assistant program manager at Northrop Grumman.

As the final weeks of training at VAQ-130 approached, we began to make arrangements for our move to Guam. We scheduled movers to pack up our household goods for shipment overseas. We arranged to drop our car at the naval station shipping dock for its transport. We scheduled two weeks of leave during which we would fly back to Silver Spring for a farewell visit before heading west ourselves.

The night before the movers came, we carefully separated all of our dishes and kitchenware and placed it on the counter to be packed, only to be rebuked by the movers who wanted the counter space for their work. Live and learn. We terminated our apartment lease and prepared to use paper plates and live out of a suitcase for the last few days. Then the hammer dropped: Charlie's last flight was canceled because parts needed for the aircraft's radar had to be sent to Guam. Now what?

Not to worry, Kathy would proceed to Silver Spring as planned. Charlie would move into the BOQ. Surely, he would complete the final flight in a day or two, then he'd join Kathy at home. A day or two turned in to a week. One week turned into two. Two turned into four. The radar could not be fixed, and Charlie could not complete his last qualification flight. Meanwhile, Kathy was at home with her parents, without a car,

and still sick every morning. Charlie was repeating what had, by then, become a well-worn pattern. He'd fly occasional FCLP flights with new pilots, and play golf when no flights were scheduled. Not being enthralled by golf, he found other leisure activities; escaping with a friend for a weekend camping trip to Oregon as they both waited for their final qualification flight.

Mercifully, the radars were finally fixed, the check-ride was completed, and Charlie could rejoin Kathy in Silver Spring.

After a brief visit, we had our farewell parties with family and local friends and headed to the airport for the long trip to Guam. Military flights were unavailable, so we were able to get a waiver that allowed us to fly on commercial airplane (actually a military charter via United Airlines.) We flew to San Francisco, then on to Guam via Hawaii.

VQ-1

CHARLIE

Before continuing, let me describe VQ-1. Formally established in 1955, the squadron's history dates back to the days immediately following WW-II when intelligence-gathering flights were begun to monitor other countries. The missions were intended to provide information that would give early warning of possible future attacks like that on Pearl Harbor. Initially based in the Philippines immediately after the war, the squadron's home base has moved a number of times. For several years it was home-based at various air stations in Japan. In 1960, it relocated to Guam, where I joined it. In 1994, it moved to Whidbey Island, in Washington State where it remains as this memoir is being written. In addition to its home base, VQ-1 maintains one or more detachments of various sizes – some permanent and some temporary – at other locations around the world. Until 1989, when the last of the A-3s was decommissioned, they also maintained detachments aboard one or more aircraft carriers.

The squadron's formal name is Fleet Air Reconnaissance Squadron One. In typical military style, that name is shortened to FAIRECONRON One or VQ-1. The 'V' in VQ stands for 'fixed wing' and means that the squadron files aircraft with fixed wings (as opposed to helicopter squadrons, which are rotary-winged aircraft and which are designated with an 'H.') The 'Q' stands for 'special' and signifies that VQ-1's mission is, well, special. Fighter squadrons are designated as VF and attack squadrons as VA.

All squadrons give themselves a nickname and a motto. VQ-1 calls itself the *World Watchers.* It's motto: *In God We Trust, All Others, We Monitor*. The official role of VQ-1 is airborne reconnaissance and intelligence collection. In simple terms, it is a spy squadron. Its aircraft are packed with specially-designed radio and radar receivers that allow listening for and recording of electronic signals of all kinds. Also included are direction-finding devices that determine where the signals originate. The goal is to identify and locate radars, radios, and other electronic emitters used by an adversary and use that information to assist in planning attacks and countermeasures. Linguists fluent in foreign languages often join the crews to listen to radio transmissions in real-time to hear what adversaries are saying.

Today, such equipment and the techniques for using it are in widespread use throughout the world by even the most ill-equipped and seemingly third-world countries and even by terrorist organizations. But in the 1960s and '70s, knowledge of those capabilities was almost unheard of and was tightly restricted and highly classified. At that time, only the intelligence services (CIA, NSA, etc.) were aware of what VQ-1 did. In general, the Navy (and other US armed forces,) including other squadrons, captains of ships, and even many Admirals and Generals did not have the security clearances required to learn what it was that VQ-1 did.

> *Such excessive secrecy was a detriment to those in all military branches who were in the Intelligence field. Their work was so secret, that their written performance evaluations could include little detail. While fighter and attack pilots could be credited with shooting down enemy aircraft and destroying bridges, performance evaluations for VQ-1 officers said simply that their members 'provided direct support to the Secretary of the Navy.' As a result, promotion boards gave little thought to VQ-1 officers and few career VQ*

officers were promoted to Admiral. Eventually, the negative aspects of such secrecy were recognized. The intense secrecy has been loosened since my time in the Navy, and the value of VQ-1's work has since been fully acknowledged. Intelligence is now a truly viable career field.

VQ-1's special security clearances and the capabilities the squadron possessed did, however, work to its benefit sometimes. In several places in this book, I make it a point to say that, in the early 1970s, there was no satellite communication. While that was certainly true for such things as television, telephone, and even for most military applications, it would be more accurate to say that satellite communication was available only to a select few. VQ-1 was one of those few. It had its own, very secret, satellite communications capability on Guam known as Special Intelligence Communications – SPINTCOM. Everywhere its members went, they had access to similar satellite communications facilities. (In fact, after separating from the Navy, while working for Sperry Univac (subsequently Unisys) I wrote software that used the SPINTCOM network.) This SPINTCOM network will feature another sea story still to come (You Don't Have Clearance For That, page 174.)

VQ-1 aircraft had no offensive or defensive weapons. But, at least, the intelligence gathering equipment the aircraft carried allowed air crews to be the first to know if they were in danger. The crews improved their margin of safety by remaining 50 miles or more away from any threats. Their best defense, if and when attacked, was to exit the area as expeditiously as possible. In just a few minutes, an A-3 could place an additional 50 miles between itself and any threats.

While the A-3 was fast, earlier VQ-1 aircraft from the 1950s and '60s were slower. Also, the politics of the early post-WW-II period was less diplomatic than

contemporary international relations (North Korea and some mid-East countries excluded.) As recently as 1971, North Korea shot down a VQ-1 aircraft (a slow EC-121) in international waters off the Korean east coast killing nearly 30. It was simply too slow to outrun the MIG fighter jet sent to destroy it.

A typical mission consisted of transiting to a place near an area of interest and flying in an elliptical orbit while the crew in the back monitored and recorded whatever signals in interest they could find. When possible, flights stayed over water in international airspace. When the mission was complete, evaluators reviewed the recorded data, combined it with the navigation charts that the navigators (like me) compiled showing the exact position during all parts of the flight, and produced reports detailing the location and type of equipment discovered. Those reports typically were used to develop potential attack missions, to be used in wartime, either to destroy the equipment that had been located, or to avoid it.

If our equipment could detect and locate our adversaries, it could do the same for our own units. Thus, some of VQ-1's missions were designed to confirm that our own units were following the rules regarding radio silence. If we could find our own units, then so could our adversaries. Sometimes, during training exercises, VQ-1 was directed to act as the enemy force (red force) and use its assets to find members of friendly forces (blue forces.) We would then direct our red force attackers to seek out and 'destroy' the blue forces we had discovered. Often, it was surprisingly easy to find the blue forces without ourselves being detected. Over time, lessons learned from the data we collected produced improved tactics and procedures that made it harder and harder for us to find and successfully attack blue forces.

So that's what VQ-1 did – flew around in circles for hours at a time 'drilling holes in the sky' while the flight crew collected

whatever data they could. VQ-1 was always close to the action. But, if they did it right, they were never in the ‘hot zone.’

As noted earlier, most of what the squadron did was considered highly classified. So I couldn’t really discuss the details with Kathy. I told her that we flew missions to collect intelligence data. There really wasn’t much more to it than that. While the data itself was sensitive, the general locations we went to weren’t. So, unlike the US Special Forces which rarely disclosed their destinations, at least when I deployed I could tell Kathy where I was going.

GUAM

We arrived in Guam excited but totally exhausted in the early afternoon of Sunday, October 22, 1972 at Andersen AFB. The trip, comprising multiple flights and a seemingly never-ending series of long layovers, lasted more than 20 hours. There were no overnight stops, but the 11-hour time difference and Kathy's pregnancy eliminated any relaxation or enjoyment and completely destroyed any sense of time of day or even day of week.

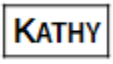
We were met at the airport by our squadron sponsors, Cheryl and Lane Newman, who promptly took us to their house where we were ushered into a set of bunk beds and told to get some rest. We didn't argue. Following a few hours of welcome sleep, we awoke to a home-cooked dinner in their dining room during which they provided an overview of what was to come. The gist of the conversation was that we would be busy for a few days getting ourselves checked in. After dinner, they drove us to the Cliff Hotel (still in operation) where we would stay until our Government housing was assigned. We ate all our meals in the Hotel dining room. We located a church to attend at the Naval Air Station and also found Guam's Cathedral nearby.

Over the next several days we completed the squadron check-in. A dock strike on the US west coast had delayed the arrival of our car. So one early task was to rent a car. Charlie selected a Datsun (as Nissan was known at the time) Sunny (sold in the US as the model B210.) Similar to today's Nissan Sentra, it was a low-end standard-shift model without air conditioning. We learned almost immediately what a bad idea it

was to forego air conditioning in Guam. Not only did the car not have air conditioning, it didn't have heat either. A heater obviously wasn't necessary in Guam. But no heater meant no blower fan and, thus, no defroster. So windows often fogged up in the excessive humidity when it rained, which it did every day.

There was another problem. Kathy had never driven a car with a standard transmission. Our next task, then, became teaching Kathy how to drive it. The driving instruction consisted of finding our way around the island to the various military facilities where we would apply for housing, acquire a phone number, get Kathy (now six month pregnant) a check-up at the hospital, and various other administrative tasks. We discovered what was then a quirk of Guam's roads. Much of the underlying rock on Guam is actually coral that was lifted out of the water as volcanic activity formed the island. Because coral was so plentiful and cheap, engineers mixed crushed coral rather than crushed stone into the asphalt used to pave the roads. The coral sometimes gave many roads an unusual pink-ish sheen. It also made the roads remarkably slippery when they were wet. In Guam, brief afternoon showers were a daily event. We quickly learned to be very careful when driving on wet roads.

On our first weekend, the squadron hosted its monthly Hail-and-Farewell party. These were informal get-togethers at the officers club where those leaving the squadron for their next assignment were toasted and given a chance to say their good-byes and new arrivals like us were formally introduced. During the preceding week, Charlie already had met many of the officers with whom he'd be working. This event gave Kathy an opportunity to meet their wives, who would prove invaluable over the coming days.

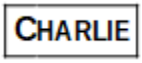


The squadron moved quickly to integrate Charlie into the crew rotation and, on November 08 – a mere 17 days after

arriving – Charlie was deployed to Vietnam for two weeks. It was quite a shock to me. I was alone and pregnant, in a tiny hotel room, 8,000 miles from home, in what seemed to be a foreign country where I knew almost no one. This was not at all the glamorous life I had envisioned as the wife of a naval officer. I was not homesick, but occasionally I found myself lonely, especially at times like this when Charlie was away.

So I filled my days getting to know the island. I located all the Air Force and Navy Exchanges, as well as the Navy commissary, and the few local stores. The Town House, Guam's equivalent of a Walmart, 1970-style, was the only department store on the island. I busied myself shopping for Christmas gifts for my relatives and for all of Charlie's family. Also, I got established at the hospital OB clinic.

I went to Guam Memorial hospital for a job interview. Still experiencing morning sickness, having no uniforms, and most importantly not wanting to leave our baby with unknown child care, I reluctantly gave up the idea of a job.



VQ-1 had, apparently, been short of A-3 crew members for some time – especially navigators like me. So the squadron Operations department was anxious to get me trained and declared 'qualified' as quickly as possible. Though I had completed my basic A-3 training in Alameda, I still had quite a bit more specialized training to complete before I would be allowed to direct a mission. Most of the action in 1972 was in Vietnam, so the first order of business was to get me familiar with combat operations.

Good Morning Vietnam

On October 9, 1972 I was assigned to join the crew of a squadron EP-3B that was headed to our squadron detachment in Da Nang. The P-3 is a large, 4-engine, propeller driven

aircraft initially built in the late 1950s as an airliner. Because of its flight endurance of more that 10 hours, the Navy modified it for use as a submarine hunter. It worked so well in that role that the Navy modified it for use in other roles too, and VQ-1 had a number of EP-3s. Much larger than the A-3 with its crew of seven, the P-3's crew of almost 20, was an ideal platform for training. Since we were flying in a War Zone, I would receive an additional Combat Pay bonus and be credited with flying Combat Missions even as a trainee.

The goal of my first deployment was to familiarize me with the basic VQ-1 mission and, most importantly, to teach me how to navigate in the Gulf of Tonkin, where VQ-1 mostly flew in the Vietnam theater. I needed to learn what the coast of Vietnam looked like on a radar screen and be able to identify key landmarks I could use for navigation. Over a period of 11 days, I would fly nine missions averaging 10 hours each (almost doubling my total flight time in less than two weeks!)

Each mission was the same. We would fly an extended oval orbit approximately 50 miles off shore over the Gulf of Tonkin while the equipment operators collected information. The process sounds repetitive and it is. My job was to give direction to the pilot to keep the aircraft in its assigned area and to know precisely where we were at all times. This required me to use the radar to fix our position every six minutes and record the information in a written log and on a paper chart. By the time I had finished the last of the missions on this first deployment I'd repeated the fix-taking process nearly 1,000 times. While I needed almost three minutes to properly record a fix during my first mission, I could complete the process in only a few seconds by the end of the last mission. It was excellent training.

Who Are Those Guys

Da Nang is on the coast. One night, on our way back after we had officially completed of our mission, we were flying

along the coast, about 10 miles off shore, descending for our approach to land. I had been relieved of navigation duties by a second navigator (the long missions required two navigators to allow for some rest during the flight.) As I looked out the window, I noticed what appeared to be tracer bullets arcing up toward us from the coastline. They were clearly small arms bullets, and they traveled less than a mile before falling harmlessly into the water miles short of us. 'Who are those guys' I asked another crew member. 'That's just some idiot with a machine gun' I was told. It was clear that, whoever it was, was shooting at us. It was equally clear that it was a total waste of his time. We were hopelessly out of range. Whoever it was apparently felt it was important enough to make the point that we were not welcome in their country.

Da Nang was my introduction to (in fact, my only experience with) a military base in a wartime environment. About 90 miles south of Vietnam's Demilitarized Zone (DMZ) it was well within South Vietnam. It was 'relatively' safe and secure. But it was close enough to the North that it wasn't entirely free from the hazards of war. Though it was well defended, there were periodic insurgent and rocket attacks.

Many of the buildings were decades-old ramshackle wooden structures. The BOQ was such a 2-story building. Built during the 1950s, it was little more than a barn with plywood walls between the rooms, each of which had two or four bunk beds. As Officer's quarters, it was superior to the Enlisted quarters because the BOQ had a communal shower within the building while the Enlisted shower was in a separate building. Air conditioning was provided via a handful of window units.

The exterior walls of the BOQ also were surrounded by 50-gallon drums, stacked two high and filled with dirt, to serve as armor. For protection against rocket attacks, there was a

fortified bomb-shelter just outside into which we would all run if and when the sirens signaled a rocket attack was imminent. It too was protected by 50-gallon drums with a six-foot pile of sand bags as a roof.

BOQ and shelter, Da Nang, Vietnam – December 1972

Rockets used in attacks were unguided. So they landed randomly, mostly in unoccupied areas of the large base, rarely causing any significant damage. They served mainly as terrorist-like tools designed to instill fear and lower morale. Rarely though, a rocket would find a target. In the year before my arrival, a rocket had exploded on the flight line and severely damaged one of VQ-1's parked EP-3Bs. No one was on the flight line at the time. But it was a reminder that Da Nang was a potentially dangerous place.

I remember only one or two rocket attacks during my entire time in-country and none did any damage. But being awakened from a deep sleep by the warning sirens was frightening. We'd all jump out of bed and rush to the shelter just outside of the BOQ. There we would huddle on the dirt floor under the light of one or two anemic light bulbs hanging from the ceiling and wait for the sirens to sound 'all clear' before we'd return to our rooms. Often, the 'all clear' would be sounded before we even had time to reach the shelter.

A story was told about one midnight rocket attack. As everyone ran through the dark, out of the Enlisted quarters to their shelter, the first in line tripped over something blocking the exit door. Eventually, everyone managed to get to the safety of the shelter. When ‘all clear’ was signaled and they returned to their barracks, they discovered that the obstacle that had blocked their path was a rocket that had landed right in the middle of the exit door but had failed to explode. They had been lucky.

Although it was possible to leave the base to go into the town of Da Nang, advance permission was required to do so. Few in VQ-1 had any interest in doing that, and I never did, mostly because there was nothing of interest in town. It was generally safe to walk around the base. In fact, the VQ-1 officers had acquired a small shack that served as VQ-1’s officers club. Little more than a large garden shed near the BOQ, it had a two tables, some chairs, and a refrigerator full of beer. It was the only place we could go to relax when we were not coming and going from a mission. VQ-1’s mascot was a bat, so we called our officers club the ‘Bat Cave.’

When I was not flying, or relaxing in the Bat Cave, I spent my time in the Operations building reading all sorts of manuals filled with standing orders and memos. There was an extensive reading list that I had to complete before I could be considered qualified. Everyone, including me, was assigned to stand as the ‘Duty Officer’ for a 24-hour period. The Duty Officer did little more than drink lousy coffee, answer the phone, and call someone else when anything happened. Happily, the time passed relatively quickly and I returned to the relative luxury of Guam and the Cliff Hotel.

Back on Guam, I spent the next several weeks learning all the things I’d need to know to become a qualified navigator. That meant a lot of flying. The flights were designed to assure I

was fully familiar with the exact aircraft I'd be flying since, like most car brands, each different aircraft had slightly different features. Mostly, I was learning trans-Pacific – transpac – navigation.

The Pacific Ocean is like the Atlantic, only larger with vast expanses of all-but-empty water. Finding your way across such open space to a tiny island like Guam requires precision. In the days before GPS, there were few technical devices that could accurately determine your position, and the A-3 was not equipped with any of them. For navigation, navigators on an A-3 used the same instruments that Columbus had used: A clock and a sextant.

It sounds primitive, and it was. But, primitive or not, it is quite accurate when done correctly. The tools are basic, work 24 hours a day, and don't require electricity. All you need is a clear sky – something that is almost guaranteed when you are flying at 35,000 feet. With an accurate watch (my personal standard required that my watch be set to within 12 seconds of the official time maintained by the Greenwich Observatory in England) and a quality sextant, you can fix your position within about three miles. That is more than enough accuracy when trying to find even a speck of an island. But it takes practice. So I practiced.

Vast or not, you might be surprised to learn how many tiny islands, most uninhabited, are sprinkled across the Pacific Ocean. I flew to a lot of them. Some were less than one hundred miles from Guam. Some were more than 1,000 miles away: Truk, Ponape, Yap, Palau (the setting for the TV series *Survivor* in 2005,) Iwo Jima, Tinian (from where the *Enola Gay* launched on its way to Hiroshima in 1945,) Saipan, Wake, Midway, Anatahan, Sarigan. I'd find our way to an island, where we would often descend from 35,000 feet down to the water to fly around like a sight-seeing tour. Then we'd climb back up to

cruising altitude and I'd guide us back to Guam – all under the eyes of an experienced instructor navigator.

Each island was different. Some were little more than a speck of a volcanic peak poking up above the waves. Others were larger. Some of the inhabited islands had airports, but many did not, relying on boats for all of their contact with the rest of the world. All were quite beautiful, often with coral reefs off shore, ringed by sparkling aqua-blue water and white sandy beaches (except Iwo Jima, which had black volcanic sand,) and covered with thick green jungle.

In addition to flying to and from the surrounding islands, I practiced traversing the main routes from Guam to Japan and the Philippines – the squadron's two main deployment sites. On January 16, 1973, I successfully completed my check-ride and was declared transpac qualified.

On November 22, Charlie got back from his first deployment just in time for us to be invited for Thanksgiving dinner with our squadron sponsors, the Newmans. Most importantly, we were assigned housing on the grounds of the Naval Hospital in a home directly across the street from the Newmans. Now we had neighbors whom we knew! We were initially disappointed because our house was not located on the NAS where most of the other squadron families lived. But the disappointment faded when we saw the home we had been assigned. It was on a huge corner lot with a playground right in our back yard. Later we realized that the hospital compound was much quieter than the NAS because airplanes did not constantly fly overhead.

After almost seven long weeks living out of our suitcase in the tiny one-room accommodations of the Cliff Hotel, we moved into our house at 212 Crandall Road. As part of the

move-in, we paid about $100 to the former tenant for three already-installed window-unit air conditioners and a lawn mower (which we would proceed to sell for the same price to the tenants who replaced us when we left Guam 30 months later.) Next stop was the Navy Exchange, where we bought our first washer/dryer. These appliances would serve us well for more than 20 years, not being replaced until long after we had moved to Reston.

As with so many places in our early life together, much has changed in Guam since 1972. The open field across the street from our house is now the site of DodEA Guam High School – Part of the Department of Defense Education Activity. Various internet satellite photographs show that our house still exists. But it appears to have been significantly remodeled to include a car port or garage, which we did not have.

Also, our household goods shipment arrived. Finally, we'd have our clothes, dishes, and everything else. We enjoyed opening our wedding gifts for the second time and using them for the first time. We set some of the less desirable gifts aside and later sold them at a local weekend flea market. We went to the furniture warehouse at the naval station to see if we could exchange some of our home's less attractive Navy-provided furnishings for others. Not as entertaining as shopping for new furniture, perhaps. But everything was free and it was lots of fun. All the homes were furnished with essentially identical chairs, tables, etc. But we found some new cushion covers for our living room furniture that made our living room look unique among our new friends.

For company, Kathy stayed in touch with some of the wives whose husbands also were deployed. One evening, as we were entertaining some friends, one of them, Lassie Jordan, asked to see our nursery. We had bought a crib and had

minimal essentials. But Lassie wasn't satisfied. She planned a squadron-wide baby shower for Kathy at her house where Kathy was delighted to receive just about every baby item she could have imagined.

Another day, just before Christmas, news spread that Bob Hope was to put on a show at Andersen AFB. This was a big deal. For years, we had watched video-taped versions of his variety shows on TV. A popular movie star and stand-up comic, Hope's biggest claim to fame were the comedy performances he would produce for servicemen and servicewomen stationed overseas during holidays. Such shows are common now, but in the 1960s and '70s, he was the only one doing them. He would routinely go to the most obscure and out-of-the-way places to bring some joy into the lives of troops far away from home. He routinely performed in war zones, all over the world, bringing as many famous movie stars – especially young female stars – with him as he could. They would sing, dance, and tell jokes, always especially tailored to include local humor unique to the location of the show. The audiences loved it.

Now, he was on his way to Vietnam for his annual Christmas tour for the troops. During a stopover in Guam, he decided to put on a show. Kathy and I made the short drive to see it. All of his shows were outdoor events, usually in large fields big enough to accommodate the huge crowds that always came to see him. As expected, this one was mobbed. Thousands of people crowded the venue and climbed up trees, light poles, and onto building roofs – anything and everything – in order to gain a view of the stage. He would pull people randomly out of the audience to come on stage for their 30-seconds of fame. It was a very enjoyable and memorable show.

Shortly after that, the grape vine then announced that Christmas trees had arrived in Guam. We rushed out to get our

tree. Guam had no pine trees of any variety or any indigenous tree that looked even remotely like pine.

Interestingly, lacking pine trees, mahogany served as the 'junk' wood of the Pacific. Even the cheapest ply-wood on Guam was made of mahogany. In fact, pine ply-wood, common in the US, was more expensive than mahogany.

All Christmas trees on the island had to be imported. Our excitement was stifled when we encountered what we would learn was the norm on Guam – many things fared poorly during

First Christmas tree – Guam 1972

the month-long journey to the island in freight ships. The trees, all cut more than a month earlier, had long since exceeded their intended life span as decorations. Also, the trees that were sent

to Guam were the sparsest, most anemic trees either of us had ever seen. But we snapped one up anyway.

Next we bounced all over the island looking for ornaments and lights for the tree. Kathy was disappointed that we found only plastic ornaments. Glass ornaments like those we'd both had as children simply weren't available – ironic since, on Guam, we were much closer to the made-in-China source of such ornaments than anywhere in the US mainland. Then we went home and immediately put up and decorated our first Christmas tree. It was the most pathetic excuse for a Christmas tree we had ever seen. At the same time, it was the most beautiful and memorable tree we could have imagined for our first Christmas together.

Family

Kathy was due to deliver soon. So, during December and January, the squadron took Charlie off the deployment schedule in order to assure that he would be present for the impending birth. He wasn't idle though. During those two months, he flew more than 20 times as the squadron pushed him through his training schedule. He had just completed the second of two flights on January 20, 1973 when Kathy called the squadron to request that he return home because her water had broken. He returned home immediately.

We had been expecting this for some days and were as ready as a couple could be for one of the most life-changing events they would experience. We quickly made the two-minute, half-mile drive from our house to the hospital and checked in. But the delivery was not progressing. In the early 70s, it was not yet common practice for family, even the father, to be in the room during delivery. Nor was it common for husbands to attend prenatal classes in which he would learn how to assist the wife with breathing and timing of contractions. So Charlie spent most of his time in the waiting room and stared at the walls. Around midnight, the staff informed us that the birth did not appear to be imminent. So, while Kathy tried to rest, Charlie went back to the house. He could return within minutes and would be by the phone where he could be notified more readily than if he had gone to the hospital cafeteria to eat or get coffee.

Early in the morning of January 21, a nurse called Charlie at home. Kathy had still not progressed, but she was lonely and

was asking for him. When he returned, he found Kathy so tired from having slept little that they simply sat together in silence. Still, there was little progression. Charlie spent a few more hours walking up and down the halls of the ward, visiting Kathy briefly every 30 minutes or so.

Lest Charlie's return home the previous evening seem callous or even irresponsible, even the staff were not convinced anything was close at hand. By late morning, as the 18-hour mark approached, Kathy was still not ready to deliver. The Obstetrician finally decided that, although she was leaking, her water had NOT fully broken. So he intervened and used an instrument to complete the process. Even so, and since he too lived only two minutes away, he went home for an early lunch.

No sooner had he left, than things accelerated rapidly. Both he and Charlie were immediately called. He returned and they both joined Kathy who had been taken in to the delivery room. Kathy was so tired after nearly 24 hours of labor and with almost no sleep that she quickly agreed to a 'saddle block' – a spinal injection to anesthetize her below the waist. Now she could follow instructions and assist with the delivery. Charlie, with some bewilderment and no preparation for this, did little beyond hold her hand and offer occasional encouragement. The rest happened quickly and, at 10:30 am on January 21, Terri was born. She was healthy and made a lot of noise. We were thrilled.

After a brief moment for each of us to hold her, Terri was taken into the nursery and Kathy was moved into her room. There were few single rooms in those days and she was placed with a roommate who also had just delivered. After a short visit, Kathy closed her eyes for some much deserved rest. Charlie went home to get the nursery ready and to announce the good news to our families. His phone calls home were two of only a

handful of phone calls to our families during our entire 30 month stay on Guam.

In a surprise, his parents told him that his sister Mary had just gone to the hospital in labor and was in the process of delivering her first daughter, Laurie. Laurie and Terri were born a few hours apart on the same day.

Here's an interesting quirk: Guam's calls itself the place 'where America's day begins.' And, because of where it is located with respect to the International Date Line, that is true. So, while Terri is actually several hours older than Laurie, the 9-hour time difference between Washington, DC and Guam, combined with the International Date Line, allow the times on their birth certificates to make it appear that Laurie was born first.

Terri – Spring 1973

Kathy and Terri came home the next day. A neighbor had done Kathy a ‘favor’ by washing all of the new baby clothes (ostensibly to rid them of supposedly dangerous chemicals used in the manufacturing process.) But she failed to iron any of them. Kathy was frustrated and upset that she had to dress her beautiful new daughter in wrinkled clothes. Despite the clothes fiasco, we were eager to begin our life as a family.

