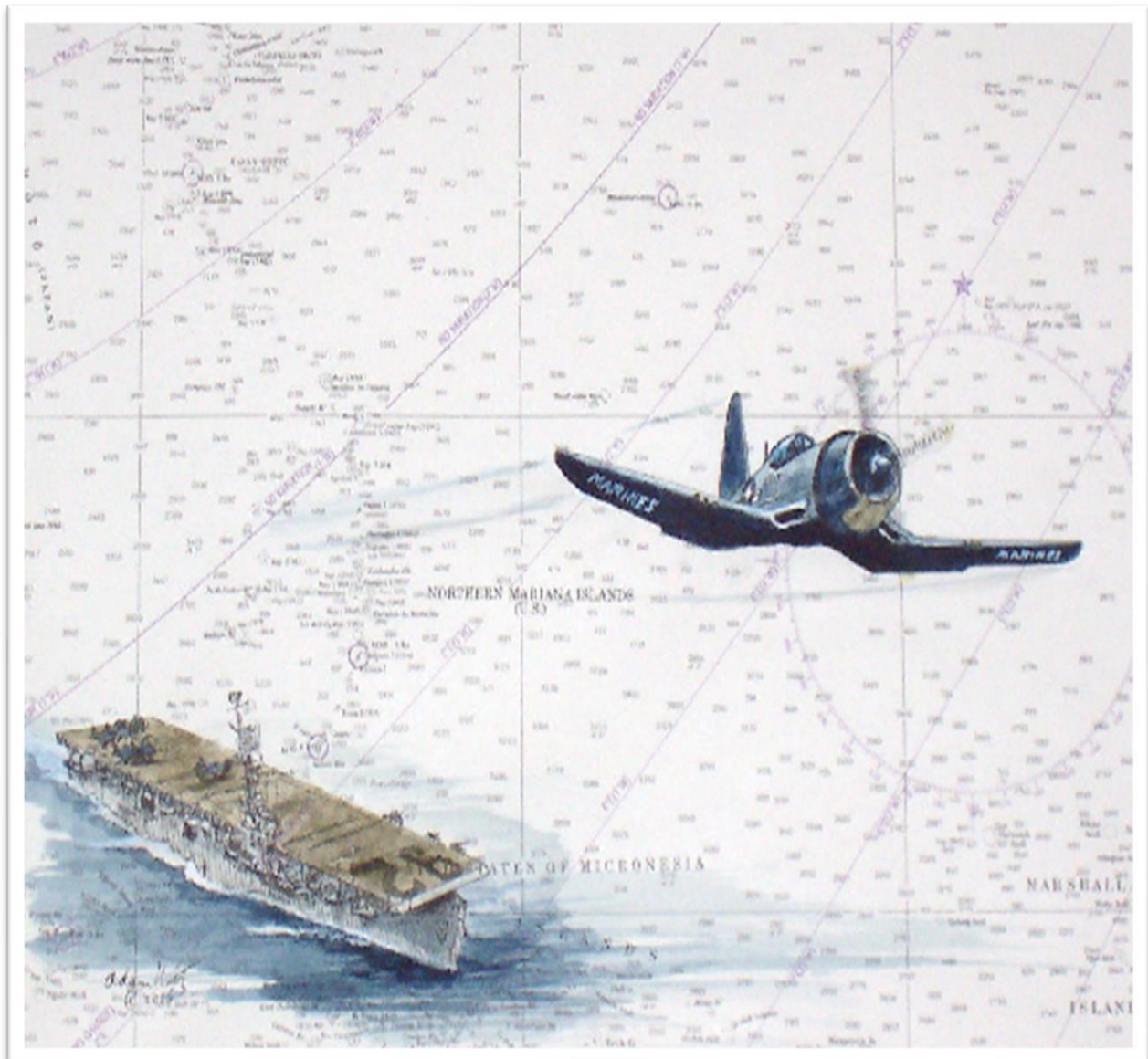


A Flying Story



Introduction

This is Part I, the first half of experiences recalled from half a century of flying. That I was able to fly in two wars, over much of northern Canada, and with aircraft and myself remaining in one piece, particularly with the early, underpowered, helicopters, I can only attribute to a great deal of luck. A number of my contemporaries were not so fortunate.

Obviously, there are countless numbers of interesting flying stories that have never been recorded. Perhaps it was the sight of all those slides lying in a dusty drawer that finally gave me incentive to take pen in hand.

My thanks go to brothers Don, Jon, and others for all the editing and suggestions. I am grateful to Christine for salvaging the slides and to Bonnie for the cover picture.

In January 2021, this document was edited and reformatted by collaboration with granddaughter Sarah Jennings. I am most grateful for her expertise.

Pete Peterson, July 6, 2007, and January 15, 2021

The Piper Cub

Summer, 1936. Our family was staying in our modest summer cottage on Lake Chautauqua in western New York State. A bored 14-year-old, I was startled to see out on the bay a little open-cockpit airplane on floats, slowly taxiing from dock to dock apparently looking for customers for a ride. When it arrived at our dock, I ran out to meet it. The pilot shouted, "Five dollars for a ride!" I ran back to appeal to my folks; five dollars was a lot of money in the middle of the Great Depression.

To my surprise they agreed, and I ran for my box camera and back out to the dock and climbed aboard. Leaning out of the cockpit as we taxied out to open water, I could see the waves lapping at the floats. We turned into the wind, and the pilot gunned the engine. Soon we were bouncing on the waves and after one last bounce we were in the air! As we climbed, I leaned out, waved and shouted, and took what pictures I could. Here was fun and adventure!

Back on earth, thoughts of flying filled my head, and I began searching for books on airplanes. Even now I can see myself sitting in the enclosed front porch of the cottage making notes and drawing sketches of aircraft, confronting terms like "wing loading" and "aspect ratio".

That fall when we moved back to town, I heard that there were two Piper Cubs at the town airport, and as soon as I had the opportunity, I hitchhiked out there. They were there all right, two 40-horsepower Piper Cubs. The airfield was a cow pasture, the hangar a tin affair, barely big enough for the two airplanes, with a small office and a shanty on one side.

I introduced myself to Fred Larsen, the owner, and learned that flying lessons were \$4.00 an hour. I could begin dual instruction anytime, but I would have to wait until my 16th birthday to get a student permit so I could legally solo.

Fred was a quiet, pleasant, middle aged man of average height, not at all the swashbuckling type I had expected. Though I was just a kid, he treated me with respect.

As soon as I could put together \$4.00, my instruction began. With only 40 hp to turn the propeller and two of us aboard, it was a struggle to get into the air. The grass field was rough, and with throttle wide open we would bump along until we were finally airborne.

The gas gauge was a wire sticking up from the tank just ahead of the windshield, an indication of just how simple these machines were.

Though I was never much good at athletics, my hand-eye coordination was good and flying seemed to come naturally to me. Boundless enthusiasm helped. I could have soloed much sooner than I did on my 16th birthday had it not been for the minimum age requirement.

Fred Larson and the adult hangars-on were good to me. I usually had to hitchhike to the airfield that was a few miles out of town, but most often, I could get a ride back in with one of the guys.



A Piper Cub Today

Most townsfolk regarded the airport crowd with a skeptical eye. The airport and all it represented were something new and not well understood. One of the patrons was the owner of a bar in town and considered something of a shady character. There were even some whispers of dope, but as far as I could see they were totally unfounded. My folks must have heard these rumors for they were not happy about my hanging out there.

Nevertheless, flying gave my life a whole new perspective. I was totally bored with school and kept busy scraping the money together for flying lessons. I worked Saturdays for my grandfather at his butcher stall in the public market, for which I was paid \$2.00 a day, good for one half-hour of flying time. Remember, we were still in the Depression. There were billboards advertising Piper Cubs for \$999!

One incident gives flying these little machines some perspective:

One day I started my takeoff downwind instead of into the wind. Looking out, Fred saw my mistake, ran out and actually was able to catch up with me and wave me to a stop. I throttled back to cut the engine noise.

“Hey Pete, wake up, you’re trying to take off downwind!!” I sheepishly taxied to the other end of the field to take off properly.

The little airplanes did very well despite having only 40-horsepower.

During a flight one day, Fred said “Hang on!” He put the nose down. The wind whistled louder and louder. Now the nose rose and up and up until we were upside down. I could see the ground again as we headed down to complete the loop. It would be hard to believe these days that this type of aircraft could perform such a maneuver. Not knowing any better, I often did loops after I had soloed.

The Piper cub was not built for aerobatics, and the danger became apparent one day when Fred organized an air show for publicity and two of the guys (after a few drinks), tried to do a slow roll with one of the Cubs.

I watched as they went into the roll. Once inverted, the wings folded, and, like a bird shot down in flight, the plane plunged to the earth. Of course, both men were killed. This surely made me aware of the hazard of looping these machines that had no support for negative G’s. Any departure from a smooth loop, whereby centrifugal force would keep me pushed down in the seat, could be disastrous. I quit doing loops.

Despite the constant skepticism of family and friends, I kept flying. All in all, it was a great experience, and gave purpose and direction to my life.

The “Yellow Peril”

At age nineteen, shortly after the United States entered the Second World War, I went up the stairs in the local Post Office to see the Petty Officer in the Navy recruiting office. I told him about my flying experience, and he gave me forms to apply for the Navy flight training program. My father had been in the Navy in the First World War, reason enough to choose the Navy. I only had a high school diploma (just barely at that), but that was enough in those days.

Sometime later, I received instructions to go to New York City for the necessary tests. There were medical and written exams of which I remember little. I do not remember if I had to take the infamous depth perception test consisting of lining up two vertical pins on a tray in front of you, a test that disqualified so many otherwise qualified applicants for military flight training. This test was later considered invalid. What I do recall was lying in the upper bunk of the Pullman car on the homeward train gazing with great satisfaction at the little pin on the lapel of my jacket signifying acceptance into the Naval flight program.

Unfortunately, too many applicants had been accepted, so I had to wait impatiently for many months for my orders.

During this time, I met an older friend, home on leave, sitting in a bar in his sparkling Naval officer whites with the coveted gold wings. I envied him. I never saw him again. He was shot down and killed over Guadalcanal, hopelessly outperformed in his Grumman Wildcat by a Japanese Zero.

At last, the orders came to go to pre-flight school (boot camp was a better description) at Chapel Hill, North Carolina. My lasting impression from that first day was of standing with my platoon at 5 AM in the dark and bitter cold being thoroughly deflated by a lean, mean Marine drill sergeant.

“Listen up, you bunch of draft dodgers,” he bawled.

He then barked orders, marching us up and down the parade ground in the dim floodlights. The romance of this adventure went up like smoke that morning, returning later as I got into the program.

This stage of training was mainly physical conditioning with some classroom instruction and drills and many training movies having to do with enemy aircraft and ship recognition.

In class one day the instructor looked us over with a serious expression on his face and said, "I don't envy what you young fellows face. War is a dreadful thing." This made little impression at the time. Adventure beckoned!

Finished at last, and after a brief visit home, I went off to Glenview, Illinois for basic flight training, where we met the great little Stearman N3N, the then famous "Yellow Peril". The N3N was an open-cockpit biplane with plenty of power, fully aerobatic.

I could hear my heart pounding as, carrying the instructor's chute, I walked to the airplane for the first time.



After a turn at the controls my confidence revived. One of the first things we had to learn was touching tail first on landings, a skill to be ingrained in preparation for future carrier landings. Training in this aircraft consisted of pure aircraft handling, e.g., surprise dead-stick landings on precise spots picked by the instructor, snap rolls, spins to be

recovered after a precise number of turns called in advance by the instructor or check pilot, the usual loops, Immalmans, and even the dreaded inverted spin.

The check ride after every few lessons was a tense occasion. After the ride, the check pilot gave the student an “up” or a “down”. Two “downs” and you were out of the program and suddenly a Seaman, Second Class. But this was the type of flying I loved, and I never had to take the second ride.

Toward the end of the program, we were required to do a night flight. The landing strip was lit only with flare pots.

Another memorable incident was that of a student getting into trouble practicing recovery from an inverted spin. As opposed to the G force pushing you into the seat that you get in a normal tailspin, you get the opposite effect in an inverted spin. You are upside down hanging on your belt, the force trying to push you out of the open cockpit.

On this occasion, the student was having trouble recovering. As he was going round and round upside down and losing altitude, his belt let go and he shot out of the plane toward the ground. He managed to open his chute but was still dropping fairly fast when he hit the ground. Fortunately, he landed in a swamp. After they dug him out, he was okay except for being badly shaken.

My final check ride arrived at last. As the instructor and I walked back to the hangar after the flight my heart was pounding again. When we reached the office, the instructor smiled and gave me a thumbs up! I had finished primary training!

After a brief ceremony, we graduates were put aboard a train headed south to Texas. In the coach I was riding in, the green seats were dusty and worn, the hanging lamps were from another era. It had obviously been dredged out of some old storage place for it was truly ancient. It was now June, and hot. As we rolled over the featureless prairies I dozed off and dreamed I was in hell.

The North American SNJ

The heat was worse on our arrival at Naval Air Station, Corpus Christi, Texas. The first sound I heard as we walked into the base was from a student hanging out his barracks window pulling his hair and shouting, "Point Option!"

His frustration, which we shared later in navigation class, was in doing the calculations on the plotting board, a 12 by 12-inch plastic affair that could be pulled out from under the instrument panel. With this device the pilot could determine, when ready to return to the carrier, its current position - known as "Point Option." To establish this point involved drawing our track as well as that of the aircraft carrier and determining various factors such as the speed and direction of the wind. This was not easily done while keeping station in the formation.

However, learning to fly on instruments was the first order of business. This took place in an aircraft fondly known as the Vultee Vibrator, a single engine plane similar in size to the SNJ Texan, but with fixed landing gear.

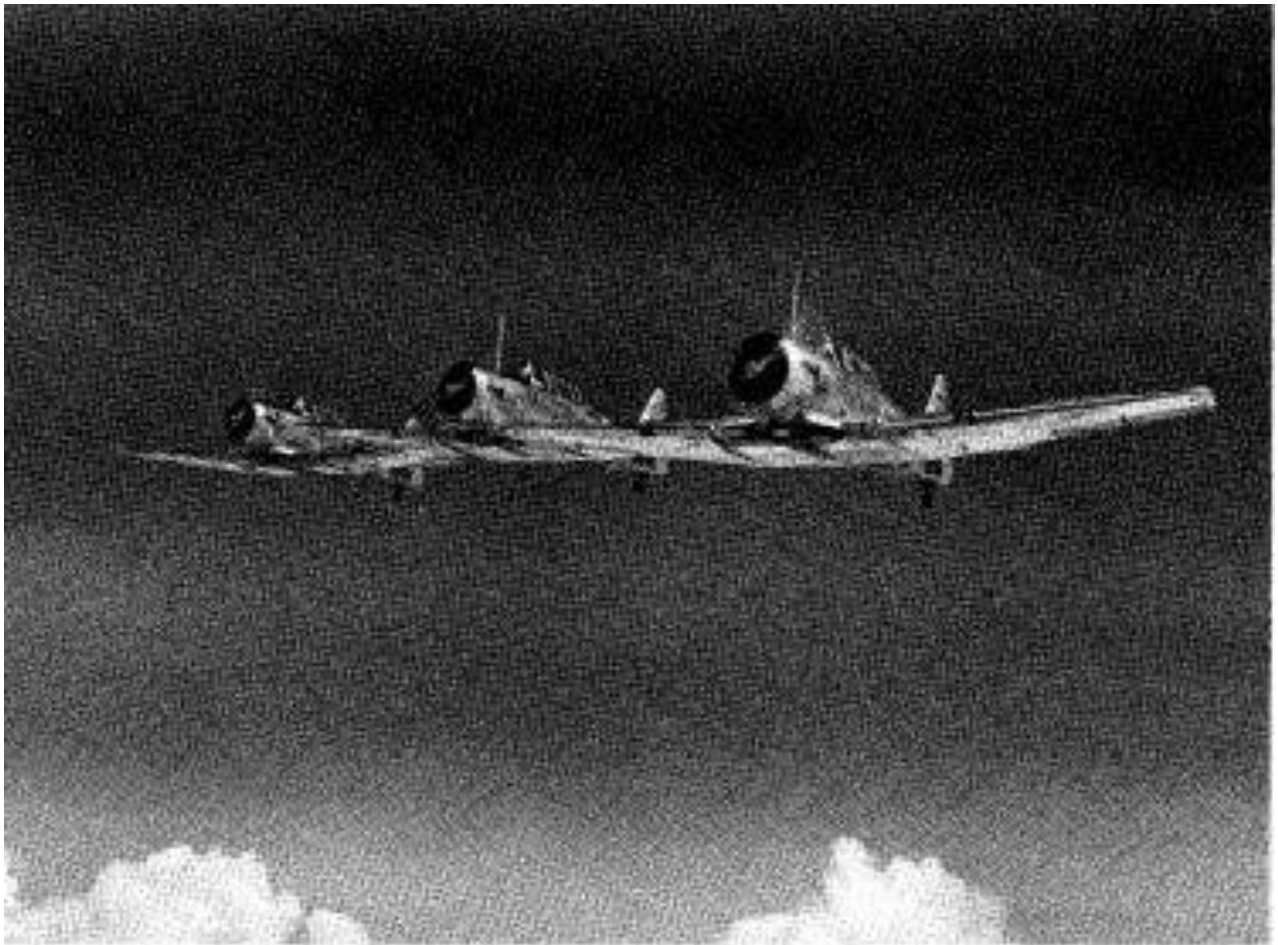
The instrument training was primitive compared to that using today's technology and relied heavily on an instrument called the "Needle and Ball". The maneuver I remember best was "recovery from unusual positions". In this test, the student was under the hood, the instructor or check pilot placed the aircraft in a spin or more often upside down on top of a loop, then turned it over to the student to do his best to recover to normal flight using only instruments. This did bring about a certain confidence in the above-named instrument.

Next, and for the remainder of our training, we flew in the venerable North American SNJ. We spent many hours in this aircraft, learning to fly in formation, navigation, and, as I had at this point been assigned to fighters, the rudiments of gunnery, dog fighting, and general fighter aircraft tactics.

For gunnery we had a 30-caliber machine gun mounted on the nose, synchronized to shoot through the propeller. Our target was a sleeve towed behind another SNJ which we took turns pulling.

As much I had enjoyed flying the Stearman in basic training, this was great stuff. We had the option to apply for transfer to the Marine Corps at the end of the training and I did so.

Finally, it was graduation time, being fitted with officer's uniforms, getting those coveted gold wings, and then we were off to Jacksonville for advanced training, a few days of partying in New Orleans on the way.



The Corsair

A bit hung over, we arrived in November at Naval Air Station, Jacksonville, Florida. Here, for the first time, we met that great airplane, the Chance Vought Corsair. It was sleek, with inverted gull wings, powered by one of the greatest aircraft piston engines ever built, the 2000 horsepower Pratt & Whitney R2800. The reason for the inverted gull wings, we learned, was to make room from the runway for the 14-foot propeller.



It was a single-place aircraft, meaning there would be no dual instruction this time. We spent many hours in the cockpit until we could quickly handle all the controls blindfolded, and we went repeatedly in our minds what action to take in every possible situation.

Finally, the day of my first flight in this fighter came. When I got “cleared for takeoff” in the headset I taxied out onto the runway and opened the throttle. The acceleration pushed me back on the seat as we roared down the runway.

Once in the air I reached down for the lever to retract the wheels and watched the ground stream by and quickly fall away. That long nose reacted to the slightest pressure on the stick, and amazement and elation came with the response to my every move. Rather than the dangerous beast it had appeared on the ground it was like a thoroughbred reacting instantly to every touch of the reins. Soon we were at 5,000 feet, and I pulled back the throttle to try the mandatory stall to get a feel for how slowly we could go before losing control. In the case of the Corsair, stall speed was 86 knots, or just over 100 mph. The stall was vicious, a sudden vibration with nose plunging and a violent twist to the left. Instant reaction was necessary because after the first turn the spin often went flat at which point there was sometimes no recovery.