ROUTINE

Soon, we settled into what would be our routine for the next 2-plus years: Periodic deployments alternating with time together on the island. During our 30 months, Charlie completed 24 deployment, ranging from a single night to over 70 days away (the average was 14 days.) Kathy, of course, remained on Guam the whole time. In all, Charlie was away for 335 days – almost 40% of the time. While Charlie was away, Kathy was busy with Terri.

> *While 40% and 335 days sounds like a lot, it turns out to be rather mild in comparison to the separations that most navy families endure. A typical Navy ship deploys for 6-9 months at a time, during which most crew member have no opportunity to return home to visit their families. Deployment rates for all armed services during the period from 2001 through 2020 have been even higher. Charlie believes that we were fortunate.*

Now, let us describe Guam as it was in the early 1970s.

Charlie claims that Guam had a distinct smell. Not a bad smell. Just distinct. He claims to have noticed it when we first stepped off the plane upon our arrival and again every time he returned from a deployment. If he were blindfolded and flown around the Pacific to any random country, he insists that he could identify Guam simply by sniffing the air when he deplaned.

Guam then had (and almost certainly still has) a reputation for operating ‘in *Guam time*.’ That was a euphemism meaning that EVERYTHING was delayed. An announced start

time for a public event was notional at best. The rationale was simply ‘what’s your hurry?’ So what if a scheduled meeting is a bit late? We’re all friends here. Relax. Enjoy life. Don’t let the clock rule your life. It sounds pleasant. More often, it was just annoying.

There was no satellite communication, no Internet, no cable. Even broadcast TV was delayed. All network TV was recorded on video tape in San Francisco and flown to Guam. Because of the International Date Line, it was shown two days late. We watched *60 Minutes* on Tuesday evening, not on Sunday.

Everything on Guam was bare-bones. Despite being a tiny island (30 miles by 5 miles) TV was broadcast not from a single tower on the mountain top at the center of the island, but on half a dozen low power transmitters, each covering a fraction of the island with spotty coverage. Moreover, TV was available only from about 3pm to 11pm, starting with the *Rosary Hour* which was broadcast live from the Cathedral. One or two recorded soap operas came next followed by the evening news. Then a hand full of the popular prime time shows. Finally an evening prayer, and the station signed off for the night. Not even a test pattern would be broadcast until the next afternoon at 2:45 pm.

The recording contracts apparently required network programming to be broadcast without editing. As a result, even such illogical advertisements as snow tires were often seen in Guam during winter months. Local commercials, however, were spliced in to replace the local San Francisco commercials. The amateurish production values of the locally-produced commercials was often a sight to behold, many appearing to have been produced in someone’s car port. Memory fails us both now, and we cannot remember if there was more than a single network to watch.

Fresh food was sporadic. Most milk from public grocery stores was canned, although fresh milk was available one or two days each week from the commissary. Likewise, fresh meat was hard to keep in supply. Beer was pasteurized to prevent it getting stale during the months long trip to the island in the holds of freighters. Everyone stayed attuned to the grape vine to learn when new shipments arrived, and the commissary was crowded on those days. Other household goods were always in short supply. For example, it was especially hard to find nice area rugs. If the locals used rugs at all, they were either bamboo mats or left over remnants of indoor/outdoor carpet.

Though our memory is that there was one (!) movie theater on the island, we don't remember attending even a single movie during our time on the island. For entertainment, we often would pack a picnic lunch and drive around the island. The 15-mile winding drive around the southern half of the island took two hours if you stopped for sight-seeing along the way. In addition to the huge beaches along 'hotel row' in downtown Agana, there were several gorgeous beaches on the various Navy and Air Force facilities. The sand was very fine and brilliant white, the result of its being produced from coral.

Beaches had no surf to speak of because most of the island is protected by a ring of coral that rises close to the surface about 100 yards off shore. That was perfect for Terri, who seemed to very much enjoy crawling around in the shallow pools at the water line. The lack of breaking surf made the beaches great for snorkeling, with beautiful coral and all kinds of fish everywhere. But the coral made them less enjoyable for wading and swimming. A few beaches had small sections where the coral had been bull-dozed out of the way to provide small areas free of the jagged coral where people could swim.

Occasionally, we would drop Terri off at the base nursery/ day-care and spend a morning or afternoon ‘boonie stomping’ through the hills where there were nature trails.

The boonies – Guam’s undeveloped areas – were a rather formidable jungle. Seven Japanese soldiers had gone into hiding when Guam was captured by US forces during WW-II. They did not know the war had ended and, fearing capture, had hidden themselves in small caves and had lived off the land. One-by-one, they died of illness or injury. They were ***very*** *good at hiding. The final soldier was not ‘discovered’ by locals until January of 1972* ***after 28 YEARS!*** *He went back to Japan as a hero, finally passing away in 1997.*

An interesting fact is that, in 1972, Guam was unique among almost all Pacific islands in that it had no snakes. Sadly, that claim to fame was lost at the end of the Vietnam war. So many airplanes were arriving in Guam in such high numbers and so rapidly that fumigation and cargo inspections explicitly designed to prevent importation of non-native species were ignored. As a result, some snakes, hidden in hastily-loaded cargo, managed to escape into the jungle. With no native predators on the island and an abundance of bird nests to raid for food, the snake population exploded. The result has been an almost total elimination of Guam’s native bird population. Several attempts have been made over the years to control or eliminate the snakes and restore the birds, but none have been entirely successful.

Earlier, we mentioned limited phone contact with our families at home. Once or twice, though, we did manage to call home with the help of ham radio. The details of ham calls remain sketchy, but here’s how it worked. We would make a local phone call from our house to a ham radio operator in Guam who would make radio contact with a ham radio operator

in Maryland. The Maryland radio operator would make a local phone call to whichever family we wanted to call. We would then be 'patched through' and could talk with our families for as long as we wanted at no cost. Since there was no way to know in advance if the Guam radio operator could successfully establish contact with another operator in Maryland within the local calling area of our parents, such calls were somewhat sporadic.

Even when contact was made, the calls were rather stilted, and not just because the two radio operators were hearing everything that was being said. Just like in an airplane, only one party could talk at a time. If both tried to transmit at the same time, neither would hear the other. When talking, as you finished a sentence, you had to say 'over' to signal the radio operators that one should stop transmitting and the other could start. A conversation might go like this:

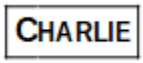
"Hi mom and dad, how are you? Over."

"We're fine honey. How are you? Over."

"We're fine too. It's great to hear your voices. Over."

"We agree. What a nice surprise. Over."

And so forth – not exactly conductive to a relaxed conversation, and certainly not a time to share intimate details. But hearing the voices of our family always boosted our spirits. So when an opportunity to participate in a ham radio call arrived, we took it.



War's End

In January 1973 the Vietnam war was drawing to a close. Fighting and bombing had continued at a high tempo through December of 1972 when numerous flights (cells) of three bomb-laden B-52 bombers (part of what was termed the *Operation Arc*

Light) could be seen leaving Guam every evening (so as to arrive in Vietnam in the middle of the night) and returning early the next morning. Sometimes, a returning cell comprised only two aircraft signifying that one aircraft had diverted to Thailand or the Philippines to land or, worse, had been shot down. Tractors pulling trains of small trailers (much like the baggage trains which drive around airports taking luggage to and from airplanes) were not an uncommon sight in the streets of downtown Agana. These trains, however, were loaded with bombs being transported from the naval port at the south end of the island to the Air Force base at the north end. These trains were a strange sight to watch.

After years of peace talks, a cease-fire finally was agreed on January 15, 1973. A peace treaty was signed on January 27. Four days later, on January 31, a mere 10 days after Terri arrived, I was sent back to Vietnam as a qualified 1st Navigator. Now, I would be on my own and fully responsible for making sure we were flying where we were supposed to fly and, equally important, NOT flying where we were NOT supposed to fly.

I flew nine missions over the Gulf of Tonkin during the first two weeks of February. Even though a cease fire was in effect, missions were considered to be combat missions up until the end of February, when VQ-1 disestablished its permanent detachment in Vietnam. Fighting had mostly stopped although, as expected, some minor cease fire violations did occur.

The missions were mostly routine with very little excitement, which was fine by me. I'd tell anyone who asked that most flights were not memorable – perhaps even mundane. But as I write this, I'm struck by the number of events I recall here. Some events may not have been especially dramatic, but they were still interesting. For example…

Beware the Blackbird

One night, I noticed what appeared to be a bright star in the sky above us. It seemed especially bright but was more orange or yellow than the other stars. A planet, I concluded. Then I noticed that the star was moving. OK. Not a planet. A satellite. But wait! Satellites aren't that bright, and they are usually white. And this one was moving fast, toward us. Ominously, it was coming from mainland China. That was worrisome. China was not as aggressive as North Korea, but still not to be provoked. We were flying at 33,000 feet and this thing, whatever it was, was well **above** us, not normal for an airplane.

I checked with the crew in the back of our aircraft. They hadn't heard anyone or seen any unusual signals coming from China. I checked with *Red Crown*, the call sign of the Navy cruiser that was acting as the air traffic controller for all military flying over the Gulf of Tonkin. Mystery solved. Red Crown reported it to be a Blackbird enroute to Thailand. A Blackbird was an SR-71, a super-fast (mach 3-plus, 1,700 mph) spy plane that flew from Okinawa to Thailand collecting data (much like VQ-1 did) as it flew near mainland China and Vietnam. Its orange/yellow color was the result of flying so fast that it heated up and literally glowed red hot.

Hawaii Calling

On another night, as we flew our mission, I heard a call on the radio from an air controller referring to himself as 'Hickam Tower.' That was strange. Hickam Air Force base is in Hawaii. We were flying off the coast of Vietnam – more than 6,000 miles away. They were using a radio frequency that typically carries fewer than 250 miles. For several minutes, we heard the tower providing directions to an aircraft that had declared an emergency. I never heard any responses, though it was clear the other party was responding. And, because the broadcast

was on an emergency channel, we did not attempt to call him ourselves. But the fact that we were hearing the broadcast at all over such a distance was remarkable. I had heard stories of such so-called ‘ducting’ before – where the ionosphere unpredictably carries a radio signal over long distances. But I had never experienced it myself before, and never did again.

Carrier Operations

With the cease fire, things were winding down. In accordance with the peace agreement, US forces were preparing to leave Vietnam, and that included VQ-1. Since we were no longer sending any aircraft into the north, there was significantly less activity and, as a result, far less intelligence to gather. So the pace of our missions could be reduced. That’s not to say they would stop. In fact, missions in the Tonkin Gulf would continue for almost another full year. In future though, rather than operating from Da Nang airfield, we would use aircraft carriers that would remain in the area or simply fly out of the Philippines.

Before discussing those missions, let me describe flight operations at sea. Flight operations on an aircraft carrier are a marvel to behold. That such complex and potentially dangerous operations can safely be carried out repeatedly, day after day, with so many people, airplanes, and machines packed into the relatively small space of a flight deck is nothing short of remarkable.

During the war in Vietnam, there were typically two aircraft carriers operating simultaneously in an approximate 50 mile square in the Gulf of Tonkin – an area referred to as ‘Yankee Station.’ On each carrier, groups of about 25 aircraft were loaded with bombs and flew in small flights of two or more to conduct what were called ‘alpha strikes’ against targets in North Vietnam. With two carriers operating there, each launching their own alpha strikes, it was possible for as many as

100 aircraft to be airborne in the vicinity of Yankee Station at any time, day or night.

Coordinating all of these aircraft was complicated, all the more so because it was desirable to do all of this flying without chatter on the radio in order to maintain the element of surprise. Imagine that for a moment: Dozens of high-performance aircraft, continuously coming and going, launching and recovering, at all hours of the day and night, almost without a single word being said over the radio.

Each carrier was assigned airspace for its aircraft. Different aircraft were assigned specific altitudes they were to use. Standard departure and return corridors were defined. Each pilot knew when the aircraft that launched before and after him were to be at certain places. That so much could happen routinely, day-in and day-out, without incident is testament to the organization and discipline of everyone involved.

To be sure, some radio communication was needed, but it was kept to a minimum, often consisting of little more than a couple of clicks of the microphone. One aircraft would launch every 45-to-60 seconds from one of each of a carriers' three or four catapults. They would fly silently to prearranged rendezvous points and form into groups. At their assigned time, these groups would proceed to execute their assigned missions.

Similarly, aircraft arriving for recovery would proceed to a specific prearranged arrival point and begin orbiting in a racetrack pattern. Each squadron was assigned a different altitude where they would orbit. Squadrons would be stacked one above the other, each separated by 2,000 feet. When the ship had completed its launch and was ready for recovery, a simple message was transmitted.

"Schoolboy, Charlie now."

Schoolboy was a carrier's call-sign (in this case, USS Midway.) '*Charlie now*' meant it was time for the first in line to begin landing. One-by-one, the flights would descend, falling into single-file. If all went well, one aircraft would trap aboard every 45-to-60 seconds until all were recovered.

Aircraft would be re-positioned on deck, rearmed, and refueled, and made ready for the next launch. Then the entire cycle would be repeated, multiple times each day. The pace was demanding and often seemed relentless. These launch and recovery cycles (so-called 'cyclic ops') could continue for days at a time. By the time a carrier had completed several weeks on Yankee Station, its crews were exhausted and its equipment worn out. One carrier would depart Yankee Station and return to Subic Bay in the Philippines for rest and repairs, to be replaced by another carrier.

Carrier Deployment

For a pilots' qualification to remain 'current,' the Navy (at that time) required four arrested landings within the most recent six month period. Thus, our attention turned to FCLP and CQ to allow all of our pilots to refresh their qualifications. For several days we flew from Da Nang to USS Midway in the Gulf of Tonkin completing our car-quals. Once qualified, we could leave Vietnam and begin carrier operations. My last flight out of Da Nang was on February 16, 1973 as we packed up our maintenance equipment and flew to VQ-1's shore-based detachment at NAS Cubi Point in the Philippines.

Even after we were qualified for shipboard operations, we discovered that the ship's company (a navy term for personnel permanently assigned to a ship) didn't like temporary crew like VQ-1. Here's why. Even with its wings folded, the A-3 requires a huge amount of deck space. Two A-4s can be parked in the space consumed by a single A-3. The deck controllers really did not want our airplanes aboard their ships. So, rather than

stay aboard, we would stage our missions from bases in the Philippines and only land aboard ship for short periods. That was fine by us. Our flights were longer, but we got to sleep in comfortable (and quiet!) beds in the BOQ, eat better food, and spend time in the officers club in the evenings.

Carrier qualification aboard USS Kitty Hawk – 1974

Regarding the above comment about the shore-based BOQ being quiet: Navy ships are surprisingly noisy. Pumps, generators, and other machinery produce a remarkable amount of noise at all hours. Aircraft carriers raise the noise to a whole new level. To the background noise present on any ship, add chains clanking as aircraft are tied down or untied from the flight deck, numerous jet and propeller engines, and the periodic launches and recoveries. Keep in mind that the ceiling of the living quarters for most junior officers is the flight deck itself. If the movement of aircraft taxiing around on your ceiling isn't enough, imagine the sound of a 20 ton aircraft landing directly above your bunk, punctuated by the tail hook slamming into the deck at 120 mph followed by the arresting engines slowing it to a stop in two or three seconds. Or the sound of a launch, including

the explosive lighting of afterburners followed by the catapult shuttle crashing into its water-brake at the end of each launch stroke (similar to the noise of a truck hitting a brick wall when you are in the room on the other side of that wall.) All of that happens inches away from you and is repeated every 45-to-60 seconds for an hour or more at a time. Despite that, it is remarkable how a body adapts and is able to sleep through the din.

The nearly two hour flight from NAS Cubi Point to the Gulf of Tonkin reduced our on-station time. To adjust, we would fly to the Gulf to conduct a two and a half hour mission. Then we would either land on a carrier, refuel, and launch again, or we would conduct air-to-air refueling (casually referred to as rendezvousing with Texaco.) Once refueled, we'd fly another two and a half hour mission before returning to Cubi Point. An interesting incident happened during this period.

Unsafe Landing Gear

Next to VQ-1 on the flight line at NAS Cubi Point was a squadron tasked with providing supply services to the carriers. They would carry important cargo to and from the carriers on a daily basis. Our schedules were such that their aircraft would depart from Cubi Point every day about 30 minutes before we did. Since our A-3s were much faster than their propeller-driven aircraft we would reach the Gulf of Tonkin and complete our first mission before they arrived. Typically, we would land on a carrier and move out of the way to allow them to land. We'd both refuel and launch again an hour later. They would head back to Cubi. We would fly our second mission and follow them back. As with the outbound journey, since we were faster, we would almost always arrive back at Cubi just ahead of them.

One day, one of their aircraft reported 'unsafe landing gear' as it arrived at the carrier. Its right main wheel indicated that it was NOT fully down-and-locked. Emergency procedures

required them to activate a compressed-air system to force the landing gear to lock properly into position. The system worked as designed, and they landed on the carrier without incident. But the compressed air contaminated their hydraulic system. They were not allowed to fly again before completing a painstaking process to purge the air and retest the hydraulic system. So the plane and its crew were stuck on the ship overnight, requiring yet another aircraft to perform the supply run the next day.

The planes' hydraulic system was purged and, with the aircraft lifted on jacks, the landing gear was cycled up and down repeatedly. Testing failed to reproduce the problem. The landing gear always locked properly. The aircraft returned to Cubi Point.

Two days later, the entire scenario repeated itself. Two days after that, it began yet again. On this day, the A-3 I was in landed and taxied out of the way awaiting the cargo plane's arrest. As we sat on the flight deck, engines running, waiting for their landing, we heard the now-familiar radio reports that the landing gear warning light was reporting an unsafe condition. The flight crew cycled the landing gear up and down half a dozen times with no improvement. Another aircraft joined in formation with them to visually inspect the wheels and reported that everything 'appeared' to be normal. Hoping to avoid another overnight stay on the ship, and another long night for the maintenance technicians who would have to repeat the repairs for a third time, the pilot decided that the warning light was probably erroneous and that the landing gear was, in fact, properly locked down. He elected to NOT complete the emergency check-list and land with the warning light still lit. After consultation, the ship agreed to allow it. We sat on the flight deck, off to the side of the landing area, facing the aft end of the ship and watched as the cargo aircraft landed.

Today, almost 50 years later, what happened next is as vivid in my memory as it was that day. They touched down normally. Almost immediately, however, the right main landing gear collapsed and the plane veered to the right, DIRECTLY TOWARD US! We were helpless. There was nowhere for us to go. Engines running and not tied down, we could not evacuate our airplane either. I watched as the event seemed to play out in slow motion, just as you might see in a movie. The landing gear collapsed, the right wing dropped and scraped the deck. The propeller blades hit the deck throwing a shower of sparks. I watched each blade bend as the propeller spun to a stop. The right engine was wrenched up, partially tearing off of the wing. A huge ball of flame erupted from the gaps in the wing and, just as quickly, disappeared. The aircraft continued to swerve toward us. I immediately checked to confirm that its hook had, indeed, caught an arresting cable and it was slowing.

To my great relief, the arresting gear did its job and stopped the aircraft. I started breathing again. My pilot and I watched with interest as its flight crew shut down the left engine. Fire fighting vehicles swarmed the plane as its cargo doors and escape hatches popped open and its crew began to scramble out. The co-pilot climbed out of his hatch on the right side, slid down an escape rope, and ran off. The pilot began the same process from his left side seat, but stopped immediately as he realized he was about to jump out right into the still spinning propeller on his side. He quickly climbed back inside and scrambled to make his escape through the co-pilot's hatch on the right side of the cockpit. Fire was extinguished. Our A-3 was tied down, we shut down our engines, and quickly evacuated our aircraft. Less than a minute had elapsed.

We spent the next hour talking among ourselves as the debris was cleaned up and the damaged plane was moved. As our aircraft was refueled, I went to the mess hall and collected

boxed lunches for all of our crew. Eventually, we launched to complete a truncated mission before completing our return flight to Cubi Point. The boxed lunch, mission, and return flight would provide some relatively quiet time for us to compose ourselves and decompress.

On our return, my pilot and I thought it might be helpful if we visited the squadron next door to provide an eye-witness report to them about what had transpired. Since direct radio contact from the ship to the squadron was not possible, we figured that they would welcome any details to help them respond to the events. As it happened, the squadron was not yet aware that anything was amiss. In fact, when we told them their aircraft had crashed, they thought we were joking. When we pointed out that their aircraft should have returned by now, their expressions quickly changed as the realization slowly began to sink in. Our visit turned out to be more than slightly useful. They now knew, at least, that no one had been hurt. Also, they now had a summary of the events leading up to the crash. They could prepare a response that was totally appropriate to the situation. They thanked us for the information we were able to provide. My pilot and I adjourned to the officers club to celebrate our good fortune.

The Nickel Light

That incident recalled the fire warning I had experienced during one of my first flights in the A-3 almost a year earlier. Sometimes a problem occurs repeatedly and the maintenance team may not be able to determine its cause. Sometimes, as in this case, flight crews think they are smarter than the engineers who designed the airplanes and wrote the checklists. But, as the flight crew, you never know if a warning is real or if it is the result of faulty wiring or a malfunctioning sensor. In such cases, the best response, unless you are in a combat situation, is to behave as if it’s real and follow the complete emergency

procedure check-list EVERY time – even if you believe the warning is mistaken. The crew in the case of the cargo plane got lucky that no one was hurt. The outcome could have been far worse.

As the above story illustrates, after flying for years, flight crews sometimes become overly comfortable with how much control they have when problems occur. An example with the A-3 might be useful. As noted in the section on The A-3 Skywarrior on page 67, the A-3 is a very safe aircraft. Almost all of its systems were redundant. There were two separate hydraulic pumps, with an additional backup system of compressed air to allow the A-3 to remain flyable even in the face of a complete hydraulic failure. Much like you can still steer your car if the power steering fails, its flight controls provided fully-mechanical flight control even if the hydraulic system failed, albeit requiring more pilot strength.

One pilot I flew with compared the A-3's hydraulic failure warning light to the warning light on vending machines of the period which lit up when the machine was out of change. The machine would still work, but simply could not provide change because it was out of nickels. He said the hydraulic failure warning light was almost irrelevant, because even in the event of a failure, everything still worked. He referred to the hydraulic failure light as the 'nickel light' and scoffed that a hydraulic failure in the A-3 was almost irrelevant. While true, in theory, a hydraulic failure was still dangerous. The checklists specified that it was to be treated as an emergency.

Some checklist items are tricky. The anti-skid braking system of the A-3 was a relatively new technology in 1955 when the aircraft was designed. As with systems now common in cars, it allowed a pilot to jam on the brakes without worrying that he would lock the wheels, skid, and blow a tire. But it was known to be undependable at very low speeds, sometimes

requiring pumping the brakes to stop the plane. As a result, the landing checklist directed the crew to disable the anti-skid system when landing aboard an aircraft carrier where a brake failure could be exceptionally dangerous. The arresting gear would stop the airplane during landing. After that, speeds were so low when taxiing on the flight deck that anti-skid simply wasn't needed aboard ship. The landing checklist directed you to disable the anti-skid when landing aboard ship, but enable it when landing at an airfield.

The problem is that, after flying aboard ship for weeks, and routinely disabling the anti-skid every time you executed the landing checklist, the process of disabling it became a habit. More than once, when flying ashore for the first time after weeks at sea, a crew would reflexively disable it. When the pilot subsequently jammed on the brakes to slow the plane on the runway, the wheels would lock and one or more tires would blow out.

My point here is that following check-lists takes great discipline. The landing gear accident above shows dramatically that it's not wise to second-guess the check-list, even when you *think* you know better. It's best to follow the checklist every time. At the time, though, I *still* hadn't fully internalized that rule, as future story will make clear.

Just as I had been left alone on a strange island only 10 days after we had arrived, Charlie left again a mere 10 days after Terri was born. I had only just gotten to the point where I felt I had my feet on the ground, when I had a whole new world to adapt to. When she wasn't crying, Terri was a joy. But she was a colicky baby and cried A LOT during her early months. It wasn't her fault. But it made my days hard. I tried to fill my days by visiting with the other wives. But most of the younger

wives were childless and even those with young children didn't enjoy a crying baby.

So I busied myself with other things. As when he was still in Pensacola, I wrote letters to Charlie. Now I wrote letters home too. Letters went by air to the west coast and, while today, all cross-country mail is transported by air, in the 1970s most mail was carried by truck from coast-to-coast. So a standard letter took almost 10 days to reach home. I usually splurged and paid extra to send letters by 'air mail' which reduced the journey to only about five days. Still, conversation by letter usually took two to three weeks for a response. Mail delivery to Charlie was even more sporadic because mail service in Vietnam or to and from a ship at sea was less than speedy. But writing letters was a wonderful release and receiving them made checking the mailbox a surprisingly enjoyable experience.

My family now included Charlie's and I had many more birthdays to remember. The ready availability of novel gifts from the Orient made shopping even more fun. So shopping continued as a way to fill my days. As a bonus, short trips in the car often calmed and distracted Terri with interesting sights and sounds. The squadron wives introduced me to the 'Wives Club Bazaar' which was a unique shop. Occupying a Quonset hut in some obscure corner of the Air Station, it was filled with all sorts of things from countries all over the Pacific. It featured furniture from Thailand, Taiwan, and elsewhere and included porcelain, fine china and dishware from China and Japan, linens, glassware, fine art, and knick-knacks galore. Since the Wives Club was able to ship even large items to Guam for free by finding space on the never-ending stream of Navy and Air Force aircraft criss-crossing the Pacific, the prices were unbelievable. I loved picking up unique gifts for family members and it was hard to resist buying things to decorate our rather plain house.

Even just browsing was a fun experience. I loved being able to show Charlie all the nice things I had bought each time he returned.

After a couple of weeks Charlie returned and we were together again. Since we knew he could be sent away again at any time, we spent little time sitting at home. We were always on the move. Almost every week, we'd drive around the island. There were only a few roads, and the drives were rarely more than an hour or two. The scenery was spectacular and although two and a half years later we would we hardly give it a second glance, in early 1973 it was still new and compelling to us. The ring road around the island often skirted the edges of the tall cliffs along the north coast providing panoramic views of the ocean and the coastline. The beaches along the south coast were equally gorgeous. Except for a single McDonald's in Agana, there were few fast-food places on the island. There were almost no local restaurants. The locals simply didn't go out to eat. So, as we had done when we lived in Oakland, we'd pack a picnic lunch.

There were a surprising number of sights to see: Inarajan where lava from an ancient volcano flowed into the coral reefs at the ocean to form natural wading pools, Talofofo Falls near the jungle in which the Japanese soldiers had hidden for many years, Tamuning and Tumon Beaches in the heart of Agana, Two-Lovers Point – a spectacular cliff overlooking Tamuning, Ritidian Point Beach – an almost private beach near the Navy Communications Station, Tarague Beach – an equally private beach on the Air Force base, South Pacific Memorial Peace Park, built by the Japanese to remember both their soldiers and those of the US who were lost in WW-II, the monument at Umatac Bay where Magellan anchored his ships when he first stumbled onto the island in 1521 (shortly before he was killed

after he continued on to the Philippines later that year,) the Cathedral, and the nearby Spanish Fort in Agana.

Terri and Kathy at Tarague beach – August 1973

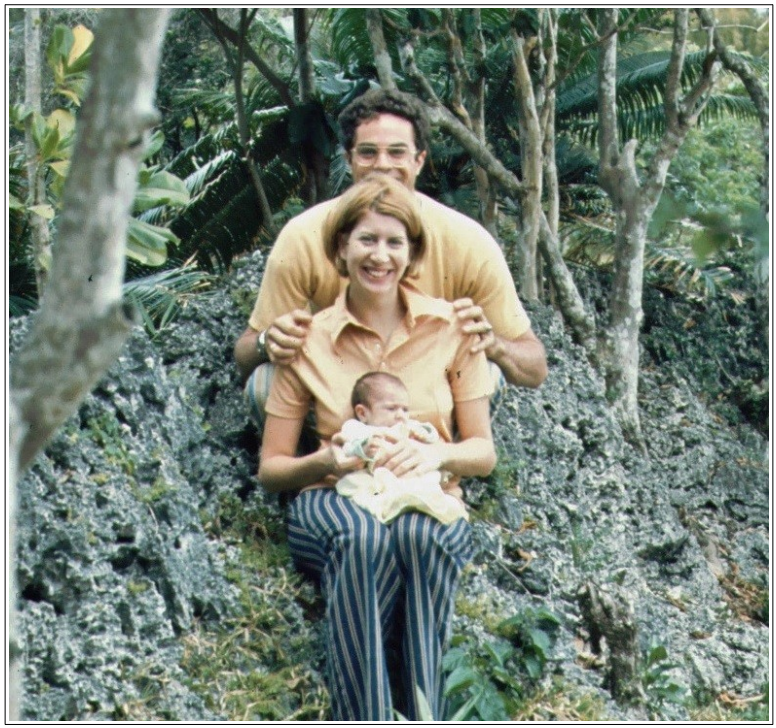
All of these places looked exactly as you might picture scenes on a remote tropical island. But the locals didn't see anything special about most of them. They were just local beaches. Tourism was not yet a 'thing' on Guam in the 1970s. All of these places were free of charge and, even on weekends, most of them were delightfully deserted. Often we found ourselves the only people visiting any particular place. There were rarely 'no trespassing' or 'keep off' signs and few fences to prevent full access. Some places were quite dangerous as only a few cliff faces had more than token safety railings. We explored all of these places with almost no restrictions.

Cliff Climbing

Two-Lovers Point is a good example. A short 3-mile drive from the town of Tamuning – Guam's main beach, it was (and still is) one of Guam's more scenic and popular attractions. The sheer cliff, rising nearly 400 feet above the ocean, provides a tremendous view of the city of Tamuning and the coast to the southwest. It was one of the few places that actually had

protective railings to prevent people from falling. Ever the adventurer, Charlie saw it as an opportunity to climb and couldn't let a simple railing stop him.

One day, the three of us drove there and parked in the small lot. Charlie brought the rope and climbing gear he had used while caving before we were married. A short trek through woods took us to a less public cliff edge without railings. Charlie anchored his rope to a tree and proceeded over the edge to



At Two Lovers Point – February 1973

rappel down. Terri and I didn't want to leave the spot where his rope was anchored for fear that someone might come along and untie it. There was little we could do, so we sat in the shade of a palm tree and ate lunch. Charlie would only be gone a few minutes. He had spent a lot of time on ropes when caving and said he wouldn't do anything risky. He would just rappel down

and climb back up. What could happen? Well, quite a bit, actually.

WARNING: Charlie acknowledges now that climbing alone is remarkably stupid. You should never do it! This adventure turned out well. But it might not have. DON'T DO IT!

In the first place, Charlie didn't know the exact height of the cliff (actually, about 370 feet.) His main rope was 300 feet, and that *looked like* more than enough. But just in case, he carried a smaller 100-foot coil of rope with him. That was fortunate. After an uneventful initial descent, he literally reached the end-of-his-rope while still 70 feet from the ground. The knot he had tied at the end of his rope prevented him from simply rappelling off its end. He found a tree conveniently growing out of the cliff face and anchored his second line to it. By now he could see the beach clearly and made certain the second rope reached all the way to the ground. He switched ropes and made the final descent. Perhaps 10 minutes had elapsed since he had begun his descent. He screamed to Kathy that he had made it safely to the bottom. But she could neither see nor hear him.

After a brief exploration and rest at the bottom, Charlie started the climb back up. This would take perhaps half an hour. The 100-foot climb and the switch to the main rope went quickly. Charlie coiled the second rope, put it in his pack, and began the second stage. With almost 200 feet remaining to climb, he yelled up to Kathy. This time she heard him. He said everything was fine and that he'd be back on top again in a few minutes.

Then Charlie noticed a few bees buzzing around. He swatted them away. Then more buzzing and swatting. They weren't bees. They were much larger – either wasps or hornets. Neither was good. More buzzing and swatting. Then a sting.

This was becoming problematic. Charlie's climbing gear kept him physically attached to his rope. He couldn't fall. But neither could he run away. Nor could he retreat back down the cliff, since different equipment is used to climb up a rope than is used to rappel down a rope, and switching takes minutes even without stinging insects attacking you. In any event, up was really the only viable option. A brief but rather frantic burst of energy put 30 or 40 feet between him and the growing swarm of whatever he had disturbed. Another brief rest, then the climb was finished. Charlie coiled the rope, we packed it all up, and went home.

No such adventure could happen today, either on Guam or in any other public park anywhere else for that matter. But there was no one on Guam in 1973 to tell us not to do it.

Nursery Nonsense

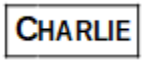
We didn't know any locals, and there were few young children of service members on the island who we felt comfortable baby-sitting Terri. So we had very little social life until she was six months old, when we could finally leave her at the base nursery. One of the first such outings was to one of the periodic squadron hail-and-farewell parties.

We dropped Terri at the nursery, and looked forward to a nice evening at the officers club. All went well until just after dinner when someone came to our table to tell Charlie he had a phone call in the lobby. The nursery was calling. Terri, he was told, would not stop crying (she was still in her crying phase) and was disturbing all the other infants in the nursery. Charlie explained that, yes, that's what she does; she was not sick and there was nothing wrong. She just cries a lot. The nursery insisted that he come and take her home. He was annoyed with the nursery. After all, we were paying them to watch her. She could not have been the first baby to wake the others. But they

insisted. He told Kathy to stay and enjoy her night out with friends while he made the short trip to get Terri.

Of course, as soon as he picked her up and put her in the car, Terri stopped crying. By the time he got back to the party, she was sound asleep. Not wanting to ruin a good thing, he simply buckled her into a seat belt in the back seat and locked the car.

When Charlie walked back into the party without Terri, Kathy was delighted. Apparently, the situation had been resolved and we could stay a bit longer. Charlie was prepared to stay. But when he mentioned that Terri was asleep in the car, Kathy sensibly insisted on leaving immediately. We said our goodbyes, stopping only briefly to chat with a few people on the way out. When we got back to the car, there was Terri, still sound asleep in the back.



From spring through fall of 1973 my deployments alternated: a couple of weeks in the Philippines, a couple of weeks at home, a couple of weeks in Japan, then home again. Each deployment brought new experiences.

Defroster ‘Disaster’

In the Philippines, VQ-1 was still operating with whichever aircraft carriers were stationed in the Gulf of Tonkin or the Philippine Sea. One day, off the coast of Manila, as we were preparing to land aboard, the aircraft ahead of us blew a tire on landing and the flight deck was closed as the crew worked to clear the landing area. We orbited over the ship as we waited, burning fuel all the while. The clearing operation dragged on. There was no tanker aircraft airborne to give us fuel. Eventually, we reached ‘bingo fuel’ – the amount of fuel we had remaining was such that if we could not land on the ship

immediately, then we had only enough to fly straight to NAS Cubi Point without delay. We were directed to bingo.

Having only enough fuel for the 150-mile trip to shore, we had to fly a 'Bingo flight profile' – a specially crafted sequence designed to use the minimum amount of fuel possible: climb immediately to a cruising altitude, fly at the most fuel-efficient airspeed, when arriving at the designated descent point reduce power to idle and glide straight into the airfield.

It's cold at cruising altitude – typically around 30-degrees below zero. But it's hot on the ground in the Philippines – typically 85-degrees – and always very humid. Just as we approached the airfield to land, the still-cold windscreen fogged up. We were essentially blind. We turned on the defroster. But the defroster was powered by the engines which, according to the bingo flight profile were at idle power, and had to remain there. So the defroster did not clear the windscreen as it normally did. Two miles out, with only about a minute until touch-down, we were still completely blind. The pilot added some power to improve the defroster action, but to no effect. We had no choice but to abort the landing attempt. Fortunately, as we went to full power to orbit the airfield for a second landing attempt, the windscreen cleared enough to actually see and we landed without further drama. Even a routine landing can be exciting.

Small Carriers

During the early post-war months, there were still two or three aircraft carriers operating in the Philippine sea. Several of them were built right at the end of WW-II. Originally built with a straight deck, these carriers were overhauled in the mid-1950s to add the now-familiar angled deck for the landing area. A straight deck required a net at the far end to stop an aircraft from colliding with already-landed aircraft in the event that its hook failed to catch an arresting cable. An angled deck allowed

aircraft which boltered to orbit and try again. These converted flight decks boasted two interesting features. The first is that the landing areas were wooden! Climbing out of you aircraft onto a wooden flight deck was a weird experience. In addition to their wooden decks, the landing areas on these older carriers were significantly smaller than on carriers built in the 50s and 60s. They had room for only three arresting wires, not four as are found on all contemporary ships. Even I could see that these ships were smaller. In heavy seas, these smaller carriers pitch and roll more than their larger brethren. Landing one night to refuel before returning to NAS Cubi Point, the danger of carrier operations at night and in heavy seas became clear to me.

At night, almost all lights on the ship are extinguished to reduce distractions. As you approach, all you can see is a small rectangular set of lights outlining the landing area. When the ship is pitching and rolling, this rectangle appears to slowly change shape! It seems to get shorter and longer as the bow of the ship pitches up and down and appears to change from a rectangle to a trapezoid as the ship rolls right to left. Approaching those slowly morphing lights at night is strange. It became clear to me just how difficult it was for a pilot to land the Navy's largest carrier-capable aircraft on one of the Navy's smallest carriers at night in heavy seas. I was reminded of the bad weather I had experienced during CQ in the summer of 1972 (Clara, page 83.) I thought back to the squadron safety officer in Oakland who had said to me 'I'll never understand why we spend so much time practicing something you can only screw up once.' I was still young and still had the youthful feeling of invincibility. But I was rapidly becoming vividly aware of the dangers of what I was doing.

Gyro Gearloose

The summer of 1973 saw a transition of most squadron operations from Vietnam to Japan. It was in Japan that I was

given my squadron nickname. Not everyone had a nickname, though movies might lead you to believe otherwise. Some guys request to be called by a name of their own choosing. Some prefer to be called by their given names. Some names are earned, often through some legendary incident. Mine came about purely by accident one day as a group of us was walking to the Officer's club for dinner. We were discussing comic books we had read as kids. A long list of super heroes and super villains was reviewed including, of course, Superman / Lex Luther and Batman /The Joker.

Then, someone mentioned the Disney comics of Mickey Mouse and Donald Duck. Speaking of Donald Duck, he said that I reminded him of one of his favorite Donald Duck characters: Gyro Gearloose. For those who are not acquainted with Donald Duck comics, Gyro Gearloose is an eccentric inventor who's inventions often don't quite work out the way he intends, leading to humorous outcomes. The character is tall, with wild bushy hair, and glasses. As a navigator, the name seemed to fit me. Hence forth, they declared, I would be known as *Gyro*. Everyone in the group immediately agreed.

In Japan, VQ-1 operated primarily out of NAF Atsugi, VQ-1 flew missions to collect intelligence data from the east coasts of North Korea and the then Soviet Union. The US had been doing this for decades. During the 1950s and early '60s, US intelligence collection was quite aggressive, often involving flights into or directly over adversary territory. Sometimes, US aircraft went so far as to simulate attack-like profiles designed to elicit a response from the target countries so that we could study their defense and be prepared in the event of a real attack. Occasionally, the responses were more aggressive than desired. Some of these simulate attacks resulted in terrible consequences, including other nations attacking and shooting down the US aircraft. The well-known Soviet shoot-down of

Francis Powers in his U-2 near Moscow in 1960 was one of the better known such incidents. As mentioned earlier, VQ-1 (and its sister squadron in Europe, VQ-2) were the victims of a number of similar shoot-downs over the decades, loosing a number of aircraft and dozens of flight crew killed.

Thankfully, by the early 1970s, the US recognized the foolishness of such tactics. Direct over-flights, such as the U-2 did, were stopped entirely. (Well, not entirely. The SR-71 Blackbird, which could fly faster than the missiles designed to shoot it down occasionally continued to conduct direct over-flights until it was retired in the early part of the 2000s.) The Peacetime Airborne Reconnaissance Program – PARPRO – was initiated. This program instituted an extensive set of rules designed to prevent countries from having reason to attack US aircraft while we collected our intelligence. Under PARPRO rules, shoot-downs gave way to intercepts in which one or more heavily-armed fighter aircraft from the country being surveiled would join in close formation with a reconnaissance aircraft as a visible reminder that their presence was not desired. PARPRO ushered in a period of relative civility.

Despite PARPRO, some nations like North Korea and China, to this day, remain very intolerant of reconnaissance flights – even those that remain more than 50 miles away from their borders. Some intercepts are characterized by extremely aggressive maneuvering designed to frighten US aircrews. In 2001, one Chinese interceptor flew so recklessly that he actually collided with a VQ-1 EP-3E flying more than 70 miles off shore. The Chinese fighter crashed, killing its pilot. The P-3 was severely damaged but, rather than direct his crew to bail out over the South China Sea, the pilot made an emergency landing at a Chinese airfield. During the 24 minute period between the collision and landing, the aircrew furiously disassembled the racks of electronic equipment inside the aircraft and worked to

destroy other sensitive documents and data. Part of this effort involved pouring freshly brewed coffee into disk drives and computer motherboards. Despite that effort, significant sensitive classified information was captured by the Chinese as revealed in documents provided to WikiLeaks in 2017 by Edward Snowden.

After 10 days of detention, during which the two governments engaged in a diplomatic stand-off, the P-3 crew was released uninjured. Four months later, the damaged P-3 was disassembled and its pieces loaded onto two huge Russian-made AN-124 cargo aircraft (even in 2020 the AN-124 remains the largest cargo aircraft in the world) and flown to Georgia where it was repaired and reassembled. Twelve years later, in 2013, after further modernization, that P-3 returned to service and remains in use.

North Korea is in a class by itself. They never simply intercept. If they launch a fighter, their goal *always* is to destroy the intruder. When flying near North Korea, all aircrews remain vigilant. At the first indication of a possible intercept, the crew immediately vacates the area as quickly as possible. As noted earlier, in 1971, a slow VQ-1 EC-121 was shot down off the coast of North Korea with the loss of nearly 30 crew. Now, if intelligence collection from North Korea is desired, only fast jets are used near North Korea. These aircraft can quickly evade any attempted intercepts.

My single Korean experience occurred in June of 1973 when my pilot and our crew flew from Japan to Osan Airbase in South Korea for a week of flights. While our operations out of Vietnam were focused on supporting Navy and Air Force aircraft operating over North Vietnam, operations in Korea were conducted in support of the US and Korean Army. The aircrew who flew with us in Korea were almost all Army Intelligence specialists. As a navigator, though, my mission was the same:

know where we were at all times so that the information collected by the crew could be properly located on the ground. Thankfully, there was no North Korean activity during any of our flights, and we returned to Japan to complete our deployment.

Flights off the Soviet coast were more eventful if a bit less nerve wracking. I was intercepted only once off the coast of Vladivostok. Remarkably, I have little memory of the incident except that it happened. The entire event lasted less than 10 minutes, just long enough for the Soviets to let us know that they knew we were near their territory. It was strange to have an armed Soviet fighter jet flying in close formation with us over the Sea of Japan while each flight crew used hand-held cameras to take pictures of the other's aircraft.

As mentioned earlier, the PARPRO rules we followed when flying in Korea or near China and the Soviet Union were extensive. They included a well-defined sequence to be followed in getting to and from our operating area and a complex arrangement for frequent reporting of our position while 'on station.' In Vietnam, where everyone was relatively close-by, communications were accomplished using encrypted UHF radios. There were no satellite communications. PARPRO flights were controlled through facilities beyond UHF radio range. All communication was via HF radio for which electronic encryption could not be used. All transmissions were 'in the clear' meaning that anyone with a radio receiver could hear everything being said. To keep our messages secure, everything was encoded.

I used a code book to manually translate words and phrases into one or more groups of five random-appearing letters. Responses to our messages were likewise groups of coded letters. Each letter group had to be looked up in the code books for translation. The process was laborious and time-consuming, preventing anything close to a conversation. Mostly

messages were simply short phrases designed to exchange critical information with minimal length.

Abort Your Mission

On one of my early missions in September 1973 I encountered a particularly nasty jet stream at altitude. That day it was blowing from west to east at over 250 mph directly across our intended north-south track. This made navigation difficult.

> *The 'jet stream' is a long narrow meandering current of high-speed, high-altitude (usually at 30,000 feet altitude or above) wind that circles the globe, blowing from a generally westerly direction to the east. In the US, the jet stream usually curves down from western Canada into the northern mid-west, swoops east across the central US, then lifts back to the north as it heads out across the Atlantic Ocean. Similar to a waving flag, the core of the jet stream slowly moves randomly north and south as the wind flows east. Sometimes the main path of the jet stream retreats all the way up into Canada barely entering the US. At other times it swoops sharply south as far as Florida. Sometimes the jet stream is wide and relatively slow-moving, flowing at a leisurely 100 mph or less. Sometimes it narrows and blows as fast as 250 mph or more. Once, an almost 300 mph jet stream combined with our 360 mph airspeed to produce a ground-speed of over 600 mph – 10 miles per minute. That's really moving.*
>
> *In the western Pacific, the jet stream generally crosses west to east near the border between North Korea and the southeast reaches of the Soviet Union, crosses the Sea of Japan, continues across northern Japan, then out across the northern Pacific:* ***precisely the area in which our missions were flown!***

In order to maintain the desired northerly track with the jet stream blowing across our path, I had to direct the pilot to

point the aircraft west, into the wind, to avoid being blown east with the jet stream. As the jet stream was blowing at more than 250 mph that day, the heading correction needed to stay on our desired track was more than 30 degrees. We flew up and down the Soviet coast, crossing in and out of the jet stream with each orbit. In order to maintain our desired 50-mile stand-off distance, the heading correction had to be applied as we flew into the jet stream, but removed quickly as we flew out of it into the essentially calm surrounding air. Flying for even a minute or two with the wrong wind correction could easily bring us ten or more miles closer to land than desired. Almost continuous radar monitoring of our position was required. After flying through the jet stream once or twice, and monitoring our position using our radar, I could identify the exact location and speed of the jet-stream. Adjustments to our headings for subsequent passes through it during the mission were then easy to compute. But on this mission, as with every mission, the very first transit north or south was always tense. On that day, the jet stream was positioned precisely over the path we had planned to use to approach the Soviet coast as we flew west from Japan to reach our desired mission track. We were flying directly into a 250 mph head wind, which slowed our approach to the Soviet coast.

Complicating the matter was the HF radio. Early mornings or evenings were always tricky with HF communications. As the sun warms the ionosphere, conditions for HF communication change rapidly. As we approached our mission track, I opened the code book to prepare the message we would send to report our arrival on station. My first transmission went unanswered, as did a second. I changed frequencies, and tried again. Still no response. By now we needed to make our final turn. A quick check of the radar though showed that the head-winds were stronger than forecast and that we were not yet close enough. I decided to wait another minute before directing the pilot to turn north.

Another frequency change and two more attempts to report that we were on station went unanswered. Distracted by the radio problems, I had waited longer than planned to turn north. A glance at the radar showed that we were now closer to the coast than I had planned. Not wanting to delay any longer, I directed the pilot to turn without first fixing our position.

The gyro-stabilizer for our radar was broken. (Remember how my final check ride in Oakland was delayed for several weeks because parts needed to repair broken radars were being prioritized for airplanes in Vietnam?) So, as we turned north, we were essentially blind. Without my knowing it yet, we were also flying directly out of the jet stream, and the 30-degree heading correction I had computed was no longer needed. Our turn north took more than a minute to complete. During the turn, I tried two more times to report that we were now on station, still without success.

As we rolled out wings-level onto the heading I had directed, I checked the radar. WHAT! How could we possibly be that close to land? Better double-check. HOLY COW! I immediately ordered the pilot to turn 60 degrees further east to remove the cross-wind correction and move us back east where we were supposed to be. Blind again for another minute.

During that minute, we finally received a reply from our monitors back in Japan. Finally we had radio contact. Before decoding the message we had just received, I transmitted my ‘on station’ report again. The monitors acknowledged my report. Another minute later, we rolled wings-level again and I could fix our position with the radar. Finally, we were back where we were supposed to be. I gave the pilot a final heading correction and checked the radar again. Everything was good.

Now I had time to decode the message I had received several minutes earlier. Surprise! I had expected the message to be a simple acknowledgment of our ‘on station’ report.

Instead, the message was a code-word indicating that we should **abort the mission**. That didn't make sense. We had just reported being on station and they had acknowledged it.

The pilot suggested a simple explanation. Our 'on station' report had been late because of the difficulty we'd had finding a viable radio frequency. PARPRO rules required that an 'abort' command be issued if communications could not be established. Since our controllers had not heard from us, the pilot suggested, they had sent the 'abort' code. But we had now established communication, reported 'on station,' and received an acknowledgment. So, was there really a need to abort? The pilot suggested that we again report our arrival on station and see what kind of a response it elicited. I once again transmitted the 'on station' code-word. Again, we received a standard acknowledgment. If they really wanted us to abort, the pilot reasoned, they would have responded with the abort code. Since they didn't, we were good to go. We spent the next three hours flying a normal mission, reporting our position every 30 minutes as required, and receiving a standard acknowledgment for each report.

As we reported 'off station' and started on the hour-long flight back to NAF Atsugi, I felt a need to 'correct' my navigation log to remove the evidence of the incursion during the first few minutes of the mission. Only the Soviets and I could have known our exact position. No sense in turning in a navigation log showing that we knew we had come within 35 miles of their coast. Everything was done in pencil, so an eraser made quick work of it. Before long, the chart and log showed a perfectly normal mission. Except for the communications problem at the mission start, there was nothing out of the ordinary.

Our arrival back at the squadron hangar, however, was anything but ordinary. As we taxied to our parking spot, a large delegation was gathered to meet us. The pilot and I exchanged

glances. The squadron Commanding Officer was there to meet us, along with the base commander, our squadron intelligence chief, and half a dozen others I'd never seen. They immediately confiscated my navigation log and we were hustled into a classified briefing room.

What had happened? Why didn't we abort the mission as directed? What were we thinking? Dozens of other questions. The pilot and I recounted the story of communication difficulties and the sequence of events regarding messages sent and received. All agreed that a mission abort would have been preferred, but that, given the sequence of messages, the group also agreed that we had not done anything wrong. Had the flight controllers truly felt an abort was warranted, they should have repeated their abort directive once 2-way communications had been established. Instead, they merely acknowledged our 'on station' report and all subsequent position reports. The (modified) navigation log showed nothing amiss. After about an hour, with lots of reviews and admonishments, the debrief ended and we all adjourned to the officers club for a few drinks and dinner. Modifying my navigation log was inappropriate to be sure, but I'm very glad I 'updated' it before we landed.

As always, I tried to learn from what had happened. We had ignored a directive to abort. During wartime that might have been acceptable because we were on-scene and understood the risks better than others might have. But during peacetime, there was simply no justification. Our mission that day was not critical. We should have known better. Such a navigation screw-up could have had much more severe – perhaps even deadly – consequences had it occurred off the Chinese or North Korean coasts. But to my great relief, the Soviets were, apparently, not concerned about us that morning. Next time, I vowed, I would abort the mission.

When I wasn't flying in Japan, my friends and I often went into town. Kathy wasn't the only one shopping. I did too, when I could. The Navy Exchange stores in Japan had unique local items not available on Guam. The department stores in nearby Tokyo and Yokosuka did too. It was fun to browse thru the stores looking for small knick-knacks and gifts to bring home for Kathy and toys for Terri. Getting things home, however, was sometimes problematic for me. Our squadron's larger P-3 and C-121 aircraft had plenty of room inside for large items such as furniture. The A-3, on the other hand, had little space inside for big or bulky items. So I generally limited my purchases to small household items.

Lost At Sea

Missions continued. Several months later, as we returned from a mission, yet another large group was gathered on the squadron parking ramp. This too related to a squadron navigation incident. Thankfully, this one did not include me. It involved an A-3 on a routine transit from Guam to the Philippines. (Isn't it interesting how many incidents occur during 'routine' operations? Perhaps that's a lesson in and of itself.) A pilot and navigator were headed to Cubi Point to replace another flight crew who was due to return to Guam. Two other junior navigators were aboard. One was to complete his qualification check-ride for open-ocean navigation on the trip to the Philippines and the other would complete his check-ride on the return flight that afternoon.

Something had gone wrong. They were lost and calling out 'mayday' on their HF radio. Some maintenance technicians in Atsugi had been testing a new radio in one of the squadron aircraft and just happened to hear their squadron-mates calls for help. Half of the squadron had gathered around on the ramp listening as the lost crew spoke with various controllers. I

climbed out of my aircraft and joined the crowd to hear what was happening.

The first hour of their flight had been uneventful. The pilot and the instructor navigator then planned to test one of the junior navigators. The plan was to temporarily turn off and misalign the primary gyro-compass to see how long it would take the junior navigator to notice. They intentionally and surreptitiously slewed the main compass about 50 degrees off of the correct heading, then pulled its circuit breaker to disable it entirely. This procedure was considered safe, because the aircraft had two additional compasses: a backup gyro-compass that was independently powered and which remained on-line, and a so-called wet-compass, which is a traditional compass needle floating in a water-like enclosure like a Boy Scout compass. The wet compass was not as accurate, but required no power at all.

As the junior navigator began the process of preparing to use his sextant to take a sun fix, he noticed that the primary gyro-compass was wildly incorrect. That's when the problems began. As they reset the circuit-breaker to restore the primary gyro-compass, it tumbled. Something was wrong. They reset the circuit-breaker again. This time the primary gyro-compass stabilized. They now needed to restore it to the proper reference heading. They looked at the backup gyro-compass, but it was clearly showing the wrong heading. Apparently as circuit breakers had been pulled and reset, it too had lost its original reference heading and had precessed to some now-unknown heading.

Gyro-compasses, like all gyros, maintain their orientation as the gimbals in which they are mounted move around. But due to friction and other complications, all gyros naturally precess over time, slowly moving away from their original orientation. Precession is slow and steady but unpredictable. To

correct for precession, a sensor attached to the wet-compass sends a signal to the gyro-compasses. That signal provides a stable reference to the gyros which can then compensate for and eliminate precession.

It rapidly became apparent that the mechanism intended to correct gyro precession was not working. Both gyro-compasses were rotating slowly as though the aircraft was in a shallow turn. Examination of the wet-compass confirmed that something else was seriously wrong. An air bubble was visible within the wet-compass that was interfering with its ability to freely move. The crew found themselves a thousand miles away from any land with no idea in which direction they were flying. They turned to the only reliable thing left – the sun. With an accurate watch, they could use their sextant to compute an approximate position. Except …

Except that the book of celestial navigation tables they were using to find the precise angles to the sun were out of date. These books are hundreds of pages thick, including dozens of numeric tables listing precise Sun angles at every latitude and longitude on the globe for every minute of every day. To reduce their size, the books are broken into four volumes – one for each quarter of the year. This flight was taking place on October 21 – three weeks into the 4th quarter. The aircraft was still carrying the volume for the 3rd quarter. It was three weeks out of date. As the three navigators laboriously worked to interpolate the data in their volume to bring it up to the current month, day, hour, and minute, their plane flew along at 360 mph in some unknown direction.

After half an hour, during which the pilot attempted to maintain a steady heading by looking at the clouds below, the navigators were ready to use the sextant. The results were not promising. It showed them to be nearly 300 miles north of their intended path. That error seemed so extreme that they concluded they had made an error, and repeated their attempt

to derive the correct angles to the sun. Another half an hour brought yet another set of angles and another result hundreds of miles away from the first and still wildly separated from their planned position. They were utterly lost and had no idea how to point the aircraft to get to anywhere nor how long it might take to get there.

They declared an emergency, calling out on emergency frequencies using their UHF and VHF radios, but received no response. There was no other aircraft or ship within the 250 mile range of those radios. They could communicate with their oceanic controller using their HF radio. But little could be done. Controllers were not aware of any other air traffic anywhere near their reported position. The crew requested use of the military's Bullseye system.

> *Bullseye is a system using HF radio and a dozen or more ground stations sprinkled all over the world to provide direction finding information. Each ground station can report the direction from itself to a specific HF radio broadcast. Plotting the reported directions from three or more ground stations to the same signal can provide a location of the transmitter.*

HF radio was unreliable that day for more than two Bullseye ground stations, so it was unable to provide any useful assistance. This flight crew already was having a very bad day. Now they were running low on fuel.