What a performer! At 20,000 feet, the Corsair could do 400 miles per hour. It was not long before we were doing aerobatics in formation, but mostly we practiced fighter aircraft tactics, gunnery aimed at towed targets with two of the six 50-caliber machine guns in the wings, dive bombing with 500-pound bombs and firing rockets at ground targets

There was a price to pay for all that power. One was the awesome torque from the big engine and the 14-foot propeller. This required immediate compensation by rudder for any change in airspeed. On takeoff, for example, it meant standing on the right rudder. And great care had to be taken to compensate for torque when flying on the wing of another aircraft during rapid maneuvers.

Another price was lack of forward visibility when the nose was high on landing, “hanging on the prop”, because of the long nose needed for all that engine and supercharger. This would be a problem during carrier approaches to keep the signal officer in sight. So, from day one, we learned to come in for a landing in a turn. All our landing approaches, whether on land or at sea, were made with the least straight-in as possible, and, of course, always touching tail first to practice for the time to come when we would have to catch a wire to arrest our landing on a carrier deck.

Although some say the Corsair turned out to be the best fighter in the Pacific in the Second world War, (over 2000 kills), it was little known to the public until the “Black Sheep” series shown on TV years later.

It was here at Jacksonville that we met several pilots who would be in our first squadron, the “Black Sheep”, and formed friendships that would last a lifetime. However, a lifetime was to be truly short for many of them.



The Black Sheep

After the training at Jacksonville orders came to report to Marine Corps Air Station, Santa Barbara, California. This was one of the most memorable periods of my life and one of the hardest to write about because of the emotion it creates, reliving those days. On this base, there were a squadron of dive bombers, another of torpedo bombers, and three with fighters. One of the latter was VMF 214, the "Black Sheep" Squadron famous for its exploits in the Pacific, which was reforming in 1943 at Santa Barbara after renowned Commanding Officer "Pappy" Boyington had been shot down and presumed lost.

I had the great good luck to be assigned to VMF 214. The commanding officer at that time was a Major Pierce, and I was assigned as his wingman. I was a most enthusiastic pilot and becoming skillful at the wing position. We got along famously.

The Black Sheep Squadron already had a great reputation, and we newcomers were determined to carry it on and worked hard at it. This was a time when any day could bring orders for overseas, and we partied as hard as we worked. Santa Barbara was a beautiful, somewhat sleepy village where we were very well received. What is now the city airport was the Marine Corps Air Station, Santa Barbara, and the base included what had been, and would be again, the University of California, Santa Barbara.

Training went on for months without these orders. The 42 of us pilots became ever more proficient and friendships even closer. We were mostly young. I might have been the youngest. The CO, the "old man" was 26! I remember sitting in the pilot's ready room one time, in flight gear, thinking "right now I wouldn't change places with anyone in the world!"



There were accidents. The first fatal accident involved “Alex” Alexander, a good-looking, well-liked young pilot, who suffered an engine failure on takeoff. Some accidents were just close calls. One I remember involved Bill Nabors, a buddy of mine (we had bought a 1938 Ford together). This happened at a dirt strip near Oxnard, California, where we had been temporarily assigned to practice “field carrier” landings. He came in behind me for a landing and got a bit too slow. His plane struck the ground with one wing, went careening down the strip, one wheel on fire, ending off the runway where it tipped up and almost turned over as Bill jumped out. The plane then went up in flames.

Odd moments I remember:

At the top of a loop, I was on the wing of Bill Dancy (the tall fellow in the picture above), and Bill was calmly puffing on his cigarette.

One day we had a visit by a tech rep from Pratt and Whitney. One piece of advice he gave us was to never worry about pouring the coal to the engine, it could take it. Sticking to someone else’s wing during fast maneuvers sometimes took fast reaction and lots of power, but from then on no one could shake me.

Red Free was our division leader at this point, and I was his wingman. One day after landing, he came to me looking rather shaken, and apologized from almost running us into a mountain on our way down from a long loop.

No problem for me I told him, I was so busy staying on his wing, I never saw the mountain.



Red Free. Photo taken by me while on his wing

Many of our training exercises ended in a tail chase, the leader of a four-plane division trying to lose the others by various aerobatics, sometimes careening through cloud canyons.

To back up a bit, Major Pierce was replaced by Major Bailey, who had been Pappy Boyington's executive officer. It was only right that Stan Bailey had been given command of the reforming Black Sheep Squadron. However, this meant that I was no longer wingman to the CO. Because of what happened later, that could very well have saved my neck!

After nine months of training together, Bailey was ordered to cut the squadron in half to get down to carrier size. With tears in his eyes, he announced this to us, saying that the choice of those who stayed with VMF 214 would be based not on flying ability, but on

which of us would best “get along together”. “Personality” had never been my strong point and I was one of those left behind. I was heartbroken. Years later Red Free told me that he had fought hard to keep me, but to no avail, and that he sorely missed me on his wing when the squadron got into combat. Art Shmagel, one of the older pilots, who eventually retired a full colonel and became chief pilot for Pan American Airlines, assured me at a reunion years later that I had been in his opinion one of the best if not the best pilot in the squadron.

Anyway, I was devastated at the time. As it turned out, this smaller version of our Santa Barbara squadron was carrying out strikes over Japan from the carrier USS Franklin when the carrier was hit by a Japanese dive bomber. The bomb went off close to the pilot’s ready room. Several old comrades were lost there, others were on deck sitting in fully fueled and armed aircraft and blown off the deck.

Those few who survived were in the air at the time. My good friend Ken Linder (one of the last three of us that we know of from the Santa Barbara group who are still with us as I write this) shot down the dive bomber that hit the carrier.

Aircraft Carrier “Tripoli”

Right after the reorganization, we ex-214 pilots and some others left San Diego for Hawaii in a troop ship. Because of zigzag maneuvers to avoid enemy submarines, the trip took 10 days.

We passed the time playing poker. In Santa Barbara I had picked up a little book on playing this game. The book was about quarter inch thick. It really put me on to the game.

On arrival in Hawaii, we were assigned to VMF 215 squadron stationed at Marine Corps Air Station Eva next to a small community some 40 miles from Honolulu. There were still scars from the devastating Japanese air strike on Pearl Harbor, but I found Hawaii to be a beautiful place. I have many pleasant memories of that time. One was of an evening sitting at a poker table on a large veranda, warm gentle rain falling on the lush and fragrant vegetation.

At Station Eva, we practiced the usual fighter tactics, gunnery, and firing rockets (at a rocket range right next to the leper colony on Molokai).

On the island of Maui, there is a large extinct volcano often covered by a cloud. I remember a group of us passing through a gap between the cloud and the rim of the volcano, then circling in the vast bowl below.

We sometimes had friendly dogfights with Army Air Force aircraft and soon found the Corsair could outmaneuver and end up on the tail of all of them except for the P-51 Mustang. We had an edge of speed on the Mustang, but we were heavier and could only turn with them by using some flap.

One measure of a fighter pilot's prowess was the ability to do a double Immelman. An Immelman is accomplished by rolling level at the top of a loop, and a double Immelman means starting the second loop as soon as rolling out of the top of the first one. Not easy. To be successful meant an initial dive to pick up enough speed and to keep this speed meant pulling up through the first loop very tightly, as tightly as the pilot could stand the G force on his body without passing out. Vision is narrowed by blood leaving the brain. There were no G suits in those days. One had to be in good shape to succeed in this maneuver.

In VMF 215, our main objective was to get carrier qualified. One of the most frightening experiences of my life was that first carrier landing.

The carrier was the USS Tripoli, a very small carrier (called a CVE) that had been converted from a merchant ship. My first sighting from high above that little ship with its deck rising and falling in the seas sure gave me pause. I joined the others in the landing pattern, came in on the last turn, 50 degrees of flap, flat pitch, hanging on the prop, only a few knots above stalling speed, and barely able to see the landing signal officer. It looked about right but just as I was to cross the deck it was falling away on a wave. I was too high, and the signal officer waved the paddles over his head signaling a wave off.

I poured the coal to the engine, but carefully so the torque would not flip me on to my back. To add to the knot in my stomach, the engine began to make a loud banging noise. While joining the landing pattern again, I radioed that I had an emergency and had to get in next time.



On the next pass, things went better (aside from the banging from the engine). I got the signal to cut power and caught a wire. As I came to a stop, I saw the deck chief looking at me and laughing. I must have been white as a sheet. Next sensation was the strange feeling as the carrier rolled slightly on a wave. My plane did not slip, but it did feel weird.

I climbed out and my plane was taken down the elevator to the hangar deck for inspection, I was invited to up the “Island” where I could watch fellow novices make their landings on that little ship.

Quite a sight!

It turned out that the engine noise had come only from a loose exhaust stack. The plane was brought back up on deck, and I was off to join the others returning to base.

This went on day after day. We needed 20 landings to be carrier qualified, and we soon became more proficient and confident. There were accidents, of course. In one I remember, a pilot named Russell was just in front of me, got too slow on his first turn, stalled, rolled, and went straight into the sea. Fortunately, he had on an empty belly tank. As I flew over the scene, I could see the tail reappear and Russ climbing out. Here are some pictures captured from a 5-minute video previously available on the web.



Notice the angle of approach. Because of the Corsair’s limited forward visibility while “hanging on the prop” in landing attitude, it was necessary to approach in a turn.

All our landings, whether on land or at sea had as little straight-in as possible. The signal officer is behind that structure on the right.



Catching a wire. But if a cut is taken and the wire missed, or it does not hold there is a cable barrier amidships to protect the aircraft parked ahead!



On this occasion the flight ended like this!



A problem with coming in “hanging on the prop” - you are now just above stalling speed. A hair too slow and here a vicious stall:



The previous eight still images were taken from World War II film footage collected and presented by the History Channel.

The three carriers that I had experience with (CVE's, converted merchant ships) were smaller than the carriers shown in the video (more like the drawing above).

About this time, the USS Franklin was coming through on its way west with the cut-down version of our Santa Barbara VMF 214 squadron aboard. While in Hawaii, two of our best friends in 214, Scramuza and Beeler, died in a mid-air collision. Replacements were needed, and Major Bailey tried his best to have Joe Kuhn and I reassigned to the squadron. But as luck would have it, we both lacked two landings of the required 20 to be fully carrier qualified. To our great disappointment, two others were given the orders. But because of this, we missed the Franklin disaster!

So, once finished with the training program Joe and I were sent off to the Mariama islands to join a pool of *carrier qualified* fighter pilots as ready replacements.

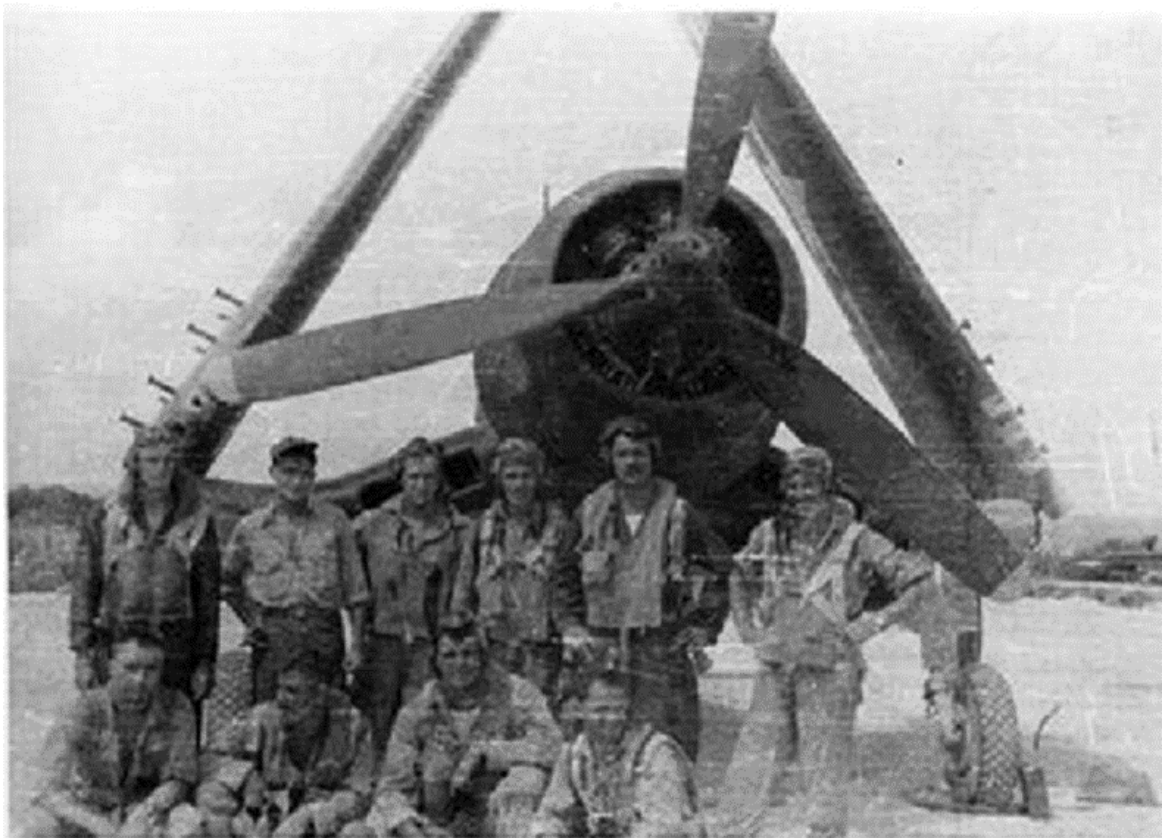


VMF 215 in Hawaii

Guam, Saipan, Okinawa, and the Philippines

On arriving in Saipan, Joe and I were ninth and tenth in a pool of young pilots eager to join the fray, which at that time was mainly taking place on Okinawa and approaches to that island.

But we had been designated carrier pilots and we were being held in reserve for that job. Time dragged on. On Saipan we were operating on a dirt strip on the north end of the island, just above the cliffs where so many Japanese jumped to their deaths when American forces invaded.



The Saipan 10, me at lower left. Joe Kuhn next to me

We flew every day, honing our skills, hoping for orders to join a squadron on Okinawa. And it was here that I felt I was at my best. The Corsair never felt better and would do things for me I never thought possible. Like coming in high over the edge of the

strip, sideslipping steeply down, and landing on a dime. Finally, some orders came in, but they were just to deliver some Corsairs to Okinawa via an aircraft carrier.

This carrier, it turned out, was another CVE, the "Windham Bay". Once aboard and on the way north, we took to the air several times to do "combat air patrols", scouring the seas and sky for signs of the enemy. And we had hopes that once on the island, we could convince some squadron commander to take us into his outfit.

About 3 AM on the night of June 4, on the carrier, we were summoned to the pilot's ready room. There we were told that in a few hours the ship would be hit by a typhoon, and though we were not yet as close to Okinawa as planned, we were to take off before dawn to save the planes and clear the decks before the typhoon struck. One of our group of pilots, Floyd Prokash, had come down with the flue and the ship's doctor prevented him from going.

So, in the black of night I found myself in a Corsair being towed into place for a catapult take off. Once there, after the engine start and warm-up, I got the signal to go to full power. With the plane jumping like a horse at the starting gate, I crossed my throat with my left arm (to prevent inadvertently pulling back on the throttle from the force that was coming).

WHAM!!! Pushed back hard in the seat I was off into the darkness. Fuzzy from the G force I got my eyes on the instruments and fought to stay right side up, then pulled up the wheels and searched the sky for the lights of planes taken off before me, circling and waiting. Is that a plane's light or is it a star?

Once joined up into four plane divisions, we headed northwest for Okinawa. On the way daylight broke and crossing the southern tip of the island we could see the smoky haze over the lines and artillery firing. We landed at Katina Airfield, a few miles north of Naha. There we were told to go over to Yontan airfield.

It was quite a change from the carrier, here we were eating K rations and walking in mud. Really hoping they could use us here, we went to see to the CO of the Marine Air Group there, but he did not have the authority to originate the orders, though he would recommend we would be sent back to him. That night we slept in tents with one foot in our foxholes, so to speak, and had plenty of opportunity to use them as there were air raids all through the night. The foxholes were not very comfortable as they were partly filled with water.

Before leaving the carrier, we had been told to get back to the fleet as soon as we could, so next morning we went down to the beach to see if we could catch a ride back to the fleet in a tanker. Everything was a bit fouled up so we could not do any good that day, so we spent that night aboard a receiving ship, which is a sort of floating transient camp. They sent us from there to another receiving ship at another anchorage and we learned there that in a couple of days there was a tanker leaving for the fleet.

It was at this anchorage that I learned just how badly a pounding the ships in the area were taking. There were ships at that place in the most appalling condition, some of them almost blown in half. The destroyers on the radar picket line had taken the worst beating as they were targets for kamikazes that could not make it to the island because of the fighter screen. Those little ships took their punishment very gallantly that the island and ships in the harbor could be warned of a raid in time. There were raids constantly and often a few would get through.

The first evening aboard the second receiving ship we were alongside the USS Louisville (a cruiser) when she took two kamikazes aboard. At night when a raid came, a smoke screen would be laid over the ships and while we were loafing around in our quarters the radar officer would announce a play-by-play description of the attack over the PA system. It was like a football game except when a kamikaze was directly overhead you would wonder if he had picked your ship, and everyone would sweat awhile until he had gone on or been "splashed".

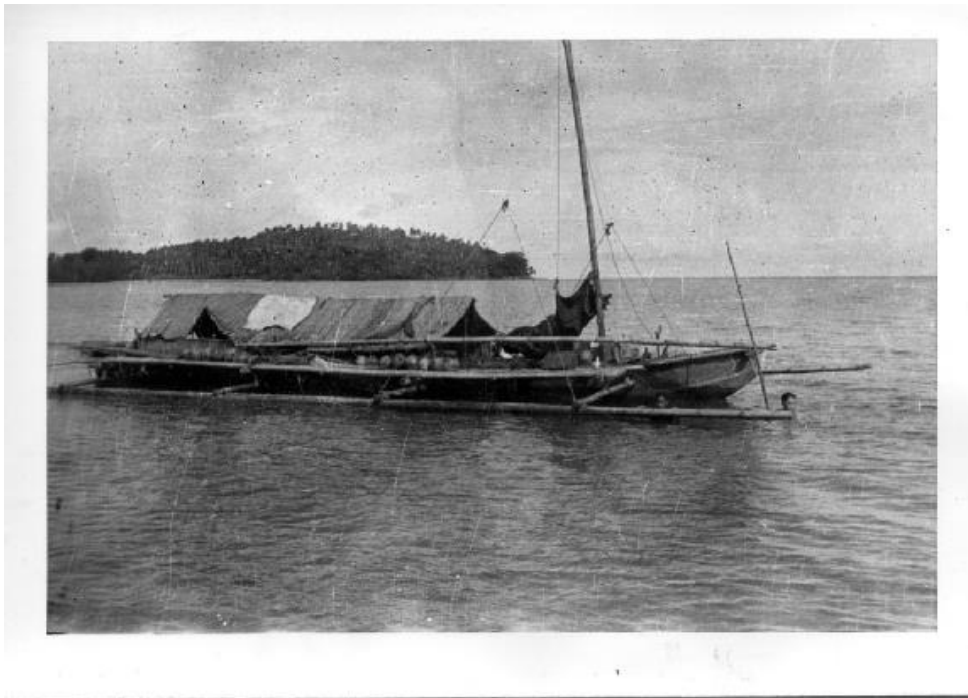
We finally found a tanker, the USS Merrimack, that was going our way, so we got aboard. In the meantime, Prokash (who had been left behind) had weathered the storm aboard the Windham Bay. Later he told us the wind had blown so hard that the captain had all the men and all the gear that was loose moved to the starboard side of the ship as it was listing to port so badly everyone thought it might capsize."

By way of a series of ships and atolls, we finally arrived back at Saipan and the usual routine of training flights and poker games. Later, we had a second cruise to Okinawa for the same purpose aboard the carrier USS Wake Island. But it was back on Saipan that, on the little island of Tinian just south of us, the Enola Gay took off to deliver the atomic bomb that ended the war.

Then new orders arrived. Joe and I were assigned to VMF 218, based at the time in Zamboanga at the southern tip of the Philippines. It was there that we learned that 218 had been scheduled to be part of the invasion of Japan in October.

The CO for 218 was Major Amerine, who told us of an experience he had had on Guadalcanal. Shot down, he had bailed out and ended up in the jungle well behind enemy lines. Days later he was so hungry he was eating insects and anything else he could find. One morning he woke to see that he was not far behind a Japanese soldier sitting on a log. Not wishing to make a noise with his 45, he found a rock, snuck up behind the soldier, and smashed his skull with the rock. As Marines advanced on the ground, he eventually found himself in friendly territory.

Zamboanga was more tropical than we had yet experienced. We lived in tents and flew patrols down to Borneo, looking for Japanese holdouts. The major hazard, we discovered, was watching out for the monkeys who dropped coconuts from the tall palms.



A Moro craft just offshore.

The people of the town were friendly, and we had a bit of a social life there. Also, we had an early introduction to radical Islamists. One night at an outdoor movie, we heard a scream from the back row, turned to see someone running off and a Filipino lying there with his head nearly severed. And it was there that we first learned of the animosity many of the Islamists had toward Christians. In fact, the local Moros, who lived on islands just off the coast, believed that killing a Christian assured them of reaching paradise. Does this sound familiar all these many years later?

In Zamboanga, I came down with a bad cold and a persistent cough. There was an X-ray machine set up in an Army camp nearby, and the squadron doctor sent me over for a picture. The next day he called me into his tent and told me to sit down. He had some bad news. He said I had a bad case of tuberculosis, and that he was sending me back to the States. This would be by way of the island of Samar, where the Navy had set up a field hospital.

I made my way to Samar by hitching a ride in an Army Air Corps B52. I was able to crawl down into the belly gunner's bubble and had a great view of the Mindanao jungle as we flew north. Mindanao is a big island, and the sight of the millions of huge mahogany trees was impressive indeed. At that time, there was little human activity in the interior, mainly because of malaria.

Arriving in Samar, the doctors gave me a once-over, took more X-rays, told me there was nothing whatever wrong with me, and sent me back to rejoin my squadron. I then discovered that 218 had received orders for Peking, China and was already on its way.

The Great Wall of China

So next I found myself on another troop ship, with another bunch of Marines, headed for North China. The way was long, the weather bad, the poker games long. Not having any way to send mail, I landed in China with a big wad of bills in my kitbag.

We landed in full combat gear not knowing what we would find. All went well, and we were soon on an ancient train, headed for Peking.

There I met up with my squadron, and we moved into quarters at the airport, replacing the Japanese pilots (who were surprisingly cooperative). We even kept their Chinese houseboys.

It turned out that our job was to fly patrols from Peking down the Great Wall to a seaport where General Chang Kai-Shek was getting his supplies. Ostensibly our mission was to repatriate the Japanese, but it became obvious that the purpose was more to make a show of force to discourage the communists, who were battling down from the north. Occasionally, we would go down to a lower altitude to watch the fighting,

Peking was an interesting place. On days off, we would go into the city, staying in quarters at then quiet Peking University. The non-Chinese community was diverse, one group was known as the "White Russians", whose families had fled the Russian communist revolution. Along the way, I met a Chinese art dealer, who showed me around town and from whom I acquired several items to take home.

The communists were getting ever more active. One night our operations building was torched, and we lost many records, one extremely valuable to me being my flight logbook.

At base we had many a pleasant evening at Major Amerine's quarters, where he hosted an almost nightly poker game. He encouraged me to apply to "go regular" on return to the States, but having missed most of the action, I had other things in mind.

For one thing, a buddy and I had been offered \$800 a month to come back to China and fly for Chiang Kai-Shek after discharge. We tried to do this, but the State Department would have none of it, and it would have been a fruitless exercise in any case. More important, I was anxious to return to the magic place I had discovered on a canoe trip in Canada in 1941. After that very interesting six months in Peking, new orders arrived, and I was on my way home.



Major Amerine and a Nationalist Soldier

Pensacola

On return to the United States and discharge from the Marine Corps (I stayed in the Reserve), I spent most of my time during the next couple of years at a remote lake in the Canadian wilderness, a place I had discovered and fallen in love with before the war (another story). Speaking of falling in love, I had not the remotest intention of getting married, but I met a girl at this lake I could not resist. One moonlit night I proposed, and to my great surprise she accepted. It turned out to be the luckiest thing that ever happened to me. We canoed the 70 miles to town and despite the considerable reluctance of her family, got married and returned to the lake for our honeymoon.

Her family's reluctance was well founded. Times were hard, there was little call for fighter pilots, and competition was fierce for any kind of a flying job. Thank goodness for the GI Bill, which allowed me to enter classes at the University of Minnesota. And luckily there was a Marine reserve fighter squadron in St. Paul, which supplemented our meager income and gave me the chance to resume flying.

So, I was back in the good old Corsair. This was great, though I was now 27 and found that I did not have quite the stamina for the double Immalmans or vertical rolls that I had had in younger days.

However, it was not long before the Korean War started. Our reserve squadron was called to active duty, school days were cut short, and we were off to Cherry Point, NC for assignment. We were given a choice for that next assignment. High altitude photography with a jet sounded interesting, and I applied. But this slot had been already filled. Having recently gotten an instrument rating, night fighters also sounded interesting, so I volunteered for them.

But I found this disappointing. The night fighter version of the Corsair, The F4U-5N, had been loaded down with so much equipment and so many new features that it required an even bigger engine. Fuel consumption was so high a fully filled belly tank was necessary for any time at all in the air.

This aircraft was now an effective ground support fighter, the role of which was becoming ever more important to the Marines, but my passion and what I had trained for was air combat and this was no longer the air combat aircraft I had known.

And aerial combat was no longer dog fighting, now fighters flew missiles at each other.

So, when an opportunity for a tour in the training command in Pensacola, Florida came along, with the added inducement of being able to have my family with me, I took it.

The US Navy is very good at training, and during this tour I got some very good experience in flight training, leadership, and administrative duties. For a time, I had staff duty with the CO of our base at Whiting Field, Navy Captain Sempler. He had taken a course in flying helicopters in his spare time and found it interesting. As the end of my tour in the training command approached, he suggested I switch to helicopters for my upcoming tour in Korea. It might be a valuable skill to have when I got back to Canada.

This was a great idea, but it did not come about easily. When my request was made to Marine Air headquarters, it was turned down, so off to the West Coast we went with a couple of weeks' leave back on our lake in Canada.

After a very long drive with two restless young boys in the back seat, we arrived at Marine Corps Air Station, El Toro in California.

The next night at the officers' club bar I ran into a former 218 squadron mate with whom I had been in China. He was now personnel officer of the base and mentioned that his biggest problem was finding helicopter pilots. Such activity was regarded with a bit of disdain by fighter pilots. When I explained that this was exactly what I had been trying to get into, he jumped at it. "We will have orders for you tomorrow", and all the back to Pensacola and helicopter training we went.

The Sikorsky S-55

The first helicopter ride gave me a sensation like that on my first airplane flight, sort of a wondrous feeling. My first flights were in a Kaman, which had twin rotors intermeshed. This resulted in a peculiar, not unpleasant, sideways back and forth motion. After the Kaman, most my flying time was in a very early version of the Bell 47 and finally sometime in the twin rotor Piasaci (forerunner of the Vertol).



Once finished with helicopter training, we were off to El Toro again, where I was checked out in the Sikorsky S-55. After a few months of training in this machine, some of it in the hills east of Santa Anna, I was sent to Korea to join Helicopter Squadron 161, assigned to the First Marine Division, which was located on the south edge of the Demilitarized Zone. Our base was a tent camp. By now things had quieted down considerably. Our job was picking up casualties, flying them out to a Navy hospital ship, supplying troops in the mountains, and other odd jobs. Night evacuations, especially in bad weather, sometimes caused the stomach to tighten a bit.

The S-55 was a good, stable helicopter. It could carry seven or eight passengers, lift a fair load, and handled well. It was a pleasure to fly.

My collateral duty with the squadron was intelligence. After several months in Korea, I was reassigned to intelligence duty with Group headquarters in Japan. Here I rented a small house and set up housekeeping.

This did not last long, however. Word came of a family emergency, and I was on my way back to the States. After emergency leave, I was reassigned to an experimental helicopter squadron in Quantico, Virginia. One interesting experiment I remember was using a small tank of rocket fuel mounted on the top of the S-55 rotor shaft from which fuel

could be sent to a nozzle on the trailing edge of each blade, good for five minutes of extra lift in an emergency.

By this time, my tour of active duty was about up, and I began casting about for a civilian job. Once again, luck was with me. I heard of an outfit in Ottawa, Canada called Spartan Air Services that were hiring helicopter pilots. I took a few days leave and went up there for an interview. This company had been created by three ex-WW II RCAF pilots. Its main purpose was to perform aerial photography with ex WWII fixed wing aircraft, the British Mosquito, Lancaster's, etc., especially in remote areas of the world. It had also started a helicopter division.

My 500 hours of helicopter experience looked good to them, the outfit looked good to me, so I signed up for what was to be an interesting job in a most interesting company, and we moved to Ottawa.

Part II - Canada



Introduction

There are countless interesting flying stories in this part of the world, but few are recorded. It was probably the sight of all those slides in a dusty drawer that gave me incentive to take pen in hand.

I first came to Northwestern Ontario in 1941, as an 18-year-old looking for adventure in the “north woods”. During this canoe trip I discovered a lake which for me became a magic place to which I was drawn the rest of my life (another story). Interrupted by military service in WW II and again in the Korean conflict, I returned to Canada on a more permanent (landed immigrant) basis in 1955 with a wife (whom I had met and married in Canada in 1948) and three young boys.

My military flying had been mostly in fighters, but fortunately I had managed to log 500 helicopter hours and armed with this experience and expectation of adventure in the north again, I signed up with Spartan Air Services in Ottawa where I begin this story.

Pete Peterson September 2007

The Bell 47-D1

After discharge from the Marines and moving my family to Ottawa, I checked in at Spartan. The helicopter division was headed by Gordon Townsend. He had driven me back to the airport on my previous visit, and I remember telling him at that time of my fascination with the far north and wilderness exploration in general. His response (a little skeptical) was that he 'hoped it would meet my expectations'.

It was a diverse lot of people I met at Spartan's helicopter hangar. Most, but not all, of the pilots were ex-military, from the Canadian Air Force, Royal Air Force, Royal Navy, US Army, and military veterans from other countries, such as Ed Godlewsky, an ex-Polish Air Force fighter pilot, who had been shot down over Russia and made a long escape from a Siberian prison camp. The Chief Helicopter Pilot was John Thielman, who had started his long helicopter career flying auto gyros in England years before. Gordy Townsend, the helicopter division head, had flown helicopters in the past and was a most competent and personable manager for whom I had immediate and long-term respect.

Many of the aircraft mechanics (known in Canada as aircraft maintenance engineers) were also ex-military, many from the Canadian Navy. Most of the administrative staff also had aviation backgrounds.

In both fixed wing and helicopter divisions, this was a pilots' company, for better or worse, and I felt completely at home.

At the time I joined (in May 1955), all the helicopters were away from Ottawa on jobs all over the country so there was no way for the chief pilot to give me a check ride. However, there was an urgent need to relieve a pilot on a mining exploration project in New Brunswick, so I was sent off there.

Once there, first order of business was a bit tense for me because the project manager decided he had better see if this guy could fly, and up we went on a trial flight.

What made it tense for me was the fact that my total flying time in a Bell 47 was only 29 hours and that had been a year and a half before. Anyway, we got up and down in one piece. The job in this case was towing an electromagnetometer over remote areas in search of nickel or copper ore bodies.



The bird



The next day I started on the job. The electromagnetometer was suspended on a cable 60 feet under the machine. The object was to tow this “bird” over the terrain at 100 feet, plus or minus 5. A radio altimeter was used to accurately monitor the distance above ground. This took a bit of practice, particularly as the terrain was rolling hills and the occasional white pine over 100’ tall had to be avoided. The passenger was a technician who monitored the sensor.



The Spartan engineer on this job was Phil Istance, a dapper Welshman, who very quickly made it apparent he knew what he was about. His wife Alma was along as well, and we soon became friends.

The helicopter in this case was a 47G, the latest Bell model. There were a few new features in this model (such as bigger gas tanks). Unfortunately, this added weight that had not been compensated for with a bigger engine. The instrument we were towing was about 12 feet long with a large coil at each end which altogether weighed about 100 pounds. This meant that on takeoff we had to rise 60 feet before getting lift from forward speed with no help from "ground effect" (air bouncing off the ground from rotor wash). And in addition to the bird, there was of course the technician passenger and all his electronic equipment.

As we got into June and warmer days, we did not have enough power to lift the "bird" off the ground after raising the 60-foot length of cable. There was only one solution to this problem and that was for a man at each end of the bird to lift it off the ground and run down the field under the helicopter as we moved forward. This was awkward, but forward speed gave us just enough lift to get our tow into the air and the system worked.

The project went well. We moved location a couple of times and by end of June the project was finished, and I headed back to Ottawa.

This time there was a spare helicopter at base and chief pilot John Thielman was able to give me a check ride. This went OK. What I remember most was that toward the end of the ride he demonstrated a vertical full autorotation. (Engine Power off) Any helicopter pilot will appreciate that this is a very difficult maneuver requiring split second timing.

I had a few days at home and then was sent off to a most interesting job in the Arctic barrenlands.

The People of the Deer

I had recently read several books on Arctic exploration, and most recently Farley Mowat's book, "The People of the Deer".

So, it was with great interest that the next assignment was taking me exactly into the area about which Mowat had written. Our job was to support a geological expedition in the barrenlands south of the Arctic coast and west of Hudson Bay.

Spartan had built an airstrip at Pelly Lake, not far south of the Arctic coast, from where it was performing aerial photography. This base was not far from the geological survey camp where I was to relieve a Spartan helicopter pilot.

The trip north from Churchill to the Arctic base was in a Spartan DC-3 loaded with supplies for Pelly Lake. I was in back with the cargo. About halfway there, we encountered a line of thunderstorms. We turned and cruised along the front looking for a gap to cross through. Finally, one appeared, but halfway through it, we hit some strong turbulence. I was fastened down with a belt, but the cargo was not, and I remember 100- pound propane bottles floating in the air, then an updraft, and BAM the bottles crashing down.

Once through the gap, we were way off course. Maps appeared in the cockpit, and there was much haste to figure out where we were. There were no radio aids up there in those days, and the maps were not that great either. But the countless lakes did help, and we were once again headed for Pelly Lake.

I admired the bush pilots who could find their way in those days over that country particularly during the long winters. Lakes were the main landmarks, but the land was mostly flat, mostly treeless, and once snow covered, it was very hard to tell land from ice-covered lakes. One of the most famous of these pilots was Gunnar Ingerbritson, whom I later met on this job.

The airstrip at Pelly Lake had been made from sandy ground next to the lake. I got acquainted and had a look around. On the lake itself, a Norseman airplane on floats was gassing up for the trip to take me to the geological camp. I was rather surprised to see the crew wearing head nets and gloves, but the reason soon became apparent. The mosquitoes and black flies were thicker than I had ever seen, and they were particularly attracted by the smell of gasoline. I had been well acquainted with them on canoe trips in the Canadian wilderness but had never seen anything like this!



A few mosquitoes?

Off we went to the geological survey camp, which consisted of several tents. There were two Bell 47-D1's on rubber floats parked nearby. After introductions and some coffee, Neil Armstrong, the pilot I was to relieve, had me climb into one of the machines and took me to a little lake out of sight of the camp to check me out on floats, which was something new to me. Neil was a geologist as well as pilot, and a great person with whom I had the pleasure of becoming good friends as time went on.



Current base camp – Geological Survey

I was fascinated with the surroundings, and after supper took my camera and went for a walk. (There were 24 hours of daylight of course.) The land was picturesque, gentle hills, sandy ravines with occasional stunted pines. This was July, but some sheltered spots still had snow. I had on a head net and gloves and made sure my clothing was tight. But every step in the tundra brought up hordes of mosquitoes and blackflies, and despite my precautions my arms were swollen in the morning. As I took pictures, I wondered if they would show through the fog of insects.



That is sand, not snow!

The work was extremely interesting. From camp we flew in carefully planned traverses to cover all the ground in a 75-mile radius, the geologist passenger taking notes of the scene below, and every so often we landed to pick up rock samples. The camp moved seven times during the summer, so we saw a lot of country.

The wildlife was of special interest to me. There were caribou herds that stretched as far as the eye could see, white Arctic wolves, muskox on the bank of the Thelon river, even a barrenland grizzly bear. I was able to get many pictures except for the grizzly, which was able to out-maneuver us by running back under the helicopter each time we approached. Here I will quote verbatim from parts of my diary:

“24 July 1955. Yesterday I will not forget for a long while. I went out on a long geological traverse with Dr Craig about 11 o'clock. The wind was blowing very hard, but we took some extra gas and thought we would give it a try”.



“We flew south to the Thelon River and then east. We made several landings to look at rocks and spotted a muskox on a beach of the river. We went a little farther and saw two more muskox. A few minutes later we looked down and saw a great herd of caribou crossing the river. Then as we looked around, we were astounded to see that the land was covered with caribou as far as we could see in every direction. We climbed to 700 feet and still could not see any end to them”.

“We took some pictures and then landed beside a little lake. As Dr. Craig ate his lunch, I took pictures and though most of the caribou gave us a wide berth a few came quite close to the helicopter and some of the pictures should be good. It is hard to believe but it was miles before we came to the other side of that band of caribou”.

“At the end of the traverse farthest from camp, the wind increased to over 40 mph, and I was doubtful for a while that we had enough gas to make it back. By the time we did get back, we had seen 5 wolves, 18 muskox and countless thousands of caribou. I had difficulty getting to sleep that night; all I could see were caribou”.

“25 July 1955. Very cold, high winds. Spent most of the day talking to Dr. McClement, professor of biology at McMaster University, who is here to check on the Thelon game sanctuary”.

“26 July 1955. Several hundred caribou passed by camp early this morning on their way, apparently, to the west. Flew a geological traverse with Dr. Eade to the west. Saw 6 wolves, several hundred caribou, no muskox. On return was advised I was to fly Dr. McClement to the area where a band of 11 muskox was reported 18 miles south of camp. Took him and Dr Fraser and flew to the Thelon without spotting any until on the way back we found one beside the river that flows into our lake”,

“We landed and Dr. McClement approached the muskox with his camera. I followed about 100 yards behind. It was a good lesson in stalking game for the doctor did a great job. When the muskox got nervous, the doc reached down and pulled some grass which seemed to reassure the animal. The doctor ended up about 30 feet away and must have gotten some very good pictures”,



Stalking the Muskox

“He motioned me up and I took some pictures while he went back to the helicopter to get his movie camera. He came back and worked up close to the muskox again. At that point, the animal began acting very peculiarly, making jerking movements and plowing the ground with his horn. Then suddenly it wheeled and charged at the doctor, mane flying, snorting, a terrifying sight”.

“The doctor, instead of throwing his camera and running, stood right in the path of the muskox. As the animal came, he waved his arms and shouted at it. Just as the muskox was about to run him down, it wheeled uncertainly and at that moment the doctor ran at it and the muskox retreated. A wonderful exhibition of nerve. There are few people who would stand unarmed in the path of a charging animal of that size. I was standing only about 50 yards away with camera ready, but I was so worried about the doctor that I forgot I had it in my hand. Sure missed an exciting picture. When I asked him how he had known to stand his ground, he said the Arctic explorer Vilhjalmur Stefansson had told him that if a muskox charged it would not complete the charge if you stood up to it”.



Me and Dr McClement



“27 July 1955. Flew an interesting traverse with Dr. Fraser to the southeast. Saw many caribou, one wolf, 29 muskoxen. Flew along a nameless river south of the Thelon that is one of the most beautiful I have ever seen. Short black spruce and green hills along its bank, white sandy beaches, many small clear lakes near it. In one of the nicest spots along this river was a band of 29 muskox, a spectacular sight.