For three more hours, no progress was made. They turned on their radar hoping to find land, but saw nothing. There was, in fact, nothing within the 250 mile range of their radar. When they got to the point where they had only 15 minutes of fuel remaining, the pilot made the decision to bail out. They descended to several thousand feet above the ocean, made a final mayday transmission on every radio they had, blew the escape hatch open, and bailed out. The aircraft

flew on, entered a shallow descending turn, crashed into the ocean, and sank.

In a wonderful stroke of luck, a Japanese Navy destroyer had heard their final radio distress call and somehow managed to locate the five crew members who were now floating in their individual life rafts. None had been hurt and all were rescued within two hours.

Monday-morning Quarterbacking is easy to do. Though I dislike second-guessing the decisions this crew made, I personally believe they overlooked several obvious ways they could have avoided this disaster. First of all, each parachute pack contained a survival kit which included a small compass. There were seven parachutes on board for the five of them. They could have used the compass in one of those spare packs for use as a directional aid to allow them, if nothing else, to at least fly a known heading rather than rely on flying toward constantly shifting clouds to maintain some unknown heading.

Secondly, even if they had out-of-date celestial tables, they knew the date and time and their approximate location. As qualified celestial navigators, they should have understood some basic facts: They were flying from Guam to the Philippines at approximately 10-degrees North latitude. That day, October 21, was one month after the Autumnal Equinox – the moment when the sun, moving from north during summer to south during winter, would have been over the equator. A quick mental calculation would have told them that the sun on that day would be about 7 degrees south of the equator – a full 17 degrees (more than 1,000 miles) south of their proposed track. Also, the current time was approximately noon locally, when the sun, in the northern hemisphere, would have been directly south of them. Simply holding a pencil vertically on their navigation table would have produced a shadow (as on a sun dial) pointing very close to due north. Aligning the aircraft with the shadow

pointing directly to the starboard (right) wing would have pointed them in a direction which would have guaranteed arrival somewhere in the hard-to-miss Philippines in two hours time. Once oriented using the sun's shadow, they could have pointed the sextant at the sun and used it as a heading device rather than the useless gyro-compasses.

What was the lesson here? Once again, the fact was brought home to me quite clearly that what I was doing on a daily basis could quickly turn dangerous. This crew had become so distracted with trying to compute a precise position that they had failed to see a simpler solution that would have been 'good enough' under the circumstances. More importantly, the lesson was that care and discipline at all times (*attention to detail!*) were vitally important and clear thinking is always helpful. Choose the simplest solution.

In November, I was promoted from Ensign, the Navy's lowest officer rank, to Lieutenant Junior Grade. I was fully qualified as a navigator in the squadron now, and the promotion felt good. It was nice to be making some progress in seniority. I also was given the opportunity to be appointed into the 'Regular' Navy. Let me explain.

The Navy has two classes of officers: Regular/Permanent and Reserve/Temporary. Graduates of the US Naval Academy are automatically commissioned into the Regular Navy – USN. Those commissioned through an Officer Candidate program, as I had been, are commissioned into the Navy Reserve – USNR. Functionally, the two are essentially the same. But career-wise the 'R' makes a big difference. Early promotions and choice assignments are offered first to USN officers before being offered to those in the USNR.

One does not apply for an appointment as a USN officer. The appointment must be earned through demonstrated

superior performance and requires a recommendation by your Commanding Officer. Becoming an officer in the Regular Navy would be quite beneficial should I choose to make a career of the Navy. I readily accepted the appointment. Now I was LTJG Charles Wright, USN.

Visitors

While Charlie was away, I was surprised one day by a visit from my brother Bill. His Air Force assignments had led to a trip to Thailand, with an overnight stop on Guam. The visit was as short as it was unexpected – so short that the details are murky. But I did have the chance to drive up to Andersen AFB to pick him up, show him my home, and introduce him to his newest niece. He was the first of our families to meet Terri. The visit was little more than 24 hours. But I enjoyed an afternoon and dinner with him at our house. After breakfast the next morning, I took him back to Andersen for the continuation of his trip. Seeing a friendly face was a huge boost to me. Bill remembers that I seemed less than happy being alone with a crying baby so far away from friends. He described me as being miserable.

To break the monotony, I busied myself with as many daily tasks as I could find. While on Guam, I took up crafting of various sorts. As Christmas approached, my mother sent me an assemble-it-yourself kit of wooden Christmas ornaments made of thin, pre-cut plywood. There were quite a few different ornaments, including various geometric shapes, as well as a Santa Clause, a miniature sleigh, three Wise Men and a camel, and other novel items. I painstakingly painted each one, sprinkled them with glitter, and assembled them. We still use them today on our Christmas trees to remind us of our Guam Christmases.

For Easter, some friends and I made three very large eggs out of sugar, flour, and egg-whites. Dyed green, yellow, and pink, each was about the size of a cantaloupe. They were hollow, with one end opened, the insides decorated as nests complete with fake straw, miniature chicks, and jelly beans for added color. Those eggs were a perennial Easter decoration in our home for decades until their color faded to a dull gray.

I also took up needlepoint and quilting, producing a number of small table linens of floral design and rugs with which we decorated our home. I also began quilting bedspreads, two of which we still have in Reston.

Terri was crawling now and beginning to explore the house. Given the lack of availability on Guam of almost everything, we could not find a gate for the stairs. As any parent knows, toddlers quickly learn how to climb stairs. But descending them is another matter entirely. Charlie spent time teaching Terri how to crawl backwards down the stairs. She was a quick learner. After only a few days, she had learned how to climb down without assistance. Though I always kept an eye on her, I no longer had to worry that she would tumble down and hurt herself.

Lawn of the Month

One of my favorite activities was yard work. Our house was on a large corner lot. It was surrounded by all kinds of lush tropical plants I had seen previously only as potted plants. There were several rubber plants. In their natural outdoor environment, they flourished and were huge. Also, to my surprise, there were poinsettias. I had never seen poinsettias growing in the ground before. But there they were. Like the rubber plants, they too were full sized bushes – not the small potted plants I had been accustomed to seeing at Christmas time, and they bloomed frequently.

I spent many mornings (the relatively cool part of the day) weeding and otherwise tending to the yard, which was a perfect play area for Terri. She explored our yard to her hearts content. There was little traffic in our neighborhood of only a dozen or so duplexes. So even playing in the street would have been safe. But, similar to how we had taught her to descend stairs safely, we taught Terri from the very first day that the curb at the edge of our lot was a red line not to be crossed. As with the stairs, she was a quick learner. Once it was clear that Terri understood that rule, I could focus on what I was doing and let her wander the yard freely. She clearly enjoyed it and expended a lot of energy exploring her large world.

All of the lots had mature coconut palm trees which continuously shed palm branches that needed picking up. Periodically the trees dropped football-sized coconuts onto the ground. The coconuts were dangerous. A 5-pound coconut falling from 15 feet up could really hurt. A coconut falling on a toddler could be serious. So I kept my eye on Terri to make sure she didn't wander too close to the coconut zones.

Charlie and I did try the coconuts once. The fresh coconut milk was good, as was the shredded meat of the coconut itself. But removing the husk without a machete was remarkably difficult. Likewise breaking open the coconut shell without spilling all of the milk took skill that neither of us ever learned.

In October of 1973, all of my yard work resulted in ours being designated **Lawn of the Month**, complete with a large sign posted in our yard for all to see. It really was a beautiful yard, even if I do say so myself. I am still proud that my efforts were recognized.

October brought more visitors. My father had a fear of flying and would not agree to travel to Guam for a visit. But my mother and grandmother had no such qualms. They planned a

vacation trip with stops in Hawaii, Japan, and then Guam. In an extraordinary coincidence, Charlie just happened to be in Atsugi when they arrived for their three-day visit to Tokyo and Kyoto. Charlie managed to be at the gate to welcome them when they deplaned at Narita airport north of Tokyo. They were astounded but very happy to see a friendly face in their first visit to a foreign country. He guided them through the airport, helped them collect their luggage, and rode with them on their tour bus to their hotel. They were having a great trip. This unexpected Tokyo welcome added a special highlight. A few days later, Charlie returned to Guam just in time to meet them at the airport again when they arrived in Guam to meet Terri and me.

Our house at Naval Hospital, Guam – November 1973

Their visit was a real pleasure for me. Terri had finally grown out of her colic phase and had become the happy and agreeable person she would be as she grew older. I was excited to introduce my mother and grandmother to my beautiful daughter. Charlie and I spent several seemingly too-short days showing them all the sights. They enjoyed the beaches and going out to dinner at the local hotels. But most of all they enjoyed playing with their newest grandchild. Charlie and I

enjoyed visiting with them just as much. All too soon, though, their visit was over, and we bid them good-bye for their trip home.

Kathy's Mom and Grandmother visit – October 1973

Carmelites in Guam

Soon enough, Charlie too departed for yet another deployment, and Terri and I were on our own again. Then, out of the blue, I received a phone call from a man claiming to be the Arch-Bishop of Guam. It wasn't a joke. It seems that Charlie's maternal grandfather Kirk, who was active in the Catholic church, had contacted the bishop and asked him if he would cheer up the wife of one of his relatives whose husband was away. His call worked. Just knowing that others were thinking of me was a boost. Later, when Charlie returned, we would share a brief in-person audience with the Bishop at the Cathedral in Agana.

There was a second reason why Charlie's grandfather wanted to connect us with the bishop. Two of his daughters (Charlie's aunts) were Carmelite nuns, one in Philadelphia, and one in Baltimore. His grandfather wanted us to visit the nuns in Guam's Carmelite monastery.

As background, Carmelite nuns live in unusual, hermit-like communities whose members choose to cloister themselves away from society. They refrain from contact with the world in general, spending their lives focused on prayer. Today, the strict traditions of the past have been relaxed significantly, and each monastery sets its own rules. In the 1970s, however, they strongly discouraged visitors, not wanting to be distracted by worldly concerns. Members of the community were not allowed to leave their cloister. In the rare cases when family and friends did visit, they were separated by walls and curtains. Face-to-face contact, even through windows, was forbidden, and veils were worn at all times.

The bishop had contacted the Mother Superior at the monastery in Guam and informed her that some friends of the Carmelites would like to visit. That was our ticket in. So one day, the three of us went to visit. After ringing the door bell and introducing ourselves over an intercom system, we were allowed into a small room with a few chairs. Along one wall was a large window-like screened opening, covered by a curtain. Several of the nuns assembled behind the curtain and we introduced ourselves. There was great excitement when it became clear that we had 10-month old Terri with us. These nuns rarely interacted with other people and, apparently, had never had a baby visit. Word spread quickly and soon the entire community was crowding into their side of the visiting room just for the chance to hear the few noises that a young baby made.

In the wall next to the screened window through which we were talking there was a pass-thru compartment with a circular turn-table. Open only on one side, it allowed small objects to be exchanged by simply spinning the turn-table. One of the nuns suggested that we put Terri on the turn-table so that they could actually see this baby. Surely, she suggested to Mother Superior, it would not be too much of a relaxation of their

rules to see such a young person, even if that person was not related to any of them. Besides, she said, the Bishop, himself, had made the introduction. Mother Superior, unable to pass up such an opportunity, agreed. Now, the excitement on their side of the curtain was clear. How could we refuse. We placed Terri onto the turn-table and spun it around.

Their room seemed to explode with oohs, aahs, and screeches of delight. Remarkably, Terri did not object to being thrust into this room full of excited strangers. Charlie and I listened as they passed her around, one to the next, taking turns holding her briefly. One nun jokingly thanked us for the gift, pretending that they would keep her. As the minutes passed, though, Terri began to get fussy, and they passed her back to us. Clearly, the visit had been a high point for the community. They invited us to return at any time.

Saipan Honeymoon

Following the visit by Kathy's mother and grandmother, we decided that it was time for a true vacation for ourselves. We lived on one tropical island but decided to visit a different one: Saipan. Only a short 140 mile flight from Guam, we hoped Saipan would be fun. We planned a four-day getaway. Taking advantage of a common practice among service members on Guam, we left Terri with our next door neighbors. We would return the favor some months later to care for their son, who was a few months younger than Terri, when they spent a week in Thailand.

To get to Saipan, we caught a flight on the so-called *island-hopper* – a small, 20-person airplane that hopped from one nearby island to another almost like a taxi. It was like a larger version of a private propeller-driven airplane except that, rather than two engines, it had four. It had a single center aisle

with only one seat on each side and a large box-shaped hump in the middle where the main wing spar passed through the fuselage. To reach the seats in the front section, we had to climb over the hump. The only crew were the pilot and co-pilot, who also served as flight attendants and baggage handlers. The ten of us who were boarding gathered around the plane as the crew loaded our bags, then they directed us to our seats, climbed in themselves, and closed the door. As they went through their takeoff checklist, the co-pilot came back into the passenger section and asked two of the passengers who had seated themselves in the last row to please move forward to another row just behind the wing spar. The move was needed, they explained, in order to better balance the plane. With little baggage in the forward luggage compartment, they needed less weight in the back, and more weight near the front.

On the way to Saipan, the island-hopper stopped first at Rota – a small island only 40 miles away. It is believed that Rota island was named, by Ferdinand Magellan, after the city of Rota in Spain. Coincidentally, Rota, Spain was the place to which Charlie had received verbal orders in March of 1972 just a week before we were married. So, although our first home was on Guam, we did, in fact, get to Rota as originally planned – just a **different** Rota, 8,000 miles away.

Considered by the locals almost as a suburb of Guam, fewer than 1,000 people lived on Rota in 1973. With no tourism and no industry, there was nothing to do and little to see. The airplane didn’t even shut down all of its engines for the ten minutes it took to allow one person to deplane and another to board and we quickly resumed our hop-scotch trip. To save fuel, when flying between islands, the airplane climbed only high enough to gain sight of its next destination and to maintain radio contact.

Our next stop was Tinian, the island from which the *Enola Gay* had launched to deliver the atomic bomb to Hiroshima in 1945. About the same size as Rota, Tinian was even less developed, with a population of only several hundred. Its airport was little more than a shed situated along the side of what appeared from the air to be an abandoned runway. Only about half of the 8,000 foot long runway was actually maintained. The other half had grass growing from cracks in its pavement and large Xs painted across it to signify that it should not be used. We got off the plane on Tinian just to stretch our legs and walk around – and to add a bit more credence to our claim that we've been to Tinian. But were soon headed to Saipan.

At 12 miles by 5 miles, Saipan is just less than half the size of Guam. 1973 saw only a bit of tourism on Saipan, but the population then was several thousand – a virtual crowd compared to Rota. And, at least, there was a Holiday Inn, at which we had booked a room.

The populations of both Tinian and Saipan boomed in the 1980s, when immigration and labor laws were liberalized in an attempt to establish an economy on the islands. Textile manufacturing, led by numerous well-known clothing brands, briefly attracted over 60,000 immigrants. Sadly, the laws were so lax that the thousands who had immigrated from China for jobs were forced to work in slave-like conditions, for sub-standard wages, and without the benefit of citizenship. After an international scandal in 1998, the laws were revised to follow US labor and immigration policies, the textile industry collapsed, and the populations shrank.

As the textile industry dwindled, gambling boomed as the indigenous population, like American Indians, took advantage of US gaming law to open casinos. Since then, Tinian and Saipan have become vacation destinations, billing themselves as the

Las Vegas of the western Pacific and each boasting an International Airport large enough to support large jet airliners. However, without Las Vegas' lavish hotels and the glittering lights, they still have a *long* way to go as luxury destinations.

Aside from beautiful beaches, there remains little to see and even less to do except to gamble. Even today, paved roads are almost exclusively 2-lane. Most construction remains one-story and strip-mall like in appearance. Saipan's single large hotel in 2020 would barely rate a second glance in most tourist destinations. Still, both islands attract a surprisingly large number of gamblers from the surrounding islands as well as newly-weds from Japan and Taiwan who will return home to claim that they visited the US for their honeymoons. Several large casinos are planned.

Upon our arrival in Saipan, we took a taxi to the Holiday Inn – then a one-story version of the typical three-story Inns so common in the US – and checked into our room. Finally, we would have a true honeymoon. It was wonderful despite the spartan conditions. In 1973, Saipan was a perfect example of a deserted tropical island. Its west-facing beaches were spectacular with wide, expansive stretches of white sand dotted with palm trees unfolding into the distance. Light surf washed the shore, with a coral reef breaking the larger waves about 100 yards out. The beaches and the surf line still held occasional reminders of WW-II, with the rusting hulks of US landing craft and tanks that had never made it ashore during the fierce fighting washed by the waves.

We rented a car and drove the full 20-mile paved loop around the southern end of the island. Jungle paths – not really worthy of being called roads – occasionally branched off of the paved road. When the trees that had sprung up in the middle of these seldom-used paths were not too big for our rental car to drive over without damage, we followed a few of them to text-

book examples of secluded beach coves where we relaxed under the palm trees and enjoyed picnic lunches, along with some romantic time together.

Without cell phones or satellite communication, we were truly *off the grid* even though, in 1973, the concept of a *grid* wasn't even a thing yet. We were truly on our own. Charlie's squadron would have had a hard time contacting him had they wanted to. We enjoyed the freedom. We visited the cliffs at the north end of the island where over 1,000 Japanese civilians had committed suicide by jumping from 'Suicide Cliff' and 'Banzai Cliff' rather than be taken prisoner during the 1944 final assault by the US to take control of the island.

We also visited Saipan's replica of Spain's *Grotto of Lourdes*. Since their 'discovery' by Magellan in the mid-1500s, the Marianas Islands have been predominantly Catholic. When Saipan's local residents found a cave-like grotto on the island similar to that in Lourdes, they constructed a shrine there dedicated to *Our Lady of Lourdes*. We were visiting Saipan during the first days of November and were there on *All Soul's* and *All Saint's days*. As we passed the local grave yards during our drives around the island, we noticed that they all were overflowing with (mostly artificial) flowers brought by the residents to honor their deceased relatives. The views were quite impressive.

Aside from scenic drives, there was little else to do or see. So we spent most of our time on the beach by our hotel just relaxing and enjoying some down-time. It was a memorably-relaxing time. Our most vivid memory is that of dinner on our first night. Next to the hotel was an open-air restaurant on the beach. We sat almost alone at its bar in a light evening breeze, enjoying cocktails and watching one of the most beautiful sunsets we had ever seen as the chef prepared

barbecued shrimp for us. It was truly a memorable and especially romantic experience for both of us.

After three days, it was time to return to the real world. We were both missing Terri, so our departure was bitter-sweet. We only half-reluctantly returned to the airport for our trip home.

Gas Crisis

Late 1973 saw the nations of the middle-east form OPEC – the Organization of Oil and Petroleum Exporting Countries. They mutually agreed to reduce production in order to raise the price of oil and increase revenue for their member nations. This brought the first *Gas Crisis* to the world. When we had arrived on Guam in 1972, gas was very cheap, selling for less than 25¢ per gallon (Really!) at the gas stations on base. Gas prices skyrocketed to almost $2 per gallon – 10 times the previous price.

> *A few years later, similar supply reductions by the OPEC nations would bring gas prices to between $3 and $4 per gallon before they stabilized in the mid $2 per gallon range common in the US as this memoir is being written.*

Long lines formed as gas stations ran out of gas and began rationing. On the grounds of the Naval Hospital where we lived, it was not uncommon to come home at the end of the work day to find the gas station out of gas. At least once, Charlie parked our car in the line at the closed-for-the-day gas station and walked the half-mile home. One of us would walk back to the car early the next day and wait (sometimes for hours) to fill the tank. Thank goodness Guam was a small island, and we did little more than drive the 10-mile round-trip to and from the Air Station every day as Charlie went to and from work.

Power plants around the world struggled to obtain oil needed to produce sufficient power as winter arrived. Everyone

was urged to conserve electricity by setting their thermostats so as to reduce heating or air conditioning needs, and to turn off lights when they left a room. Guam, entirely dependent on oil for electricity production, urged the whole island to adjust air conditioners (which ran 24/7, year round) to higher temperatures. We all reduced what little driving we did, combining trips to the grocery with other necessary errands. Car pools to and from work became widespread. We set our house temperature higher, but did not turn off our air conditioners.

During this time, Charlie spent most of his deployed time in Japan. When he was home though, he worked on home improvement projects, specifically, enclosing our lanai – the Pacific equivalent of a porch. A Lanai is just an open-sided, roof-covered patio. All of the military-provided houses included one. Most, including ours, had been screened to keep mosquitoes out. But Guam was hot and humid. **Very** hot and **very** humid. **All of the time**. Spending time on a lanai in Guam, even one protected from mosquitoes, was rarely enjoyable. We decided to enclose ours to provide an indoor play-room for Terri.

The Navy provided the required building materials at no cost. We provided the labor. Detailed construction drawings also were provided. We collected the necessary cinder blocks, bags of mortar, 2x4 lumber, ply-wood, and paint. On weekends, when he was at home, Charlie did the work. Terri worked as his able assistant, generously helping him to make sure that he did things right. Over a period of a couple of months, the two of them slowly laid the cinder block lower walls, installed the ply-wood upper walls, designed and installed several plexi-glass windows, and created a beautiful 10-by-20-foot addition to our home.

Terri assists with lanai construction – November 1973

The Tile Caper

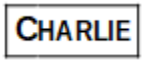
One final detail focused on the floor of our new room. Along with all of the other materials, the Navy agreed to provide the necessary vinyl tile and adhesive needed to cover the cement slab floor. The 'problem' was that the Navy inventory included only black tile. Who wants a black floor? We didn't. Our entire house had either white or green tile throughout, except for the lanai. Covering the floor of our lanai with black tile simply didn't seem right.

Meanwhile, at the same time that we were enclosing our lanai, the Navy was constructing a brand new enlisted barracks only two blocks away from our house. One evening, as we walked around our neighborhood to relax at the end of the day, Charlie insisted, as any red-blooded male might do, that we explore this new construction. As we walked thru the building, he noticed dozens of boxes stacked at one end of the ground floor. Closer examination revealed that these were boxes of floor tile – WHITE floor tile! Now THAT was interesting. We quickly agreed that white floor tile was far superior to black floor

tile. Charlie quickly convinced Kathy that merely redirecting a few boxes of tile from one Government construction project (the barracks) to another Government construction project (our lanai) was both entirely reasonable and entirely legal.

The very next evening, as dusk settled, we drove our car the 100 yards over to the construction area. Kathy stood by the car with the trunk open as Charlie made repeated trips to the construction site to 'liberate' just enough boxes of tile to cover the floor of our lanai. We both did our best to act completely nonchalant at the occasional car passed by. We apparently fooled everyone. We were not arrested.

Later, when our friends visited our house, they often commented on how nice our white floors were compared to the mismatched black they had been forced to install when they enclosed their porches. We just smiled to one another and kept our secret. We had learned how to work 'the system' to our advantage. We were truly veterans!



Accuracy

Apparently, the navigation incident in Japan (See Abort Your Mission on page 145,) had taught me nothing. I was overconfident and continued to occasionally make mistakes. Finally, I learned a lesson on one of my flights between Guam and the Philippines. I had considered that flying west to the Philippines from Guam was like flying east to the US from Hawaii. Anyone could do it. Just point the airplane in the general direction and you can't miss finding land eventually.

That is certainly true. But missing your expected arrival point was both frowned upon and embarrassing. On this flight, I would miss by 50 miles! I had been careless and had shrugged off some 'small' differences between the predicted and actual cross-winds that appeared as I navigated west. No big deal, I

said to myself. But I was about to find out **again** that, given enough time, small differences could become big differences.

As we approached the Philippines, the pilot tapped me on the shoulder and pointed out his window.

“Is that an island over there?” he asked.

“Of course not!” I replied. “There isn’t any land within 50 miles.”

I looked out. There really did appear to be some land off to the south only about 10 miles away. But shadows produced by low clouds over the south Pacific were tricky and often made it appear that there was land underneath them when there was not. A quick check of my chart showed that the closest land was, in fact, well over 50 miles away from our planned track. We couldn’t be THAT far off course. Could we? No, I thought. It couldn’t be land. To settle it conclusively, I turned on our radar. Sure enough, it **was** land.

Embarrassed, I quickly gave the pilot a heading correction to return us to our correct track. Then we heard a call on our radio to the effect ‘Unidentified aircraft north of Catanduanes island, please identify yourself.’ Busted! Now I was doubly embarrassed. The pilot directed me to ignore the radio call – we would be back on our authorized flight path in another minute. No harm, no foul. As cover for the mistake, the pilot and I agreed that we would radio our air traffic controller (in Hawaii!) and notify him that we had elected to divert south of our approved flight path to avoid some thunder storms. My pilot and I had a good laugh, wondering what the Philippine radar operator who had seen us would have done had we been an intruder.

But inside I wasn’t laughing. Sure, over the open ocean, 50 miles isn’t much. We were the only aircraft within hundreds of miles. But I was humiliated. How could I have allowed us to

get that far off course? Had I learned nothing from my navigation incident in Japan? Pay attention to detail, I told myself. After that, I certainly did.

In spite of my mistakes, in January of 1974, I finally qualified as an Instructor navigator. My best friend in the Navy, Keith Putnam, whom Kathy and I had first met in Oakland, signed my qualification papers. For the first time in my career, not only was I no longer a student but now I would be teaching others. It was even more important now that I maintain the discipline needed to do my job right. I knew I could be a good navigator. I had repeatedly shown that I could perform with the best when I needed to. To help myself perform at my best on every flight, I decided to institute what would become my normal practice for the rest of my navigating career: putting my accuracy on the line on every flight.

To do so, I would place bets with my pilot regarding accuracy. The winner would buy the first round of drinks that evening. For example, when returning from an open-ocean mission, I would write on a placard on our instrument panel my prediction of the exact time and/or position when the aircraft's TACAN would detect our position as we came back within range. Supposedly, the bet was with the pilot but, to be honest, I was really competing against myself. The pilot really had no way to know with any degree of accuracy where we were. Sometimes, as we reported off-station when a mission was complete, I'd predict the exact time the ground crew would chock our wheels and give us the signal to shut down the engines as we parked the aircraft in front of our hangar.

As I mentioned previously, the A-3 had no navigation equipment other than the sextant. So the accuracy of our navigation was entirely up to me. I loved the challenge. I could usually forecast TACAN lock-on times or chock times within a minute or two. Similarly, I could predict our location (range and

bearing reported by the TACAN) within a degree or two and a couple of miles – pretty good accuracy after flying around randomly over the ocean for several hours. After my previous mistakes, this practice of competing with myself on every flight kept me on my toes and helped us out of some difficult situations to come.

Indian Ocean

Up until now, my deployments typically had alternated between Japan and the Philippines – two or three weeks at one location, home for several weeks, then two or three weeks in another. By 1974, though, the routine in the Philippines had changed. The focus there was no longer exclusively Vietnam. In fact, after the peace agreement was signed, politicians in the US were doing their best to extract the US from the very unpopular war and anything to do with it. So attention turned to the larger South China sea and the Indian Ocean.

Rather than operate out of NAS Cubi Point and using aircraft carriers as gas stations, as had been the routine immediately after the Vietnam peace agreement had been reached, our aircraft would be formally assigned full-time to a specific aircraft carrier. Now, we would operate from a single ship rather than hop from ship-to-ship or from ship-to-shore as we had done previously. We would stay with that ship as it sailed to various places around the world. I was part of one of the first groups to follow this new routine. We were assigned to the USS Kitty Hawk, which was scheduled to sail west through the Indian Ocean to the east coast of Africa and back.