Sure would like to camp beside that river for a couple of weeks”. I was particularly impressed with the Thelon River, with its sandy banks, clear water, and abundance of wildlife. It is a beautiful place. I always wanted to visit there someday, but never made it. In 1927 a part of the area was designated a game sanctuary. May it always remain so.

It was on one of these trips that we came upon a group of Farley Mowat's people, inland Eskimos, truly "the people of the deer". Frightened off by this strange machine as we landed, they scattered behind a hill, but we waited patiently and eventually they approached.



People of the Deer

I had been really hoping for a glimpse of these incredible people who had adapted to live in this very hostile environment, a land where 50 below with 50 mile an hour winds in the long winter were not uncommon. They relied almost entirely on caribou for their food and clothing. Note in this picture the inner parkas which they wear in summer to cope with the hordes of mosquitoes and black flies. Their caribou clothing is so efficient they are free to roam the land using only tents for shelter most of the year, building snow houses only for times of the most bitter cold.

We had no common language, but with sign language we were able to indicate to them that we were camped 25 miles east.

Two days later three young fellows, dressed in their best, arrived with wolf and caribou skins to trade. Our party chief gave them some of our food, and in return for a wolf skin I gave them a pair of binoculars I had bought in Japan with which they were delighted. It would be of great value in their hunting.



It is hard to believe, but these people relied almost entirely on caribou for food. To balance so much protein in their diet, they had to find caribou with sufficient fat, which meant choosing certain gender at certain times of the year. And to get enough vitamin C, it had to be eaten rare. Unlike the coastal Eskimos they normally had little fat to heat and light their snow houses and cooking had to be done outside even in winter.

Farley Mowat's book describes his life with them for a two-year period. There are many tragedies in his story that resulted from their contact with the white man and the slowly dwindling caribou herds. He describes a dying race. It was therefore very encouraging to come across a group that seemed to be doing very well.

Toward the end of August, it was apparent that winter was not far off. We had finished the geological survey and reached Baker Lake, a remote post not far from the northwest coast of Hudson Bay.



Baker Lake

From there it was a long, slow, windy trip south to Churchill. The Bell D-1 was great for scouting the ground, but not great for long trips. To conserve fuel, we flew at 60 mph (it would not go much faster anyway). Once at Churchill we loaded the helicopters into railway box cars and left this fascinating land.

South Porcupine

It was not long before the next project came up. This was for a mining exploration company in a remote area west of South Porcupine, Ontario. Our base camp, which had been put in using a DeHaviland Beaver, consisted of three tents. The job was for crews to investigate geophysical anomalies that had been mapped by fixed-wing aircraft earlier and to stake claims on anything that looked interesting. Our responsibility was to fly these crews out to the sites from the base camp and pick them up in the evening.



Base camp

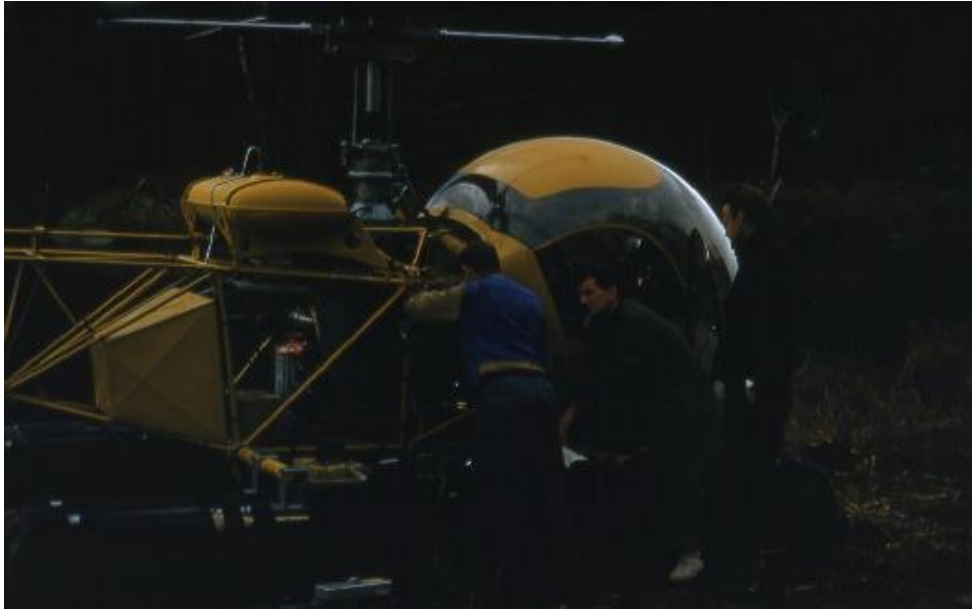
Another newly hired pilot came along for familiarization. His name was Tim Schwenk, until recently a Lt. Commander and helicopter pilot in the Royal Navy. The engineer on the job was Ken Thomas.



Setting up a Ground Magnetometer

Tim and I took turns doing the flying. The job went smoothly until one day Tim noticed that the voltmeter in the instrument panel was not showing any charge. I thought the problem was just the instrument, but Tim continued to worry about it. One afternoon when it was time to fly out to pick up and bring back a crew, we could not start the helicopter; its battery was dead. And this was at a time when there was a crew in the bush with no food or camping equipment. It was late fall with freezing temperatures at night. And we were camped in a remote area with no radio contact with the outside world. By the next day, we were getting concerned about those guys.

So, what to do? Ken Thomas came up with an idea. Among the camp equipment, he found an electromag backpack that had a little gasoline engine. He took the generator off the helicopter and, using a helicopter fan belt, connected the generator to the little gas engine and was thereby able to get a weak stream of juice into the helicopter battery. This took all day. By the time we finally got the helicopter started, it was nighttime.



Repairs, hopefully

Not wishing to risk a landing into a small hole in the bush in the dark, we loaded up with sleeping bags, tent, and food, and flew out and at treetop level dropped these supplies to them. We then went back at daybreak to pick them up.

Away at Daybreak



Other than for that incident, the project went well. It was that job that started my interest and experiments in radio communication. In those days, a helicopter was regarded by many as an accident looking for a place to happen. What if one had happened on that job?

Also, it was a demonstration of ingenuity. I had been brought up with the belief that Americans had a lock on “can do” and ingenuity. The competence and resourcefulness of Canadian mechanics and others soon showed me the falsity of that claim. Here is another example:

The next job was in northern Manitoba. Now, it was late fall, and we were operating out of a tent camp again in a very remote area. With very cold temperatures, we were dependent on an APU (auxiliary power unit) to get the helicopter started in the morning. We kept the APU next to the stove in our tent so it would start in the morning, but one morning it was no go.

The problem turned out to be a faulty carburetor in the APU. Our engineer, Tom Murray, took the carburetor off, and with a blowtorch sent a stream of gas at just the right gas-air mixture into the APU intake to make it run, at least long enough to start the helicopter.

The Little Buffalo River

After a break at home over the Christmas holidays, the next job was way farther north, on the Little Buffalo River, just south of where that river runs into the Great Slave Lake, not far from the Arctic Circle. The helicopter was shipped in a box car from Ottawa to Edmonton, from where with engineer Paddy Reilly we began the journey.



Arrival in Edmonton



On our way north

This job was a really cold weather operation, far out in the bush, in tents again of course. But this time we had an HF radio in the helicopter and by rigging up an antenna from the helicopter, using an empty whisky bottle for an insulator, I could contact Yellowknife.



Base camp



Talking to Yellowknife



With the helicopter, we set up several outpost camps.

The purpose once again was staking claims on possible nickel deposits. Sleeping quarters was a large tent heated by a wood stove. The floor was hard-packed snow covered by a tarpaulin. By this time, I had discovered the amazing insulating qualities of caribou fur, and I had a caribou skin that I laid on the snow, upon which I was quite comfortable in my down sleeping bag.



Cold Morning



30 Below

One of the crew was an interesting old-timer by the name of Sam Otto whose home was in Yellowknife and who was well known in the north for his trapping activities in the Arctic. On this job, he insisted upon setting up his own little tent. From long experience, he knew exactly what worked for him in this environment.



Sam Otto



Buffalo Herd

Our camp was north of Wood Buffalo Park, and during some of my flights I would happen upon some buffalos.

On finishing the job, we flew into Yellowknife. I advertised our helicopter services in the local paper, but nothing came up, so I spent a month flying a Beaver for Associated Airlines Ltd. Then one day in April, I headed south for Edmonton.

This was 700 miles, a long trip for a little 60-mph helicopter. On the helicopter cargo racks, I strapped all the gas cans I could, and I remembered some gas we had left when we camped on the Little Buffalo on the south shore of Great Slave Lake.



A stop on the long way south

Flying over Great Slave, I noticed an animal traveling on the ice. It looked like a small bear, but I knew it could not have been at this time of year, so I went down for a look. It became a wolverine as I got closer. I had a rifle strapped to the tail boom so I thought this would be a chance to get wolverine fur for my parka. As I got close, preparing to land, the wolverine turned and faced me. It showed its teeth and raised its front legs ready to fight the helicopter. With admiration for this show of courage, I turned the helicopter and went on my way.

I made it in one day to Edmonton but was exhausted when I checked into the nearest motel. I must have left the key in the door because someone came in during the night and stole my wallet. I had a pistol in my survival kit close to the bed, and it was lucky for the intruder that my exhausted sleep was much deeper than usual that night.

Anyway, I turned in the helicopter to the Spartan office there and went back to Ottawa by Air Canada.

Smoke and Fire

With spring came preparations for my next assignment from Spartan. This one was for the Ontario Ministry of Natural Resources (at that time called the Department of Lands and Forests). The contract had been offered to commercial operators for two machines and had been split between Spartan and Dominion Helicopters of Toronto. One was to be based in Cochrane in the east and one in Kenora in the west. The locations were decided by a coin toss between the two operators and Spartan got the eastern base, much to my disappointment. I was sure hoping for Kenora because my wife Boo and I had long since decided that is where we wanted to settle, she because of family in the area and I because of Lake Manitou.

So off to Cochrane where the work started routinely, flying a technician out to set up radios in the fire towers, game warden patrols, etc.

But as summer began, forest fires started to appear, and though the family had joined me in Cochrane for a brief while, the work gradually took me farther and farther west. These fires did not amount to much, but north of Thunder Bay and east of Lake Nipigon there was a dandy of several thousand acres, which gave me a real introduction to what firefighting was all about. Boo was meanwhile trying to follow me, driving down the TransCanada highway with two boys, a dog and a cat in our little Karmen Ghia.

These were pioneer days for the use of helicopters on forest fires. For one thing, Department personnel were anxious to make the best use of them but had very little knowledge of their capabilities or of the hazards involved. And for another, the helicopter I was flying was still a Bell 47-D1, which had enough power to rise off the ground aided by rotor wash bouncing from the ground, but with any kind of a load it needed some forward speed to gain height. This meant that taking off from a small clearing in the bush with a load or two passengers was a very tricky thing. And this decision had to be made time after time.



Note the flat tank, an early model 47-D1.

Reconnaissance capability using the helicopter was great. It gave the fire boss a good platform from where he could plan and monitor his attack. Contrary to usual opinion, it was perfectly safe to fly along the edge of the fire for this purpose, even in front of one that was moving fast, by staying low under the smoke.

In this type of lake country, the strategy was to set crews at locations around the fire close to any water source where they could set up their hose pumps. And, of course, their tent camps. A base camp would be set up at the nearest lake big enough to handle the float planes that brought men and equipment from town.

So, the first order of business for the helicopter, after giving the fire boss a good look from the air, was flying out these fire crews and their equipment to locations the fire boss had picked out, and in the process giving each crew boss a look at his area of responsibility. From then on, the job was to supply these crews with hose, food, information (no radios then, we had to land each time to communicate), keeping the fire boss informed of

developments, dropping hose along the fire line, evacuating crews that were about to be burned out, etc.

This all seems quite straightforward, but there were difficulties. Number one, the Department had very few trained crews in those days. Fire fighters were recruited from beer parlors or nearby logging operations (all most reluctant recruits, of course). Loading or unloading people or equipment on or off the helicopter, while keeping anyone from a fatal walk into the tail rotor or someone from raising something up into whirling blades or walking down a slope into the blades was a constant threat and a severe strain on the pilot's nerves.

These operations were usually carried out in an atmosphere of considerable urgency with no radio communications. I can remember hovering over a group of men, my arm out of the door, pointing the way to the part of the fire line they were supposed to be working on.

Number two, the fire boss would want his crews to set up as close as possible to the fire line without understanding the limitations of these little underpowered helicopters, so the pilot would be under constant pressure to land in dangerously small holes in the bush. This is not a problem with helicopters today, but the early model 47-D1's could not hover out of ground effect with any kind of load (in other words, they could not go straight up with any kind of load or even with more than one passenger) so that the required forward speed needed to take off meant there was a fine line between what was a safe hole in the bush to get in to or out of and what was not. And as these urgent activities went on from dawn to dusk during long summer hours, the pilot would have to make many, many, such critical decisions each day.

This brought up difficulty number three, pilot fatigue, something no one in the firefighting business had yet heard of. Once a fire was declared out, most of the crew were discharged and headed for the nearest beer parlor. Except the helicopter pilot. He was given directions to the next blaze where he met a fresh crew ready for battle.

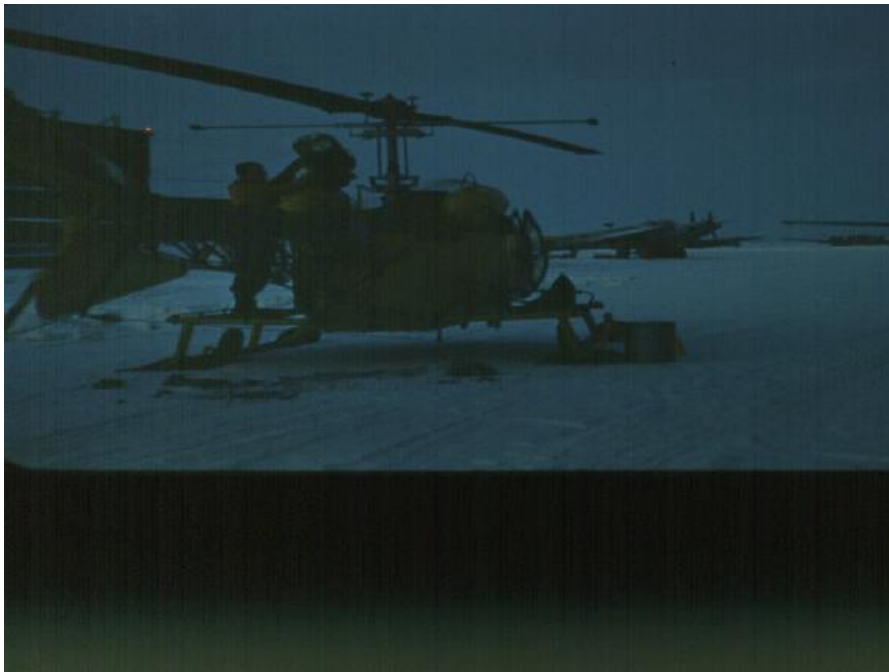
By the time Boo had caught up with me in the little village of MacDermit on Lake Nipigon, I was exhausted. That night I did some sleep walking, the only time before or since that has happened to me.

But we survived, the job was done, and I wrote a long report on the summer activities which was well received at Department of Lands and Forests in Toronto.

Winter Prospecting

The '50s were times of excitement among the mining companies using new technology to explore for ore bodies. Fitted with electromagnetometers, fixed-wing aircraft were covering the north looking for so-called “anomalies”, which might indicate valuable mineral deposits. Then the exploration company that had the information would send crews into the bush, whatever time of year, to do more precise investigation and stake claims on anything interesting.

For this latter job, helicopters were invaluable, and it was just such an operation that found the huge nickel deposit north of Timmins, Ontario during this period. In this picture, we get ready to leave Ottawa one cold morning during the winter of 1957 to support just such an operation.



Leaving Ottawa one Cold Morning



The crew and supplies were flown to the nearest lake by fixed wing aircraft and from that tent base in the bush we operated the helicopter.

Snug in the bush. A wood stove would keep our tent warm during the day. At bedtime it



would be filled with green birch logs, the damper closed almost all the way off, and we would creep into our down sleeping bags. We could tell when it went down to 50 below because birch trees would start snapping from

their sap freezing. In the morning someone would stick his arm out from his sleeping bag and open the damper. Soon the stove would be vibrating from the roaring fire. We could climb out of our bags and get some coffee brewing.

Getting machinery running in these temperatures was tricky, the helicopter having a lot more moving parts than fixed wing aircraft. The heater we used to warm it up we would keep in the tent by the stove so it would start in the morning.



Getting ready for the day's work



Staking claims



Yours truly

The Vertol



A nice shot by George Hunter

During the Cold War, two early warning systems were installed in the Canadian north, the Dew Line in the far north and the Mid-Canada Line about half-way up to the Arctic coast. The Mid-Canada sites were located on remote hilltops and most of the construction material was delivered by RCAF helicopters. In 1957 it was decided to turn the helicopter work over to commercial operators.

At that time there were only two substantial helicopter operations, Okanogan in the west and Spartan in the east. The job was divided between the two. Spartan's portion was to service the sites from Great Whale River on the east coast of Hudson's Bay to Hopedale, Labrador on the Atlantic coast.

Spartan found itself with a million-dollar, cost-plus contract, and responsibility for nine great lumbering Vertols.

During the previous two years, I had pursued the operations I had been assigned in the bush and in the far north with enthusiasm. This had resulted in some particularly good feedback from customers, and Gordy Townsend, in his wisdom, assigned me as project manager for this new endeavor. By this time Larry Camphaug was recognized as an exceptional aircraft maintenance engineer and was assigned to head the maintenance end of the Vertol operation.

This operation started at a small quiet airport adjacent to the village of Arnprior, Ontario, about 50 miles west of Ottawa. One of the buildings at the airport became Canadian headquarters for the Vertol Company. It was an ideal location for checking out Spartan's Bell 47 helicopter pilots and engineers on this much larger aircraft.

Known in the US Air Force as the H-21, this banana-shaped, twin rotor, 19 passenger machine looked to be quite a challenge for Spartan helicopter pilots, most of whom had little experience with large machines. Would they be up to the job? I had no doubts. Pilots who had survived the challenge of getting work done in the bush with the little

underpowered 47-D1s, requiring constant critical decisions, would have no problem whatsoever.





On the job, doing some blade de-icing



On patrol

I was right. The only pilot error accident we had during the three years we had the contract was a bad weather incident which could have happened in any type of machine.

We had the luxury of lots of power, many instruments, and great communications gear. Operations were mainly from open country in the north or occasionally from airports.

Three noisy transmissions and great lengths of whirling shafts made for a noisy, vibrating machine that some called a “flying machine shop”, but sitting up front wearing padded helmets, we pilots felt less of the vibrations and noise.

The radar sites were located on hilltops and some, particularly those in the Labrador section, experienced some really strong winds. Shutting down for any length of time meant securing the machine to strong and well-anchored cables.



Tying down

Some of the main sites had a cook, and sometimes the cook would use his expertise to bottle some home brew. On one occasion, a cook, made adventurous by sampling his wares, went outside to take a picture of a polar bear in the garbage dump. It was a fatal mistake.

I was doing my share of the flying. On another occasion, when I was staying overnight at one of the sites, the cook presented me with a bottle of his efforts to take home for Christmas. I set it beside the bed and was startled halfway through the night when it exploded.

While in the office in Ottawa on January 9th, 1958, I got word that one of our machines was missing. I immediately left Ottawa for Knob Lake. By the time I got there, I learned there had been a bad crash and that the crew in another Vertol had found the accident scene and rescued the crew and the one passenger.



A control cable had broken (as we learned later) and the machine had fallen to earth out of control. The result would no doubt have been fatal to all except that the helicopter had struck the back side of a hill, careening down through and crushing small spruce trees. This had absorbed some of the shock before the helicopter hit the bottom of the hill and broke out in flames.

The pilot, Doc Demerah, had instinctively held right rudder on the way down, and the final impact broke his right leg. In the passenger area, the heavy APU (auxiliary power unit) had struck John Linden, the crew engineer, and knocked him unconscious.



With the aircraft in flames, Doc (with a broken leg) struggled out of the cockpit window, crawled around to the cabin door, and pulled the unconscious engineer to safety. The passenger, who had been sitting up front with Doc, made it out on his own. The aircraft meanwhile was entirely consumed by fire.

Here it was, way below zero, maybe the coldest day of the winter, and because of the fire only two sleeping bags had been recovered. Doc and the passenger made a depression in the snow, laid one sleeping bag down, put the engineer, still unconscious, between them with the other sleeping bag over the top to wait out the night. During the night John Linden inadvertently kicked off the cover over his legs and one leg and one foot were badly frostbitten. Early the next day, they were located and flown out.

Back in Ottawa, I was driving home to Arnprior, passing the Townsend house, and there beside the highway was Ida Townsend waving me down!

“Been another accident”, she shouted. So back to the airport and back to Knob Lake! This was about the 28th of January.

It was a weather accident this time, the machine lying on the side of a steep hill. No one hurt. thank goodness.



By phone I explained to Gordy Townsend what a precarious position the machine was in, and he arranged for a salvage expert from Montreal to give us a hand.

On his arrival in Knob Lake, we arranged for a Cessna 180 to take he and I out to the nearest lake from which we hiked up to the accident scene.



We secured the machine by means of a cable to a big rock at the top of the hill.

In the spring, we flew in a crew to dismantle the machine and piece by piece we slung it out with another helicopter.





Getting ready



Hooking up



And away!

Other than on those two occasions, the job went smoothly from there

At a meeting with a Vertol representative, we learned that the US Air Force had had the same control cable break in one of its Vertols shortly before Doc's accident, and we were able to fix the potential problem in all our machines.

Boo and I had become acquainted with the village of Arnprior when the Vertol operation began. We were impressed with the village and moved there as soon as we could find a house to rent. To help with the commuting, we bought a Cessna 140. These pictures were taken before and after we had it painted, the paint shop suggested by Neil Armstrong.



The Bell47-D1 out west

As a result of the efforts by Neil Armstrong and Jim Lapinsky, we were starting to get more work in the west. It was thought a mountain training school in Banff would be a good idea. I was sent out there to look this over and then do a stint on a contract on the Yukon/Alaska border.

An immediate problem in the mountains was of loss of power in the 47-D1 with altitude, a machine without much power anyway. At 11,000 feet, it could barely hover. With any kind of a load, it could not take off. One precarious method of overcoming this was to use the inertia in the blades to hop to the edge, then to hop off into space.



At Banff at 11,000 feet

The answer to this problem came later with an addition of a turbine to the engine as in the 47-G3 and 47-G3B1. This provided the manifold pressure that the thin air at higher altitudes could not. And, of course, much later the turbine machines such as the Bell Jet Ranger and Hughes 500 were much more efficient at higher altitudes.

The first time I flew over a ridge like the one we are approaching here and over the valley, it gave me the first sensation of height I had ever experienced in a helicopter, probably because of the relatively slow speed. I turned around, went back to the ridge, and flew down the slope to the bottom of the valley, then up-slope to the next ridge. I got over this eventually.





The job up in the Yukon was in support of mining exploration. Sometimes it consisted of taking a geologist to a mountain top. Sometimes there would be grizzly bears at the drop-off point.



Spartan's Demise

Politics in Spartan's helicopter division became interesting about this time. Larry Camphaug had been doing such a great job on the Vertol operation that I urged his promotion to become head of all field maintenance. That came about eventually. Then Gordy Townsend made the only questionable call I can remember him making, and that was to promote me to my "level of incompetence", helicopter operations manager!

This took me away from what I was better at, flying and bush operations. I did not have the same interest, enthusiasm or for that matter the personality for a desk job. However, I had been away too much from a growing family, and this would be a welcome change, so I did not resist.

My first mistake, true to Parkinson's Law, was to appoint an assistant operations manager for the east and another for the west, which was later seen by the head office as "empire building".

And wouldn't you know, about this time Spartan's main business, aerial photography, and mapping, had run into trouble on some African operations and was getting into financial difficulty. Those of us in the helicopter division thought we were doing OK, particularly with the money the Mid-Canada operation was bringing in. But for some reason, we were never privy to the books that were kept at the head office.

This was a very frustrating time for me. We had moved the family to Arnprior and the one hour and a quarter commute to and from the office at Ottawa airport did not help. The financial situation for helicopter operations kept getting worse, and it became apparent that some investment from outside would be required to stay afloat. About this time to the disappointment of us all Gordy Townsend left. I was appointed to temporarily take his place as manager of the helicopter division.

It was then announced that Bristol Aircraft of Canada was putting \$300,000 into Spartan and was to take over control. A few days later a limousine pulled up outside the helicopter hangar. Out stepped a figure dressed in a black coat, white scarf, bowler hat, and gold topped cane. His name was John Reynolds, I believe. A meeting took place, and my main memory of that meeting was John Reynolds' reference to the helicopter operation as a "dog's breakfast"!

Bristol had long experience and expertise with aircraft manufacturing, but none with flight operations to my knowledge. So, it soon established a whole new set of strict rules for personnel, such as so many days off in case of death in the family, the number to depend on distance of relationship, and so on and on. For crews who were used to using their own ingenuity and resourcefulness in far flung operations and for whom time in Ottawa with family was important, it was a blow to morale to suddenly be constrained by factory floor rules. I could see where this was going and began casting about for another job. That was a good thing for me because the company did not last much longer. A sad end to a colorful company. An interesting saga for some writer to chronicle.

Dominion Helicopters

It was now the spring of 1960. At a gathering of helicopter people at some place or other, I ran into Jack Fleming, president of Dominion Helicopters in Toronto. He said he was aware of my reputation, and I expressed an interest in joining his company, especially if I could be assigned to work out of Kenora, Ontario. This was sort of half promised to me and a few days later I left Spartan and reported to Dominion headquarters in Toronto.

My first assignment was another bird-towing job with a 47G in the Sudbury, Ontario area. This went off well, and I was assigned next to the Port Arthur base for the 1960 season's contract with the Department of Lands and Forests. This was at least getting closer to Kenora, and there was some understanding that Kenora might be available to me the following year. We rented a house in Port Arthur and proceeded to move there.

The atmosphere at Dominion was quite different from Spartan. Pilots were no longer "project managers" for jobs in the field. In fact, it became apparent that pilots were just a necessary evil, and in general this was an engineers' company. Jack Fleming had been a helicopter pilot, in fact he had met his wife on a job in the Yukon Territory, but he now stayed close to the office. His partner and vice president, Ernie Grant, was an aircraft maintenance engineer, in fact an exceptionally good one. He did most of the hands-on supervision including visits to field operations.

As an example of the difference in philosophy, in Spartan it had been routine for the office to keep in touch as far as possible with the crews in the field and to support them vigorously. Here at Dominion, the office would say to a departing crew, "We don't want to hear anything from you, just get the job done". (Or words to that effect). It seems to me that Dominion's attitude toward its pilots ignored a lot of talent, for many quit and went on either to responsible positions in other companies or started their own.

Anyway, the summer went well, most of the flying for Lands and Forests at Port Arthur had to do with forest fires. The 47-D1 was still an underpowered machine, getting the job done was not easy. On one job we made the Port Arthur newspaper which reported on our hauling up all the material for a cabin to a remote hilltop on an island out in Lake Superior for the US Forest Service. This was a big job for that little machine. The engineer on the job, at my request, very reluctantly stripped the helicopter of its gasoline heater and everything else not critical to save weight.



Strapping on the load



Unloading on the hilltop



The intended end result

There were many odd jobs of course, conservation officer (game warden) patrols and so forth, but one was of enough interest to make a weekly newspaper in Toronto. That was tagging moose.

In those days, our helicopters were on rubber floats. The idea was to surprise a moose out having breakfast on aquatic plants, steer him into deep water, and glide over him on the water to the point where the conservation officer lying on the cargo rack could clip a tag on to his ear. In 1960 this project was underway just north of Red Lake, Ontario. Another helicopter and a reporter sent to record the event followed me, and the story was featured in the Toronto newspaper.



Herding into deep water



Clipping on the tag.

In later years, moose tagging became rather routine, except radio collars were now used making it a lot more difficult for the conservation officer. Out of Ear Falls Ontario, we were able to tag 100 moose a year in July for 2 or 3 years until an incident near Wawa, Ontario put an end to the project. There the pilot let the moose get into shallow water while under the machine. It rose suddenly and flipped the helicopter over. No one was hurt, but that was the end of moose tagging by helicopter.

I believe it was on the Red Lake moose-tagging job that I met John Schultz, who was flying the other helicopter with the reporter that took these pictures. An outstanding pilot with great good humor, always good company, we were to have a long relationship.

In the fall, I asked to keep the helicopter at Port Arthur for the winter in hopes we could find some work for it, but we produced little. Establishing bases at locations far afield would become important in later years, but at that time Dominion was scornful of the idea.

Of more interest to Dominion's office that year, the federal government was becoming aware of Spartan's approaching demise and was putting the Mid-Canada project with the Vertols up for bid. Dominion had not planned to bid for the job. Except for myself, there was no experience in the company with flying or maintaining heavy helicopters. I told them that if they were interested, I would write a proposal for them and organize crews. I was not interested personally in getting involved in this project if Dominion got the contract. I would prefer to stay in northwestern Ontario.

This produced a somewhat different atmosphere. I was taken to a dinner in Ottawa together with the relevant Member of Parliament at a posh restaurant, etc. I wrote the proposal and contacted potential crews. On a visit to the Vertol plant in Arnprior during this time, I first met Robby Lavack who was then an official with the Department of Transport and who commented very favorably on my proposal. (In later years and other circumstances, we became very good friends). Dominion got the contract and for Christmas I received a small bonus.

Kenora at Last

In the spring of 1961, I got word that I could have the Kenora portion of the Lands and Forests contract so off we went to Kenora, rented a house, and set up housekeeping.

The spring was quiet until one morning in June as I was sitting on the porch studying for exams for aircraft maintenance engineer, I got instructions to head off for Sioux Lookout, about 200 miles NE, for fire work.

On arrival, I was told there were three fires started by lightning strikes about 65 miles north. I was to meet the crews which were being flown to the nearest lake by Otter aircraft.

I did this and took out the crews together with their pumps, hose, and other equipment to the nearest clearing next to each of the three fires. With the little 47-D1, it took some time. The fire fighters caught two of the fires, but the third got away. The wind came up strongly, and that third fire spread to 6,000 acres.

The next day more crews, equipment, and a Cessna 180 on floats arrived at our base camp at the nearest lake. There now started several days of very hard work, the Bell 47-D1 and Cessna 180 placing crews at locations all around the fire, together with all their firefighting and camping equipment, cruising the fire line, dropping hose, and all the many tasks that could be done by helicopter and floatplane. After 10 days on the job, we had held the fire to 6,000 acres, and it was about to be called under control when that afternoon we could see an ominous red cloud coming at us from the west.



Big trouble coming our way.



Darkness at noon!

There were now over a hundred fire fighters out on our fire line. We scrambled to pick up and return to base camp all the crews we could, two at a time of course, in the helicopter. Soon the smoke became so thick we could not see to fly. There was a group of 40 men on the south side of our fire line right in the path of the oncoming blaze that had not yet been picked up, and there was much concern for them. That night it was announced, "Breakfast will be at three thirty!"

It was hoped that by daybreak there would be enough visibility to fly. There was, and approaching the site we were worried about what we would find. I remember seeing a fire fighter in the top of a spruce tree waving his shirt. They had found refuge in a creek and survived the oncoming blaze.

Then there came word from Sioux Lookout that we were to gather all the crew and equipment from our original fire line and regroup. Some of the sites from which the crews had been working were on lakes big enough for the Cessna 180 to land on, but most were on swamps, creeks, or very small lakes that only a helicopter could service. It was a big job. Below is a picture of hose stacked up on the dock at camp many, many feet long. This was in the days before we started using cargo nets, and equipment had to be laboriously tied on onto the helicopter cargo racks by the pilot at each pickup.



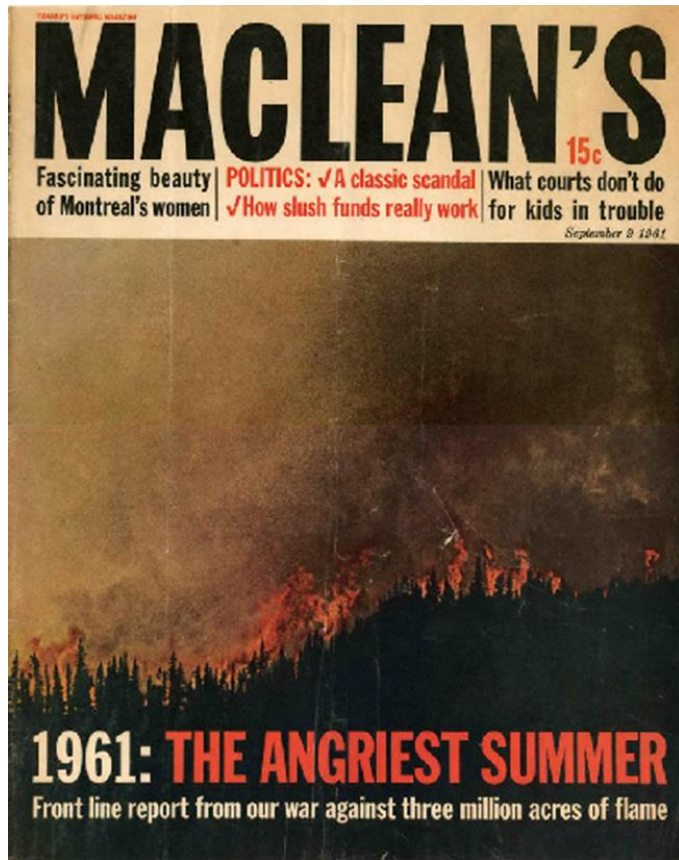
Hose and other equipment flown in from the fire line.

We had moved materials by means of nets under the helicopters when we had flown the Vertols that had lots of power, but we did not consider the 47G capable of this. Ernie Grant came up with an idea that would change this. He added a turbine to the engine, making more manifold pressure available and thereby more power when it was needed. The only drawback was that the engine now required higher octane fuel (which had more lead), and this occasionally caused spark plugs to lead up and misfire. Flying along, the engine would sometimes cough, the tail would switch, and we would land at the nearest clearing to take out the spark plugs and scrape out the lead with a pocketknife. We soon became adept at diagnosing which bank of plugs was the problem.

Which recalls another difficulty we had with early 47's. The fan that cooled the engine was powered by a belt, and this belt had a habit of breaking. While flying, there would be a big bang as the broken end of the belt slapped the firewall right behind the pilot. Now there would be three minutes to get on the ground and shut down before the engine overheated to the point of destruction. Once on the ground, we installed the spare belt carried behind the seat and on.

I digress. Back to the fire, which now suddenly had grown to 250,000 acres. New plans were made, much more equipment and many more fire fighters gradually arrived, and we started over again. This went on for a least a month. We got some help from Mother Nature in the form of rain. Otherwise, it would have eventually taken snow to put the fire out!

By now our fire had become big news. A young Peter Gzowski and a photographer arrived at base camp. There was not much big blaze left to take pictures of, but I had been snapping photos from the beginning, so they took some of mine back to Toronto where they were published, along with Peter's story, in the next issue of MacLean's magazine



Canada's news magazine, McLean's. One of my pictures was on the cover and more inside. During all this, there was another fire north of us, too big to tackle with the resources at hand, that eventually covered 500,000 acres!

So once our fire was declared out, we moved north. This big fire had been dampened by rain to the point that there were only hot spots left along the perimeter. We were able to patrol this fire from a base camp and transport crews to clean up the hot spots. The perimeter was so long, we had to have gas caches along the way!



At this point, we were racking up a pile of flight hours, sometimes 11 or 12 a day. This was in addition to time spent loading and unloading, gassing up, doing maintenance if no engineer was close by, etc. We were getting very tired, but it did not stop. We went from fire to fire until the end of the summer. My logbook showed 700 flight hours logged in the last two and a half months!

Normal procedure was to commute from the nearest town to the fire, but I decided early on this was a waste of time and energy and instead camped at each fire's base camp.

The first time I tried this, I bunked in a tent with some beer parlor conscripts and natives who regarded mosquito netting as tenderfoot. Instead, they filled the tent with a fog of Raid insecticide. I soon learned to bring my own little tent and sometimes food as well.



Groceries would stay put without any tie down.

At the end of the 1961 season, I once again wrote a long report on helicopter operations on fires which was well received at the Department of Lands and Forests.



ONTARIO

DEPARTMENT OF LANDS AND FORESTS

PORT FRANCES, Ontario
April 19, 1962

Mr. P. A. Peterson
Box 551
KEEWATIN, Ontario

Dear Mr. Peterson:

I have been unpardonably slow in thanking you for the report you made to us on the use of helicopters in Forest Protection. It aroused considerable interest and I had copies run off at Head Office's request for all Districts in the Province and the Ranger School.

Repeat orders came in from several Districts and eventually the stencils were sent to Pembroke District at their request.

Mr. Braine, in charge of Protection in Manitoba, seemed familiar with the report but I gave him a couple of copies also when we met with his men in Kenora on March 22nd.

Thank you very much for your help and thoughtfulness.

Yours very truly

R. Boulton
Regional Forester

RB/fw

That fall, we bought (made a down payment, that is) on a nice house in Keewatin (sort of a suburb of Kenora) on the shore of Lake of the Woods. Shortly after this, I had a call from my friend Neil Armstrong in Calgary. Max Ward, who had established a highly regarded bush operation in Yellowknife, was expanding into the international charter business. He was looking for an operations manager and would like to talk to me. I thanked Neil very kindly and begged off. We had finally made it to Kenora and just bought a house.

Also, by now I had the mandatory five years residence requirement to apply for Canadian citizenship and did so.



Our New house (on the left). That lawn further up was to be our helicopter base for the next six years.

Later that fall, we had a visit from Ernie Grant, who was obviously skeptical about my getting enough business in the Kenora area to justify leaving a machine there and keeping me on salary for the winter (\$500 a month). I was pushing the idea of Dominion applying for an official base in Kenora, but not getting any response. I admit that prospects did not look that great at that moment, but eventually Kenora became a valuable base indeed, that they had passed up.

At one point during Ernie's visit, I made some suggestion about Dominion's Mid-Canada Vertol operation, which I had been project manager for in Spartan days. Ernie turned to my aunt, who was also visiting, and said, "Pete wrote a letter for us, now he wants to tell us what to do". Here I had just finished, at considerable effort, 700 hours of revenue flying in record time, had the previous year written a long proposal that resulted in a valuable cost-plus contract for them, a contract that they would not even have bid for, and this was now Dominion's attitude.

The writing was on the wall.

Win some – Lose some

In 1961 the Department of Lands and Forests concluded that in Northwestern Ontario the moose population had grown to the extent that it was a threat to itself. Moose were not being hunted in remote areas. To remedy this situation, it was decided to open for two years 3,000 acres in which it would be legal to spot moose from the air, an activity often done anyway, but to that point had been illegal. This could get some hunters off the roads and into more remote areas.

In the fall of 1961, I was so tired from the season's fire activity, I did not give that development much thought, but 1962 was much quieter, and during that summer among other things, we had tagged over 100 moose in the Ear Falls, Ontario area, thereby learning more about moose habits and their reaction to helicopters. So, in the fall of 1962, the idea of spotting moose for hunters sparked my interest.

Since the helicopter's capabilities in such an activity would have advantages over fixed-wing aircraft, the first thing I did was to ask the Kenora conservation office what the ground rules for us would be.

The answer was, "Do anything you like with the exception of shooting from the air".