> *Our deployment to the Indian Ocean (the IO) marked the first post-Vietnam carrier-based deployment of VQ-1 to the IO following the end of operations in Vietnam. At that time, US ships and aircraft would visit various ports in Iran. It must be remembered that, in 1973* ***Iran was an ally of the US while Iraq***

***was an adversary**. Politics is not predictable. For several years, VQ-1 would operate its P-3 aircraft out of an airfield at Bandar Abbas, Iran located near the Strait of Hormuz. Following the Iranian revolution in 1979, VQ-1 reverted, as they had done at the end of the Vietnam war, to operation solely from carriers. They would maintain a continuous presence in the IO up to the present day, with A-3s operating from whichever aircraft carrier might be operating in the area or, for the squadron P-3s, by operating from Djibouti or other exotic airfields, including the island of Diego Garcia (see below.)*

USS Kitty Hawk detachment – 1974
Charlie front row, 7th from left

You Don't Have Clearance For That

A humorous incident happened shortly after we were assigned to the ship. Remember that our aircraft and personnel technically were not part of the air wing. We had no space aboard the ship that was truly our own and had to share space with others, always seeming to be in their way. While our relationship with others was always cordial, it was, at the same time, always just a little uncomfortable. We were visitors. Interlopers.

The upper echelons of the Navy knew what we did and how important our missions were. But, because of the intense secrecy of our work, few others did. This extended all the way to the Commanding Officer of the USS Kitty Hawk himself. The only things others knew were that our airplanes were too big, took up too much space on the flight deck, and that they had to find room for our several dozen sailors and crew somewhere on the ship when we were aboard.

Aircraft carriers are huge ships – many almost a quarter-mile long! But, as with any ship, space was always at a premium. As we began the cruise, the Officer In Charge (OIC) of our detachment approached the air wing commander to request more space for our maintenance team. Sorry, he was told, there simply wasn't any space available. Undeterred, the OIC went to the CO of the ship with the same request. Surely, he asked, there must be a compartment (rooms on ships are referred to as compartments) somewhere on the ship that could be assigned for our use. No. There was not. We would have to make do with the scraps of space here and there that we had been allocated.

Our OIC then drafted a message to our squadron CO describing the conditions and the lack of cooperation he had received from the ship and took it to the ship's communications room to send. But they refused to send it. The ship's CO had told us 'No.' Period.

Finally, our OIC went to the SPINTCOM operators and had them send his message. Remember, our missions were so secret that we had access to that separate satellite communications system. It was so secret that even the ship's CO was unaware that it even existed. Back on Guam, our squadron CO received the message and forwarded it to the admiral in command of the entire Pacific fleet who quickly agreed that we deserved more space and sent a message to

the CO of the USS Kitty Hawk directing him to find additional dedicated space aboard the ship for us.

The ship's CO was furious. He called our OIC to his stateroom. How had we managed to get our message out? 'Sorry, Captain.' Came the reply. 'You don't have a sufficient security clearance for me to answer that question.' That did not go over well. But we did get the space we needed.

In the IO, our missions would be rather boring. Our job was to scour the oceans to locate and identify ships from other navies, especially Soviet Navy ships. That entailed flying around semi-randomly simply looking to see what we could find. In the era before near-continuous satellite surveillance, that was the only way to do it. The crew in the back of our aircraft listened on their various devices. If the Soviets broadcast any signals at all, we'd hear them, head toward them, and identify them. Mostly, we came up empty and merely spent hours flying in circles with nothing heard and little to see except water and clouds. When we did find anyone, however, it was big news and the USS Kitty Hawk would get some of the credit for having found them. Perhaps, the Kitty Hawk's CO admitted, this VQ-1 wasn't such a bad outfit to have aboard as he had initially thought.

Shellback Initiation

A port visit was planned for Mombosa, Kenya. That would be interesting, not least because it was south of the equator. Sailors have lots of traditions. Among them, sailing across certain notable lines of latitude and longitude. Those who have crossed certain lines are given unique names:

- Equator – 0-degrees latitude – Shellback
- Arctic Circle – 66-degrees north latitude – Blue Nose
- Antarctic Circle – 66-degrees south latitude – Red Nose
- International Date Line – 180-degrees longitude – Golden Dragon

There are literally dozens of recognized events: circumnavigating the globe, transiting the Panama Canal, rounding the horn of Africa, etc. Special designations are given for doing two or more of these at the same time, or during a single voyage. Surprisingly, there doesn't seem to be an award for crossing the Prime Meridian – 0-degrees longitude – perhaps because it is so common. Anyone who has traveled between the US and Europe has crossed it.

Crossing these lines usually involves elaborate rituals and, at least in 1974, more than a little hazing of new initiates by veterans. Today, all but the mildest hazing is considered inappropriate (maybe even illegal!) But in 1974, there were few restrictions. When the initiation is complete, each person is presented with a colorful certificate to certify their membership in the group.

Some crossings are considered more important than others, probably because of their relative rareness. Some are considered so significant that a notation of it is included in your official personnel folder and an official ID-card is issued. Such records could be important if, later, you find yourself on another ship making the same crossing. If you cannot prove that you already crossed, you will be forced to go through the initiation again. (No one is actually *forced* to endure the initiation, but failure to participate shows an extreme lack of camaraderie.) On this trip aboard USS Kitty Hawk, I would cross the Equator and become a Shellback. For decades, I carried my Shellback card in my wallet – just in case.

My Shellback initiation was memorable not least because that is how I celebrated my 2nd wedding anniversary. On the morning of March 18, 1974, the entire 5,000-plus crew of the USS Kitty Hawk were awakened early to begin the Shellback initiation.

The entire Battle Group crossed the equator at once, sailing in loose formation. After I had completed my initiation, I remember standing on the flight deck and watching the sailors on several other ships going through theirs as they sailed along side of us.

The Shellbacks aboard Kitty Hawk had prepared a remarkably elaborate ceremony. Those of us to be initiated into the realm of King Neptune were considered *polliwogs*. We had to pass through a series of silly obstacles to earn our right to become Shellbacks. On a ship as large as an aircraft carrier, with hundreds of initiates, multiple initiations were underway simultaneously. Each department conducted their initiations separately. I was initiated by the Aviation department. If memory serves, USS Kitty Hawk and its Battle Group set a record for the number of people initiated on a single day.

We were directed to arrive barefoot, dressed only in athletic shorts and a T-shirt, and report to one of the several mess halls. From there we were ushered into the initiation process via a hatch that led to the flight deck. As I climbed a short ladder, I was ordered to kneel down, recite some absurd pledge, and express my subservience and devotion to King Neptune himself. In this case, the King was the fattest sailor that could be found, seated on some highly-decorated throne. For each of us, he would reach into a bucket of axle grease and smear a handful onto his bare belly, which I then had to kiss. When I leaned forward to do so, he grabbed my head and rubbed it around vigorously to make sure that I good a good face full of that grease. The grease turned out to be good sun screen as well as protection for what was to come.

Then I had to crawl through a long line of people holding ping-pong paddles to get my butt slapped. Those who crawled through the line too quickly were returned to the beginning again in order to assure that they had been properly initiated. Once on the flight deck, I was guided to the next event where I was

directed to blow the collected water out of several tie-down pads on the deck. (A tie-down pad is a small hemispherical depression in the flight deck, about four inches across and two inches deep with an X-shaped cross welded across its top. Chains were hooked onto the cross and connected the landing gear struts of each aircraft to firmly tie them to the deck.) The act of blowing the water out of the depression forced me to hyperventilate and made me hypoxic. Once dizzy with hypoxia, I was directed to walk around where I would stumble into another group of people with paddles.

The final event, was the *Pièce De Résistance*. It comprised a fabric tube, perhaps 15 feet long and 3 feet in diameter filled with garbage from the ship's kitchen. Each initiate had to crawl through the tube. In the hot equatorial sun, the interior of the tube was quite ripe. The garbage was slippery and making progress was difficult. People standing outside of the tube continuously pushed and shoved me so as to knock me down and further slow my passage. Some initiates clearly had become nauseous and vomited as they crawled thru, making my passage even more disgusting. Once out, I was directed to climb a ladder and jump into a dumpster filled with bright green water.

Jumping into green water may sound disgusting, and some initiates objected. But I instantly recognized the bright green color as the same dye included in our aviation life rafts that was intended to make us visible to anyone searching for us. It was clear to me that this obstacle was intended to allow me to wash off the majority of garbage. I immediately jumped in and cleansed myself. Though the dumpster had some garbage floating around, the cool water was quite refreshing in the equatorial heat.

Not knowing yet that I was done, I swam around for a minute or two, cooling myself and preparing myself for what

might come next. But, when I climbed out of the dumpster, I was met with congratulations, handshakes, and a towel (to wipe the grease off my face) and welcomed into the *Royal Order of Shellbacks*. I was then directed down to one of the large communal showers where all new Shellbacks were given the opportunity to take a long, hot shower in real fresh water before heading to my stateroom to get dressed and return to the flight deck for the lunch celebration. My entire initiation had lasted only about 10 minutes. But it was memorable.

> *On ships, fresh water is a precious commodity. Especially so on an aircraft carrier with a crew of over 5,000. Often, especially in hot climates and when one or more of the evaporators which produce fresh water from sea water are not fully functional, showers are limited to the use of salt water. Even when fresh water is available for showers, you are expected to take a 'n*avy shower*' in which you wet yourself, turn the water off, lather up and wash yourself, then turn the water on again only long enough to rinse off. Sometimes there was no hot water. So a non-time-limited fresh water shower using* ***hot*** *water was a genuine treat.*

Following the Shellback initiation, the flight deck was cleared and rearranged into a celebration picnic. Such celebrations were conducted periodically during long deployments to keep morale high. Held on the flight deck – known as *Steel Beach* for these events – the picnic was a grand affair. Charcoal grills were set up and hamburgers cooked. Music was broadcast over the PA system. A boxing ring, bucking horse, volleyball, and other events were put together. Groups gathered to relax and enjoy a day off, well-earned after several 7-day weeks of 12-hour work days. To make it extra special for this occasion, each sailor was allocated two cans of beer – alcohol was otherwise prohibited aboard ship. Not the

way I would have chosen to celebrate my 2nd wedding anniversary. But certainly unforgettable.

'*Steel Beach*' cookout aboard USS Kitty Hawk – 1974

My father tells the story of his initiation as a Golden Dragon *in Chapter XII of his autobiography* That Jack The House Built *in which he recounts that, as the senior officer to be initiated he assumed leadership of the opposition. Apparently, he and his fellow initiates decided to put up a fight using fire hoses to fend off the initiators. His team was eventually overcome when someone figured out how to shut off the water to his hoses. Obviously, some initiation ceremonies are more elaborate than others. For more details, you will have to read his book.*

Some of these periodic '*Steel Beach*' cookouts featured an air show. After the fighting stopped in Vietnam, people began to lose their skill in using their weapons. These air shows were not intended simply to showcase flying skills like those of the Navy's Blue Angels. Rather, they served as a training event to allow the weapons-handling crews and the pilot's keep their combat skills current.

Smoke flares and oil drums would be dropped into the water and, as the carrier sailed slowly past, a half mile away, formations of aircraft would attack them. Some aircraft would drop bombs, others would fire their guns, swooping and diving. Sometimes, a flare would be dropped from a parachute and an antiaircraft missile would be fired at it. Cheers would go up whenever a direct hit was achieved.

When all the ordinance had been expended, squadron aircraft would fly past in formations of two, four, or more. Often, an A-5 Vigilante would fly past slowly to provide a spectacular visual display. While dumping fuel from its tail as it flew abeam of the ship, the pilot would light the afterburners. This would cause the stream of fuel being dumped to ignite, resulting in a giant tongue of fame trailing behind the plane as it pulled up hard into a vertical climb. Then, the A-5 would circle back and execute a supersonic fly-by at flight-deck level. It's eerie to watch as a plane approaches traveling faster than the sound it makes. You see it moving fast, but hear nothing until it flashes past, followed immediately by the sonic boom and the loud roar of its engines.

As a finale, all the aircraft would gather into a single large formation of a dozen or more aircraft and fly past the carrier as a group. These air shows were always as impressive as they were enjoyable.

The day following our initiation as Shellbacks, the ship anchored just off shore at Mombosa where it would remain for several days. Most of us were granted shore leave and jumped at the chance to get off the ship for a few days. My roommate, Keith Putnam, and I got onto the first barge headed to the beach, caught a cab into town, and asked for a room in the first hotel we came to. A quick examination of the rooms showed they were as bad as the dilapidated hotel itself. This wouldn't do. We asked around. Another cabbie told us about a resort

several miles outside the town. Much better. For several nights, Keith and I luxuriated by the pool in a beach-front hotel. Quite a change from our cramped, noisy room aboard ship.

Many of the ship's crew went to Nairobi where safaris were offered. But I chose to relax in the sun and shop for souvenirs. I found a large earthenware vase painted with flowers which was displayed in our den in Reston for many years. While waiting at the dock for the barge that would take me back to the ship on the day we were to depart, a local vendor repeatedly badgered me to buy one of the carved wooden masks he was selling for $5. After shaking my head no a dozen times, I finally showed him my empty wallet and pulled my pockets inside-out and showed him the spare change I had left – about $1.25 in a mixture of local and US coins. 'This is all I have' I told him. Apparently, it was enough. For years, that mask too was displayed in Reston, hung on the wall just above the vase. Then, back to the ship and back to sea.

Coffin Run

One of the most unusual missions of my career occurred the next day as we weighed anchor and headed back out to sea for our return to the Philippines. It seems that one sailor had died while the ship was anchored. He had apparently overdosed on some local heroin. Our mission: deliver his body for transport back to the US. The Air Force would provide most of the transportation, but they couldn't land on the carrier. So we completed the first leg of the trip by bringing the coffin to Diego Garcia. Even less well-known than Guam, Diego Garcia is a tiny island in the middle of the Indian Ocean. Really more of a large atoll than an island, it lies 2,000 miles east of Mombasa and 1,000 miles south of the southern tip of India.

Diego Garcia seemed the definition of a true tropical paradise – the only inhabited island within thousand miles. Once a coconut plantation, it was purchased by the British in

1967. They relocated its entire population of about 1,000 plantation workers to the Seychelle Islands and Mauritius and built an airfield which is now shared jointly by the British and US and serves as the only strategic airfield in the Indian Ocean. Nicknamed *the footprint of freedom* because of its shape, the atoll can be described roughly as a half-mile wide ribbon of coral in roughly the outline of a human foot, about 14-miles by 5-miles. With white sandy beaches all around, the center is a beautiful lagoon filed with gorgeous aqua-blue water. The highest point on the island isn't more than 10 or 15 feet above sea level. In early 1974, the British were fully in charge and there were fewer than 100 people on the island – all military, all male.

For this trip, our maintenance crew removed the four seats in the back of our aircraft to make room for a coffin, loaded it aboard, and tied it down securely – no need to have a coffin flying around during a catapult launch! Navigation to the island was tricky. The date was March 28 – a mere week after the vernal equinox. Complicating matters, we would be arriving very close to noon when the sun would be almost directly overhead. As with the crew who had gotten lost on their way from Guam to the Philippines (see Lost At Sea on page 150,) this flight would require careful attention to our position at all times. At least I had the proper volume of celestial navigation tables with me.

As we approached Diego Garcia, we were unable to acquire a signal from the island's TACAN or its radio beacon. We received no response when calling the airport control tower on our radios. That was strange. Radar was of little help. There were lots of radar targets, but it was impossible to distinguish the cumulus clouds that dotted the ocean below from land. On radar, they looked the same. At 35,000 feet altitude, we couldn't distinguish the shadows under the clouds from land.

It was time to descend for landing, but we had no contact with anyone and couldn't see for certain where our airfield was. The nearly 2,000 mile flight had put us near the limit of our fuel range. If we descended to land and weren't in the right place, we'd be too low for our radios to be able to contact any potential rescuers. We'd have to expend precious fuel to climb again if needed. But there was nowhere else to go. There wasn't another airfield within 1,000 miles. So we started down.

I had been careful with the navigation, and had to trust that we were in the right spot. As we descended, we repeatedly called the tower on every radio frequency we could find. Nothing. I called our flight following controller in Thailand via the HF radio and asked if he could contact Diego Garcia via telephone and alert them to our imminent arrival. Lower now, we could clearly see that most of the clouds were just that – clouds. We couldn't see any land. What we *could* see, ominously, were sharks. Lots of them! If we couldn't find the island and had to bail out, this would NOT be fun.

I was sure we were in the right place. So, as I had done during my low-level navigation training, I told the pilot to maintain the heading toward the largest radar target I could see. We simply had to wait until we got close enough to see the island. Still, I was nervous. Finally, less than 10 minutes from touch down, someone finally called out to us on the radio. Relief! Then, a surprise.

Apparently our flight plan had never been forwarded to the island and they had no idea that we were coming. The air controller in Thailand had woken these guys up and they ran to the tower and turned on their radios and navigation aids. The radio beacon indicated that the island was directly ahead, and we were cleared to land. We were met on the ramp by a group of local customs officials who asked me, as we deplaned, if we had anything to declare.

"Nothing other than the coffin." I told them.

That drew a strange look. "The *what*?" They asked.

Apparently, like our flight plan, the message from the ship informing them of the purpose of our trip had failed to reach them.

An animated discussion followed wherein we related who we were and what we were doing. We were escorted to the administrative building and told to sit while they straightened things out. Half an hour and several phone calls later, they returned smiling. It was just a typical communications foul-up. The Air Force had thought that we were bringing the cargo directly to Thailand. They would send a cargo plane to the island tomorrow to complete the journey. We were free to go. Instead, not wanting to try to find a moving ship in the middle of the Indian Ocean for a night landing, we elected to spend the night on the island.

We headed over to the visitor's BOQ for the night. That was an adventure in itself. The visitor's BOQ was a simple one-story building with plywood walls and screened windows. Only 20-feet by 50-feet, it was a single open room with rows of bunk beds lining the walls. There were a few fans, but no air conditioning. Bathroom and shower facilities were outside in an adjacent open-air structure consisting of a concrete slab covered by a tin roof. It was surrounded by 4-foot high plywood walls, open both above the waist and at the bottom, with no screens. Clearly, this visitor's BOQ was not designed to encourage visitors.

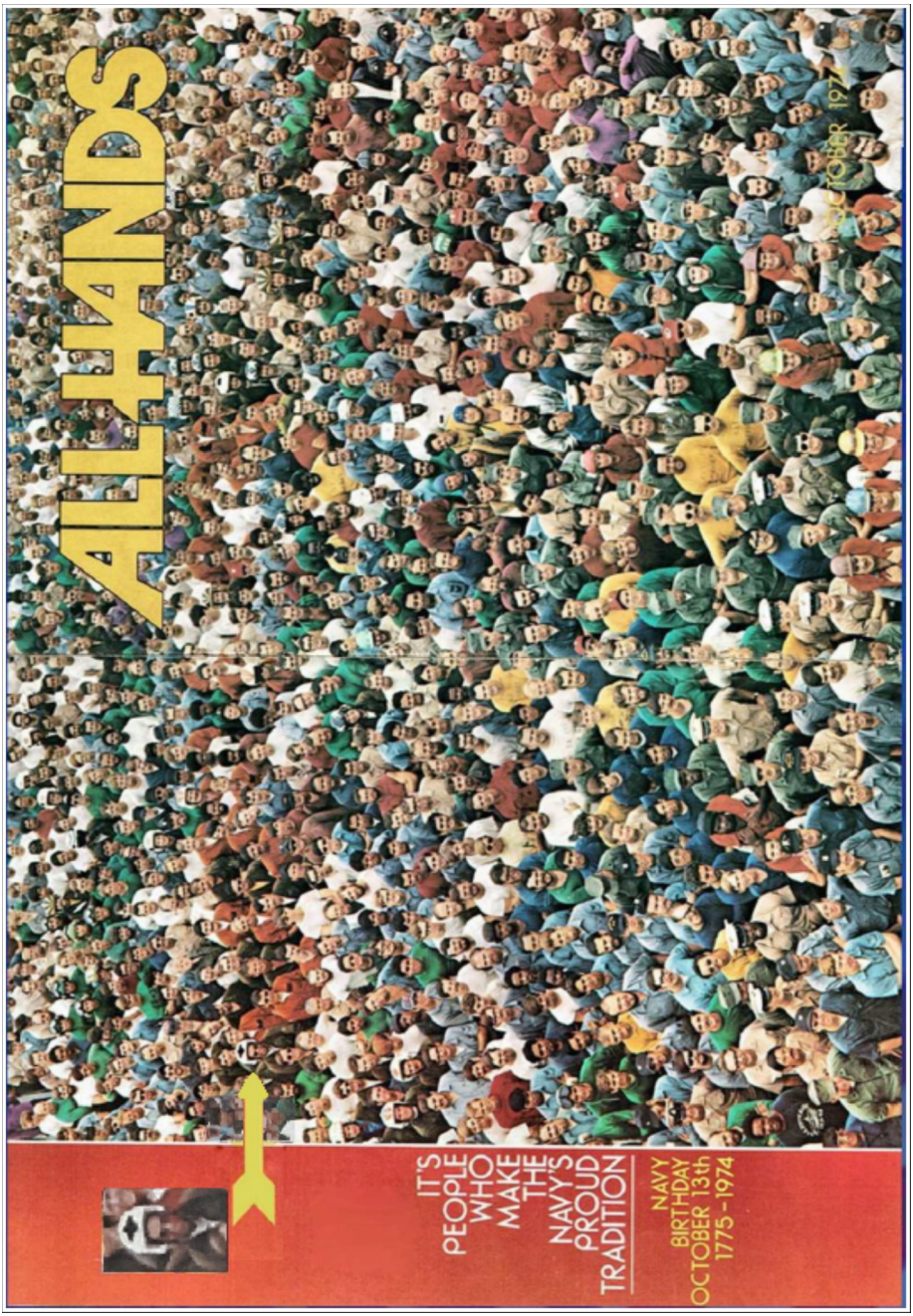
We each selected a bunk, dropped our flight bags, showered, and retired to the combined cafeteria/mess hall/club for a late lunch. Facilities were pretty sparse on the island. With nothing to see or do, we spent the afternoon making sure that the ship knew of our plans to return the next day and

requesting their route of travel so we would know where to meet them. I bought a Diego Garcia T-shirt as a souvenir. On the flight back to the ship, our flight crew became airborne Shellbacks by flying across the equator. We didn't bother with an initiation ritual.

> *When I was there, in 1974, Diego Garcia was a spartan outpost in the middle of nowhere. While it remains in the middle of nowhere, by 1980, facilities at Diego Garcia had been significantly improved and VQ-1 had established a semi-permanent detachment there to provide continuous support for US operations in the IO. That detachment is still operating today. The United Kingdom still administers the island and, in addition to VQ-1, the US Air Force stations B-1, B-2, and B-52 bombers and other intelligence-gathering aircraft there.*

Photo Shoot

Back aboard, as the USS Kitty Hawk headed east towards home again, an announcement was made over the ship's public address system: Everyone who could, was requested to assemble immediately on the flight deck for a photo-op. Usually, each ship produces a 'cruise book' during each deployment. Much like school yearbooks, these cruise books are sold to the crew as souvenirs. The editors had decided that a large crowd on the flight deck would make a nice picture. So, many of us made our way up. That picture was eventually used in the cruise book. I was unable to get a copy of the USS Kitty Hawk cruise book. Some months later, though, the same picture was published on the cover of *All Hands* magazine – a sort of 'coffee-table' magazine distributed Navy-wide each month with stories of general interest to the entire Navy. The picture covered the entire back and front covers of the issue. Though I never managed to get a copy of the cruise book, I did acquire a copy of the magazine, which I keep in a



All Hands Magazine cover – October 1974

drawer of our file cabinet in Reston. If you look closely, you will be able to see me on the back cover, wearing my green flight suit, white flight helmet with a black VQ-1 bat on top, and sun glasses. Many of my squadron-mates, also wearing their flight suits, surround me. My 15-minutes of fame.

Everyone aboard hoped the ship would stop in Australia on the month-long trip back to the Philippines, but that was not to be. Instead, we stopped for what turned out to be a thoroughly enjoyable three days in Singapore and an even more enjoyable week-long stay in Hong Kong. I'll let Kathy tell the story of Hong Kong.

Hong Kong

KATHY

While Charlie was enjoying himself in the Indian Ocean, I was enduring an early 'rainy season.' Generally, rain isn't an issue on Guam. Typically, it rains every day, almost like clock-work, at 4pm. But it's usually just a brief shower as the clouds, which build up over the ocean during the day, dump their moisture in the afternoon. Ten minutes and done. Hardly enough to notice. During the summer rainy season, though, rains are more prolonged, sometimes lasting for hours. In 1974, the rains came early and were persistent – sometimes several days of near-continuous rain.

Day-long clouds and rain on Guam were novel. The first one or two such days were an almost a welcome change of pace. But the novelty faded quickly. Again, I was stuck inside with nothing to do. There was hope, though.

Charlie had told me that the Kitty Hawk would be spending a week in Hong Kong. This was my opportunity to do what I had heard so many navy wives do: meet their husbands in some exotic port for a vacation. There was no Internet for planning. Not even a travel agent. Everything was done by

word-of-mouth and via friends who had done it previously and ‘knew the ropes.’ First of all, I appealed once again to our next-door neighbors who had watched Terri when we visited Saipan the year before. They agreed to care for Terri while I was gone. That was the hardest and most important thing and was a big relief. I knew Terri would be in good hands. Now I could plan with purpose.

For that I connected with Jeanie Putnam, whose husband Keith was on Kitty Hawk with Charlie. She and I had become close during the weeks Charlie had been away, sharing news of the cruise and commiserating with one another about our husband’s long absence and the rain. The Putnams were (and still are!) experts in taking advantage of every benefit and ‘good deal’ the Navy offered. She and Keith definitely ‘knew the ropes.’ Together, we planned our adventure. First we’d fly to Taiwan for a wives-only adventure. We’d spend a few days in Taipei on our own, then fly on to Hong Kong where we’d meet our husbands before returning to Guam. I was truly excited. I’d never done anything remotely like this before and even just the planning was exhilarating.

When the time came, Jeanie and I headed out. On arrival in Taipei, we exchanged a few dollars for local currency. Denominated in NT (New Taiwan dollars,) the exchange rate was something like 400 NT per US dollar. Neither of us was well-versed with exchange rates yet. When the cab driver unloaded our luggage at our hotel and held out his had for a tip, one of us handed him a 50NT coin (worth barely more than a dime,) thinking that was a $5 tip. The driver, who did not speak any English, objected to such a paltry tip and began jabbering and gesturing. Thinking he was asking for too much, we refused to be bullied. The driver threw the coin onto the ground in frustration and drove away in disgust. When we discovered our mistake, we shared a good laugh.

I spent two enjoyable days strolling the streets of Taipei with Jeanie, browsing the seemingly-endless rows of shops. It was a refreshing change to experience a crowded and bustling city after having spent a year and a half on a comparatively-deserted and slow-paced island. I was simply bowled over by the immense displays of merchandise. Shops were packed to the ceiling with dishware, lamps, furniture, and knick-knacks of all kinds, spilling out onto the sidewalks. I had never seen anything like it. I was amazed when I walked into an art store to see dozens of copies of a batik painting like the one that Charlie had brought home from one of his deployments. Until that moment, I had thought our picture was unique. Now I was a bit disappointed to see that it was merely one of hundreds. Despite my disappointment, I still think that painting is beautiful and it still hangs over our sofa in Reston.

Meals were wonderful too. Jeanie and I went out one evening to a place recommended to us for its Mongolian Barbecue. The officers club on Guam served that dish and Charlie and I had come to love it. In a sort of do-it-yourself buffet, you fill a bowl with sliced and chopped ingredients: Pork, chicken, beef, shrimp, squid, mushrooms, cabbage, carrots, onions, and more. Once you have the mixture you want, you pass your bowl to the cook who grills it all with soy and other exotic sauces into a wonderful meal. I filled my bowl, anxious to eat. But, in my enthusiasm, I severely misjudged the strength of the ginger sauce I added at the end. I had made my meal so spicy hot that it was inedible. Today, I still very much enjoy Mongolian Barbecue when I can find it in a restaurant, but I'm very careful now not to repeat my Taipei mistake.

After two days, it was on to Hong Kong. With no way to communicate with our husbands, our plan was simply to meet at our hotel. On the recommendation of a squadron-mate, we had selected an 'authentic' Chinese hotel. Jeanie and I caught a

cab to the hotel, arriving to find our husbands were not there yet. Rather than check in, we decided to drop our luggage with the concierge and wander around the area while we waited for them.

As it turned out, Charlie and Keith had already arrived but were waiting at a different hotel located several blocks away. Apparently, the two hotels had similar names and, whatever the distinction in their names was, it was lost in translation between English and Chinese. They were surprised that their hotel did not seem to have a record of a reservation. So they too left their bags with the front desk and decided to wander the streets waiting for us to arrive.