Fair enough, I then advertised that we would be available to take hunters out to look for moose and gave some thought about a base for the hunt. We did not need to take hunters from town. This could be done by fixed wing aircraft. What we needed was a base in a remote area from which our hunting would not interfere with the more usual hunting activities.

One of my favorite places in the world was Camp Beaverhead on Manitou Lake, which had been built by my wife's uncle in the 30s and where I had worked as a guide and had met her in 1948. This was still a remote area (some 12 years before there was any road access to the lake), an area with lots of moose and with the least potential disturbance to the prevailing practice of hunting off roads. Excellent accommodations would be made available at Beaverhead by Bea and Shag for hunters. Altogether, Camp Beaverhead was a natural for my purpose.

I flew a helicopter down to Beaverhead from Kenora in October, set up a crude HF radio for communication, and we waited for customers.

They were not long in coming, flown into Camp Beaverhead from Fort Frances or Nestor Falls. Once settled in, we would take them out by helicopter to look for a moose. It turned out that the average time for spotting one from the helicopter was twenty minutes. We would then drop the hunter off downwind from the moose at the nearest clearing, usually a hilltop, beaver pond, or swamp, and then takeoff and circle far above watching the hunt.

If it were successful, we would then land as close as possible to the downed moose. These were days before our helicopters had enough power to use cargo nets, so it was a matter of my quartering the moose to load on to the cargo racks to take to camp.

It was an interesting project, but a lot of work. There was some hazardous treetop flying, little monetary reward, a public relations fiasco, and our disgust with some so-called "sportsmen".

An example of the latter was a TV sportscaster who offered some publicity in return for a free hunt. I took him and a friend out one afternoon, showed him several moose before he picked one he wanted to try for, dropped him off, and then circled above. He stalked the moose, took his shot, and I saw the moose fall and then get up again. Instead of walking toward the moose, he went back to the clearing where he waited for me to land. "Never

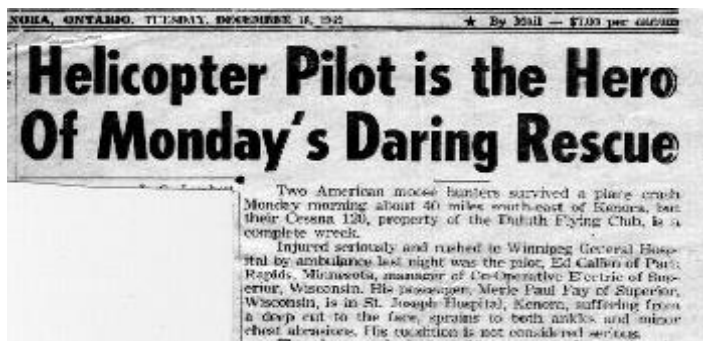


mind," he said. "I can't go back and tell my audience that I didn't get him with one shot, let's find another."

"Nothing doing", I said, "I'm going back and hover over that moose until you finish the job." Which we did.

As for the public relations problem, despite being in a remote area, we were actually in a straight line only 50 miles north of Fort Frances, and in couple of cases people saw us. When they heard a shot our hunter had made on the ground, they must have assumed it was coming from the helicopter above. The sportsmen's club in Fort Frances had a meeting to which I was invited. I thought I had fully explained what I was doing. I even took one of the members out on a hunt to demonstrate, but evidently the club still thought what I was doing was illegal. For one thing, I believe a lot of people must not have realized that it was the Department of Lands and Forest that had initiated this project. If that department was getting any complaints on my activities, they were sure not being passed on to me.

I believe these misunderstandings exist to this day. But while getting in the bad graces of the Fort Frances Sportsmen Club, the headlines below appeared in the Kenora Miner and News plus a front-page article about what my helicopter activities were contributing to the area.



What brought about the favorable Kenora newspaper article was this incident:

We had returned to Kenora late that fall after the moose hunt. One day in early December, about 5 o'clock in the afternoon, we got a phone call that there had been a Cessna 180 crash in the bush east of Lake of the Woods. It had evidently been spotting moose, but got too low and slow and spun in.

A doctor had been flown to the nearest lake by a Norseman on skis. He and the pilot hiked two miles to the crash scene over difficult terrain, but needed help getting the survivors out.

By now it was getting dark, and we were not licensed to fly at night, but the ground was snow covered, the lakes were frozen, and therefore it was not as dark as it would have been earlier in the fall.

We took off and headed southeast. On arrival, we circled the crash scene, deep in the forest. Now it was dark, but those waiting had a fire going and by the light of this fire we made our approach. Landing in a small clearing in the bush is never easy, but luckily it was just big enough. The light from fire was not enough to be certain that the tail rotor was going to clear all the brush, but I took a chance and set down.

The doctor had the pilot and his passenger lying by the fire. One appeared unconscious. His face had been smashed in. Looking down at him, I groaned. He opened his eyes briefly. My reaction sure had not given him much reassurance. The other survivor had a broken leg but was at least conscious.

It would be a tight squeeze with the two men beside me in the little machine, but they were loaded in. The idea was for the one with the broken leg to be on the outside holding the unconscious one in place.

My worry was that if the unconscious person in the middle came to and started thrashing close to the controls, it could be game over.

So, it was my strong desire to make this flight as quick as possible. By radio we had arranged for an ambulance to come down from Kenora, and it was waiting a few miles away on the highway that runs north and south just east of Lake of the Woods.

With this destination in mind, we took off. Once we found the ambulance, we landed beside it. I was mightily relieved when my passengers were transferred to the ambulance, and, having had enough illegal night flying for the moment, I left the helicopter there in the ditch and rode back to Kenora in the ambulance.

On arrival at the Kenora hospital, the doctor on duty took one look at the accident victims and said to the ambulance crew, "You might as well keep on going to Winnipeg!"

I was dropped off in Kenora. I heard later that on the way to Winnipeg the ambulance hit an icy patch and rolled over twice! Everyone survived, being well strapped in.

One following note: The next year on a flight to Toronto with the helicopter, I stopped at the airport in Duluth, Minnesota to gas up. A person with a broken nose and scarred face walked up to the helicopter with its Canadian logo and asked me if I knew Pete Peterson in Canada? How is that for a coincidence?

A second note: The day after the accident, I was driven down to get the helicopter. On the flight back, I was just starting to let down for the landing at home when the engine quit.

This was the first of my three engine failures with the early Bell 47's during my flying days. This one was no problem, in fact I skidded over the ice almost to home base, but I hate to think what might have happened if it had quit over the trees the night before!

Nineteen sixty-three went by rather routinely while flying on Dominion's summer contract with the Department of Lands and Forest out of Kenora. I was still flying the little 47G with extra boost from the turbine that Ernie Grant had developed. Beside the odd fire, there were always patrols with the game wardens, tagging moose, overseeing lumber cutting operations, and so forth. With the game wardens we tried checking fishermen by landing beside their boats on our rubber floats, but it soon became apparent that if a fishing rod were lifted into the whirling blades disaster could result so that project was abandoned.

One project was the first (I believe) aerial seeding experiment by helicopter in Ontario. This was simply a tank strapped to one side with a whirling apparatus underneath the machine, the flow of seed controlled by the pilot. It took place in Sioux Lookout, Ontario, and was routine except for a problem on the first try:

As I flew along the designated lines spraying seed a pungent smell filled the cockpit. I did not think much of this, in fact at one point with one hand I was happily eating a sandwich. However, the next morning I felt rather peculiar and I found I could no longer fly a straight line. I talked to the crew about this and came to find out there was rat poison mixed with the seed! A further check with Toronto brought an excited response, "READ THE INSTRUCTIONS!"

Which we did, my doctor was not concerned, and I got over this in a couple of days. The rat poison was eliminated in further batches and aerial seeding became a routine project in ensuing years.

Another development project that took place in during this period was the attempt to deliver water by helicopter to forest fires. The first attempt was a tank on the side of the 47G from which water was pumped to a hose directing water out the front under the bubble. The resulting stream was pitiful, and this was quickly abandoned.

Next was a 45-gallon drum slung under the machine, rigged so that it would scoop water when dunked in a lake by the pilot who also had a trigger by which the barrel could be tipped and the load released over a fire. This enabled us to smother some hot spots on a fire north of Kenora in a rocky area. However, by now means of delivering water or retardant by air was being developed for much larger helicopters and fixed wing aircraft and it seems ludicrous now that we made the attempt with these small machines.

A development of note the next winter was the beginning of our flight training school. All it took was my getting an instructor's rating, and we were in business. We operated from the lawn beside our house on the shore of Lake of the Woods. We had built a wooden platform on the lawn on which to park the helicopter. We had aviation gas delivered in 45-gallon drums, and that was it. The ice on the lake made for an excellent area for instruction, particularly for autorotation (engine failure) practice.

In those days, it required 50 hours of dual and solo flight instruction to get a commercial helicopter pilot's license, only 25 hours for a commercial fixed-wing pilot to add helicopters to his license. There was no check ride by the DOT, only approval by the instructor, in this case me. The 25-hour requirement was not nearly enough in my opinion, and in later years this was changed.

The summer of 1964 was a different story. I had been trying to get Dominion to apply for a permanent base at Kenora, but the idea was greeted as hopelessly optimistic and impractical. But it must have become apparent that I was getting restless for that spring I was offered a deal whereby I could pay a flat hourly fee for the use of Dominion's helicopter and keep anything between that and the published tariff rate.

That was fine by me and fortunately I experienced a busy fire season much like fires had been in 1961. I went from fire to fire for the whole season, doing not only the flying but routine maintenance on the machine as well.

Pilots of today's big jet helicopters would laugh at the little Bell 47-D1 for fire work, but we did accomplish a lot. I remember one situation working from a base tent camp about 50 miles in the bush east of Pickle Lake, Ontario, a remote area. With that little machine, I was the sole support of almost 400 fire fighters scattered on several fires in various directions from the camp. At one point my engine started acting up, and I suggested that some backup might not be a bad idea. The idea was scoffed at by headquarters, and we carried on. It turned out that the flap in the turbine that controlled manifold pressure had burned loose, causing an occasional overly lean fuel mixture. Once that was fixed, all was well.

One incident on that job I remember well. I was on my way back to the fire camp located on a beach on the edge of a lake when I got a radio message "Pete get down, a squall has hit, the tents have blown down, the Otter is beached!"

I looked for the nearest swamp and just as I cut the engine and was dropping fast, I could see trees falling in a wave. When it hit me, I got a boost that must have taken me up a

thousand feet, even though in free falling mode. We hung there for a few seconds before resuming our drop into the nearest swamp. There I waited until the squall had passed, then returned to camp where the tents were being raised and the Otter levered back out onto the lake.

I logged a lot of hours that summer, lost weight in the process, and by fall was pooped out for sure. From John Schultz I learned that Ed Godlewski, an old helicopter pilot friend from Spartan days, was spraying bananas in St. Lucia in the Caribbean. This sounded great to me, so I went down to look for him. Once located, Ed gave me a tour of the island, introduced me to friends, I sent for my wife, and we had a great holiday on this beautiful island.

Helair

A prominent businessman in Kenora by the name of Barney Lamm operated a large and successful fishing camp about 50 miles north of Kenora. To insure flying service from Kenora to his camp, he had started a float plane service which also turned out to be quite successful. He gave it the ambitious name, "Ontario Central Airlines".

Meanwhile, the Canadian Air Transport Board, to protect the pioneering helicopter companies that were already operating, particularly Spartan and Dominion in the east and Okanogan in the west, had been exceedingly careful about awarding helicopter operating licences. But for reasons known only to it, in 1963 the Board suddenly opened for applications. Barney Lamm was quick to note this, applied for and got a licence for a helicopter operation out of Kenora. He also took advantage of our training program and sent one of his bush pilots to me for the 25 hours training for a helicopter pilot's license. This was during the winter of 1963/64. He then bought a Bell-47G.

It was of course very frustrating to me that the company I was working for could not see the potential for a base at Kenora, and here was a new operation taking advantage of the situation.

Anyway, what happened next was that at one point during the summer of 1964, the Department of Lands and Forests called upon Barney for the service of his helicopter to help on some fires north of Sioux Lookout.

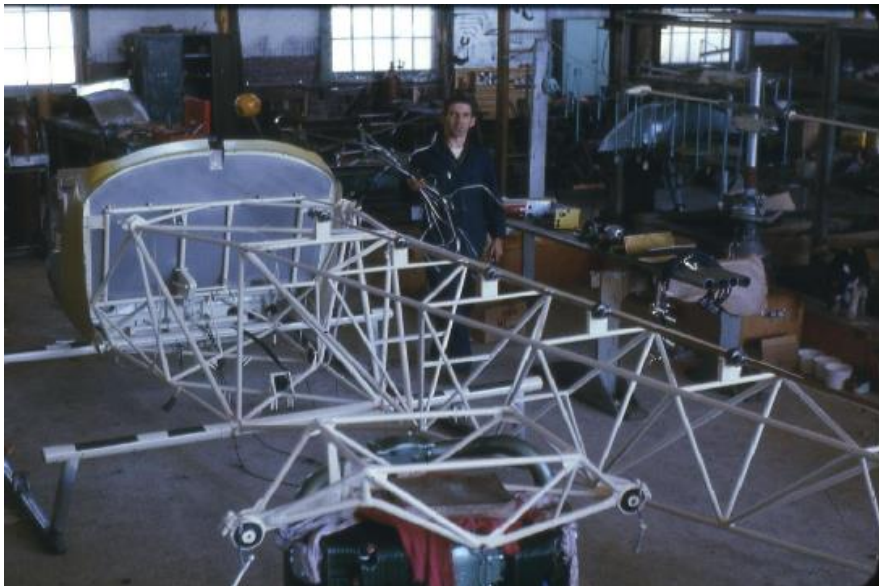
On arrival at the fire base at Sioux Lookout, the helicopter was loaded with fire equipment and two passengers (too much for this machine). It fired up, rose, and moved forward a few feet. It then came down and struck the ground with forward speed on its rubber floats, rolled over, and smashed up. There were no injuries fortunately, but the machine was a total mess. A fairly predictable outcome.

By winter of 1964/65, my relations with Dominion had deteriorated some more. And right here in Kenora was a valuable unused helicopter operating license plus the wreckage of Barney's helicopter lying in a snowbank.



Barney's wreck

The Dominion engineer who was with me at the time, Ralph Beal, and I talked it over and decided to make Barney an offer. Ralph and I would put in \$5,000 apiece if Barney would contribute his helicopter operating licence and his wreck, and together we would start a new company. Barney went for it. We quit Dominion, Ralph went to work in Barney's hangar rebuilding the machine, and we were in business. We named the company Helair.



Ralph Beal rebuilding the wreck

To finance the helicopter rebuild, we borrowed money from the bank (the total cost turned out to be \$17,000), but while this was going on, we needed some income so when a friend out west in Calgary asked if I would do some flying for him that fall. I jumped at the chance.

The job was a staking rush just east of Hay River, Alberta flying a 47G3. A G3 was slightly bigger than a G with a turbo-charged Franklin engine. Hay River was on the south shore of Great Slave Lake, the northernmost point of the railroad in those days.

I had three close calls on that job:

The first one was the ferry trip from Calgary north. About two-thirds of the way, I was getting into the far north, but was far enough west where there were still some trees. I was cruising along at about 1000 feet, daydreaming, when there was a sudden bang, then silence except for a slowing whoosh, whoosh of blades.

Waking up, I downed the collective (which control the blade angle) smartly, and the blades recovered some speed as I fell toward the trees. Just ahead was a cliff falling away from me, and I thought there might be a better chance beyond it. I gave the collective a boost to clear the cliff. Then appeared a creek, some open water with rapids, but ice farther along. I gave the collective another boost (I was now running out of inertia in the whirling blades), but this got me to the ice. Once skidding along the ice, the tail rotor lost speed and leverage to the point that the machine lurched sideways, and the tail struck one of the banks. As the machine slowed, I unbuckled and jumped out, thinking the ice might not hold. But it did.

This all happened in a matter of seconds and it was pure luck that, after boosting over the cliff, a partially frozen creek appeared.

So here I was, down miles from nowhere in late November in the far north. These were days before emergency locator beacons, but I did have an HF radio and managed to get one message out to Fort Nelson that I was down, but uninjured.



Down after engine failure

Grateful to be in one piece, the first order of business was to become visible to any searchers. There were bright red 10- gallon drums of avgas on each cargo rack, which I untied and placed on each side of the creek. Next, I gathered fuel for a signal fire which was not difficult.

Then I looked over my survival gear. I had a sleeping bag, there was food good for several days, but no tent or even a tarp, so I took the winter cowlings off the helicopter and with some pine boughs made a lean-to. I had a 22-caliber pistol with which I could shoot a partridge or a rabbit, but it was incredibly quiet except for some distant wolf howls.



My lean-to

The night passed uneventfully, and the next morning I heard a helicopter coming. My fire was giving off smoke, and as the helicopter came over, I began to pack up thinking he would soon be landing in the creek. But to my surprise, the sound faded and was soon gone. (I learned later that the pilot was by himself and looking out on only one side of the machine, so he did not see me.) I also later learned that there were some flares tucked away in my helicopter which I had not come across.

Time went on for several more days. I was not particularly concerned, sooner or later someone would come by. It was on the fifth night that I heard a big twin-engine airplane come over. I stoked up the fire some more, and it circled.

This time I was sure I had been seen and sure enough a helicopter arrived the next day. It turned out that it had been an RCMP aircraft from Yellowknife that had spotted my fire that night. Once in Hay River, I was given another helicopter and the job went on.

My friend Jim Lapinsky called my wife in Kenora, "Hey, we found Pete!"

She did not know I had been missing!

My second close call was as follows: We were operating out of the airport in Hay River, taking staking crews out in the morning by helicopter and picking them up in the evening, meanwhile staying at a hotel in town. Between town and the airport, there were railroad tracks on which a train arrived from the south once a week. In the predawn darkness one morning, we approached these railroad tracks in a taxi without a thought and missed being hit by the oncoming weekly train by a matter of inches!

Speaking of the hotel, it was made of cedar logs that had been thinned to a few inches. It was comfortable enough, but the wood was poor as a sound insulator. I could hear talking several rooms down the way. Each night the mining promoter in the next room would first call his girlfriend in Vancouver, then his wife in Toronto, have a long conversation with each, and I could hear every word.

The third close call on that trip came with a helicopter again. At the airport one morning in the darkness, I was three or four feet in the air moving over to the gas pump when the cooling fan in front of the engine broke loose and struck the control rods. I came down and struck the ground with a great thump, but fortunately the blades did not strike the tail boom as they gyrated back and forth. What if this had happened after takeoff??

Game over.

Once the job was finished, we ferried back to Calgary. I was then informed by the Department of Transport that the engine failure on the ferry trip north had been caused by a connecting rod failure, and the event would not go on my record as an accident.

Back to Kenora. For the rebuild of Barney's wreck, we had bought a new engine, the latest Franklin model which was billed as having a bit more power. Ralph did a great job doing the rebuild, the machine looked great.



The wreck rebuilt, CF-LPQ

Our first job was at a gold mine in Red Lake staking more claims in the area. That job went fine.

Part of the deal with engineer partner Ralph Beal was that we would train him for a helicopter pilot's license, which we did. He was now one of the few pilot-engineers in the business, a much-admired position. A problem came up, however. It seems once trained; he really did not care that much for flying. He had a habit of staying close to the treetops. I kept urging him to get some altitude on his flights. If anything went wrong, he would have some choice as to where to come down.

His reply was, "By flying low, if anything goes wrong, I won't have so far to scream!"

By winter, things did not look all that bright and not enjoying flying that much, Ralph understandably decided to cash in his investment and go to work for Air Canada in Toronto as an engineer.

Sometime before that, I had qualified for a maintenance engineer's license. I had always been good at studying and got good marks on the exams. It turned out, however, that while I could diagnose problems well, I had little talent for repairs and usually got someone else to do any fixing necessary. It seems that most people in this line of work were good at one or the other. There were pilot engineers all right, but not many that were really good at both jobs.

Anyway, Helair was now off and running if we could just get some business! Not counting Barney's aborted attempt, the Helair operation was now I believe the first helicopter base between Toronto and Winnipeg, certainly the first in Northwestern Ontario, an idea that Dominion had scoffed at as hopelessly naive, a pipedream. We will see.

Night Flight

Our little company was barely surviving at this point, but in early January suddenly there appeared an opportunity to get ahead.

Barney Lamm, my partner, in addition to his bush flying operation out of Kenora, had as I mentioned before, a prospering fishing lodge on the English River about 60 miles north of Kenora. The previous summer, one of his guests had arrived in a 47-J helicopter, on rubber floats no less. Operating a helicopter on floats on the water is no easy matter even for an experienced pilot, and for a middle-aged businessman with little experience, the outcome was almost predictable.

Sure enough, on a fishing expedition on a remote lake about 50 miles north of Barney's lodge, the machine overturned, blades thrashing the water, and sank. The pilot and one passenger managed to get out and swim to shore and were subsequently rescued. The guide in the back seat went down with the helicopter where it settled in 90 feet of water. His body was later recovered by a police diver from Kenora.

Barney then contacted the insurance company involved and arranged for Helair to buy the wreckage for next to nothing. Now we had to dredge up the wreck. Why we picked January 9th the coldest day of that winter to attempt the salvage, I am not sure, but that is the way it was. There were now three feet of ice over the site.

That day, Barney flew a crew of his guides and a diver friend to the accident site, and I flew in with our little newly rebuilt 47G.

Barney had carefully noted the location of the sunken wreck, and over this spot his crew proceeded to cut a large hole in the ice, erected a tripod over it, and set up a large tent next to the hole. Next, his diver friend went into the cold water, made it down to the wreck, tied a rope to it, and the winching began.

It was cold!! A clear day, but at least 30 below zero! When the wreckage appeared above the ice, clouds of steam rose from it.

But the cabin looked intact, which gave us hope, for I had contacted a friend in Calgary from Spartan days, Jack Nicholson, who (like several of us ex-Spartan pilots) had started his own company. He was rebuilding a Bell 47J and offered to buy the cabin of the sunken machine if it was OK and could be brought to Kenora.

Back to the salvage operation, we now had a new problem. The internal structure of our salvaged machine was steel tubing. If water within this tubing froze, it would split the tubing and ruin everything.

We had thought of this, and for this reason brought a large tent together with a "Herman Nelson", a 500 BTU gasoline-driven aircraft heater, that Barney had flown in to heat the tent.

So once the wreck was out of the water and slid into the tent, it was now my job to lie under it drilling tiny holes in all the tubing to drain the water before it froze.

This took time. As night approached, everyone except Barney and me were picked up and flown some 50 miles back to his lodge.

Drilling holes in the tubing went on. Soon it was the middle of that very cold night, and wouldn't you know, we ran out of gas for the Herman Nelson to heat the tent

Barney had flown in with a little Piper J-3 Cub, on skis of course, which was still there. I had the job only half finished, and the cabin would be ruined if we quit now!

So, he volunteered to attempt the flight in the dark back to his lodge to get more gas for the heater. We proceeded to cover his Cub engine with a tarp and heated it with a blow pot to get it warm enough to start.

The little Cub went down the ice into the darkness and away south to the lodge. It was quite a while returning, and after he landed Barney said that halfway back his engine had sputtered and quit! It was so cold that night there was not enough carburetor heat to keep his engine running.

So, there he was, in the middle of the night, with a dead stick landing to perform. As in most areas of Northwestern Ontario, this one was studded with lakes, and he was able to glide to the nearest one to make a landing on the ice. Coming to a stop, he brought out the tarp once again, covered the engine, got the blow pot going once again, warmed up the engine enough to start it again, took off, and made it back to our lake. Wow!

By morning, we were finished with the job of drilling holes in the tubing of the 47G, so we flew back to the lodge to rest and regroup.

Next day back to the accident site again. Once the J cabin was wrapped and tied into as neat a bundle as we could manage, it was my turn. Barney had arranged for a flatbed

truck to meet us on an abandoned logging road about 10 miles from our lake. There was only one way to get it out there, that is what helicopters are for, isn't it? But could the little 47G lift it? There was only one way to find out.

The very cold air helped, and we were able to lift it underneath on a sling far enough off the ground to take off. But the bundle was very bulky, and the large surface presented resistance to forward speed. By the time we got moving and well into the air, it began to swing. Barney meanwhile had taken off in a Beaver and came alongside to describe to me on the radio what the load was doing.

I did not need much description, we were rocking from side to side violently, and I was using almost full throw with the stick to keep upright. Several times I was tempted to pickle off the load with a click of a button, but slowly the miles crept by, and as we approached the road with the waiting truck the swinging diminished as we slowed on our descent. We were able to lower the load gently onto the bed of the truck to the great relief of us all.

Back in Kenora, Jack inspected the cabin and paid us the agreed upon \$15,000, a most welcome boost, which gave us the means to make a down payment on a new helicopter and to mark the beginning of a successful company.

The Bell 47G4A

In the following spring, I had a call from a government geologist who was planning a survey in Ontario's far north to explore possibilities for hydro development. Since the job was to start in Northwestern Ontario and Helair was the only helicopter operation listed in that area, we got the call.

Asked if we were interested, I said "sure!" The only hitch was that there was a requirement for a larger machine than our 47G, but I told him that if we were to be assured of the job, we would buy one. He gave me the assurance, and I called Bell Helicopters in Fort Worth, Texas to order a Bell 47G4A. The G4 was slightly bigger than the G with a wider bubble and a larger engine, the Lycoming 540, which gave the machine considerably more lift than the G. It still carried only two passengers but was more comfortable.

It is interesting to note the state of Heliair, Ltd at this point. Our base was the lawn of our house on the shore of Lake of the Woods, the office was part of our bedroom, and maintenance facilities were in the basement of the house, which fortunately had a door that opened to the outside. The property was nestled in a little cove of the lake with houses on both sides. How the neighbors put up with all the noise the helicopter could make at 5'clock in the morning, it is hard to imagine, but we never had a complaint. It helped that I had given everyone a ride when we set up there. I was the only employee, wife "Boo" did all the paperwork.

The Winnipeg office chief from the federal Department of Transport and his staff arrived during the spring to inspect our base, and they approved it! Can you imagine this happening today?

We made the down payment on the G4, and in April I went down to the Bell factory in Fort Worth to pick it up.

There I met Floyd Carlson, who had been one of us hangars-on at Fred Larsen's Piper Cub operation in Jamestown some 28 years before. He was now Bell's chief pilot and proudly showed me their new AirCobra.



Robby Lavack and our new G4A at home base. (That is neighbor house)

I flew our new machine back and realized now that I needed some help. I had been experimenting with radios and in Kenora had become acquainted with an innovative radio technician by the name of Andy Young. He pointed out that one of his sons was very technically oriented and might be interested in learning helicopter maintenance.

Thus, began our relationship with Brian Andrews. Brian had lost an eye in a chemistry experiment, but it was soon apparent this was no handicap for him. We sent him down to Fort Worth for the 47G maintenance course, and it turned out that he was a natural for the job.

In May we were happily getting set for our first big contract when I had a call from the geologist in Ottawa with whom we had been dealing. "Sorry to tell you this, but we were just informed that the contract will have to be put out to the public for bid!"

Wow! Here we still owed money to the bank for the G, were stuck with payments to Bell for the G4A, and we may have lost our contract!

While we scrambled to learn the rules for bidding on the contract, another ominous development took place. The contract work was to start at Pickle Lake, about 300 miles northeast of us. One of Barney's bush pilots reported that he had just seen a Dominion G4 there.

It did not take long to figure out that Dominion had decided, "We will fix that upstart, Helair!" and parked a machine at Pickle Lake so they could avoid the ferry portion of their application, and thereby underbid us.

There was nothing to do but go to Ottawa where I could get a handle on what was going on and submit a bid at the very last moment hopefully to beat any competition. I did this, and we were successful. It was pure luck that the Dominion machine had been spotted in that faraway place!

In June Brian and I flew in our new G4A to meet the government party at Pickle Lake, and the job proceeded up the Nelson River.

To back up just a bit, we had been carrying on with pilot training during the winter and to help us Robby Lavack (who was then living in Dryden, the next town east of us) had in his spare time been doing some instructing for us. We had met Robby a few years earlier when he had been an official with the Department of Transport. Now he was working with Ontario Northern Affairs, supporting First Nation reservations in the north.

Robby is an interesting character for whom our admiration has grown over the years. Talk about marching to another drummer! Soft spoken, amiable, it was hard to believe he had been torpedoed in the merchant marine early in World War II, had later been a fighter and bomber pilot in the RAF during that war (earning a Distinguished Flying Cross) and was aide-de-camp to Randolph Churchill for a while. He was later a soldier of fortune in the Rhodesian conflict. Here in Canada through years of effort Robby was instrumental in helping the native artist Norval Morrisseau gain international recognition for his paintings.

Anyway, at this point in our story, he was flying the little G for us on a part-time basis. While I was way north on the water survey contract with the G4A, I got a message from him that a bush operator in Ear Falls had bent a wing on his Cessna 180 on a lake the previous winter and was looking for a helicopter to lift it back to base. Robby was asking for my OK to try it. I advised that it would be best to wait until I returned with the G4A when my job was finished. "OK," he replied.

But a few days later, he got in touch again. Ever the optimist, he thought the G could do the job. As it turned out, he was able to lift the 180 off OK, and he headed back over the bush toward Ear Falls. This effort would have been successful except that halfway back his engine failed!

He pickled off the load and falling in autorotation barely made it to the nearest swamp. Hitting the ground with some force, the G caught fire and burned until there was hardly anything left. This was very bad luck for the 180 owner. He had had to waiver his insurance, and his 180 was really bent this time. Robby had a bad back for a while.

It was in the spring of the following year, I believe, that Robby suggested, "With your G4A, why don't you bid on the Lands and Forest helicopter contract for the Kenora base for the coming summer season?" This seemed a rather wild idea because Dominion appeared to have had a political lock for several years on the Lands and Forest contract for the Department's various bases in Ontario.

Also, I had worked for Dominion not too long before, but then I thought back to its nearly successful attempt to do us out of our first critically important contract.

"All's fair at this game," let us give it a try.

Robby told me we could get support from Leo Bernier, our local Member of Parliament with whom he had become acquainted. In fact, we had supported this Member in the last election with our helicopter by means of loud hailer broadcasts over nearby First Nation reserves.

Leo invited me to Toronto where he gave me a tour of Parliament and assured me that I would have a fair shot at the contract. I then installed myself in the Four Seasons Hotel and wrote a proposal.

Returning to Kenora to await the outcome of my bid, I soon learned that it was successful. However, Dominion's influence with the Department's head office in Toronto was strong enough to have the base moved from Kenora to Sioux Lookout to make things as

awkward as possible for me. We spent the summer in Sioux Lookout, and successfully carried out all the many uses the Department had for helicopters.

We now realized we needed a second machine, but also that there was hardly room for two helicopters on our lawn, so it was time to cast about for a new base.

During the winter pilot training operations, we had often used a field just north of town which we presumed was an abandoned farm. The property had an open area of about 30 acres with a power line at the east end, but with plenty of room to practice autorotation's and various ground maneuvers. We asked a realtor to investigate this. It turned out that the property consisted of 80 acres owned by an old timer currently in the hospital. The realtor visited the owner in the hospital and negotiated a price of \$5,000, which we jumped at. This was a very lucky development.

The property was private, completely out of sight of the main road, yet only 10 minutes from the Kenora post office! Further, it was all sandy ground in sort of a sandy basin in which there was clean water only 15 feet below the surface. There was no access to the gravel road near the west end where the 30 acre-clearing was, but the neighbors, Mr. and Mrs. Stevenson were extremely helpful, giving us permission to put a road through their property



What a deal! We borrowed more money from the bank, built a hangar and office in the northwest corner of the clearing, and for living quarters installed a large trailer a few hundred yards to the east of the hangar to which we added on a porch, another bedroom, and a swimming pool.



It was during this time that Jerry Ossachuk, one of Barney's bush pilots, expressed an interest in getting into helicopters so we made a deal that we would train him for his license if he would come and fly for us.

Also, about this time, we used insurance money from the G loss to help pay for a 47-G2. The G2 was essentially a G with a bigger Lycoming engine. This engine added weight therefore decreasing payload and causing steeper autorotation's, but overall, it was an improvement from the G. This particular machine, CF-MEU, for which we paid \$25,000, flew over 2,000 revenue hours over the next few years, and we sold it for \$25,000!

As with most areas of Northwestern Ontario, ours was studded with lakes. Float planes had access almost everywhere and the need for more costly helicopter services seemed like rather wishful thinking. Business did increase though, and we were able to show a profit each year. I was never much of a salesman, but luckily all that was required was to advertise a little and answer the telephone. We gradually paid off our debts and were able to add another G4 to the fleet.

We had our ups and downs, of course, good and bad incidents. One disappointment that occurred before we moved out to the new base was a fish research project that began on some small lakes a few miles east of us. We were hired to fly biologists on this job from their camp once a month to check results at the many lakes where they had placed their research equipment.

This was to go on for a few years and looked like a bonanza for us. Unfortunately, the party chief was changed while a friend from Winnipeg (who we had trained and afterward did some flying for us) flew this new manager out on his initial rounds of the project while he (the pilot) was smoking a big cigar in this tiny cabin. This made the new boss airsick, and he decided they would find some other means of transportation.

Another incident comes to mind that happened on a 40-degree below zero day one January. A crew was working on a new power line some 40 miles west of Kenora. I got a call that afternoon that one of the wooden poles had snapped in the extreme cold and fallen on one of the linemen. The crew did not dare to move him. A doctor was desperately needed. I called the hospital, but the first doctor refused to go, there was no way he was going to ride in a helicopter. I kept trying and finally located one who was willing. When he arrived at the base, Jerry flew him out to the accident scene, and the rescue was a success.

On another occasion, I was leveling what was to be the front lawn of the office with a bulldozer when someone came running out. "Red Lake says they just heard a Mayday from our helicopter!"

At that time a helicopter engineer, who we had trained as a pilot and was working for us, was supporting a diamond drilling crew on an island some 250 miles northeast of us.

I contacted Red Lake (one of Barney's bases) and asked that they send a plane out there which they did. It turned out that one of the miners had lifted a steel drill rod up into the whirling blades, smashing his head and, of course, putting the helicopter out of commission as well. The injured miner was flown back to the hospital in Red Lake. We were eventually able to repair the helicopter and fly it back, but the miner's injuries were very serious.

During these years, I was always looking for better communications equipment. With Andy Andrews help, we experimented with installing loud hailers on the helicopters. This often came in handy. On one occasion, a woman from Fort Frances just out of a mental hospital had been out picking blueberries with her family, had become separated in the bush from her folks, and could not be found. We were called the next day. An MNR

(Ministry of Natural Resources) ranger beside me in the passenger seat spotted her. Thoroughly confused, she was frightened by the helicopter overhead and ran off through the trees.

We landed the ranger in the nearest clearing. She kept running, but hovering over her and talking to her over the loud hailer, we were eventually able to convince her to sit down until the ranger arrived.

There were always forest fires to help on. It was nothing like 1961 or 64, but enough work to keep us busy at times. We had hooked up a tape player to the loud hailer, and it was amusing to arrive at a fire base camp at five in the morning and play reveille over the tents. Or the sound of a jet buzzing the camp. I remember once a deputy ranger singing, "Jesus loves me, this I know " high over the astonished and laughing natives working on the fire below. These were natives from a far north reserve who were well acquainted with the hymn from their contacts with missionaries. Incidentally, I had had several occasions to work with these people on fires and was awed by their abilities as fire fighters.

For example, showing a new fire (say from a lightning strike) to fire fighters, then landing them at the nearest clearing, sometimes a half mile off, usually resulted in hovering over the fire for some to guide them in as they walked in through the bush, then a longer wait while they made a clearing at the fire site big enough for the helicopter. These guys from the northern reserves would pick up a fire pump from the helicopter cargo rack (115-pound clumsy affairs in those days), go straight to the fire through the bush with no guidance whatever, and with axes only make a clearing for the helicopter to land, a job that would normally require a chain saw!

One of our experiments was with a new type of single-sideband, self-contained HF radio with which to equip our helicopters. This brought about a unique situation when one day I was sitting beside a swimming pool in Hawaii on a holiday and got a telephone call from our office manager informing me that Jerry was hanging upside down in the bubble of his helicopter down in the bush some 100 miles north of Kenora! He was talking to Jerry on the radio from the upside-down helicopter while he was talking to me on the phone in Hawaii!

What had happened, Jerry was on his way home from a job way up by James Bay when he encountered icing on the helicopter blades. This caused severe vibration, but he thought he could make it to the next lake. It got worse, however, and the machine fell into the trees, striking the ground hard on the rubber floats, and then flipping over. Now Jerry

was hanging on his belt with his hands on the ground out of the broken bubble but was able to reach for the mike and call out, the radio having its own batteries. He was not hurt and was rescued the next day. We were able to eventually salvage and rebuild the machine.

One more incident involving Jerry comes to mind. One day a robber, dynamite strapped under his coat, walked into the Royal Bank in Kenora and demanded money. He was holding a clothes pin to which wires had been attached. He said if anything happened to him, he would let go of the clothes pin and the dynamite would explode.

After he received a bunch of money, he next demanded that a helicopter be sent to pick him up. Jerry received the call at Helair. With no hesitation, he fired up a machine, took off, and headed for the bank.

As Jerry circled above the bank awaiting developments, the robber came out of the door. A Kenora city policeman, crouching behind a car, took careful aim and let go a shot with his pistol, resulting in an explosion that showered buildings on the street with bank notes and bits of bandit. End of that story.

We did have some interesting salvage jobs as shown in the following photographs. They were not always easy with these little helicopters.





Viking

In the fall of 1968, I had a friendly call from a gentleman who had been (probably still was) on Spartan's board of directors. He informed me that Spartan had for sale what was left of its helicopter operation. This consisted of an operating license in Ottawa and two ancient 47-D1's for which they wanted altogether \$90,000. The call to me had probably been at the suggestion of my old and esteemed friend Neil Armstrong.

An interesting idea! Debating who would be a good partner for such a venture, I immediately thought of Larry Camphaug. He was, in my opinion, the best helicopter engineer in Canada. We had worked together to good effect on Spartan's Vertol operation. After leaving Spartan, he had started a small helicopter repair company, Mercury Aviation.

Yes, he would be interested, and in January 1966, I traveled to Ottawa to meet him and see what we could do.

Among Larry, Barney, and myself, we could raise \$40,000, so what we needed was a bank loan of \$50,000 to make the deal. We had exceptionally good backgrounds for such a venture, and during that cold January Larry and I visited every bank in Ottawa with what we thought to be a very reasonable proposal. But to no avail. One bank manager told us not to show up again without an appointment. Disappointed, I went home to Kenora.

A few days later, I was talking to the manager of our little bank in Kenora and offhand mentioned the reaction we had received in Ottawa to our idea. Much to my surprise, he responded, "Never mind, I'll loan you the \$50,000!"

We made the deal, now we had to set up our operation. Since Larry was of Norwegian descent and I of Swedish the name "Viking" seemed a natural for our new company. Larry set up shop in Bells Corners, at the east end of Ottawa, repaired the two D's, and we were in business!

Viking's first substantial job was an interesting one. In a bar somewhere, Larry had met a character who had a small helicopter operation in Quebec, north of Ottawa. This Quebecer did not have any experience operating helicopters, but he did have contacts in the Quebec government, which at that time was starting a large hydro development in northern Quebec. This development had potential for a great deal of helicopter work.

So, over a few drinks, Larry and his acquaintance made a deal. Larry would supply the helicopters and crews, and his new friend would get the contracts. Since the job would

have to be done in the name of his friend's company, that company would collect the money, keep 10%, and pass the remainder on to Viking.

The job started off. A couple of months went by with a lot of flying, but no money for Viking showing up. By this time Larry had persuaded a bank in Ottawa to supply operating capital, but it was rapidly disappearing.