In an unbelievable coincidence, the four of us stumbled onto one another as we wandered. After a brief discussion, we all agreed that neither hotel looked very enticing and none of us were looking for an experience quite so 'authentic.' Instead, we wanted luxury. We decided to cancel our reservation at the 'authentic' hotel and relocate to something better. I don't remember where we stayed. It was probably a Marriott or Hilton. Whatever it was, we got two very nice rooms on the 10th floor overlooking the city of Kowloon – the mainland part of the Hong Kong metropolis. It was a good choice and turned the bad omen of our initial hotel confusion into a great vacation.

That afternoon, we joined the ship's Air Wing at a reception on the rooftop of a downtown hotel. Intended as an opportunity for the guys to network with their senior officers in an informal setting, it was disappointing to me because I knew no one there. Later, just the four of us had dinner at a rotating roof-top restaurant on a downtown office building. The views of the brightly-lit city at night were wonderful, but the food was mediocre.

The four of us spent the next few days enjoying ourselves. Sometimes we stayed together and sometimes went

our separate ways. One day, as was common, Charlie and I hired a cab driver for the day. Our driver took us all over and around Hong Kong and the surrounding area. We went to a hillside overlook where we gazed onto the taboo-for-military-personnel hills of mainland Communist China (not open to western tourists in 1974) and drove through the waterfront area jam-packed with hundreds of fishing junks tied together in a dense floating city-within-a-city.

At one stop, as Charlie and I enjoyed the view, some female Japanese tourists asked to take their pictures with me. One of them was dressed exactly like me (green top and white skirt) and my height and blonde hair were as unique and interesting to them as the Hong Kong was to us. One of them asked, in broken English, 'Where do the blondes come from in America?' We were unable to explain to them that there was no area of the US that produced blonde haired women.

One memorable evening, Charlie and I took the ferry across the harbor to Hong Kong island and caught the tram to the top of Victoria Peak at the center of the island to watch the sun set. It provided a panoramic view of the entire city. The dinner was enjoyable and the view and our time together in such an exotic location was very romantic. We were establishing what would become a life-long vacation theme: exotic locations where the meals provided the memorable moments.

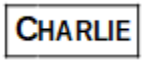
Crazy American Tourists

We shared another particularly memorable, if somewhat less romantic meal with our friends at a downtown restaurant renowned for its Peking Duck. The duck was excellent, as advertised. The memorable part was our own doing. Shortly after being seated, one of us accidentally knocked over a glass of Saki, soaking the tablecloth. The wait-staff immediately jumped into action, quickly clearing the table, replacing the

Kathy in Hong Kong – May 1974

tablecloth, and resetting it to pristine condition. Then, we did it again. Someone knocked over a pitcher of water, this time soaking the entire table. We all laughed in embarrassment while the staff repeated their table magic, and we waited for our meal. Perhaps, our several pre-meal cocktails had something to do with our clumsiness. Then, incredibly, someone spilled a cup of tea. This time we were truly humiliated. This group of noisy, ugly Americans had made a scene multiple times. The wait-staff eyed us carefully. The other patrons were beginning to stare. This time, we shooed the wait-staff away, not about to

be the center of attraction for a third time. Despite the disruption, we all very much enjoyed the meal, and laughed about it privately as we made our way back to our hotel.



Shore Patrol

While in Hong Kong, Kathy was forced to spend one evening alone as I was assigned an evening shift on Shore Patrol duty. The job required me to wander the streets of Hong Kong, accompanied by a senior enlisted sailor, and deal with shipmates who were causing trouble. That meant walking from block-to-block in the entertainment district. My partner and I would slowly amble from bar-to-bar. We'd pop into a bar if it sounded particularly boisterous, make ourselves seen clearly, have a few words with staff, and introduce ourselves to anyone who appeared to be causing trouble. Mostly, our time was spent with drunken sailors who were, for whatever reason, looking for a fight. There were more than a few. Occasionally, as we walked, a bar owner would call us in on purpose.

My general approach to defusing these situations was to pull the offending sailor(s) outside and calmly explain that the bar they were in was terrible. It was well-known, I'd say, for serving watered-down beer and for overcharging servicemen. I'd tell them that servicemen were sometimes lured into the back alleys, robbed, driven away, and dumped into the countryside. Then I'd point to a brightly-lit bar the next block over (which just conveniently happened to be outside the boundary for which my partner and I were responsible) and explain that they should try their luck over there. Rather than be arrested and spend the night in the brig, they quickly agreed, thanked us, and hurried out of our territory to become someone else's problem.

As our shift ended, my partner and I began walking back to the headquarters building near the port. We came upon two

clearly drunken sailors who, on their way back to the ship, had decided to remove the rear-view mirror from a parked car. Apparently this mirror held some special significance to one of the sailors. He was furiously attempting to wrench the mirror off of the car door using brute force. He had managed to bend the sheet metal, but the mirror remained securely bolted to the door.

We asked him what he was doing? 'I need this mirror' was his reply. Wanting nothing more than for our shift to be over, we tried to convince him to leave. But he was adamant. He wanted that mirror. We threatened to arrest him. He was undeterred, continuing to rock the now-dangling mirror back and forth to free it. He offered us some money if we'd leave him alone – probably more money than the mirror itself was worth. Explaining that we didn't want or need his money, we again urged him to walk away. We just wanted our shift to be over.

He was having none of it and took a swing at my partner. That settled it. He was going down. Out came our batons and hand cuffs. He was so drunk that he almost fell over as he swung again at us. Subduing him was easy. His friends just stood by, too drunk themselves to do more than watch. We walked our prisoner back to the headquarters, wrote up our report that would certainly land him in a great deal of trouble not only with the Navy, but with the local Hong Kong police, signed out, and left. Shore Patrol wasn't fun, but it was interesting.

Lobster Feast

On our return to Guam, LCDR Max Otto, the Officer in Charge of our detachment aboard ship, hosted a huge party at his home for the entire detachment crew. We enjoyed all-you-can-eat grilled lobster, courtesy of the US Navy. The lobster is a story of its own and deserves to be told.

Ships sail in groups known as battlegroups. Typically, all of the ships arrive and depart from port at almost the same time.

The Supply Officer of each ship in the group is responsible for obtaining the food for their ship. When the ships are at sea, the food supply dwindles. When they return to port, the Supply Officers rush to the supply depot to renew their supplies. Aircraft carriers, due to their size, are often the last ship in the group to arrive. As a result, by the time the carrier's Supply Officer arrives at the depot, all the best supplies have been snapped up by the smaller ships whose Supply Officers arrived first.

When carriers are scheduled to go into port, air crews like ours often fly ashore one or two days before the ship arrives, simply because we can. Most aircraft have room only for their pilots. But our aircraft had five additional seats. Apparently, the Kitty Hawk's Supply Officer, aware of these extra seats, convinced LCDR Otto to let him take one of those seats as we flew ashore two days before the rest of the battle-group. This allowed him to get to the supply depot two days before everyone else. He would get first choice of all the fresh vegetables, meat and other foods, which would make him a hero to the entire 5,000-man crew of the carrier – especially to his boss and the admirals who were aboard. In return for the favor of flying him ashore, he gifted two cases of lobster tails to LCDR Otto. We all enjoyed those lobsters in his back yard on our return.

More Deployments

Summer through Fall of 1974 was a particularly busy time for me with nearly 80 flights between May and October. Following our Hong Kong port visit, Kathy returned home and the ship returned to sea. It would be several more weeks before we finally docked in Subic bay near NAS Cubi Point. By the time we did, I had been away from Guam for more than 11 weeks – the longest deployment of my time with VQ-1. (I had it

good. Following my time with VQ-1, long deployments became the norm, now typically 6-months at a time.)

After being home for only a few days, I went back to the Philippines and ship for a busy month. For several days, we operated from Clark Air Base, about 30 miles from NAS Cubi Point. In 1974, my sister Martha lived there with her husband Gary, an Air Force helicopter pilot who was stationed there at the time. During my stay, Gary was deployed, but I had a chance to visit with Martha. It was good to see some family.

Charlie at Clark AB, Philippines – April 1974

While at Clark, my pilot and I decided that some training would benefit us both. There was an established low-level training route near the air base. He could brush up on his low-level flying and I could refresh my low-level navigation skills. We enjoyed an hour of high-speed sight-seeing over the countryside in the heart of Luzon island. Interestingly, the route took us to and around Mt. Pinatubo. Then a nearly 6,000-foot mountain, it

was one of the most active volcanic peaks in the Philippines. It was interesting to fly so close to a smoking peak.

> *Long after, in the summer of 1991, following weeks of increased activity, Mt. Pinatubo produced the second-largest volcanic eruption of the 20th century, spreading devastation across wide areas of the island and reducing the height of the mountain by almost 1,000-feet.*

SNOOPEX

In other adventures, several times we were tasked to support SNOOPEX exercises wherein the goal was for us to find US battle-group ships while they were attempting to hide at sea. On one such exercise occurred somewhere several hundred miles off the west coast of the Philippines.

The most important part of hiding is radio silence. If you don't transmit anything (radio, radar, satellite, and, at night, even light) then no one can see or hear you without giving themselves away. That holds true for both the seeker and the sought. With radar, you can find a target hundreds of miles away. But if you turn on your radar to find a target, they can detect your radar.

So we tried to detect. We listened on every imaginable frequency for any signals at all. By examining a signal we could determine if it originated from a radio, a radar, or something else. If we determined a signal to be of interest, we'd determine the direction from which it originated and simply follow it back to its source. If you have the necessary receiving equipment, like we did, it's really quite simple. If you remain radio silent yourself, you are undetectable unless the other guy uses radar to look for you, in which case they give away their own position. So, during wartime, use of radios and radars is strictly controlled and allowed only when absolutely necessary.

Today's stealth aircraft use special paint and other coatings designed to absorb radar and are carefully shaped to disperse what little radar energy isn't absorbed into all directions in order to minimize radar detection. Even so, a radar signal must travel from the transmitter to its target, bounce off and return to the radar receiver – constantly loosing energy as it goes. If a target is far enough away, the returning signal is simply too weak to be detected by the receiver.

Here's the clever part: Their signal must bounce off of you and return to them. So, if you have a receiver as sensitive as theirs, then you can detect their transmitted signal when you are twice as far away from them as they can detect you. So you always will know they are looking for you well before they can detect you.

Also, radar transmits are what are referred to as 'line of sight' signals. Their signals travel only in straight lines. The receiver must have an uninterrupted line of sight to be able to 'see' a target. Since the earth is curved, the farther a signal travels from its transmitter, the higher the target must be to be seen. When you stand on a beach and look out over the ocean, you can see only a few miles to the horizon due to the curvature of the earth. The same holds true for radars. Lower targets are said to be below the 'radar horizon' leading to the saying 'flying under the radar.'

For us, flying under the radar was simple. When we first detect a radar signal at its minimum strength, we can be certain that they cannot yet detect us. We then reduce our altitude until their signal disappears to keep ourselves below their radar horizon. As we get closer, we just repeat the process, reducing our altitude each time we detect their signal again, always staying below their radar horizon. Of course we cannot fly into the ground, so eventually we will be high enough to be detected

by them. But, by then we will have gotten close enough to launch whatever weapons are available to attack them.

The A-3 did not carry weapons. On SNOOPEX missions, two A-7 attack jets would fly in formation with us to simulate cruise missiles. We guided them toward the battle-group, getting lower as we approached, until we were flying just above the waves. At about 50 miles, we directed the A-7s to detach and fly as separate 'missiles' to their targets. By the time we were detected, we were almost within sight of the ship, giving them only seconds to react.

For safety, as we approached the carrier, we revealed ourselves, climbing to 1,000 feet and calling them on the radio to request clearance for a fly-by. Just as in the movie *Top Gun*, when Maverick requested a tower fly-by, our request was denied – we had embarrassed them. But, it was too late. We were too close by then to stop. We had been listening on all of our radios and knew that no other aircraft were airborne. We flew directly across the stern of the carrier at 500 feet and about 300 knots, making the obligatory tight turn followed by a rapid climb to head back to NAS Cubi Point. SNOOPEX missions were always fun.

On another similar exercise, as we flew only about 50 feet above the water, we spotted a Soviet intelligence gathering ship directly in front of us. They were constantly looking for the US fleet, just as we were constantly on the lookout for them. Our pilot altered course slightly to avoid flying directly overhead, which was considered too aggressive. We could see several sailors sunning themselves on the deck. They jumped up quickly as we passed them by at high speed. Clearly, they had not been aware of us. We got a good laugh knowing they had something to report back to their bosses that day.

In April, our crew on Kitty Hawk was finally replaced by another and I could go home. I assumed I would be home for a

while. WRONG! Home only three days, and taking a few vacation days to rest and be part of my family again, I was awakened by the squadron duty officer and informed that I had been assigned to a VIP mission that would depart the next day. I was angry and let him know it. I had been gone for one of the longest deployments in recent squadron memory. The squadron should find someone else, I told him. The duty officer listened politely, knowing I was just blowing off steam. I knew I was wasting my time. The 'needs of the Navy' would, once again, take precedence. I prepared to leave again.

The only advantage of VIP flights was that they almost always took me to unusual places that I'd otherwise never have had the opportunity to visit. The down side was that usually there was little time to do more than grab a quick meal before we moved on. Over three days, we carried the Inspector General of the USMC from Okinawa to Thailand, Saigon, and Singapore. With such a high-ranking passenger, our squadron CO decided that he would be the pilot. When preparing to depart from Saigon, one of our engines failed to start. While waiting for a replacement huffer (the machine used to generate the compressed air used to start our engines) the CO, embarrassed that our VIP was anxious to depart, suggested that we request one of the other aircraft taxiing by to stop in front of us so that its exhaust could blow into our engine intake. That exhaust, he reasoned, would spin our turbine fast enough to allow us to start the engine. I convinced him that the engine exhaust was too hot and would cause our engine to overheat when he tried to start our engine. He agreed. Eventually, the replacement huffer arrived and we were able to start our engine.

A Questionable Captain

The foregoing was a good example of our squadron CO, Captain Akins. He was one of the most senior Captains in the Navy at that time. That our squadron CO was a Navy Captain

was, itself, unusual. Most Navy squadrons were commanded by Commanders or Lieutenant Commanders. VQ-1 was a huge squadron, though, with a compliment of nearly 1,000 personnel – more than double that of most squadrons. With almost 30 years of active-duty service, the opinion of most was that Captain Akins had reached the pinnacle of his career, and would probably never be promoted to Admiral. He had been flying for decades, accumulating thousands of flight hours and had a reputation for being a bit ‘flexible’ with rules. Many navigators, including me, disliked flying with him.

Once we had an A-3 with a tear in one of the large rubber fuel tanks within the fuselage, causing fuel to leak when it was filled to capacity. Japan was the only place other than the US with the appropriate repair facilities. Flying from Guam to Japan without filling that tank would be possible, but not without waiving the requirement to carry enough fuel to divert to an alternate airfield in the event that weather or some other issue made landing at the primary airfield impossible. Captain Akins was quick to grant the necessary waiver. The flight would be scheduled only when the weather was good. Just to be sure, he proposed to fly the aircraft himself. I drew the short straw and was assigned to navigate for him. To assure minimum fuel use during the flight, we would climb to the A-3’s service ceiling of 43,000 feet (normally, we flew at 35,000 feet) which would require us to wear our oxygen masks, which normally were required only during takeoff and landing. That was problematic, because Captain Akins was a chain-smoker and simply couldn’t manage the 3-hour flight without a cigarette.

He solved that problem by climbing to only 39,000 feet, the maximum altitude allowed for flying without the mask. He knew we’d burn more fuel. But he was sure we’d have plenty. In addition to granting himself a waiver for flying without the minimum required fuel load, he’d give himself permission to fly a

less-than-optimum fuel profile. Ultimately, he was right, and the flight went without incident. But we would have been in trouble had anything unexpected happened. That was not my only experience with him.

Once, when flying FCLP with him on Guam, a loud warning horn sounded in the cockpit as we approached for touch down. The horn signaled that we had failed to lower our landing gear. Somehow, during the repeated touch-and-go landings and his arguing with the LSO after having been waved off on a previous landing attempt, we had failed to fully complete the landing checklist on the subsequent attempt. As it was designed to, the warning horn got our attention. But it was very distracting.

“Turn that damn horn off!” He screamed.

Without thinking, I immediately pulled the circuit-breaker, silencing the horn. Only then did I realize what the horn had meant and, without even asking him, I reached over and lowered the landing gear. Flying with Captain Akins required continuing vigilance. But, occasionally, he showed that he was more aware than most people knew.

Once, on a midnight flight from the Philippines to Guam, he told me to turn off the light for my navigation table. He then turned off all the instrument and cabin lights leaving the cockpit totally black. He then told me to look up. Through the clear plexi-glass canopy overhead, the Milky Way was so bright as to be almost disorienting, appearing as a thick band of white across the sky from one side of the airplane to the other. I doubt that I’ve ever seen so many stars. We flew in silence for several minutes, savoring the moment, in awe of the view.

Another time, while I was acting as the squadron duty officer, I received a call from air controllers in Hawaii. One of our A-3s, enroute from Hawaii to California had experienced an

engine failure. Not yet half way to the US, the crew immediately turned around to return to Hawaii. But, still heavy with fuel for the long trip, they could not maintain altitude and slowly descended. Eventually, they stabilized at about 8,000 feet but, at maximum power on their remaining engine, they were now burning fuel so fast that they would not be able to make it all the way back to Hawaii. That was a dire situation, and, I was told, they were preparing to bail out when they reached minimum fuel.

I immediately called Captain Akins and informed him of the situation. Almost immediately, he picked up the phone and called the Commander of the Pacific fleet (CINCPAC) in Hawaii. According to the morning briefing he had received only hours before, there was an aircraft carrier on its way to Hawaii. He reasoned that it would be very close to where our aircraft was. Couldn't they launch a tanker to provide fuel to get our stricken aircraft back to Hawaii? Sure enough, they could … and did. To the great surprise of our struggling crew, an A-6 tanker flew up to join them, and streamed their fuel basket.

In-flight refueling is difficult. Especially so with only one engine. But they succeeded and acquired enough fuel to complete their return. Shortly, they made an arrested landing back in Hawaii. Captain Akins' quick, out-of-the-box thinking had saved an aircraft and its crew. He was an old sailor who operated a bit too casually for many. But he also could be sharp as a tack. Even as you kept a close eye on him, you had to respect him.

Sometimes, like when looking at the stars, flying brings other unusual experiences. One night while flying back to Guam, the entire cockpit was lit up by an eerie purple glow. It wasn't a UFO. It was St. Elmo's Fire – an unusual weather-related phenomenon wherein the electrical charge in the atmosphere creates a bright violet glow, sometimes

accompanied by the appearance of lightening-like electric sparks. It lasted only a minute or two, with jagged lines wildly branching like fingers across our windscreen. It had no adverse effect, and vanished as quickly as it had appeared. In bright daylight we may not have noticed it at all. But at night it was both impressive and wondrous. I only experienced it once.

Summer and Fall of 1974 saw me home more regularly, which was good because Kathy was then pregnant again. At least this time around, I could giver her some support. But, as with many things in the Navy, we were separated at precisely the times of most need. For example, during the rare instances when typhoons (the Pacific term for hurricanes) were predicted to hit Guam, I invariably was directed to fly our aircraft elsewhere to prevent them from being damaged. That would leave Kathy home alone with Terri in the storm. Thankfully, though I did have to fly away several times for storms, no major typhoon struck Guam during our time there.

This period also saw me flying numerous flights as an instructor navigator for new arrivals. I was now one of the senior navigators in the squadron and I was approaching my departure date. In addition to routine flights back and forth to Japan and the Philippines, during this period as an instructor, I probably visited every island within a thousand miles of Guam: Truk (600mi SE), Ponape (1,000mi SE), Yap (600mi, SW), Palau (800mi SW), Northern Marianas, Iwo Jima (500mi NNW), Wake (1,400mi NE), Midway (2,600mi NE), Anthan/Sarigan (230mi NE.) I never actually set foot on any of them. Most of them didn't even have airports. But we almost always descended to 500 feet and enjoyed a quick sightseeing tour, circling the island(s) and their surrounding coral reefs. They were all beautiful … but isolated. Nice places to visit, perhaps. But I would not have wanted to live on any of them.

Exploring Japan

Not all of my adventures while deployed were airborne. I didn't get an opportunity to explore the Philippines because, when in that part of the world, I was usually aboard an aircraft carrier, only staying 'on the beach' for one or two nights at a time. But when I was in Japan, as often as I could, I tried to explore. One of my favorite (and very low-cost) pastimes was riding the trains. Without a car, trains were my primary mode of transportation in Japan. I would head out to the station in the morning, hop on a train, and ride it to the end of the line, then I'd simply cross to the other side of the platform and ride the train back to where I started. Sometimes the journey took hours. But I got to see the countryside as the trains went from town to town, climbed hills and mountains, often through tunnels, and negotiated winding switch-backs as they climbed one side of a mountain and descended the other side. Some hillsides were so steep that, rather than winding turns, the train pulled into a dead-end and reversed direction, alternating backwards and forwards as it climbed. By staying on the train, never exiting until I returned to the station at which I had entered, my cost was minimal – just the cost to ride for a single stop.

Occasionally, though, I would encounter a destination scenic enough to warrant exiting. In those cases, I'd wander the sights and towns, usually finding a restaurant to enjoy a lunch. Sometimes I'd travel alone and sometimes one or more squadron-mates would join me. Returning early one evening from a full day of riding, three of us were hungry as we walked thru the town of Atsugi back to the base. 'Let's get something to eat.' one of the group suggested. We looked for a restaurant.

In Japan, rather than simply post their menus outside, many restaurants include a display window behind which are wax replicas of their main menu items – quite helpful to those unable to read Japanese. So we browsed the windows of the

restaurants we passed. We found a bar with some appealing-looking dishes displayed and decided to go in. It was crowded, which we interpreted as a good sign. But it was clearly a local bar, not catering to foreigners. The menu was entirely in Japanese and no one in the place spoke any English. We sparked lots of conversation as the local patrons clearly wondered who we were.

We ordered by signing the number of a specific item in their window or by casually eyeing the other patrons and gesturing that we'd like whatever someone else was being served if it looked good. The place had a fish tank with various fish. One patron went to the tank and pointed out a fish. The chef retrieved it, cooked it up, and served it. I drew approving looks from the patrons when I pointed to a large spiny snail. Served in the shell, with a savory broth as soup, it was delicious. I kept the shell for years as a souvenir.

Climbing Mt. Fuji

One August weekend while in Japan, my pilot for that deployment, Jim Arthur – a Naval Academy classmate of my older brother George – and I decided to climb Mt. Fuji. On a clear day, we could see the mountain from our base in Atsugi. It only seemed fitting that we should climb it. We bought tickets on a tour bus that would transport us to and from the mountain, packed a small backpack, and headed out. I'm not sure which trail we took to the summit, or even if there was more than one trail back in 1974.

The first thing we did was buy climbing sticks. These were 6-foot wooden poles, about 1.5 inches in diameter. We then started up the long, zigzag trail to the summit. Unlike today, when the trails often are crowded and over-flowing with tourists (over 170,000 people climbed the most popular trail in 2017,) there were only a few dozen of us climbing that beautiful summer day in 1974.

A volcanic mountain, the entire mountainside, including the trail itself, is black lava gravel. There were no trees and little green, with only occasional small patches of scrub brush and mountain flowers. The trails start at an altitude of about 6,000 feet and wind to the summit at over 12,300 feet. I have no idea how long our trail was, but our ascent took at least four hours.

Charlie climbs Mt. Fuji – Summer 1974

As we climbed, we passed through several stops (stations) along the way. At each station, we paid a small fee to have someone use a red-hot iron to brand our walking sticks,

providing proof that we had reached that station. To fortify and invigorate ourselves for the climb, we had brought a flask filled with brandy. As we had our sticks branded, we'd each take a sip (or two) of brandy. The brandy made the climb more enjoyable, but it combined with the altitude to make us giddy. By the time we reached the summit, we were having more fun than we should have been having. We had our sticks branded at the summit and spent a few minutes enjoying the view. But even with the light jackets we were wearing, it was cold in August at 12,000 feet. So we took a few pictures and decided to head back down.

Today, in order to better control crowds, separate trails exist for ascent and descent. In 1974, though, the same trail provided two-way traffic. Initially, we followed the trail as we went down. We were in a hurry, though, and in our brandy-infused state it seemed perfectly sensible to go off-trail and simply walk straight down the mountainside. It was VERY steep. As we walked, we rapidly accelerated – each step longer than the last one. Very quickly, we were bounding down the slope, almost totally out of control, barely able to stay upright. In his pack, Jim had brought a 'laughing box.' It was a silly gadget that, when shaken, would play a recording of a rather strange, almost supernatural laugh. As we jumped and jolted our way down, the box spontaneously started its laughter, causing us to start laughing ourselves.

Picture the locals on the mountainside, watching two apparently insane American maniacs, careering down the mountain, laughing uncontrollably. We must have been quite a sight. Miraculously, we managed to stop without hurting ourselves and somehow quietly blended back into the crowd.

Off-trail hiking is strictly prohibited today (as I'm sure it was in 1974) as too dangerous and, at a minimum socially and culturally inappropriate (the Japanese consider Mt. Fuji to be

sacred.) Speaking from experience, I do NOT recommend it. I still have the flight boots I wore that day – the toes of which were buffed by the lava gravel into an almost suede-like texture. I kept my climbing stick for years as a souvenir.

Smoke in the Cockpit

The summer of 1974 also hosted the most harrowing in-flight emergency of my career. As we taxied out for a 2am launch, my pilot pointed to the main vertical gyro indicator – the VGI. That's the large instrument in center of his instrument panel that displays the artificial horizon telling him if the plane is climbing, diving, or turning. A small flag reading 'OFF' appeared to be flickering at the bottom of the instrument. What did I think, the pilot asked. The flag, when displayed, indicates that the instrument is not working. Clearly, if that instrument is not working properly the aircraft is not fit to fly. But the flag appeared to be only partially visible. As we taxied, he tapped the brakes a few times and zig-zagged right and left across the taxiway. As he did so, the VGI bounced up and down with the brakes and rotated left and right. We concluded that the instrument was working and decided that the flag was visible only because of the unusual way the instrument panel lights illuminated it at night from an unusual angle.

We completed the takeoff checklist and received clearance to takeoff from the tower. As we began to climb, the VGI correctly displayed a nose-up attitude. The tower controller instructed me to switch radio frequencies to the departure controller as we climbed above 3,000 feet – the altitude at which control formally switches from the airport tower to the departure area controller. I watched the altimeter count up, ready to switch frequencies: 1,000 feet, 2,000 feet, 2,500 feet … then it stopped. We were in the clouds now so there was nothing visible outside the cockpit. The main VGI still showed us wings-level, 10-degrees nose-up. But we were no longer climbing. I

scanned the instrument panel and noticed that the backup VGI, a smaller instrument not normally used, had rotated to indicate that we had rolled to the right 90 degrees.

"Looks like we lost the standby gyro." I said to the pilot.

He glanced at it, then scanned his other instruments. Almost instantly, he jerked the control yoke hard to the left. The aircraft immediately rolled so violently that my helmet banged into the cockpit plexi-glass. The standby VGI returned to the wings-level orientation. The altimeter began to count up again. The main VGI never moved. Before the pilot and I had a chance to discuss what had just happened, we both smelled smoke.

Smoke and fire in an aircraft is scary. Few aircraft have any fire extinguishing system. Ours did not. You're hostage within the aircraft and, if you cannot extinguish a fire, your only option is to land immediately or bail out. I grabbed the checklist book and instantly began reading off the steps for *Smoke in the Cockpit* and *Fire of Unknown Origin*.

One of the very first steps directed us to reconfigure the aircraft power systems. Remember that the A-3 has two completely separate power systems. In normal operation, half of the instruments are powered by the right-side generators and half by the left-side generators. When one side is shut down, the two normally-separate electrical systems can be tied together allowing one side to power everything.

Following the checklist, we were to shut down the power units one at a time, assessing whether doing so stopped the smoke. Thankfully, the smoke began to dissipate almost immediately when the first unit was disabled. Excellent! But with one unit shut down, half of the instruments were now inoperative. To address that, the checklist directed us to connect the two formerly-separate electrical systems together.

As soon as we did that, the standby gyro, which had been providing our artificial horizon, tumbled. Now we were in the clouds, with no direct indication of our aircraft attitude – no way to see directly if we were nose-up or nose-down, turning or wings-level. Other instruments can be used to infer the aircraft attitude, but flying safely in the clouds under such conditions is very, *very* difficult if it is possible at all.

Thankfully, at that moment, we climbed out of the clouds into clear air above. In the moonlight we could see the horizon. At least maintaining controlled flight was much easier now. We completed the emergency checklist and assessed our situation. I called departure control and declared an emergency telling them that we had a possible fire and that we'd contact them again when we had everything under control. The pilot 'caged' and released the standby gyro (which had tumbled earlier) and it stabilized. A few shallow maneuvers indicated that it was working properly again. We were now level at about 5,000 feet. Perhaps a minute had elapsed. The pilot spoke to the rest of the crew in the back of the aircraft to clue them into what had just happened.

The smoke was gone now. The fire (if there had been an actual fire) appeared to have been extinguished. We were under control. One of our electrical systems had been disabled. Our main VGI and some other primary flight instruments were not functioning, but the backup systems appeared to be working as designed. The immediate emergency seemed to have been addressed.

We wanted to return to landing, but still had a full load of fuel and were too heavy to land. We decided that attempting to land when that heavy could put us at risk of being unable to stop the aircraft before running off the end of the runway. So we climbed to 10,000 feet and started dumping fuel. (Fuel dumped at that altitude evaporates before it falls to the ground.) I

informed the air controller that we were stable and would request landing instructions as soon as we had reduced our weight to be light enough to land. Meanwhile, I told him, we'd simply orbit where we were. The fuel dump system appeared to be inoperative. Fuel was being dumped, but almost imperceptibly slowly. It appeared that the dump pumps were not working. We would have to fly around in circles and simply burn fuel. That would require us to orbit for almost an hour.

As we orbited, and I began to relax a bit, the pilot asked me to trim the airplane in a slightly nose-up position. That was an odd request. I don't fly the airplane. He does.

"What?" I asked.

"Try to trim the airplane a few degrees nose-up. Just do it."

"OK, if that's what you want." I reached for the trim switch on the control yoke and toggled the switch for nose-up. The nose went down. Huh? I selected nose-down, and the nose went up.

"Trim is working backwards." I said.

"Thanks." He said. "That's what I thought too. But it's almost 3am and I still have so much adrenaline in my system that I wanted a second opinion."

When we finally reached landing weight, we received clearance to land and did so without any further drama. We taxied back to be met by a large group of maintenance personnel waiting for us at the hangar.

Later that day, my pilot and I went to the hangar to see if the mechanics had discovered what had caused our emergency. They told us that a crack in the ducting that routed compressed air from the left engine to run the left-side power unit had allowed high-pressure, 600-degree hot air to blow onto

and melt a bundle of wires which powered the main VGI and some other flight instruments. That explained the VGI failure. The OFF flag that we had ignored while taxiing out for takeoff had been legitimate after all. But what about the trim working backwards? What was THAT about?

It turned out that D/C generator run by the right-hand engine had been installed incorrectly with the plus and minus wires reversed. All of the motors powered by it had been operating backwards. When we switched to the other generators, everything was reversed. That explained the backwards trim. It also explained why the standby gyro had tumbled when we switched generators. Instantly, its motor reversed and began running the other way. Once 'caged' and stabilized, it operated normally. But the switchover had caused it to tumble.

Thinking about the incident later, it was obvious that we should have trusted the OFF flag we saw as we taxied out for takeoff and aborted the flight before we even took off. For the 3rd time in my career, I had been told: DON'T TRY TO OUT-THINK THE AIRCRAFT WARNING SYSTEMS. Third time is a charm. This time, I learned my lesson. I never again attempted to second-guess things.

Local Apparent Noon

One last flying story: In October 1974, I flew from Guam back to the West Coast of the US. The purpose was to ferry a squadron A-3 to the Naval Air Rework Facility (NARF) in Alameda where it would undergo a year-long refurbishment designed to allow it to be flown for another 5,000 hours. This was the same trans-Pacific training flight I had completed two years earlier as a junior navigator when I first arrived in Guam. Our route would take us from Guam, through Wake Island, Midway Island, and Honolulu, to Alameda.

Important during WW-II, both Wake and Midway Islands are isolated and are now seldom-used airfields. But Hawaii was too far away for us to fly non-stop from Guam. So at least one stop was required. In Hawaii, a flight of several A-7s would join us for the final leg to the US.

Our stop in Wake was quick – just long enough to refuel and obtain an updated weather forecast. As we took off for the comparatively short flight to Hawaii, the tower requested a fly-by. Normally, it's the other way around, with the aircraft crew requesting the fly-by. The tower crew, no doubt bored after days of little activity, and typically visited only by large, lumbering transport aircraft, were curious to see our more high-performance aircraft and wanted just a bit of excitement. We were happy to oblige. After takeoff, we turned down-wind and flew for a minute or two while we accelerated. Turning back toward the airfield, we flew over the runway, just barely above the level of the tower itself at well over 300 knots, pulling up sharply into a high-speed climb as we passed abreast, before turning east toward Midway Island. The tower thanked us, explaining that our aircraft was their first visit in more than a week and that we had made their day. Simple pleasures.

On the way to Midway, I completed a rare feat: I used the sextant to complete a '*local apparent noon*' fix – something that only navigation geeks like me can appreciate. As readers, I'm afraid you will either have to skip ahead, or bear with me as I explain.

A sextant is used to focus on a single celestial object – the Sun or Moon during the day, or another planet/star at night. Your observation will allow you to draw a single line across your navigation chart. Your position is *somewhere* on that line. A single line is helpful, but is not definitive. If you can find two different planets/stars, you can obtain two lines, and your position (your '*fix*') will be the intersection of those two lines.

The Sun usually provides a line running essentially east/west – something very close to your latitude. Finding your longitude using the Sun is problematic – except at noon. By definition, noon is the time when the Sun is directly over your longitude – directly north (or south) of you. If you have an accurate compass, you can observe when the Sun is exactly north or south of you. If you also have an accurate watch and note the exact time (it will be exactly 12pm by your watch only if you happen to be precisely in the center of your local time zone) when the Sun is exactly north/south of you, you can then, through a simple calculation, determine your exact longitude. Essentially, at that moment, the sextant will indicate your exact latitude and your watch will indicate your exact longitude. Perhaps that fact maters only to a few navigation oddballs like me. But I found it exciting.

After an overnight in Hawaii, we departed the next morning for Alameda. As we headed east, a flight of three A-7s joined us along with a pair of tankers. We all took on fuel to 'top off' our tanks. Technically, our role was to serve as a 'pathfinder' for these tactical aircraft, making sure they didn't get lost. In reality, the A-7s were perfectly capable of making this flight without us because they were equipped with inertial navigation systems far more sophisticated and accurate than my sextant. The reality was that our A-3 was needed only because it carried an HF radio that would provide radio communications over the open ocean. The A-7s carried only UHF/VHF radios through which they could communicate with us and each other, but they would be without any communications at all once we had traveled more than 250 miles from Hawaii.

At one point during the flight, I called the leader of the group of A-7s to ask for a '*nav check*.' The position he reported to me was within about 3 miles of the position I had computed. I

was comfortable that I had the navigation situation under control.

After arrival in Alameda, we turned our A-3 over to the NARF facility, then spent two days relaxing in Alameda before catching a commercial flight back to Guam.

More Visitors

We hosted a few more visitors in late 1974. In August, Gary Toth, the husband of Charlie's sister Martha, passed through Guam. He was on his way from their Air Force home in the Philippines back to Utah for a week of specialized flight training. We saw him only for an hour or two as he waited for his next flight during a layover at Andersen Air Base. We introduced him to Terri, who was now 18 months old. Aside from Kathy's mother and grandmother and Kathy's brother Bill, no one else in our families had yet met her. It was a short but enjoyable visit, and reminded us how much we missed our families.

Gary's visit keyed us up for the visit by Charlie's parents who, like Kathy's mother and grandmother the year before, were planning a Pacific tour to visit. As the Haber's had done before them, his parents planned to visit some exotic places while visiting with their children. Referring to it as their '*Trip of a Lifetime*,' Charlie's dad did what he had taught Charlie to do. He planned every aspect of the trip in great detail.

They would visit Tokyo, Taipei, and Hong Kong before stopping in Manila for a 4-day visit with Martha and Gary in the Philippines. Then they would proceed to Guam for four days with us before a final stop in Honolulu on their way back home.

Their visit was a wonderful break from our rather boring day-to-day. By now, we were experts on Guam. We showed

them all the sights, both in town and in the ‘boonies,’ taking them to see the WW-II bunkers and hideouts, the waterfalls, beaches, and other sights. Of course, we also went out to dinner at the local hotels. At our home, they did what you might expect: played with, read stories to, and otherwise enjoyed a brief bonding with Terri. As with all visits, it was over too quickly, and we bid them a safe trip home.

Charlie’s parents visit – November 1974

These visits by family and friends were wonderful and we wouldn’t have wanted to miss them. But, after we were alone again – just the three of us – we discussed how much of a growth experience being alone on Guam had been for us. These first two years spent so far away from our families had been emotionally hard at times, to be sure. But the separation had, we concluded, given us a chance (forced us, actually) to build our life together **on our terms**. Charlie had been deployed during both of our first two wedding anniversaries. His frequent absences had forced us each to grow both individually and together as adults and parents. We learned that anniversary dates, birthdays, and holidays were special when we could be together. But we also learned that we could celebrate them within our family at any time, and we did.

During his deployments, Charlie spent much of his free time building model airplanes. When he was home, he would fly some of them in the vacant field across the street from our home. So-called control-line models, these airplanes had a pair of kite-string lines attached to one wing. The plane would fly in a circle, with the pilot standing in the center.

Manipulating the control lines allowed the pilot to move the plane up or down, do loops, and reverse direction by flying inverted. Not very impressive by the standard of today's remote controlled planes and drones. But they were cheap and fun and were, essentially, the state-of-the-art at the time. Kathy learned to fly them as the below picture attests.

Kathy flies model plane – November 1974

About this time, as our time on Guam was drawing to a close, we were surprised with an unusual gift. The wife of one of the pilots that Charlie frequently flew with was a portrait artist and had somehow obtained a photo of Terri. From it, she had drawn the beautiful charcoal portrait of Terri as an almost-2-year-old that still hangs in our living room in Reston. It was an unusual going-away gift. We loved it.

Later, in Pensacola, we snapped a few pictures when Katie was the same age as Terri had been and sent them to her requesting that she draw a similar portrait of Katie. This one we gladly paid for. Later, when we moved to Town Creek in southern Maryland, we encountered another of those amazing coincidences of life. Her husband had been transferred to NAS Patuxent River and they lived only a few miles from us. We picked up Katie's portrait directly from her at their house. It too hangs in our living room, along with Terri's, as a wonderful reminder of our early days.

Finally, in November of 1974, Charlie received orders for his next assignment. In March, we would be transferring to the Naval Aviation Schools Command (NASC) in Pensacola, FL. These were **written** orders. There was no uncertainty or confusion here as there had been when his verbal orders to Spain had been replaced by written orders to Guam. We would definitely be moving to Florida in the spring of 1975. After wondering for months about our future, it was nice to finally have some tangible information. We began planning for our next big adventure. But first…

ARRIVAL AND DEPARTURE

The squadron scheduled all flight crews for deployment on a rotating basis. But they understood that certain events took precedence. One of those events was the birth of a child. As Kathy's due date approached, Charlie was taken off the deployment schedule and assigned only local training flights that kept him on the island.

Kate's due date of January 22 (one day after Terri's 2nd birthday!) already had come and gone. As we went to bed on February 01, Kathy told Charlie that she was feeling some contractions. They were sporadic and fleeting. Like a typical husband, Charlie responded with something to the effect of 'Not tonight, dear. Please, at least, wait until morning.' No sooner had he gotten to sleep than Kathy woke him. The contractions had become more regular and vigorous.

We didn't hesitate. We quickly dressed, grabbed the '*go bag*' we had packed with minimal supplies, and headed to the hospital. Unlike the labor with Terri that had lasted nearly 24-hours, Kate's labor was quick. Charlie was again in the delivery room but still had taken no formal prenatal classes. Still, Kathy was glad to have him there. Clearly, Kate was ready to arrive, and was born at 02:43 am on February 02 without any of the drama we had experienced two years earlier. We celebrated with a big hug. Then Kathy was taken to her room and immediately went to sleep. Charlie went home to make the phone calls to announce the news while it was still daylight on the US east coast.

Kate was, apparently, not satisfied that her arrival was comparatively drama-free. The staff informed us that her feet were turned inwards – she was severely pigeon-toed. Terri too, had suffered from the condition and wore corrective shoes for some months as an infant. But Kate's condition, we were told, required more aggressive action. Doctors recommended that her legs be placed in full casts, from hip to toe. This would allow her feet and lower legs to be turned and held outward while her bones were still soft. We were told that, by properly positioning her legs in this way for four to six weeks, her condition could be corrected quickly. So, two days later, Kate sported leg casts that she would wear even when we left Guam a month later.

Katie – February 1975

The days after Kate's arrival were a blur. We were scheduled to leave the island forever only five weeks hence. There was a lot to do. Caring for a new-born just added to the chaos.

Navy procedure called for us to vacate our housing so that it could be reassigned to a new arrival. Plus, we had to

schedule a moving company to pack up our household goods for shipment to Florida, drop off our car to the shipping port for transport back to the US, and clean our house for the move-out inspection. So, we spent our last weeks on Guam just as we had spent our first – living in a hotel. In this case, we packed several suit cases and moved into the Mendiola Apartments, situated just a mile outside the gate to the Naval Air Station.

Terri and Katie – with foot casts – February 1975

If living in the Cliff Hotel by ourselves for six weeks upon arrival had seemed a trial, then consider living in a motel-style apartment with just two double beds, no kitchen, and a sitting

area for five weeks with a 2-year-old and a new-born. One word that comes to mind is ‘memorable.’ It was.

A few days later, we watched as our household goods were boxed, packed into wooden crates on our front yard, loaded onto a flatbed truck, and hauled away. Then we spent two days cleaning our house from top to bottom, because the Navy required us to pass a comprehensive move-out inspection. We dropped off our car at the Naval Station, where it would be put on a freighter bound for the US. Charlie would pick it up in Norfolk after we arrived in the US. Then we simply waited for departure day.

On March 10, 1975, Charlie checked out of VQ-1. He didn’t know it at the time, but this would be the end of his military flying career. He would never fly again as a Naval Aviator. His last flight was on February 19, 1975 – a brief 1.8 hour training flight. As a crew member, he had accumulated a total of 1,262.9 flight hours in 419 flights (of which 37 were combat missions,) 105 arrested landings aboard 11 different aircraft carriers, and 117 catapult launches. The 100-plus arrested landings made him a member of the ‘*Centurion*’ club.

Marathon Return

We checked out of our apartment, and went to Andersen AFB for the charter flight through Hawaii to Travis AFB. Charlie’s not-so-brilliant plan was to fly straight through – all the way back to the east coast. Terri had tickets for a separate seat, but Katie didn’t. Kathy predicted that it would be an ordeal. Charlie agreed, but reasoned that it would be an ordeal any way you looked at it. He wanted to just press ahead and get it over with. Kathy was too tired to argue.

As we taxied out for takeoff, our pilot announced that there was a problem with some piece of electronics. We’d have

to taxi back to have it replaced. Not to worry, he told everyone, it will only take a few minutes. We were off to a bad start.

An hour later, we finally managed to get airborne. The flight to Hawaii was unremarkable. But we were tired by the time we arrived, and Terri was unhappy. After a two-hour layover, we boarded our flight to Travis AFB. Terri was now throwing a fit. As we boarded, a flight attendant casually remarked to Kathy that her children would never behave so poorly in public. Stifling an urge to punch the flight attendant, Kathy quietly took her seat and did what she could to calm Terri.

For her part, Kate was in a small portable cocoon. Like a small bassinet, it had handles that made it easy to carry and a top that zipped closed. Still only 5-weeks old, her cries were not yet as full-throated as Terri's. As long as the top was closed, Kate was barely audible. The flight to the west coast was less than quiet.

We arrived at Travis in early evening. Our plan was to catch an Air Force bus from Travis to San Francisco International airport (SFO.) With luggage and two crying babies, we blundered through the Air Force bus terminal. There were several buses waiting, all of which had signs indicating that they were headed to SFO. We hopped aboard the first bus we came to. As luck (?) would have it, the bus we picked was NOT non-stop. It would, we found out only AFTER it departed, detour for a stop at the main bus terminal in the heart of San Francisco. By the time our bus reached the airport, we had missed our connection to Washington.

It was getting late now. Rushing to the airline's service desk, Charlie managed to get seats on the last red-eye flight leaving at 10:30 pm that night. With no time to waste, we scrambled to get to the gate on time. That overnight flight to Chicago was yet another ordeal. We were exhausted, and both

kids were at their limits too. None of us managed more than a few minutes of sleep.

Chicago presented a logistic problem. The connection we had missed in SFO was to fly through Philadelphia and arrive at Dulles in Washington. We had left SFO in such a hurry that we had no onward connection from Chicago. But, it was now early morning in Chicago. Surely there would be numerous commuter flights to choose from. There weren't. All the flights to Dulles were full. But a flight to Baltimore Washington International had room. Desperate to complete our now seemingly-endless ordeal, we grabbed them. The flight was already boarding. If we hurried, we could make it. As Kathy boarded with Terri and Kate, Charlie went to find a phone. Our families were to meet us at Dulles. He needed to redirect them to Baltimore. Hanging up the phone, he hurried to the gate only to find it closed. Empty. Even the airline staff was gone. Now what?

He ran down the deserted boarding tunnel to the plane. In 1975, security was non-existent. No one was present to stop him. The plane's door was closed. Frantically, he pounded on its door. Amazingly, the door opened. By the skin of his teeth, he had made it. Neither of us have any memory of the flight to Baltimore.

We arrived at Baltimore in late morning to a crowd of family, most of whom we had not seen for almost three years. Amid '*welcome home*' signs, cheering, and crying, we hugged everyone. It had taken more than 30 hours, but we had made it. Kathy was shocked to see her father. His hair had thinned and grayed during the years we had been gone and he had lost quite a bit of weight during a brief hospitalization for pulmonary emboli to the point where she almost didn't recognize him. She struggled to hold back tears as we collected our luggage, then drove to the Haber home in White Oak where we would collapse

into bed for some much needed sleep. Kathy had been right. It had been an ordeal. We still disagree, though, about whether it would have been more bearable had we spent the night in San Francisco.

Arrival at BWI – March 1975

We spent two weeks relaxing in Silver Spring introducing Terri and Kate to their numerous cousins. Terri also experienced snow for the first time, though she wouldn't remember it. We visited friends who were still in the area and generally enjoyed the new-again environment of home. After years where the temperature never changed, it was almost disorienting to re-accustom ourselves to the cold of March in Washington.

Later, Charlie's mother drove him to Newport News to retrieve our car, which had arrived a few days after we did. We

both experienced having to re-learn how to drive on a crowded highway. Guam had no high-speed, multi-lane roads. Interstate highways and the Washington beltway required some getting used to, especially during rush hour.

While we were home, we celebrated our third wedding anniversary. Surprisingly, despite the fact that it was the first anniversary for which we were actually together, neither of us has any memory whatsoever of what we might have done. We suspect that we were so happy to have Charlie's periodic deployments behind us that we settled into a '*normal*' family life and simply enjoyed being together.

PENSACOLA

After two enjoyable weeks in Washington, we packed ourselves into our car for the nearly 1,000-mile drive to Pensacola. We don't remember for certain where, but we both agree that we stopped overnight somewhere along the way. After the trip from Guam, neither of us wanted to re-live such an extended travel experience. In the days before young children were required by law to be belted into child safety seats, we improvised. Not only were safety seats not required in 1975, the quality of infant seats that actually were available was questionable. There were no air bags. Seat belts had been mandatory equipment in cars only since the late 1960s and it wasn't even yet mandatory for the occupants to actually wear them. Even safety ratings for cars themselves wouldn't be formally instituted for another decade or more.

We felt like we were reasonably safety-conscious. But today's auto safety culture simply had not yet been established. So our travel configuration was unusual by today's standards. We had an infant carrier for Kate which we secured with a standard seat belt between us in the center of the full-width bench-type front seat. Terri would have the entire back seat to herself for the long road trip. Charlie cut a piece of plywood to rest on top of the back seat that extended forward all the way to the back of the front seat. Though we did put Terri's car-seat in the back for her, the plywood base provided a large platform similar to the back section of an SUV in which Terri could lay down to sleep if she wanted. Such a thing would be completely illegal today. But it was not at all unusual for the time, and it made the long road trip far more bearable because Terri also

had someplace to play with dolls and toys when she wasn't in her seat.

We arrived in Pensacola on March 26, 1975 and checked into the Navy Lodge on the grounds of the Air Station. Now an Embassy Suites-like motel, the Navy Lodge in 1975 comprised a hand full of repurposed 1930s era officer housing, with separate buildings, each housing four families in a single unit. Built in southern style, with wrap-around porches, they were large square buildings comprising four apartments, with a broad staircase in the center of each side providing access to one apartment. Each building was surrounded by huge, decades-old oak trees covered with Spanish moss.

Scenic from the outside, the insides were less so. Though roomy (our apartment had two bedrooms, a kitchen/dining area, and a very large living area) and cooled by window-unit air conditioners, they were old and dingy. The floors creaked. The buildings also hosted a large community of roaches. Clearly, our first order of business would be to find a house.

Continuing the theme of unexpected coincidences, the Putnams, the Guam couple with whom we had vacationed in Hong Kong, had moved to Pensacola only a month earlier. They introduced us to a realtor with whom we spent days exploring the neighborhoods surrounding the Air Station. He was quite a character. In the days before cell phones, he had installed a Citizen's Band (CB) radio in his car. CB radio had become a popular solution for those who needed to stay in touch. He apparently thought it was crucial for his office to be able to reach him at any moment and would constantly call his office to keep them informed of his location. We stopped for lunch one day and he called his office:

"We'll be 10-20 at Pat's Quick-Fry for about 20 minutes."

he drawled in his thick southern accent, using the police jargon to indicate that he would be away from his radio for a few minutes. We had to stifle ourselves to keep from laughing out loud.

On March 30, 1975, we wrote a check for $300 and signed a contract to buy a brand new house. It was a 1,500 sq-ft, one-story, four-bedroom house with a one-car garage on a ¼ acre lot at the end of a cul-de-sac in a new development named Eldorado Estates about four miles from the Air Station. It was situated back-to-back with a similar new home that the Putnam's had just bought. Soon, we'd move into a brand new home in a brand new neighborhood, right next door to our best friends. Pensacola was looking like it would be a nice place to live.

Our Pensacola house – Summer 1975

We moved in on April 08, renting the home for 60 days while the Veteran's Administration fumbled with our paperwork. Finally, at closing, we signed an 8.25% interest, 30-year mortgage for $33,900. Our monthly payment was $261.86. Homes were less expensive in 1975, but interest rates were high and rising fast.

It took some time for us to adapt to life on the mainland. Stores always had fully-stocked shelves. We didn't have to wait two days to watch live TV. There were multiple TV networks to choose from. There seemed to be an infinite number of restaurants. Life was more normal without the continuous prospect of deployments. Frequent trips to the beaches and the pools on base as well as to the public beaches on the Gulf of Mexico were very relaxing.

The first order of business was to furnish and decorate our new home. We had a house full of appliances and clothes. But aside from our bed, a desk, and a crib for Katie, we didn't own a stick of furniture. So we went on a shopping spree. Furniture for our bedroom, Terri's bedroom, a kitchen table, and living room all had to be bought and delivered before we could move in. We didn't have an unlimited budget, but it sure was fun.

Then we went about the business of living. There was much to do. We found a church less than four miles from home, and settled in. The rules for Veteran's Administration mortgage loans required only that new homes have grass planted within ten feet of the house. So our lot, small as it was, was mostly bare, sandy Pensacola earth. One of the first tasks was to plant a lawn. The lawn grass of choice in Florida is a creeping variety known as '*St. Augustine*' grass. It is planted in plugs. We bought flats of hundreds of starter plugs, and Charlie spent hours on hands and knees planting new sprigs of grass 12 inches apart over the remainder of our lot. St. Augustine grass is remarkably fast-growing and, in only a couple of months, we had a passable lawn. By early summer, it was established enough that it required regular mowing.

Our neighborhood was small, comprising at the time, fewer than 25 homes distributed on only two or three short

streets. Every home was less than a year old, with new homes being added each month.

Terri and Katie in the pool – August 1976

Eventually, the neighborhood would grow to almost 70 homes. Eldorado Estates was quiet, with only one road in and out, which connected directly with US Route 29. Charlie joked that if his family wanted to visit, our home would be easy for them to find. From his home in Silver Spring, all one had to do was drive the six blocks to US Route 29, turn south, drive 900 miles, turn right, and drive two blocks.

Progressive Dinners

In addition to the Putnams – our good friends from Guam, who lived directly behind us – there were numerous other young families in the neighborhood. It seemed that every family was just like ours: Officers, in their twenties, newly married, with one or two young children, or a child on the way. We quickly became friends with a number of them. A favorite pastime, popular at the time, were so-called ‘progressive dinners.’ One person would prepare a menu and each couple would be responsible for one course. We would all meet at one home for cocktails. The entire group would then walk to another

home for appetizers, move on to another home for the main meal, and finally to another home for dessert and a night-cap.

One such meal was memorable for the dessert. The wife, who hailed from the Philippines, had been in charge of the menu for that evening and for dessert had prepared a family favorite that she called *Mix-Mix* which turns out to be vanilla ice cream mixed with walnuts, kidney beans, and onions. Though apparently quite popular in the Philippines, the combination was less appealing to us. Not sure if it was a joke, we all struggled to keep ourselves from laughing. Assured that it was delicious, we composed ourselves, then struggled to eat enough of it to be polite. We all were embarrassed at our lack of grace, and uncomfortable with the obvious humiliation the young wife must have felt at our behavior. The subsequent glass of brandy helped to sooth hurt feelings, and the evening ended on a happy note. Future dinners included less exotic menus.

We had not been there long before we discovered a Florida nemesis commonly know as *fire ants*. For those not familiar with them, fire ants look exactly like regular ants. They are territorial, aggressive, and widespread in Florida. Various species range in size from extremely tiny to quite large. The bite doesn't last long but stings, like a pin prick. One or two bites are merely annoying and warn you quickly to go away. More than a few bites quickly become painful. We rapidly learned to avoid ants of any kind. Terri, two years old now, learned too – the hard way. Playing in the sandy yard one day, she sat down to dig. Nearby ants didn't like her presence, and quickly converged. Not understanding what was happening as her legs and bare feet began to hurt, she sat down and began crying. Investigating, we found her little legs covered with ants. It was a sad and painful, but ultimately harmless event. After cleaning her up, we carried her back to the scene of the incident and showed her the ants. We were more vigilant after that in

keeping an eye on her – and Katie too, who was now mobile. But she had learned an important lesson, and carefully avoided ants from then on.

KATHY

Back to Work

After almost three years away from nursing, I was anxious to regain my skills. I wanted to work again, but with two young children at home, I decided that a part-time position would be more than enough. I canvassed the local hospitals and was offered a position as a staff nurse on a Medical floor at Sacred Heart Hospital near Pensacola airport. It was a small, Catholic hospital run by nuns, about ten miles from our house. I was to work evenings. I was finally back at work, and it felt good.

Evening shift worked well. Charlie's schedule was flexible enough that he could always be home early enough to take over at home when I had to be at work. To give me more freedom on the days I did not work, Charlie again rode his bike to work most days so that I could have the car for errands and shopping.