As time went on, the bank manager was getting nervous. Barney and I were also getting nervous. Larry called his friend and a check for \$50,000 showed up which he sent to the bank. The next call from the bank manager was frantic,

"THE CHECK BOUNCED!"

Larry told us all to calm down, called his friend again, who said, "Sorry about that", and wired the \$50,000 to Viking. From then on, all the checks came in regularly with no problem. In fact, the money was coming in so fast that Larry was buying farmland alongside a yet-to-be constructed Ottawa- Montreal superhighway with the idea of starting an industrial park complete with airstrip.

As well as a first-class engineer, Larry turned out to be one dynamo of a salesman. Soon, we were up to 18 machines, working all over Canada. We even had two machines in Africa! The bank manager, who had asked us not to call on him without an appointment, was now taking Larry out to lunch.



There were accidents, of course. Donny Pollock from Thunder Bay tripped his helicopter on a power line. He and his passenger were fatalities. Our old friend Doc Demerah from Spartan days died of a heart attack high over a lake in the barrens. The helicopter he was piloting plunged into a lake. It was found later floating upside down suspended by its rubber floats on which his passenger was sitting (incredibly) and rescued. Viking's operations manager's son, who was a newly trained pilot, ran into a mountain in Newfoundland in bad weather, and was killed.

Viking produced some star pilots. One of the most interesting was Bart Stevenson, son of the Stevensons who had so kindly let us create a road through their property when we built the Helair base north of Kenora. We gave him a helicopter ride when he was still a high school student which sparked his interest. He took his training later with Helair, did some fantastic flying for Viking mostly in northern Manitoba, flew for Helitac for a bit, then Midwest, and finally started his own successful helicopter company Forest Helicopters, back at Kenora, his hometown.

Back to the story, after a couple of years, Viking bought Helair, including the base in Kenora. My family and I then moved to Ottawa to see if I could be of help with this swiftly growing company.

About this time, through John Schultz, we became acquainted with a wealthy young investor in Toronto, Gary McMahon, who was showing an interest in Viking. We all had signed personal guarantees for Viking's bank loans. Barney was getting restless, and Gary suggested he might buy him out. We met in a hotel room in Ottawa. Barney and Gary haggled for a while, and then Barney put on his coat, saying, "If you get serious about this, let me know".

Gary replied, "Wait!"

Barney sat down and the deal was concluded.

By this time Larry had grown the company very fast. An example of his prowess in marketing was a meeting in Switzerland where he won a big contract for Viking with the World Health Organization despite fierce competition from helicopter operators from many other countries.

In addition to being a great salesman, Larry Camphaug won esteem and loyalty from Viking's employees, particularly the engineers. Together with several of them, Larry often indulged in protracted happy hours at a local hotel.

Beside these sessions, which seemed to some to be getting a bit out of hand, he and I had some differences in policy. Under his management Viking became an engineer's company sort of like Dominion again, and pilots were passed over for management jobs. Sometimes this did not work out to best advantage. For example, Helair made a loss the first year under Viking management, the first loss in Helair's history.

The other difference was that being a strong conservative, Larry was very reluctant to pay taxes. So, when profits accumulated, to minimize taxes Larry would take the company further into debt by buying more helicopters. Why? To take advantage of the tax deductions created thereby. But this was in the early '70s when interest rates were heading for 20 per cent! And another problem arose. We were not getting the average annual utilization out of our helicopters that was needed to stay healthy. This one, I can take part blame for. Here is why:

During Viking's beginnings, our friend John Schultz was Canadian sales manager for Hughes Helicopters. When he got his first order for a Hughes 500, he invited me to go with him to Los Angeles to accompany him while flying the machine back to Toronto. On the trip back, I was indeed impressed!

That spring, the Ontario Department of Lands and Forests hosted a seminar in Petawawa for provincial forest fire managers across Canada. I was invited to give a talk to the seminar on what was coming up in the helicopter line that might be of interest, and John was invited to show the group the new Hughes 500.

At one point in the meeting while we were all standing outside, John was asked how small an area the 500 could work in. "I'll show you", he replied, and started the machine. He flew to the edge of the clearing, disappeared amongst the seemingly dense trees, and popped up some way off!

With the same engine as its competitor, the Bell JetRanger, the Hughes 500 was more compact, lighter, and faster, a real pleasure to fly. As Robby Lavack mentioned sometime later, flying the 500 was like flying a little fighter. Being faster and able to lift more than the JetRanger, as well as having a more survivable shape in event of accident, we decided this was the way to go.

There was a catch! Being faster and able to lift more than the JetRanger meant the 500 could get the job done more quickly. The catch was that we were being paid by the hour, not by the job done, so that on a given job we would make less money with the 500 than with the JetRanger.

Another problem was that the 500 was noisier and less comfortable for the customer than the Bell. Translated into annual utilization, we were averaging fewer revenue hours than companies operating JetRangers which, in my view, was a critical problem. Getting back to the big picture, Viking's swift growth had not gone unnoticed in the helicopter community. In 1973 the new owners of Dominion Helicopters made it known to us that they might be interested in buying us out. Sure, we told them, if the price was right!

So, we decided what kind of an offer we would accept. In November 1973, Larry, Gary, and I were on a holiday in Palm Springs, California talking things over. Larry and Gary were all for ordering another batch of 500s. It was my opinion that we should slow down. Instead of adding more helicopters, we should concentrate on improving annual utilization with what we had. Larry and Gary were all for continued expansion. "Pete, you're stubborn, we're going to make millions!"

To settle the matter, Gary proposed that we hold off on the order for more machines and if by spring Dominion did not buy us out, Gary and Larry would buy me out so they could carry on the expansion without my interference. The price for my shares would be what we would be asking of Dominion. We shook hands on this.

Spring arrived, the Dominion offer had not materialized, Larry had ordered more machines contrary to my advice, and I had not heard any further about my buyout. I sent Gary a letter in Toronto reminding him of the deal we had made. This prompted a meeting. Some haggling occurred during which I finally accepted a price less than the previous agreement, but my buyout was settled, and they could now proceed to make their millions.

For the next while, Viking did very well. It became the second largest helicopter company in Canada, grossing a million and a half a year, and working in seven foreign countries. It peaked out in the late '70s, and then the slide began, a slide that struck many Canadian helicopter operations about that time, even Dominion Helicopters in Toronto.

The Hughes 500

In January 1976, I was playing tennis with an acquaintance at a public park in Palm Springs, California. He was telling me about a visit he had just made to some exotic place. I saw an opportunity for one-upmanship. I said, "You see the red dust on these tennis shoes?"

"Yes, what does that mean?"

"It means my last tennis game was on the clay courts of the Addis Ababa Hilton."

"Wow, what brought that about?"

What happened was I had a visit from Dr. Henderson from the World Health Organization, who oversaw the WHO smallpox eradication program. He said he had an offer I might be interested in.

He explained that WHO had recently finished its program in Bangladesh, now the only remaining cases of smallpox in the world were in Ethiopia, and WHO was determined to eradicate smallpox there.

There were two problems. One was that traveling into the areas where the WHO team needed to go was extremely difficult. There were mountains, desert, plateaus cut by deep gorges and ravines, and roads that were terrible or nonexistent in some places. The other problem was that there were two armed conflicts going on.

Haile Selassie had just been deposed (imprisoned and tortured to death), and his followers were fighting to get back. And the province of Eritrea in the north was fighting to secede.

Employing helicopters for the job was expensive, but by far the most efficient way of getting doctors into areas where smallpox had been reported.

And getting a consultant to have a look at the helicopter operation would be a good idea.

I told him I would be glad to take the job.

After getting acquainted with the WHO office in Addis Ababa, I left with Robby in a Hughes 500 for a tour of the area. Five minutes from the city, we were a hundred years back in time. In the city, there were many marble buildings, reminders of the Italian occupation in WW II, but out here in the countryside there were mostly thatched huts.

We had a quick but interesting look at the Great Rift Valley, and then visited some of the sites where smallpox vaccinations were being carried out by WHO workers.



We continued our observations for a couple of weeks. I then wrote up a report with some suggestions.

In the end, the WHO eradication program was a great success. Ethiopia is an interesting country with a colorful past. Among other things, the Ethiopians sure put up a fight to resist the Italian invasion in WW II.

After I left, Robby had an adventure. He and a doctor landed in an area that was probably dangerous, but important to the eradication program. Robby's motto was "never worry". He was never afraid of taking risks.

After they landed and climbed out of the helicopter, they were rushed by a group of fighters, shooting as they came. Not having time to get back into the helicopter, Robby and the doctor took off on foot. A grenade was tossed into the 500 and it blew up. Five days later, they got to friendly territory and were picked up.

A couple of “off topic” notes.

I never realized coffee could taste so good! Ethiopia’s province of Kaffir is supposedly where coffee was first cultivated and where the word “coffee” came from.

Whenever eating at an Ethiopian restaurant, coffee beans are roasted and ground as you wait, and the result is superb.

A note on the trip home: The first landing of the trip was to Rome by Ethiopian Airlines. After we landed and as we taxied toward the terminal, we noticed the airport was strangely quiet. As we came to a stop, we heard the captain say,

“Sorry to tell you this, but the airport just went on strike. I don’t know how we are going to get you off the plane!”

We sat for about an hour, then the captain’s voice once again:

“OK, we have arranged for a ladder to help you climb down, but I have no idea what will happen to your luggage. Be careful.”

We got down off the plane OK and walked into the terminal where we met chaos. It was just a few days before Christmas, and there were Boeing-747 planeloads, or at least waiting 747 planeloads of Italians going to the States for Christmas.

We saw a priest shouting at a clerk behind a ticket counter and the clerk shouting back at him, “We have a right to strike!

In recent days, there had been some terrorist concerns, and we noticed guards armed with submachine guns patrolling the terminal.

After a couple of hours milling around to no purpose, I started looking for my luggage. I had some valuable mementos of the trip, among other things, in this one suitcase. I was wandering down a corridor hoping to find a luggage area when I was confronted and menaced by with one of those submachine guns. I hastily retreated to the main part of the terminal, and there was my lone suitcase sitting all by itself in the middle of all the people! I finally managed to get a taxi to a hotel, and the remainder of the trip was uneventful.



Tough times at the Addis Ababa Hilton

Interesting note: Idi Amin was in that swimming pool with his clothes on the day after I left.

ZYD

I was now out of the helicopter business, but in the spring of 1975, we were visiting Boo's parents in Fort Frances when we heard that a forest fire had started southwest of Dryden in a 500-square mile patch of blow-down, the fire likely to be a big one.

Thus, awakened by the smell of smoke, I looked about for a helicopter.

Larry knew of a G4A for sale in the Ottawa valley. I flew down there, bought it, and flew it back to Dryden. This was ZYD.

By then the fire had really taken off as expected. I was well known to the fire boss and was hired on with no problem.

We worked hard on that fire, which went on for a several weeks. Once released, I flew down to Camp Beaverhead on the Manitou where we spent the rest of the summer, picking up some forest fire work in the Fort Frances district. We bought Camp Beaverhead that fall.

I contacted Brian Andrews once again. He checked the machine over, and we left it in his yard in Kenora for the winter.



Thus, began a series of summers during which ZYD was based at Camp Beaverhead on Lake Manitou, a remote location, picking up various kinds of work including forest

fires for the Department of Lands and Forests (which had changed its name by now to the "Ministry of Natural Resources", MNR for short).



Our pad by the icehouse

This went on for several years. I would have had more flying on fires in the Fort Frances district if it had not been for the incredible ability of Art Kolfer with his Turbo Beaver to take crews into lakes so small it would normally have been accessed only by helicopter. Eventually good old ZYD was replaced at Beaverhead by a Hughes 500.

About this time began a staking rush for gold claims on the Manitou so we got work from prospectors and miners as well. Camp Beaverhead became hosts for prospectors, geologists, and well-known mining company people such as Murray Pezem, known in the west as "The Godfather of the Vancouver Stock Exchange" or with his close associates fondly as "The Nose that Walks".

One of the many jobs of this kind was flying a diamond drill crew and all their equipment out to highway 502 from Manitou Island one late November. This involved many trips over the icy water of the Lower Manitou on skids (Hughes 500) with blade icing only a couple of degrees away. I did not enjoy this much.

The efforts of that crew resulted in diamond drilling on the ice just east of the island later that winter, with an ore body discovered, but not rich enough to justify further exploration.

So here we were at last, on a more permanent basis, at our favorite place in the world, a lifelong ambition. But as it turned out, it was only to witness from the bubble of our helicopter, over a many year period, the wilderness slowly disappear. As was happening all over the planet, forested areas were being transformed by economics. The vast wilderness reserve to the east of the Manitou was quietly dropped from the map, the previously planned protection of the lake from road access forgotten. Dog teams of past years were replaced by skidoos, canoes by jet skis and motor launches. Trappers, prospectors, and the few colorful characters who called the lake home were replaced by summer tourists and developers.

A dam was built to enable floating logs down the lake. Though it quickly became obsolete for that purpose it was left standing. Extremely difficult, sometimes dangerous to control, it resulted in high water nearly every spring, and higher than its natural level at any time. The surrounding forest, which had been an adventure to explore, was becoming crisscrossed by logging roads and a patchwork of timber cutovers.

Here are two of yesterday's Lake Manitou residents and my good friends of a bygone era:



Ivo

(Shag) Shegrud



Alice Watson

Alice Watson believed the Manitou would never change, it being so difficult to access. If only she had been right! The Manitou of nearly 70 years ago that so enchanted me that it changed my life is gone, but I will always remember what it was like in the days of canoes, dog teams, and characters who “marched to another drummer”.

Helitac

By this time, Larry was planning to move Helair out to Manitoba where it could be set up to compete as a “local” operation. My oldest son Bill and his wife Bonnie had always been very fond of our old Kenora helicopter base, “the field”, as we called it, and they suggested we try to buy it back. We agreed and made a deal with Larry to sell it to us.

Now we had a helicopter and a base again, so it was logical to form a new company. Bill suggested the name “Helitac”, and we incorporated it as such. Jerry Ossachuk expressed interest and came in for half and Brian Andrews joined as engineer.



The Helitac Base

Jerry managed the operation in Kenora. I stayed most of the time at Camp Beaverhead 90 miles southwest with ZYD or a Hughes 500, picking up what flying I could in that area and staying out of the day-to-day Helitac operations.

The MNR was no longer putting out seasonal helicopter contracts, but instead relying on availability of local operators. This was the backbone of Helitac's work. I recall one fire that started about half-way between Fort Frances and the Manitou. In a strong southwest wind that afternoon, it roared right up to the south shore of the Manitou about 10 miles south of camp. I could see the red sky from my bedroom window at Camp Beaverhead that night.

ZYD and our two 500's were hired on the next day. The first job with ZYD was flying the fire boss around the fire. It had almost crossed the Manitou. We flew down the south shore just under the smoke. There were plans to start a backfire along the whole south edge of the Lower Manitou, but luckily, we got some rain that night and that idea was called off. We worked with all three machines for a couple weeks on that fire. Our good friend Robby Lavack was flying the third helicopter.

Things were changing on the firefighting scene. Resources were being protected more forcefully meaning forest fires were being hit harder and more quickly. For years even on a large fire I had usually been the loan machine carrying out the many jobs a helicopter could do but now there was more traffic, often including a Canso (PBY) dropping water or retardant. I recall one occasion where I was pulling up out of a small hole in the bush. Once above the treetops I found myself staring straight into the face of the pilot of an oncoming Canso. I slammed the collective down, of course. Man, that was close! Soon traffic control from an aircraft circling above the fire became the norm.

Also, the Ontario MNR was now moving away from recruiting fire fighters from the local beer parlors and the old practice of setting up base camps at the lake nearest to the fire and placing fire fighters along the fire line from there by helicopter. Instead, it was training professional crews to be kept on standby at centralized fire bases. The next logical step for the MNR was to acquire helicopters large enough to fly these crews and their equipment directly out to the fires from these bases.

This is where we dropped the ball. We tried to persuade the MNR Dryden office that two Hughes 500s could do this job more cheaply and with more versatility than one expensive bigger machine, but it was to no avail. Surplus Bell 204s (the Vietnam Huey) were available. We talked a bit about going in this direction but did not act on it. Summer

contracts started going out for these and even larger machines, and our business languished.

It seems we blew it!

At Beaverhead, business for the G4 was falling off as well so when we were offered \$75,000 for ZYD, which we had bought for \$25,000, we had little choice.

Three other events took place that added to Helitac's problems. Brian quietly gathered his tools and equipment and called me in California that winter to tell me he had quit. This was most regretful, I told him, and took his statement literally. It appeared later that he was not serious about quitting but was extremely upset that we had not addressed his concerns.

Another event was a disastrous engine failure in one of the 500s. Jerry had just taken off from a small clearing in the bush with fire fighters when it happened. The engine quit just over the trees. There was no chance for an autorotation, and the machine came down hard causing injuries to everyone, including Jerry. His injuries caused loss of his pilot's license and some serious chronic problems.

The third event was loss of our base. (the field). A highway bypass was to be constructed around Kenora, and the route chosen was to go right through our 80 acres. We had to give the property up.

Jerry arranged for a hangar and office to be leased just off the highway west of Kenora. He also decided he could manage by himself and proposed that Helitac (the company) would buy out Beaverhead's interest leaving him with complete control. No longer having a machine to operate from camp and having lost the Kenora property of which we were so fond, we agreed.

To keep going, Jerry would now have to lease a machine and hire a pilot on a part-time basis, a very tough proposition. He plugged away for quite some time, but eventually had to give it up.

The Parachute

As of this date anyway, my last flight while under my control was my second sky dive, at age 75. The location was at a jump school south of San Diego. For me, this flight was a rather exciting one.

I stepped out of the airplane door. As I heard the chute open, I experienced a sudden turn,



which became a spin, and, at the same time, I heard "**LINE TWIST!**" through my earphones. Since a line twist is a situation that can usually be remedied, I got my hands on the risers and tried to pull them apart, but without success.



Meanwhile time was going by, the risers were hopelessly twisted, and the spinning and looping were getting ever-more violent. It felt like a tailspin in an aircraft, complete with G forces. I decided there was only one way out of this situation. **WHERE IS THAT CUTAWAY HANDLE ?**

The G forces had pulled the entire harness upward thereby changing the position of the handle that would cut away the main chute!

I couldn't find it!

This took up more time and added to the suspense for onlookers on the ground and in the aircraft from which I had jumped. Unknown to me, this aircraft was circling overhead, loaded with jumpers, who were watching and shouting,

"PETE CUTAWAY!".

And in the earphones, I could hear the instructor telling my son Bill:

"I don't like this!".



It was not easy to function during these gyrations, and I remember that for a second or two during this wild ride I was thinking that maybe this was the end of the line, but then I either saw or felt the cutaway handle and got both hands on it and pulled.



The sudden drop as the main canopy released felt good. I pulled the reserve ripcord. I was falling free for a moment, but then the reserve chute opened nicely, and it was great to be floating peacefully at last.



The ride down under the reserve chute was anticlimactic. I tried a turn, but the response was so slow that I worried for a moment that it was not working.



Being a bit hard of hearing, I was having some trouble hearing the instructions in my earphones that I was getting from the ground but following them as best I could. I ended up lined into the wind exactly on the right glide path to the intended landing area. But because I did not appreciate how rapid my rate of descent was, I mistakenly thought I was going to be too long and tried to do a gentle S-turn. This got out of hand

with the poor canopy response, and I ended up landing short. No problem on this drop zone, lots of room here, but sort of humiliating.



Another goof, still not taking into account the slow response of the reserve chute, I flared at about the same height as I would have with a main chute, but I do not believe I got much, if any, benefit from the flare and landed with a rather good thump. Anyway, I was down in one piece, which was the main thing. The jumpers, who had been in the aircraft circling to watch the outcome of my problem, came down under their canopies a few minutes later, and each extended hearty congratulations on my successful

cutaway. This was much appreciated. They told me that there was a resounding cheer in the aircraft when they saw that I had finally cut loose.



So that marked the last of my flying experiences. It was interesting that I could collaborate at this very late date with granddaughter Sarah to fix minor glitches and reformat this document.