After two stints at VA hospitals, where most of the patients were older men suffering from end-stage conditions, alcoholism, and diabetes; now I was on a medical ward with younger patients who would mostly be treated, recuperate, and be discharged. Since I worked only part-time, I rarely saw the same patients twice. Each day, and each patient required me to take in a whole new history. Worse, staffing was always reduced during evening shift. Generally, I was the only RN on the floor, assisted by a couple of nurse's aides. Doctors were rarely present in the evenings. I was in charge. Often, the day staff was so eager to leave at the end of their shift that they provided little or no turn-over report. Luckily, because it was the

end of the day, most patients were interested only in dinner. After that, they mostly slept and didn't bother me with many requests. Still, it was quite a challenge. I found it both educational and exhausting. By the time I got home I would be asleep before my head hit the pillow.

Terri and Katie play in the back yard – June 1977

Though my off days gave me time to recharge, I would frequently arrive at work to find I had been 'pulled' to another floor or service for one reason or another. That assured me a completely new set of patients with a completely new set of medical conditions to learn. It also meant a completely new support staff and new procedures. Every day brought new challenges. But I was gaining experience, and I loved it. Though Charlie wasn't flying anymore and I no longer worried day by day that something terrible might happen to him, it was good to know that I could make a living if anything did happen. In addition, I was proud to be contributing financially to my family. I would continue to work and contribute for the next 33 years.

CHARLIE

My assignment at the Naval Aviation Schools Command (NASC) was as an academic instructor. I was to teach the course in basic aircraft systems that I had, myself, attended only two and a half years earlier. The almost continuous good weather in Pensacola allowed biking to work almost year-round and also had the beneficial effect of giving me some exercise, which helped to keep my weight under control.

First, I attended a four-week Aviation Instructor Training course which taught me how to teach. It was rudimentary. I was taught the basics of developing technical courses, defining course objectives, making lesson plans, creating tests, and the all-important skill of public speaking. I would then join the staff of half a dozen others teaching the officer candidates.

Having mastered the complexities of the A-3, I found the course material for an introductory course in aircraft systems easy to grasp. Getting comfortable standing in front of a group of 25 or 30 students who assumed you knew everything was more difficult. I found the first day of my first class to be even scarier than flying. Unlike Kathy, who was assumed to be fully qualified and was simply thrown into her role as Charge Nurse, I had the safety net of having a veteran instructor monitor my classes until I was declared qualified.

I adapted quickly and enjoyed the work, though even after a dozen classes, I always found the first several lectures with a new class of students intimidating. I didn't know it at the time, but the teaching experience would serve me well later in life as I became a manager and frequently had to address large groups that often included corporate superiors.

US

By summer, we had been in Pensacola long enough that family wanted to visit. Charlie's sister Kate visited in June,

continuing her tradition of visiting us – she had spent a few days with us three years earlier when we lived in Oakland. It was a short visit. We showed her all the sights, including the beautiful beaches. We visited Charlie's sister Martha and her husband Gary who, following his tour of duty in the Philippines, had relocated to a new neighborhood similar to our own near Eglin AFB, a short 45-mile drive east.

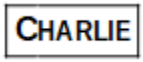
In addition to having visitors, we were now able to visit others. In December, we mentally prepared ourselves for our first visit home since our return to the States. Following the hard earned lesson of avoiding extended travel, we decided not to drive straight through. Instead, we spent the night in South Carolina. The trip was more bearable than a straight-through drive, but even with the modified back seat play area, our two toddlers made it demanding.

Christmas in Silver Spring was quite a change for us. After three quiet Christmases in Guam, we had a chance to experience the full impact of a boisterous Wright family Christmas with a room literally full of people. Kathy was able to enjoy visiting with her extended family as well. On top of that, it snowed four inches. Katie, now almost a year old, had her first opportunity to experience snow in a memorable way. Although she had seen it previously in March, when we returned from Guam, she was only weeks old then and had no memory of it. Terri, now almost three years old, was old enough to enjoy the full effect of rolling around in it, throwing snow balls, and building her first snowman. She couldn't stay outside very long though because, living in Pensacola, we didn't have the full compliment of boots, gloves, and heavy winter clothes. Regardless, she clearly enjoyed it as much as we enjoyed watching her. Christmas over, we endured the drive home.

In Pensacola, we had promised each other that we would really focus on family. Though we were both working, we

wanted to make sure our children experienced a close, loving family. Almost every weekend, we planned some kind of event, continuing our now-well-established tradition of picnics. We visited beaches and nearby parks. Even casual grocery shopping was often done as a complete family. But, as 1976 arrived, we had to begin thinking seriously about our future. We both enjoyed the international travel experience the Navy had given us. (We're certain that those experiences were the reason behind our desire to travel so much 30 years later as we both retired.) But neither of us were eager to endure long separations or continue the almost gypsy-like life of a navy family. Neither of us looked forward to relocating every three years and we absolutely did **not** want to impose the repeated emotional burden on Terri and Katie that having to leave their friends and make new ones every couple of years would bring.

We concluded that Charlie would leave the Navy at the end of this assignment in Pensacola, now scheduled for the fall of 1977. But then what? And where?



Back to School

Having made the decision to leave the Navy, I began considering a career in the civilian world. Air Traffic Control appealed to me. A position with the FAA would provide a stable government job, with good benefits, in a field I was familiar with, with controller positions available almost anywhere in the country and plenty of opportunity for advancement. But I wanted more marketable technical skills too, just in case.

My technical skills as an Aerospace Engineer had faded during the five years since I had graduated. Moreover, Aerospace Engineering remained a difficult field in which to find work. The field had been in great demand while I was an undergraduate at Maryland. But following the Moon landing in

1969, NASA's Apollo program, which had been a huge driver for aerospace jobs, came to an end. In fact, the final mission to the Moon had been completed just as we were moving into our house on Guam. After that, budgets had been slashed and Aerospace engineers were laid off in droves. Three years later, the industry still had not recovered. I needed different technical skills in a different field. I would have to go back to school.

Still focused on a technical career, I decided to study Computer Science. It was a field that had interested me since my days at Maryland. It clearly was a rapidly growing field, with potential jobs available almost everywhere. But there was a hitch. I would be separating from the Navy in little more than 18 months. I felt it important that I be done with school before I became a civilian. As broad as my undergraduate work at Maryland had been, I simply did not have enough of a foundation in computer science to earn a master's degree in the time remaining. However, there *was* enough time to complete the courses needed for an undergraduate degree.

So that became the plan. For the next 18 months, I would be a teacher during the day and a student in the evenings. Actually, I ended up taking mostly daytime classes. My CO in Pensacola said, at one of the monthly all-officers meetings, something to the effect that 'The NASC is not an operational squadron. We're not fighting a war here. Teach your students well. But if it's 3pm and you aren't out on the golf course enjoying yourself, then you have no one to blame but yourself.' I took full advantage of that sentiment and often took a break from teaching to dash out to the University of West Florida to attend one or more classes before rushing back to work to teach one of my own. On days that Kathy worked, I'd come home from school or work in time to help out with dinner, put the kids to bed, then spend the evening studying. It was a very hectic 18 months.

For Kathy, sometimes, it seemed almost like Guam. Even when I was at home, I was locked away in the den studying and she was effectively alone with the kids. To pass the time, she returned to the needlepoint and quilting which had helped her pass the time on Guam. Several full sized quilts, each having taken months of meticulous work, remain folded safely and securely in the cedar hope chest in our spare bedroom in Reston – heirlooms for a future generation.

I'm deeply grateful for Kathy's ability to tolerate such extended isolation. I was focused and working hard to achieve mostly personal goals that I felt were important for our future. Only much later in life did I realize the degree of dedication and sacrifice that Kathy had put forth over so many years to help me reach those same goals. Her selfless and quiet commitment to our future, both personally and financially, was perhaps even more important to our eventual happiness and success in life than my own.

We were enjoying a normal life. But we were busy. There were occasional Navy events. One of them was an annual '*dining in*' ceremony wherein all the officers in the NASC attended a formal dinner. The men (still, almost exclusively men) wore their formal dress white uniforms and women wore formal dresses. These dinners were always fun, if rather scripted evenings. At one such dinner, Charlie decided that he was not happy with the seating assignments. Without telling me, he subtly swapped around the place cards on our table to an arrangement more to his liking. As the event proceeded, someone discovered the anomaly. Officers seated at the table were quietly pulled aside and questioned. Ultimately, it was determined that Charlie had been responsible. He was taken aside and received a very stern chewing-out by his immediate superior officer and was told that kind of stunt was very

unprofessional and could have serious consequences with respect to future promotions. He apologized profusely, knowing that his not-yet-submitted resignation from naval service would preclude any adverse impacts on his Navy career.

Dressed for *Dining-In* – March 1976

There were more visitors. In May, 1976, Kathy's parents put their car on Amtrak's Auto-Train and visited Disney World before heading west to Florida's panhandle to visit us. As usual, we visited all the sights, including the beaches, and had some wonderful dinners. Charlie's youngest sister, Maureen, also visited briefly (with his sister Monica?) and we repeated our now-familiar sightseeing and dining tour for our guests.

To temper our busy days, we decided that a regular routine was important to allow ourselves some rest. One part of that routine included a daily nap for both Terri and Katie. Though both kids often objected, naps were mandatory. At 2pm every day, we'd put Katie in her crib. Terri would have to go into her room, close the door, and remain there for an hour. She didn't have to sleep and was allowed to play with any of her toys. She could even ride her beloved rocking horse. But she had to be quiet. No matter her objections, it was a rare day

when she didn't drift off to sleep within 20 minutes. We'd often come in at 3pm to find her asleep on the floor.

One afternoon while Charlie was at work, Kathy put both kids down for the daily nap and walked next door for a brief visit with Jeanie Putnam. As the two of them sat in Jeanie's family room, chatting, they heard a soft knock at the door. Terri, it seemed, had concluded that she had stayed in her room for the required hour. Not finding anyone at home, Terri knew where her mom would be. She knew what she needed to do. She woke up 18-month old Katie, helped her climb out of her crib, and walked her through the back yards to Jeanie's house. After recovering from uproarious laughter, Kathy took them home for an afternoon snack.

Other events in Pensacola reminded us that we were living in the deep south. On the way home from church one Sunday, while stopped at a traffic signal, we were approached by men seeking donations. Similar to volunteer fire departments, which often had their firefighters holding out boots into which people would throw spare change as donations, these men too were holding out boots and collecting donations. This group, however was dressed in the easily-recognizable white robes and pointed hats of the Ku Klux Klan. We were stunned. Confederate flags were ever-present in Pensacola, and racial attitudes were hardly well-hidden. But we had never seen racism displayed so obviously and actively. It was unsettling.

It did occasionally get cold in Pensacola in the winter – sometimes for more than a few days in a row. During one particularly extended cold spell, it actually snowed briefly. It had been cold enough for several consecutive days that the snow actually covered the ground, if not the roads. Only about half an inch fell over the period of about an hour. But it was a big event

in Pensacola. Terri and Katie had a chance to play in the snow in their own yard.

Charlie came home from work that day to describe the pandemonium at work when the snow had begun. Offices emptied as locals, many of whom had never seen snow before, dropped what they were doing and ran outside to stand in the falling snow, arms outstretched, head back, looking at the sky in awe, marveling at the spectacle. Impromptu snow-ball fights erupted as the locals went crazy. What little snow accumulated was gone the next day as soon as the Sun appeared.

One Last Surprise

December of 1976 brought another Christmas and the prospect of another long road trip. This time Charlie had an idea. As a Christmas present to Kathy, he'd buy airline tickets to fly home. To make it even more special, it was to be a surprise, so he said nothing. He'd pack up the car for the long drive but would head to the airport instead. It worked but not without a bit of adventure.

On departure day, we hadn't gotten more than a few miles away from home, when Kathy explained that she wasn't sure if she had turned off the stove after morning breakfast. She insisted that we return home to make sure. But Charlie knew that we had a plane to catch and that there wasn't enough time to return home and still make the flight. He improvised. Claiming that he had forgotten to get cash for the trip, he said we could just swing by the local branch of the credit union to get the cash and, while there, he would call our neighbors from a pay phone to ask them to please check on the stove. The credit union, by the way, just happened to be on the grounds of the airport. It was a compromise that Kathy reluctantly accepted.

On turning into the airport, Charlie asked Kathy to retrieve a map from the glove compartment wherein he had

placed the tickets for our flight. The ruse had worked. Kathy was surprised, and not a little delighted, though she still insisted that Charlie call our neighbors to address the issue of the stove before she would fully relax.

We boarded the flight and were back in Washington by lunch time. The flights also provided two additional days of time for a very enjoyable visit. Despite the success of his scheme, and remembering the adverse consequences of surprising Kathy with early returns in San Diego and Oakland (Surprise Return, page 58 and Surprise Return #2, page 62,) it was the last time Charlie attempted a surprise for Kathy.

Christmas in White Oak MD – 1976

In the spring of 1977, Charlie's parents, following his father's time-honored pattern of foregoing a simple visit in favor of a more extensive trip, embarked on a tour of the south. They would visit relatives in central Florida, stay with his sister Martha near Ft. Walton Beach, visit with us in Pensacola, then skirt up the east coast to scout out the Carolina beaches for potential future vacations for themselves. We completed yet another tour of Pensacola's sights and beaches, even traveling as far west as Mobile, Alabama to visit the USS Alabama. It is a floating

museum where his dad enjoyed a tour of the engine room of a ship similar to the one he had served on during WW-II. Terri and Katie were finally beginning to recognize and remember members of their extended family.

Wild Fire

A bit of excitement came one afternoon in March when we heard fire sirens – lots of them. Curious when a seemingly endless stream of sirens continued passing by our neighborhood, Charlie went outside to see what he could see. He quickly came back inside to tell me there was a rather large wildfire only about a mile east of our neighborhood. Black smoke was billowing into the air and flames, visible even from our house, were reaching 50 feet into the sky above the trees.

Neighborhood fire in Pensacola – March 1977

As with most developments in the Florida panhandle, ours had been carved out of a plot of perhaps 150 acres of Florida's seemingly endless pine forests. As was the custom, ours had been clear-cut except for a hand full of trees. But the surrounding land on all sides was still thick with tall pines. After

a very dry winter, south Florida had been in the news at the time struggling to contain some rather extensive wildfires across the state sparked by lightening. In this case, someone burning leaves had allowed their fire to get out of control and that fire had spread quickly to the adjoining woodlands.

At the time, the fire seemed far away, and our house was on the west side of our development, as far from the fire as any house in the neighborhood. Like tourists, we stood on our front lawn and watched. Had we known then how vulnerable homes are to being destroyed by wildfires (as they often are in the American west) we would have been in a panic to evacuate as the only road in and out of the neighborhood ran right along the eastern edge of the development – right next to the area that was in flames. The fire crews were effective, though, and within half an hour they had knocked down the flames. By dinner time, the fire was out. As so many times in the past, we had gotten lucky.

Later that year, we experienced another hazard of life in Florida – hurricanes. A storm had formed in the gulf and was strengthening. Satellite pictures were still the exception and forecasting was rudimentary at the time. But the prediction was for a direct hit on Pensacola. We were told to expect a Category-3 storm to make landfall at 2am. Our house was situated six miles from Pensacola beach and almost two miles from Perdido Bay. But Florida is exceptionally flat and our home was only 23 feet above sea level. So while we weren't terribly worried about storm surge, the possibility of flooding due to heavy rains certainly was likely.

We spent a frantic afternoon and evening criss-crossing our windows with masking tape to prevent broken glass from blowing everywhere and stacking valuables in boxes on tables and beds to lift them above potential water that might invade the house. We went to bed expecting the worst. But luck was with

us again and the storm veered sharply east. Another catastrophe averted.

By summer, our time was growing short. Charlie began to attend job fairs and sent out dozens of job applications. The southern culture, fires, and hurricanes had soured us on Florida. Charlie said: 'It will be fine with me if I never again live in a place where palm trees are a native species.' After much deliberation, we concluded that we wanted to return to the Washington area. Despite our years in the Navy, Maryland was still 'home' for both of us, and we wanted to be closer to our families. So his job search focused on the DC area.

Government positions were plentiful there, and we very much liked the security and benefits the government offered. There were equally as many opportunities available for Kathy. But Charlie's applications to the FAA as an air traffic controller went nowhere. NASA wasn't interested either. In a moment of hope, he did receive an offer as a Systems Engineer working for The Navy's Space and Naval Warfare Systems Command in Washington, DC. But the salary was significantly less than he was making in the Navy and the cost of living in Washington was significantly higher than in Pensacola. Reluctantly, he turned down the offer.

In an ironic note, Charlie spent nearly his entire civilian career supporting contracts for the same office within the Navy's Space and Naval Warfare Systems Command that had offered him the position which he turned down – the very position which oversaw his work with Sperry, Unisys, INRI, and Northrop Grumman in Reston.

Charlie's focus turned to civilian prospects. He interviewed with half a dozen computer firms and a number of other companies, turning down a financially generous offer to work designing an automation system for the production lines at a Corning Glass plant in Danville, VA. The hills of southern

Virginia reminded him too much of the deep south, and the remote area simply didn't offer the educational paths we hoped Terri and Katie would follow. We both still yearned to return to the Washington area we were familiar with.

Finally, Charlie received an offer to work as a software developer for Sperry Univac in Lexington Park, MD. It seemed the ideal job. While it wasn't a government job, there were plenty of government agencies near the Naval Air Station there. Perhaps, after a year or two, he could find one and make a change.

Sperry Univac would eventually drop 'Univac' from its name. In 1986, Sperry would merge with Burroughs Corporation to become Unisys. This was the first of nearly half a dozen corporate mergers Charlie's division would undergo. Subsequently, Unisys sold its Defense Systems Division to Loral, which was, itself acquired by Lockheed Martin.

Proximity to NAS Patuxent River in southern Maryland also made it convenient regarding potential positions in the Naval Reserve which Charlie was still considering. He absolutely wanted out of the *active-duty* Navy. But one weekend a month in the Navy Reserve would provide additional income with little impact on our lives. With Sperry, he'd be developing software, which was his real goal. The work related to Navy surveillance, with which he was quite familiar. The location, in southern Maryland, was close to 'home.' Best of all, the salary was more than competitive, the cost of living was low, and the opportunity for advancement was clear. Time was growing short. Perfect is the enemy of good enough. We decided he would accept the offer. We could now make definite plans.

Home Again

The final hectic months in Pensacola remain hazy to us both. As with all moves, the sequence was complex. We sold our home in August and had to vacate by the end of the month when movers were to come to pack up our household goods for temporary storage. As soon as the packing was done, we all drove back to Silver Spring. Kathy, Terri, and Katie stayed with Kathy's parents in White Oak. Charlie flew back to Pensacola where he stayed in the BOQ briefly while he completed the final separation paperwork with the Navy.

His Navy adventure ended in Pensacola – exactly where it had begun. He would spend his final days as a Navy Lieutenant on official leave in Silver Spring. His separation became official on October 31, 1977, six years and one month from the day he was commissioned.

The years from 1971 to 1977 had begun with the two of us as single college kids. They had carried us through an amazing number of experiences far beyond our imagination. Now we were a family and he was a civilian. We were about to begin a whole new life … and a whole new set of experiences.

Future

Us

Charlie returned to Silver Spring in our second car. Our plan was to use Kathy's grandmother's summer cottage in Sandgates, MD (only a short 20-minute drive from Charlie's prospective office) as a temporary home while we searched for a home of our own. In early October 1977, we moved into the cottage in Sandgates for what we hoped would be a brief stay as we searched for a house. The search took longer than expected.

Sandgates house circa 2015

Our planned short stay at Sandgates grew to over three months. We celebrated our 5th Christmas at Sandgates. We celebrated Terri's 5th birthday there too … and Katie's 3rd birthday. The next day, though, on February 03, 1978, we used the proceeds from the sale of our Pensacola house and our

savings to write a check for $16,000, signed a 30-year mortgage for $50,000 at 8.5%, and moved into the house on a half-acre wonderfully-wooded lot at 205 Island Road in Town Creek, MD to establish our new home. Our monthly house payment was now $600.

We would spend almost five years in Town Creek as Charlie established himself with Sperry Univac. Kathy continued to work part-time. By 1982, Terri was in the 3rd grade at Town Creek Elementary School and Katie was in 1st grade. Disappointed with the culture of southern Maryland, where the major industry was tobacco and soy bean farming, and where children were mostly directed to trade school as opposed to college, we concluded that it was time to relocate to an area where children were guided towards professional careers. Another move was required.

Our Town Creek house – October 1978

Our years in Town Creek, our subsequent move to Reston, VA and the following decades would be as adventure-filled as our first six years. But the story of those years will have to wait for another volume of this saga.

AFTERWARD

As we edited the final version of this work, we discovered why authors always thank the people who help them edit and proof-read their manuscripts. Despite several complete read-throughs, we are certain there are numerous remaining flaws. Charlie takes full responsibility for any and all such errors in this work.

More seriously, it became apparent that Charlie's stories far outnumber Kathy's. In no way should the reader conclude that Kathy's life was less full or less important than his. Perhaps it is because Charlie's original inspiration for this work was an intent to put down on paper all of his sea stories and he was simply unable to restrain himself from documenting every thought that came into his head. More realistically, it may be because Kathy is merely less full of herself than Charlie is full of himself. Whatever the reason, we hope that we have presented an enjoyable picture of these event-filled years of our lives.

Putting it all down on paper revealed another reality. The flying Charlie did was inherently more dangerous than he had, at first, remembered. As the stories tumbled out of his memory, it became clear that there were far more '*incidents*' than he had initially thought. More importantly, it was clear that he wasn't always the conservative, safety-minded aviator he thought he had been. While he (now) strongly insists that it's important to be careful at all times, follow the rules, and not do stupid things, it is clear that he didn't always do those things. In fact, he clearly demonstrated that he repeated the same mistake several times before learning the appropriate lesson. His recommendation: Be smarter than he was. Learn from your own lessons the FIRST time.

Also, Charlie became aware of another fact of life: life is change. It seems that every navy base at which he was stationed, (almost) every unit he was assigned to, every ship he sailed on, and every aircraft type he ever flew in has been closed, decommissioned, retired, or otherwise taken out of service. His specialty (navigation) is now done using GPS, with far greater accuracy than he could have dreamed of and is available to everyone with nothing more than a smart phone or watch. The missions he flew are now flown by drones (well, not drones (yet) but by unmanned remotely-piloted vehicles controlled by 'pilots' on the ground, often thousands of miles away.) Collection of signal intelligence is done automatically by satellites and computers controlling dozens of on-board radio and radar receivers. Collected data is often made available to interested users in real-time through satellite and other communications links. In almost all respects, he is obsolete. Sobering as such a thought might be, it should not be taken as a negative. Rather, it is merely the reality of life.

So, we end this book by acknowledging that change is to be expected. You can fight it, or embrace the change and enjoy it. We thoroughly enjoyed all of the experiences recounted here. We recommend that you do the same in your lives.

As we said in the Forward, we hope you got as much enjoyment from reading this as we got from writing it. We urge you to record some details of your lives for your children. They will thank you for it.

GLOSSARY

ADIZ	Air Defense Identification Zone: The area surrounding a Country within which airplanes must identify themselves. An airplane must have a clearance from the Country before crossing from International airspace into a Country's ADIZ.
AFB	Air Force Base
AJN	Advanced Jet Navigation
AOCS	Aviation Officer Candidate School: The Navy's school for prospective aviation Officers at NAS Pensacola, Florida in the 1970s. The non-aviation portion of Officer Candidate School was relocated to Naval Station Newport, Rhode Island in 1994. The aviation-specific training remains at NAS Pensacola.
Bingo	A *Code Word* indicating that aircraft should proceed immediately to an alternate airfield
B/N	Bombardier/Navigator
BJN	Basic Jet Navigation
BOQ	Bachelor Officer Quarters
BullsEye	The code name for a world-wide direction finding system used for intelligence gathering

	and search and rescue
BWI	Baltimore Washington International airport
Car-quals	Carrier (landing) qualifications: A term for aircraft carrier operations intended to certify pilots as qualified to launch and land
CCD	Confraternity of Christian Doctrine (Catholic religious education classes)
Clara	A *Code Word* indicating that an aircraft is flying in clouds
CINCPAC	Commander In Chief of the Pacific Fleet
CO	Commanding Officer
CQ	Carrier (landing) Qualifications, also referred to as car-quals
DI	Drill Instructor
DMZ	De-Militarized Zone: An area approximately five miles wide along the border between what was, in the 1960s and 1970s, the border between North and South Vietnam
DOR	Drop On Request: A request to quit from, or drop out of a (training) program
DWEST	Deep Water Environmental and Survival Training: Training provided to aircrew who were expected to regularly fly over the open ocean for extended periods.
EC-121	A 4-engine, propeller driven 1950-era aircraft, known in the

	airline world as the Lockheed Super Constellation
ETA	Estimated Time of Arrival
FAIRECONRON	Fleet Air Reconnaissance Squadron: The abbreviated name for my squadron in Guam
FCLP	Field Carrier Landing Practice: Landing practice conducted at land based airfields to simulate landing on an aircraft carrier.
GPS	Global Positioning System
HF	High Frequency: A range of radio frequencies capable of traveling around the world
LCDR	Lieutenant Commander
LORAN	Long Range Navigation: A type of navigation system used prior to the invention of GPS
LSO	Landing Signal Officer: A person who stands next to the approach end of a runway (or Aircraft Carrier) and provides verbal guidance to approaching pilots
MCAS	US Marine Corps Air Station
NAAF	Navy Auxiliary Air Field: A small airfield, usually having only limited facilities
NAF	Naval Air Facility: A navy facility operating at an airport other than a navy base
NARF	Naval Air Rework Facility: A maintenance facility where aircraft undergo complete refurbishment

NAS	Naval Air Station
NASA	National Aeronautics and Space Administration
NFO	Naval Flight Officer: An officer Naval Aviator who is not a pilot
Nugget	A newly minted NFO or Navy Pilot
OB	Obstetrics
OCS	Officer Candidate School
OLF	Out Lying Field: A small airfield, usually having only limited facilities and also typically situated away from populated areas
OIC	Officer In Charge
OPEC	Organization of Petroleum Exporting Countries
PARPRO	Peacetime Airborne Reconnaissance Program: A program of intelligence collection flights flown near the borders of adversary countries carried out during non-war-time periods
POW	Prisoner Of War
RIO	Radar Intercept Officer: A flight crew member responsible for using radar to provide guidance to the pilot during air-to-air combat before enemy aircraft are within visual range
RN	Registered Nurse
SERE	Survival, Escape, Resistance, and Evasion: Training intended to expose an aviator to the treatment they could expect if

	they had to bail out of an aircraft over hostile territory.
SFO	The code letters for San Francisco International airport
SPINTCOM	Special Intelligence Communications: A satellite-based communications system.
SUV	Sport Utility Vehicle
TACAN	Tactical Air Navigation: An electronic navigation aid that provides the range and compass direction of an airplane to a fixed site on the ground
TACINTEL	Tactical Intelligence: A satellite-based communications network.
Transpac	Trans-Pacific: A term referring to a long, over-water flight across the Pacific Ocean
UHF	Ultra High Frequency: A band of radio frequencies used for radio and TV broadcast
USN/R	United States Navy / Reserve
VA	Veteran’s Administration
VAQ-130	The Navy’s training squadron for A-3 crew members at NAS Alameda, CA. during the 1970s. Relocated to NAS Whidbey Island WA. In 1975.
VF-126	The Navy’s Advanced Jet Navigation training squadron at NAS Miramar, CA. during the 1970s. Disestablished in 1994.
VHF	Very High Frequency: A band of radio frequencies used for

	radio and TV broadcast
VGI	Vertical Gyro Indicator: An instrument on an aircraft dashboard displaying an artificial horizon which indicates the attitude of the aircraft
VOR	VHF Omni-Range: An electronic navigation aid that provides the compass direction of an airplane to a fixed site on the ground
VQ-1	The Navy's surveillance and reconnaissance squadron in the Pacific region at NAS Agana, Guam during the 1970s. Relocated to NAS Whidbey Island, WA. in 1994.
VT-10	The Navy's basic training squadron for NFOs in Pensacola, FL.
VT-86	The Navy's Basic Jet Navigation training squadron at NAS Glynco, GA. during the 1970s. Relocated to NAS Pensacola, FL. in 1974.